# CLIFFORD TOWNHSIP SUSQUEHANNA COUNTY, PENNSYLVANIA ADOPTING AN ORDINANCE FOR PRIMARY SOLAR ENERGY SYSTEM IN PENNSYLVANIA

An Ordinance of Clifford Township adopting model ordinance for Principal solar energy systems in Pennsylvania sources in an effort to preserve the health, safety, and wellbeing of the inhabitants of Clifford Township.

**BE IT ORDAINED AND ENACTED** by the Board of Supervisors of the Township of Clifford, County of Susquehanna and of the Commonwealth of Pennsylvania, and it is hereby ordained and enacted by the authority of the same, as follows:

WHEREAS, in recent years Clifford Township has seen a growth of various economic activity tied to industrial and commercial use of its lands; and the people of the Township continue to seek a peaceful and quiet atmosphere in which to enjoy the use of their lands, and

WHEREAS, the Township has recognized a need to regulate and balance the use and development of lands in the Township with the quiet enjoyment and use of the same and to avoid disruption of the inhabitant's peaceful use of the land and resources of the Township and the health, safety, and wellbeing of its residents and therefore, enacts the following ordinance:

# ORDINANCE FOR PRIMARY SOLAR ENERGY SYSTEM IN PENNSYLVANIA

#### 1. TITLE:

This Ordinance shall be known as the Primary Solar Energy System Ordinance for Clifford Township.

#### 2. PURPOSE:

The purpose of the Ordinance is to provide for the construction and operation of Primary Solar Energy Systems (PSES) in Clifford Township, subject to reasonable conditions that will protect the public health, safety, and welfare.

#### DEFINITIONS:

- A. "Applicant" is the Landowner or Developer, as those terms are defined in the Municipalities Planning Code and including their heirs, successors, and assigns, who has filed an application for development of a PSES under this Ordinance.
- B. "Primary Solar Energy System (PSES) Owner" means the person or entity having an equity interest in the PSES, including their heirs, successors, and assigns.
- C. "Operator" means the entity responsible for the day-to-day operation and maintenance of the PSES.

The following words, terms and phrases, when used in this ordinance, unless the context indicates otherwise, shall have the following meanings ascribed to them:

Accessory Solar Energy System (ASES) - 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 the majority of which is 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 to a reasonable person of ordinary sensibilities.

"Primary Solar Electric System (PSES)" - 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 the majority of which is used 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 Array - A grouping of multiple solar modules with purpose of harvesting solar energy.

Solar Module - A single photovoltaic panel made up of a grouping of Solar Cells

Solar Cell - The smallest basic solar electric device which generates electricity when exposed to light.

Solar Easement - 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 into electricity.

Solar Related Equipment - Items including a solar photovoltaic cell, module, panel or array or solar hot air or water collector

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device panels, lines pumps, batteries, mounting brackets, framing and possibly foundation or other structures used for or intended to be used for collection of solar energy.

## 4. APPLICABILITY:

A. This Ordinance applies to any PSES proposed to be constructed after the effective date of this Ordinance with the specific purpose of generating off-site energy use through distribution of power through distribution or transmission lines.

- B. A PSES constructed prior to the effective date of this Ordinance shall not be required to meet the requirements of this Ordinance; provided that any physical modification or alteration to an existing PSES that materially alters the size, type or components of the PSES shall require a permit under this Ordinance. Routine operation and maintenance or like-kind replacements do not require a permit.
- C. ASES are exempt from this ordinance. Except that 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 as described in applicable industry standards such as Uniform Construction Code. In the event of a violation of any of the foregoing provisions the Township Code Enforcement Officer shall give written notice specifying the violation to the owner of the ASES to conform or to remove the ASES.

