

**TOWN OF WALLKILL**

**LOCAL LAW NO. \_\_\_ OF 2016**

**A LOCAL LAW REGULATING CERTAIN SOLAR ENERGY SYSTEMS AND EQUIPMENT WITHIN THE TOWN OF WALLKILL**

Be it enacted by the Town Board of the Town of Wallkill, County of Orange, State of New York, as follows:

Section 1. This Local Law is enacted for the purpose of creating regulations for the installation and use of solar energy generating systems and equipment within the territory of the Town of Wallkill.

The portion of the Town of Wallkill Town Code entitled **Chapter 249. ZONING** shall be and hereby is amended by this Local Law as follows:

The following is added as the new Article XX entitled “Solar Energy Systems and Equipment,” comprising of the newly added Sections 249-109 through 249-117, as follows:

**Section 249-109. Purpose**

The purpose of this article is to encourage and promote solar energy systems while protecting the health and safety of the residents of the Town of Wallkill by establishing regulations for the installation of small scale solar energy systems and equipment for residential and commercial purposes.

**Section 249-110. Definitions**

Unless otherwise stated, the following definitions shall apply solely to this Article XX Solar Energy Systems and Equipment:

**ACCESSORY BUILDING**

“Accessory Building” shall have the same meaning as that defined in Section 249-3 of this Chapter.

**ALTERNATIVE ENERGY SYSTEMS**

Structures, equipment, devices or construction techniques used for the production of heat, light, cooling, electricity or other forms of energy on site and may be attached to or separate from the principal structure.

**BUILDING-INTEGRATED PHOTOVOLTAIC (BIPV) SYSTEMS**

A solar energy system that consists of integrating photovoltaic modules into the building structure, such as the roof or the façade and which does not later the relief of the roof.

**COLLECTIVE SOLAR**

Solar installations owned collectively through subdivision homeowner associations,

college student groups, “adopt-a –solar-panel” programs, or other similar arrangements.

**FLUSH MOUNTED SOLAR PANEL**

A photovoltaic panel or tile that is installed flush to the surface of a roof and which cannot be angled or raised.

**FREESTANDING OR GROUND-MOUNTED SOLAR ENERGY SYSTEM**

A solar energy system that is directly installed in the ground and is not attached or affixed to an existing structure. Pole mounted solar energy systems shall be considered Freestanding or Ground- Mounted Solar Energy Systems for purposes of this Local Law.

**GLARE**

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

**NET-METERING**

A billing arrangement that allows solar customers to get credit for excess electricity that they generate and deliver back to the grid so that they only pay for their net electricity usage at the end of the month.

**PERMIT GRANTING AUTHORITY**

The Building and Code Enforcement Department, which is charged with granting permits for the operation of solar energy systems.

**PHOTOVOLTAIC (PV) SYSTEMS**

A solar energy system that produces electricity by the use of the semiconductor devices, called photovoltaic cells that generate electricity whenever light strikes them.

**QUALIFIED SOLAR INSTALLER**

A person who has skills and knowledge related to the construction and operation of solar electrical equipment and installations and has received safety training on the hazards involved. Persons who are on the list of eligible photovoltaic installers maintained by the New York State Energy Research and Development Authority (NYSERDA), or who are certified as a solar installer by the North American Board of Certified Energy Practitioners (NABCEP), shall be deemed to be qualified solar installers for the purposes of this definition. Persons who are not on NYSEDA’s list of eligible installers or NABCEP’s list of certified installers may be deemed to be qualified solar installers if the Town determines such persons have had adequate training to determine the degree and extent of the hazard and the personal protective equipment and job planning necessary to perform the installation safely. Such training shall include the proper use of special precautionary techniques and personal protective equipment, as well as the skills and techniques necessary to distinguish exposed energized parts from other parts of electrical equipment and to determine the nominal voltage of exposed live parts.

**ROOFTOP OR BUILDING MOUNTED SOLAR SYSTEM**

A solar power system in which solar panels are mounted on top of the structure of a roof

either as a flush mounted system or as modules fixed to frames which can be tilted toward the south at an optimal angle.

#### **SETBACK**

The distance from a front lot line, side lot line or rear lot line of a parcel within which a free standing or ground mounted solar energy system is installed.

