ORDINANCE NO. ___ OF 2021

AN ORDINANCE OF LEWIS TOWNSHIP, UNION COUNTY, PENNSYLVANIA, AMENDING LEWIS TOWNSHIP ZONING ORDINANCE TO PROVIDE FOR ACCESSORY SOLAR ENERGY SYSTEMS (ASES) AND PRINCIPAL SOLAR ENERGY SYSTEMS (PSES).

WITNESSETH AS FOLLOWS:

WHEREAS, the Board of Supervisors of Lewis Township, Union County, Pennsylvania, have heretofore enacted an ordinance named therein as the Lewis Township Zoning Ordinance, (the "Zoning Ordinance"); and

WHEREAS, the Pennsylvania Municipalities Planning Code, act of July 31, 1968, as amended, 53 P.S. §§ 10101 et seq., enables a municipality through its zoning ordinance to regulate the use of property and to promote the conservation of energy through access to and use of renewable energy resources; and

WHEREAS, Lewis Township seeks to promote the general health, safety and welfare of the community by adopting and implementing an amendment to the Zoning Ordinance providing for access to and use of solar energy systems; and

WHEREAS, the purpose of this Ordinance is to set forth requirements for solar energy systems;

IT IS HEREBY ENACTED AND ORDAINED by the Board of Supervisors of Lewis Township, Union County, Pennsylvania, as follows:

SECTION 1. AMENDMENTS: The following changes and amendments to the Lewis Township Zoning Ordinance are hereby adopted and enacted:

Article II

§202 Terms Defined:

Add new definitions:

Accessory Solar Energy System: An area of land or other area used for a solar collection system 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 (1) or more free-standing 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.

Glare: The effect produced by light with an intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility.

Principal Solar Energy System: 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 (1) or more free-standing 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.

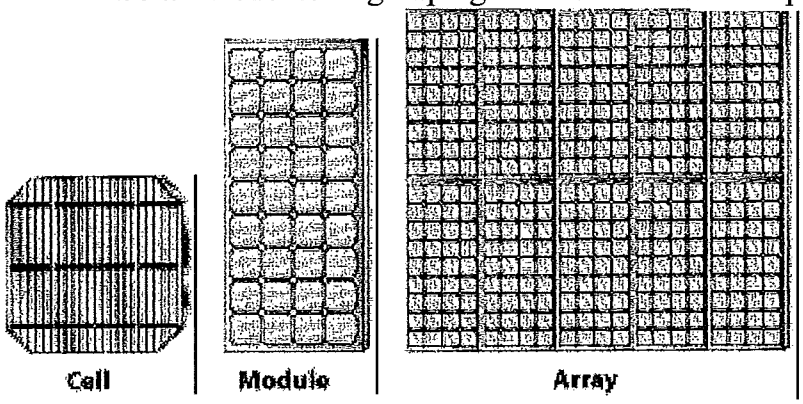
Solar Easement: A solar easement means a right, expressed as an easement, restriction, covenant, or condition contained in any deed, contract, or other written instrument executed by or on behalf of any landowner for the purpose of assuring adequate access to direct sunlight for solar energy systems.

Solar Energy: Radiant energy (direct, diffuse and/or reflective) received from the sun.

SOLAR PANEL: That part or portion of a solar energy system containing one or more receptive cells or modules, the purpose of which is to convert solar energy for use in space heating or cooling, for water heating and/or for electricity.

Solar Related Equipment: Items including a solar photovoltaic cell, module, panel, or array, or solar hot air or water collector device panels, lines, pumps, batteries, mounting brackets, framing and possibly foundations or other structures used for or intended to be used for collection of solar energy.

- **Solar Array:** A grouping of multiple solar modules with purpose of harvesting solarenergy.
- **Solar Cell:** The smallest basic solar electric device which generates electricity whenexposed to light.
- **Solar Module:** A grouping of solar cells with the purpose of harvesting solar energy.