# 5. LAND DEVELOPMENT REQUIREMENTS:

No land development plan providing for the construction or installation of a PSES or addition to an existing PSES shall be approved unless such plan has complied with the requirements of

# 6. ADDITIONAL LAND DEVELOPMENT REQUIREMENTS:

- A. Applications filed pursuant to this Ordinance shall comply with the Subdivision and Land Development Ordinance of Clifford Township and shall contain the following:
  - 1. A narrative describing the proposed PSES, including an overview of the project; the project location; the approximate generating capacity of the PSES, the approximate number, representative types and height or range of heights of the panels or other associated equipment to be constructed, including their generating capacity, dimensions and respective manufacturers, and a description of all ancillary facilities.
  - 2. An affidavit or similar evidence of an option with verification of a lease agreement between the Landowner of the real property on which the PSES is to be located and the PSES Owner, demonstrating that the PSES Owner has permission of the Landowner to apply for necessary permits or approvals for construction and operation of the PSES ("Participating Landowner Agreement").
  - 3. Identification of the properties or portions thereof on which the proposed PSES will be located, and the names of owners of contiguous properties adjacent to where the PSES will be located.
  - 4. A site plan showing the planned location of each PSES property lines, setback lines, access roads and turnout locations, substation(s), electrical cabling from the PSES to ancillary equipment, storage battery locations, buildings, and structures, including solar related equipment, distribution and/or transmission lines, and layout of all structures within the geographical boundaries of any

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applicable setback.

- 5. Documents related to decommissioning, including a schedule for decommissioning.
- 6. Other relevant studies, reports, certifications, and approvals (for example glare or noise studies) as may be provided by the Applicant or required by the Township to ensure compliance with this Ordinance.
- B. Within one hundred eighty (180) calendar days after receipt of a land development application the Township will determine whether the application is complete and advise the applicant accordingly. The Applicant will be required to reimburse the Township for all engineering, administrative, and or expert review costs incurred by the Township relative to the project.

#### 7. DESIGN AND CONSTRUCTION:

- A. <u>Design Safety Certification</u>: The design of the PSES shall conform to applicable industry standards, including those of the American National Standards Institute. The Applicant shall submit certificates of design compliance obtained by the equipment manufacturers from Underwriters Laboratories (UL), IEEE, Solar Rating and Certification Corporation (SRCC), ETL, Florida Solar Energy Center (FSEC) or other similar certifying organizations.
- B. <u>Uniform Construction Code</u>: The PSES shall be constructed to and comply with the Pennsylvania Uniform Construction Code, Act 45 of 1999, as amended, and any regulations adopted by the Pennsylvania Department of Labor and Industry as they relate to the UCC, except where an applicable industry standard has been approved by the Department of Labor and Industry under its regulatory authority.

# C. <u>Visual Appearance</u>:

1. PSES shall not be artificially lighted, except to the

extent required by safety or by any applicable federal, state, or local authority. Moreover, any such lighting installed shall be shielded to prevent night light pollution

- 2. PSES shall not display advertising, except for reasonable identification of the panel, inverter or other equipment manufacturer.
- 3. On-site transmission and power lines shall, to the maximum extent practicable, be placed underground.
- 4. A PSES shall be enclosed by a fence at least 8 feet high that is sufficiently opaque to prohibit a person at ground level for seeing through it, to prevent or restrict unauthorized persons or vehicles from entering the property. This fence will have at a minimum a self-locking entrance gate and additional self-locking emergency gates appropriately located as determined by the Clifford Township Fire Company to allow emergency vehicles access.
- 5. In addition to the physical barrier, naturally occurring vegetation such as ever green trees and shrubberies and approved by the Township Planning Commission, will be used to block the line of sight at ground level. The vegetation will be maintained on an annual basis to replace dying or diseased vegetation.
- 6. A Clearly visible warning sign, 4 feet by 4 feet stating the name and address, company business of the PSES owner, and the 24 hour emergency phone number for the PSES operator shall be placed on the fence at both the operational entrance and the emergency entrance. In addition warning signs to inform individuals of potential voltage hazards will be placed on all sides of the perimeter fence.
- 7. The PSES will be required to meet the decibel emissions level in the Township noise ordinance as measured at the PSES Fence.
  - 8. Ground screening is required to prohibit glare

1

reflecting onto the tallest nearby building beyond the system.

9. A Storm Water Management System in compliance with all State and Federal Departments of Environmental Protection and approved by Township Planning Commission will be established to prevent run off negatively impacting local bodies of water or adjacent properties and causing erosion of soil.

