HANOVER TOWNSHIP ORDINANCE NO: 80

AN ORDINANCE OF THE TOWNSHIP OF HANOVER, BEAVER COUNTY PENNSYLVANIA AMENDING THE ZONING ORDINANCE, "59" TO PERMIT AS AN ACCESSORY USE, ACCESORY SOLAR ENERGY SYSTEMS (ASES) BY RIGHT IN ALL DISTRICTS AND TO PERMIT AS A PRINCIPAL USE, PRINCIPAL SOLAR ENERGY SYSTEMS (PSES) IN THE A-1 AGRICULTURE ZONING DISTRICT AND I-1 INDUSTRIAL ZONING DISTRICT

SECTION 1 - INTRODUCTION

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, Hanover 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 Hanover Township, Beaver County, Pennsylvania, as follows:

SECTION 2 – 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, roof or building 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.

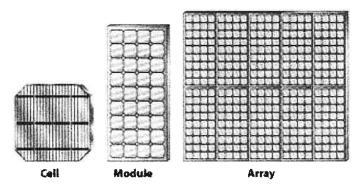
SOLAR EASEMENT: A solar easement means a right, expressed as an easement, restriction, covenant, or condition contained in any deed, contract, or other written instrument executed by or on behalf of any landowner for the purpose of assuring adequate access to direct sunlight for solar energy systems.

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.

- 1. SOLAR ARRAY: A grouping of multiple solar modules with purpose of harvesting solar energy.
- 2. SOLAR CELL: The smallest basic solar electric device which generates electricity when exposed to light.
- 3. SOLAR MODULE: A grouping of solar cells with the purpose of harvesting solar energy.



SECTION 3 - ACCESSORY SOLAR ENERGY SYSTEMS (ASES)

- A. Regulations Applicable to All Accessory Solar Energy Systems:
 - 1. ASES shall be permitted as a use by right in all zoning districts.
 - 2. The installation of a ASES shall not constitute a land development under the Hanover Township Subdivision and Land Development Ordinance.
 - 3. Exemptions
 - a. ASES with an aggregate collection and/or focusing area of (100) square feet or less are exempt from this ordinance.

- b. 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.
- 4. The ASES layout, design, installation and ongoing maintenance shall conform to applicable industry standards, including, but not limited to the National Electrical Code (NEC) and shall comply with the PA Uniform Construction Code (UCC) as amended and as enforced by Hanover 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 Hanover Township codes, regulations and ordinances under which the ASES was constructed. The subject use shall conform to and be maintained in accordance with the manufacturer's specifications for the entire life of the use. Failure of the property owner to maintain the ASES in good working order in accordance with the manufacturer's specifications is grounds for appropriate enforcement actions by Hanover Township in accordance with applicable ordinances.

- 5. All on-site utility, transmission lines and plumbing shall be placed underground to the extent feasible.
- 6. The owner of an ASES shall provide Hanover 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. Off-grid systems shall be exempt from this requirement.
- 7. The display of signage, graphic content and/or advertising is prohibited except for reasonable and required identification of the manufacturer of the system in an area not to exceed 36 square inches in size.

8. Glare

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

9. Solar Easements

- a. 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.
- b. 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:

- i. 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;
- ii. Restrictions on the placement of vegetation, structures, and other objects which may impair or obstruct the passage of sunlight through the easement;
- iii. Enumerate terms and conditions, if any, under which the easement may be revised or terminated;
- iv. 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.
- c. 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).
- 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.

11. Decommissioning

Section 2

- a. 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.
- b. 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.
- c. 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.

12. Permit Requirements

- a. 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.
- b. 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.

c. 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 or Code Enforcement Officer shall give written notice specifying the violation to the owner of the ASES to conform or to remove the ASES within Sixty (60) days of receipt of the notification.

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

- 1. A roof mounted or wall mounted ASES may be located on a principal or accessory building.
- 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 and in no instance shall the ASES extend above the peak or highest part of the roof or wall to which its is mounted.
- 3. Wall mounted ASES shall comply with the setbacks for principal and accessory structures in the underlying zoning districts.
- 4. Solar panels shall not be mounted within four (4) feet of any portion of the roof's edge.
- 5. For roof and wall mounted systems, the applicant shall provide evidence that the plans comply with the Uniform Construction Code (UCC) as amended and adopted building codes of the Township and that the roof or wall is capable of holding the load imposed on the structure.