Article VI

Add new Section **618 Accessory Solar Energy Systems (ASES)**

1. Regulations Applicable to All Accessory Solar Energy Systems:

1.1 ASES shall be a permitted use in all zoning districts.

1.2 Exemptions

1.2.1 ASES with an aggregate collection and/or focusing area of 100 square feet or less are exempt from this ordinance.

1.2.2 ASES constructed prior to the effective date of this Section shall not be required to meet the terms and conditions of this Ordinance. Any physical modification to an existing ASES whether or not existing prior to the effective date of this Section that materially alters the ASES shall require approval under this Ordinance. Routine maintenance or like-kind replacements do not require a permit.

1.3 The ASES layout, design, installation, and ongoing maintenance shall conform to applicable industry standards, such as those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations, and shall comply with the PA Uniform Construction Code as enforced by Lewis Township, and with all other applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the application.

Upon completion of installation, the ASES shall be maintained in good working order in accordance with standards of the Lewis Township codes under which the ASES was constructed. Failure of the property owner to maintain the ASES in good working order is grounds tor appropriate enforcement action by Lewis Township in accordance with applicable ordinances.

1.4 ASES installers must certify they are listed as a certified installer on the PA Department of Environmental Protection's (DEP) approved solar installer list or that they meet the criteria to be a DEP approved installer by meeting or exceeding one of the following requirements:

1.4.1 Is certified by the North American Board of Certified Energy Practitioners (NABCEP).

1.4.2 Has completed an Interstate Renewable Energy Council (IREC) Institute for

Sustainable Power Quality (ISPO) accredited PV training program or a PV manufacturer's training program and successfully installed a minimum of three PV systems.

1.4.3 For residential applications, a registered home improvement contractor with the Attorney General's office.

1.5 All on-site utility, transmission lines, and plumbing shall be placed underground to the extent feasible.

1.6 The owner of an ASES shall provide Lewis Township written confirmation that the public utility company to which the ASES will be connected has been informed of the customer's intent to install a grid connected system and approved of such connection. Oft-grid systems shall be exempt from this requirement.

1.7 The display of advertising is prohibited except for reasonable identification of the manufacturer of the system.

1.8 Glare

1.8.1 All ASES shall be placed such that concentrated solar radiation or glare does not project onto nearby structures or roadways.

1.8.2 The applicant has the burden of proving that any glare produced does not have significant adverse impact on neighboring or adjacent uses either through siting or mitigation.

1.9 Solar Easements

1.9.1 Where a subdivision or land development involves the use of solar energy systems, solar easements may be provided. Said easements shall be in writing, and shall be subject to the same conveyance and instrument recording requirements as other easements.

1.9.2 Any such easements shall be appurtenant; shall run with the land benefited and burdened; and shall be defined and limited by conditions stated in the instrument of conveyance. Instruments creating solar easement shall include but not be limited to:

1.9.2.1 A description of the dimensions of the easement including vertical and horizontal angles measured in the degrees or the hours of the day, on specified dates, during which direct sunlight to a specified surface or structural design feature may not be obstructed;

1.9.2.2 Restrictions on the placement of vegetation, structures, and other objects which may impair or obstruct the passage of sunlight through the easement;

1.9.2.3 Enumerate terms and conditions, if any, under which the easement may be revised or terminated;

1.9.2.4 Explain the compensation for the owner of the real property subject to the solar easement for maintaining the easement and for the owner of the real property benefiting from the solar easement in the event of interference with the easement.

1.9.3 If required, an ASES owner and/or operator must obtain any solar easements necessary to guarantee unobstructed solar access by separate civil agreement(s) with adjacent property owner(s).

1.10 Prior to the issuance of a zoning permit, applicants must acknowledge in writing that the issuing of said permit for a solar energy system shall not and does not create in the property owner, its, his, her or their successors and assigns in title or, create in the property itself: (a) the right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining or other property or the growth of any trees or vegetation on such property; or (b) the right to prohibit the development on or growth of any trees or vegetation on such property.