# 8. SETBACKS:

- A. <u>Property lines</u>: All PSES solar related equipment shall be set back from the nearest property line a distance of not less than the maximum setback requirements by Clifford Township Subdivision and Land Development Ordinance. The setback distance shall be measured from the closest edge of the PSES to the property line.
- B. A PSES shall be sited in such a way that it presents no threat to traffic or to public health and safety.
  - C. Internal Setbacks:
- 1. At a minimum, a 25' wide access road must be provided from a site or township road into the site.
- 2. At a minimum, a 20' wide cart ways shall be provided between the solar panels rows and the solar panels and enclosing fence in sufficient numbers as approved by the Township Fire Department to allow access for maintenance vehicles and emergency response vehicles including fire apparatus and emergency vehicles. Cartway width is the distance between the bottom edge of a solar panel to the top edge of the solar panel directly across it.
- 3. Access to PSES shall comply with the municipal access requirements in the Subdivision and Land Development Ordinance.

#### 9. DECOMMISSIONING:

- A. The PSES Owner and Operator shall, at their expense, complete decommissioning of the PSES or individual PSES Solar related equipment within twelve (12) months after the end of the useful life of such PSES or Equipment. A PSES or related equipment will be presumed to be at the end of its useful life if no commercially viable electricity is generated for a continuous period of twelve (12) months. It is the responsibility of the PSES owner and operator to notify the Township of any such termination of production.
- B. Decommissioning shall include removal of all PSES fencing, Solar related equipment, buildings, cabling, underground conduit and pipes electrical components, roads, foundations, and any other associated facilities. It shall include all infrastructure materials installed above or below ground level for the purpose of establishing a PSES.
- C. Disturbed earth shall be graded and re-seeded unless the landowner requests in writing that the access roads or other land surface areas not be restored.
- D. All removal, and restoration of the Decommissioned PSES site will be verified by Township Engineers and experts to the Township's satisfaction before any bond or financial security will be returned to the PSES owner.
- E. Prior to ground disturbance for the purpose of the initiation of construction of the PSES, the owner shall provide financial security, 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 decommissioning, dismantling and removing the facility and restoration of the land to its original condition, in the amount of 110% of the estimated decommissioning cost.
  - E. The bond amount will be reviewed and adjusted every five

- (5) years, the Township's engineer's estimate of probable cost of decommissioning 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. This financial security shall be adjusted upward or downward as necessary. The owner of the PSES shall pay for all fees associated with the review and approval of each such decommissioning cost estimated by the Township engineer.
- F. Groundwater testing groundwater samples shall be taken from the site by the Township engineer prior to construction to establish a baseline for heavy metals or other contaminants common to solar array materials. Further samples shall be taken every two years thereafter to make sure that there are no contaminants leaking into the soil at the site.

## 10. REMEDIES:

- A. It shall be unlawful for any person, firm or corporation to violate or fail to comply with or take any action that is contrary to the terms of this Ordinance, or a permit issued under this ordinance or cause another to violate or fail to comply or take any action which is contrary to the terms of this Ordinance or a permit issued under this Ordinance.
- B. If, after thirty (30) days from the date of the notice of violation, the Clifford Township determines, in its discretion, that the parties have not resolved the alleged violation, the Township may institute civil enforcement proceedings or any other remedy at law or in equity to ensure compliance as provided in the Clifford Township subdivision and Land Development Ordinance.

# 11. SEVERABILITY AND EFFECTIVENESS:

- Should any part of this Ordinance be rendered or declared invalid, preempted by other legislation, or unconstitutional, by a court of competent jurisdiction of the State of Pennsylvania, such invalidation of such part or portion of this Ordinance should not invalidate the remaining portions thereof, and they shall remain in full force and effect.
- Any ordinances or part of ordinances inconsistent herewith are hereby appealed.
- The provisions of this Ordinance shall become effective on the

DULY ENACTED AND ORDAINED this 3 day of June

by the Board of Supervisors in lawful session duly assembled.

TOWNSHIP OF CLIFFORD

By:

SUPERVISOR