C. Ground Mounted Accessory Solar Energy Systems:

1. Setbacks

a. The minimum yard setbacks from side and rear property lines shall be equivalent to the principal structure setback in the zoning district and ground mounted ASES are prohibited in front yards, between the principal building and the public street.

2. Height

a. Ground mounted ASES shall not exceed (15) feet in height above the ground elevation surrounding the systems.

3. Coverage

a. The surface area of the arrays of a ground mounted ASES, regardless of the mounted angle of any solar panels, shall be considered impervious and calculated in the lot coverage of the lot on which the system is located. The applicant shall submit a Stormwater Management Plan that demonstrates compliance with the applicable governmental stormwater management Ordinances, laws and regulations.

4. Screening

- a. Ground mounted ASES shall be screened from any adjacent property that is residentially zoned or used for residential purposes at the time of the installation of the ASES. The screen shall consist of evergreen plant materials which provide a visual screen. Immediate replacement of evergreen plant materials which have died is required. In lieu of a planting screen, a decorative fence capable of providing a visual screen and meeting requirements of the zoning ordinance may be used.
- 5. 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.
- 6. 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.

SECTION 4 - PRINCIPAL SOLAR ENERGY SYSTEMS (PSES)

A. Regulations Applicable to All Principal Solar Energy Systems:

1. PSES shall be a permitted use in the A-1 Agricultural Zoning District and the I-1 Industrial Zoning District subject to the terms, provisions and requirements of this Ordinance, the Hanover Township Zoning Ordinance, the Hanover Township Subdivision and Land Development Ordinance and all other applicable Township and other Governmental Rules, Laws, Regulations and Ordinances.

2. Exemptions

- a. PSES constructed prior to the effective date of this Ordinance 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.
- 3. The PSES layout, design and installation and ongoing maintenance shall conform to applicable industry standards, including but not limited to the National Electrical Code (NEC) and the National Electrical Safety Code (NESC) and shall comply with the PA Uniform Construction Code (UCC) as amended and as enforced by Hanover 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 and said specifications and shall be maintained and complied with for the life of the use.
- 4. PSES installers must demonstrate 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:
 - a. Is certified by the North American Board of Certified Energy Practitioners (NABCEP).

- b. Has completed an Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (ISPQ) accredited PV training program or a PV manufacturer's training program and successfully installed a minimum of three PV systems.
- 5. All on-site transmission and plumbing lines shall be placed underground to the extent feasible.
- 6. The owner of a PSES shall provide the Township written confirmation that the public utility company to which the PSES will be connected has been informed of the customer's intent to install a grid connected system and approved of such connection.
- 7. 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 for the zoning district in which the system is located.

8. Glare

- a. All PSES shall be placed such that concentrated solar radiation or glare does not project onto nearby structures or roadways.
- b. 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.
- 9. Noise from a PSES shall not exceed (50) dBA, as measured at the property line.
- 10. 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.
- 11. 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.
- 12. The PSES owner and/or operator shall conduct/provide on-site solar energy/solar panel and associated solar related equipment training for local firefighters and emergency responders prior to commissioning energizing and/or activating the PSES.

13. Decommissioning

- a. The PSES owner 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 by such system for a period of twelve (12) continuous months.
- b. 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.

- c. At the time of the issuance of the permit for the construction of the PSES, the owner shall provide financial security in the form and amount acceptable to Hanover Township to secure the expense of decommissioning, dismantling and removing said PSES, including but not limited to, regrading as necessary, vegetation/seeding of any disturbed areas, providing erosion control, dismantling and removing 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 PSES owner fails to comply with the above decommissioning requirements.
- 14. 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; or (b) the right to prohibit the development on or growth of any trees or vegetation on such property.

15. Solar Easements

- a. Where a subdivision or land development proposes a PSES, 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.
- b. 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:
 - i. 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;
 - ii. Restrictions on the placement of vegetation, structures, and other objects which may impair or obstruct the passage of sunlight through the easement;
 - iii. Enumerate terms and conditions, if any, under which the easement may be revised or terminated:
 - iv. 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.
- c. If necessary, a PSES 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).