1.11 Decommissioning

1.11.1 Each ASES and all solar related equipment shall be removed within twelve (12) months of the date when the use has been discontinued or abandoned by system owner and/or operator, or upon termination of the useful life of same.

1.11.2 The ASES shall be presumed to be discontinued or abandoned if no electricity is generated by such solar collector for a period of twelve (12) continuous months.

1.11.3 The ASES owner shall, at the request of the township, provide information concerning the amount of energy generated by the ASES in the last 12 months.

1.12 Permit Requirements

1.12.1 Zoning /building permit applications shall document compliance with this Section and shall be accompanied by drawings showing the location of the system on the building or property, including property lines. Permits must be kept on the premises where the ASES is constructed.

1.12.2 The zoning/building permit shall be revoked if the ASES, whether new or pre-existing, is moved or otherwise altered, either intentionally or by natural forces, in a manner which causes the ASES not to be in conformity with this Ordinance.

1.12.3 The ASES 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. In the event of a violation of any of the foregoing provisions, the Zoning Officer shall give written notice specifying the violation to the owner of the ASES to conform or to remove the ASES.

2. Roof Mounted and Wall Mounted Accessory Solar Energy Systems:

2.1 A roof mounted or wall mounted ASES may be located on a principal or accessory building.

2.2 ASES mounted on roofs or walls of any building shall be subject to the maximum height regulations specified for principal and accessory buildings within each of the underlying Zoning Districts.

2.3 Wall mounted ASES shall comply with the setbacks for principal and accessory structures in the underlying zoning districts.

2.4 Solar panels shall not extend beyond any portion of the roof edge.

2.5 For roof and wall mounted systems, the applicant shall provide evidence that the plans comply with the Uniform Construction Code and adopted building code of the township that the roof or wall is capable of holding the load imposed on the structure.

3. Ground Mounted Accessory Solar Energy Systems:

3.1 Setbacks

3.1.1 The minimum yard setbacks from front, side and rear property lines shall be equivalent to the applicable setback requirements in the zoning district.

3.2 Height

3.2.1 Freestanding ground mounted ASES shall not exceed the applicable maximum height requirements in the underlying zoning district.

3.3 Coverage

3.3.1 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 the impervious surfaces limitations for the applicable Zoning District.

3.3.2 The total surface area of the arrays of ground mounted ASES on the property shall not exceed more than five (5%) percent of the lot area.

3.4 Appropriate safety/warning signage concerning voltage shall be placed at ground mounted electrical devices, equipment, and structures. All electrical control devices associated with the ASES shall be locked to prevent unauthorized access or entry.

3.5 Ground-mounted ASES shall not be placed within any legal easement or right-of-way location, or be placed within any storm water conveyance system or in any other manner that would alter or impede storm water runoff from collecting in a constructed storm water conveyance system.

Add new Section **619 Principal Solar Energy Systems (PSES)**

1. **Principal Solar Energy Systems (PSES)**

1.1 **Regulations Applicable to All Principal Solar Energy Systems:**

1.1.1 PSES shall be permitted as a conditional use in the Agricultural Preservation Zoning District.

1.1.2 Exemptions

1.1.2.1 PSES constructed prior to the effective date of this Section shall not be required to meet the terms and conditions of this Ordinance. Any physical modification to an existing PSES, whether or not existing prior to the effective date of this Section that materially alters the PSES shall require approval under this Ordinance. Routine maintenance or like-kind replacements do not require a permit.

1.1.2.2 The PSES layout, design and installation shall conform to applicable industry standards, such as those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM),), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations, and shall comply with the PA Uniform Construction Code as enforced by the Township and with all other applicable fire and life safety requirements.

1.1.2.3 The underground placement of on-site transmission lines and plumbing lines shall be utilized whenever possible consistent with the standard industry practices.

1.1.2.4 The owner of a PSES shall provide the Township with a written acknowledgement from the public utility company or the Regional Transmission Operator (RTO) to which the PSES will be connected that they have been informed of the customer's intent to install a grid connected PSES to their facilities.

1.1.2.5 No portion of the PSES shall contain or be used to display advertising. The manufacturer's name and equipment information or indication of ownership shall be allowed on any equipment of the PSES provided they comply with the prevailing sign regulations.

1.1.2.6 **Glare**

1.1.2.6.1 All PSES shall be placed such that concentrated solar radiation or glare does not project onto nearby structures or roadways.

1.1.2.6.2 The applicant has the burden of proving that any glare produced does not have significant adverse impact on neighboring or adjacent uses.

1.1.2.7 A noise study will be performed and included in the application. The noise study will be performed by an independent noise study expert and paid for by the applicant. Noise from a PSES shall not exceed 50 dBA, except during construction, as measured at the property line of non-participating land owners.

1.1.2.8 No trees or other landscaping otherwise required by the municipal ordinances or attached as a condition of approval of any plan, application, or permit may be removed for the installation or operation of a PSES.

1.1.2.9 The PSES owner and/or operator shall maintain a phone number and identify a person responsible for the public to contact with inquiries and complaints throughout the life of the project and provide this number and name to the Township. The PSES owner and/or operator shall make reasonable efforts to respond to the public's inquiries and complaints.

1.1.2.10 A Contingency Plan of Emergency Procedures shall be developed by the PSES owner consistent with standard operating practices of the industry and furnished to the Township, the local fire company and the County Department of Emergency Services.

1.2 Decommissioning

1.2.1 The PSES owner is required to notify the Township immediately upon cessation or abandonment of the operation. After the start of commercial operations of the PSES, the PSES shall be presumed to be discontinued or abandoned if no electricity is generated by such system for a period of twelve (12) continuous months.

1.2.2 The PSES owner shall then have twelve (12) 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 and other associated facilities from the property. If the owner fails to dismantle and/or remove the PSES within the established timeframes, the municipality may complete the decommissioning at the owner's expense. The Township may authorize one twelve (12) month extension for just cause shown by the PSES owner.

1.2.3 At the time of issuance of the permit for the construction of the PSES, the owner shall provide evidence that financial security will be in place at the start of commercial operation in the form and amount of a bond, irrevocable letter of credit, or other financial security acceptable to the Township to secure the expense of dismantling and removing said PSES and restoration of the land to its original condition, in the amount of 110% of the estimated decommission cost minus the salvageable value. Every 5 years a new engineer's estimate of probable cost of decommissions shall be submitted for approval in the same manner as the initial submission, and the bond, letter of credit, or other financial security acceptable to the Township shall be adjusted upward or downward as necessary.

1.2.4 Prior to the issuance of a zoning permit, PSES applicants must acknowledge in writing that the issuing of said permit shall not and does not create in the property owner, its, his, her or their successors and assigns in title or, create in the property itself: (a) the right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining or other property or the growth of any trees or vegetation on such property, except as is otherwise agreed to in writing with any participating landowner; or (b) the right to prohibit the development on or growth of any trees or vegetation on such property, except as is otherwise agreed to in writing with any participating landowner.

1.3 Permit Requirements

1.3.1 PSES shall comply with the Township subdivision and land development requirements. The installation of PSES shall be in compliance with all applicable permit requirements, codes, and regulations.

1.3.2 The PSES owner and/or operator shall repair, maintain and replace the PSES and related solar equipment during the term of the permit in a manner consistent with industry standards as needed to keep the PSES in good repair and operating condition.

1.4 Ground Mounted Principal Solar Energy Systems:

1.4.1 Minimum lot size

5 (five) acres

1.4.2 **Minimum Setbacks**

PSES shall comply with the following minimum:

Fence: 25 ft. From Property Line

Panels
Front: 50 ft.
Side: 50 ft. From Property
Line Rear: 50 ft.