16. Permit Requirements

a. PSES shall comply with Hanover Township's Zoning and Subdivision and Land Development requirements. In addition, the installation of PSES shall be in compliance with all applicable Governmental permit requirements, codes, rules, laws, regulations and ordinances.

b. 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.

17. Inspection

The Township reserves the right to inspect a permitted PSES to ensure compliance with the provisions of this section and any other provisions found within the Township Code or state or federal law. The Township and/or its agents shall have the authority to enter the property upon which a PSES is located at any time, upon reasonable notice to the operator and landowner, to ensure such compliance.

18. Land Development

The installation of a PSES shall constitute a land development under Hanover Township's Subdivision and Land Development Ordinance.

19. Retention of Experts

The Township may hire any consultant(s) and/or expert(s) necessary to assist the Township in reviewing and evaluating the application for approval of the PSES and, once approved, in reviewing and evaluating the application any potential violations of the terms of this section. The applicant and/or owner of the PSES shall reimburse the Township for all costs of the Township's consultant(s) in providing expert evaluation and consultation in connection with these activities.

B. Ground Mounted Principal Solar Energy Systems:

1. Minimum lot size

a. The PSES shall meet the lot size requirements of the underlying zoning district.

2. Setbacks

a. The PSES shall comply with the setbacks of the underlying zoning districts for principal structures.

3. Height

a. Ground mounted PSES shall not exceed (15) feet in height.

4. Impervious Coverage

- a. The surface area of the arrays of a ground mounted PSES, regardless of the mounted angle of any solar panels, shall be considered impervious calculated in the lot coverage of the lot on which the system is located.
- b. The applicant shall submit a Stormwater Management Plan that demonstrates compliance with the Township's stormwater management regulations.

5. Screening.

- a. Ground mounted PSES shall be screened from adjoining residential uses and RI and R2 Zoning Districts. The screen shall consist of two rows of a mixture of evergreen trees on 15' staggered centers which provide a visual screen. Evergreens shall be a minimum of 3' tall when planted. Immediate replacement of dead trees shall be required.
- 6. 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.

7. Security

- a. All ground-mounted PSES shall be completely enclosed by a minimum seven (7) foot high fence with a self-locking gate.
- b. 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.

8. Access

- a. At a minimum, a 25' wide mud free gravel or paved access road must be provided from a state or township roadway into the site.
- b. At a minimum, a 20' wide mud free gravel cartway with 5 foot grassed shoulders shall be provided between the solar arrays to allow access for maintenance vehicles and emergency management 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 from it.
- 9. The ground mounted PSES shall not be artificially lighted except to the extent required for safety or applicable federal, state, or local authority.
- 10. If a ground mounted PSES is removed, any earth disturbance resulting from the removal must be graded and reseeded.

C. Roof and Wall Mounted Principal Solar Energy Systems:

- For roof and wall mounted systems, the applicant shall provide evidence that the plans comply
 with the Uniform Construction Code (UCC) as amended and as enforced by Hanover Township
 and adopted building codes of the Township that the roof or wall is capable of holding the load
 imposed on the structure.
- 2. A roof mounted or wall mounted PSES may be located on a principal or accessory building. A PSES mounted on the roof or wall of any building shall be subject to the maximum height regulations of the underlying Zoning Districts and in no instance shall the PSES extend above the peak or highest point of the roof or wall to which it is mounted.

SECTION 5 - MISCELLANEOUS

A. SEVERABILITY If any chapter, section, subsection, paragraph, sentence or phrase of this Ordinance is for any reason declared invalid by a court of competent jurisdiction such decision shall not affect the validity of the Ordinance a whole any section or part thereof other than the section or part thereof so declared to be invalid.

B. REPEALER Any Ordinance, chapter, section, subsection, paragraph, sentence or phrase of any Ordinance conflicting with the provision of this Ordinance is hereby repealed to the extent of such conflict.

ORDAINED and ENACTED this 13	day of October, 2020.
ATTEST:	TOWNSHIP OF HANOVER
Sharon Vinci	George Roberts
Hanover Township Secretary	Chairman,
	Hanover Township Board of Supervisors
	BY: Samue D. Color
	Sam Eaton, Supervisor
	BY:

Steve Zalusky, Supervisor