1.4.2.1 In all cases there shall be minimum distance of 100 (one- hundred) feet between adjacent non-participating residential structures and any component of the PSES including fences, buildings, panels, and other equipment.

1.4.2.2 The minimum side and rear yards specified above may be waived in the case of adjoining tracts of land within a single PSES. With Landowners Mutual Consent.

1.4.3 **Height**

1.4.3.1 Ground mounted PSES shall not exceed 20 feet in height.

1.4.4 **Impervious Coverage**

1.4.4.1 The area beneath the ground mounted PSES is considered pervious cover. However, use of impervious construction materials under the system could cause the area to be considered impervious and subject to the impervious surfaces limitations for the applicable Zoning District.

1.4.4.2 The following components of a PSES shall be considered impervious coverage and calculated as part of the impervious coverage limitations for the underlying zoning district:

1.4.4.2.1 Foundation systems, typically consisting of driven piles or monopoles or helical screws with or without small concrete collars.

1.4.4.2.2 All mechanical equipment of PSES including any structure for batteries or storage cells. For zoning purposes, the solar modules themselves, however, are not included as impervious cover.

1.4.5 Gravel or paved access roads servicing the PSES.

1.4.6 PSES owners are required to follow the current *PA DEP Guidelines for Solar Collectors* as a best management practice for storm water management.

1.4.7 Ground mounted PSES shall be screened from non-participating adjoining residential uses unless landowner waives such requirement. Also highly trafficked sections of road, shall be screened as determined by the Township. The location and specifications for required screening shall be indicated on the land development plan.

1.4.8 In the Agricultural Preservation Zoning District, no more than 20 percent of the entire area for development shall consist of Class 1 and Class II prime agricultural soils as defined by the current version of the NRCS Custom Soil Resource Report.

1.4.9 Ground-mounted PSES shall not be placed within any legal easement or right-of-way location, or be placed within any storm water conveyance system or in any other manner that would alter or impede storm water runoff from collecting in a constructed storm water conveyance system.

1.5 **Security**

1.5.1 All ground-mounted PSES shall be completely enclosed by a minimum six (6) foot high fence and gates shall have locks.

1.5.2 A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence on the surrounding the PSES informing individuals of potential voltage hazards.

1.6 **Access**

1.6.1 At a minimum, a 25' wide access road must be provided from a state or township roadway into the site.

1.6.2 Service roads, at a minimum 16' width, shall be provided to allow access for maintenance vehicles and emergency management vehicles including fire apparatus and emergency vehicles.

1.6.3 The ground mounted PSES shall not be artificially lighted except to the extent required for safety or applicable federal, state, or local authority.

1.6.4 If a ground mounted PSES is removed, any earth disturbance resulting from the removal must be graded and reseeded.

1.7 **Roof and Wall Mounted Principal Solar Energy Systems:**

1.7.1 For roof and wall mounted systems, the applicant shall provide evidence that the plans comply with the Uniform Construction Code and adopted building code of the township/borough that the roof or wall is capable of holding the load imposed on the structure.

1.7.2 PSES mounted on the roof or wall of any building shall be subject to the maximum height regulations of the underlying zoning district.

SECTION 2. AFFECT ON REMAINING PROVISIONS: Except as amended hereby, the Zoning Ordinance shall continue and remain in full force and effect.

SECTION 3. EFFECTIVE DATE: The provisions of this Ordinance shall become effective atthe earliest possible date permitted by law.

ORDAINED AND ENACTED ON THIS, THE_____ DAY OF_____, 2021.

BOARD OF SUPERVISORS,
LEWIS TOWNSHIP

ATTEST:

_____
Wayne A. Klingman, Chairman

_____
Karen L. Watters, Secretary

_____
Robert W. Goss, Jr., Supervisor

_____
Karen L. Watters, Supervisor