#### **SMALL-SCALE SOLAR**

For purposes of this Article, the term “small-scale solar” refers to solar photovoltaic systems that produce up to ten kilowatts (kW) per hour of energy or solar –thermal systems which serve the building to which they are attached, and do not provide energy for any other buildings.

#### **SOLAR ACCESS**

Space open to the sun and clear of overhangs or shade including the orientation of streets and lots to the sun so as to permit the use of active and/or passive solar energy systems on individual properties.

#### **SOLAR ARRAY**

A group of multiple solar modules with purpose of harvesting solar energy.

#### **SOLAR CELL**

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

#### **SOLAR COLLECTOR**

A solar photovoltaic cell, panel, or array, or water collector device, which relies upon solar radiation as an energy source for the generation of electricity or transfer of stored heat.

#### **SOLAR EASEMENT**

An easement recorded pursuant to NY Real Property Law 335-b, the purpose of which is to secure the right to receive sunlight across real property of another for continued access to sunlight necessary to operate solar collector.

#### **SOLAR ENERGY EQUIPMENT/SYSTEM**

Solar collectors, controls, energy devices, heat pumps, heat exchangers, and other materials, hardware or equipment necessary to the process by which solar radiation is collected, converted into another form of energy, stored, protected from unnecessary dissipation and distributed. Solar Systems include solar thermal, photovoltaic, and concentrated solar. For the purposes of this law, solar energy system does not include any solar energy system of four square feet in size or less.

#### **SOLAR FARM or SOLAR POWER PLANT**

Energy generation facility or area of land principally used to convert solar energy to electricity, whether by photovoltaics, concentrating solar thermal devices or various experimental solar technologies, with the primary purpose of wholesale or retail sales of

electricity.

**SOLAR MODULE**

A grouping of solar cells with the purpose of harvesting solar energy.

**SOLAR PANEL**

A device for the direct conversion of solar energy into electricity.

**SOLAR STORAGE BATTERY**

A device that stores energy from the sun and makes it available in an electrical form.

**SOLAR –THERMAL SYSTEMS**

Solar thermal systems directly heat water or other liquid using sunlight. The heated liquid is used for such purposes as space heating and cooling, domestic hot water, and heating pool water.

**Section 249-111. Applicability**

- A. The requirements of this local law shall apply to all solar energy system and equipment installations modified or installed after the effective date of this local law.
- B. Solar energy system installations for which a valid building permit has been issued or, if no building permit is presently required, for which installation has commenced before the effective date of this local law shall not be required to meet the requirements of this local law.
- C. All solar energy systems shall be designed, erected and installed in accordance with all applicable codes, regulations and industry standards as referenced in the State Building Code and the Town Code.
- D. Solar collectors, unless part of a Solar Farm or Solar Power Plant, shall be permitted only to provide power for use by owners, lessees, tenants, residents, or other occupants of the premises on which they are erected, but nothing contained in this provision shall be construed to prohibit “collective solar” installations or the sale of excess power through a “net billing” or “net-metering” arrangement in accordance with New York Public Service Law 66 or similar state or federal statute.

**Section 249-112. Permit Required**

- A. No Small Scale solar energy system or device shall be installed or operated in the Town except in compliance with this article.
- B. Rooftop and Building-Mounted Solar Collectors are permitted in all zoning districts in the Town subject to the following conditions:

- (1) Building permits shall be required for installation of all rooftop and building-mounted solar collectors.
- (2) Rooftop and Building-Mounted Solar Collectors shall not exceed the maximum allowed height by more than four (4) feet of the principal use in any zoning district.
- (3) There shall be adequate ventilation opportunities afforded by panel set back from other rooftop equipment (for example; shading or structural constraints may leave significant areas open for ventilation near HVAC equipment);
- (4) In order to ensure firefighter and other first responder safety, in accordance with the New York State Uniform Fire Prevention and Building Code, there shall be a minimum perimeter area around the edge of the roof and structurally supported pathways to provide space on the roof for walking around all Rooftop and Building-Mounted Solar Collectors. Additionally, installations shall provide for adequate access and spacing in order to:
  - (a) Ensure access to the roof;
  - (b) Provide pathways to specific areas of the roof;
  - (c) Provide for smoke ventilation opportunity areas; and
  - (d) Provide emergency egress from the roof.

Exceptions to these requirements may be requested where access, pathway or ventilation requirements are reduced due to:

- (i) Alternative access opportunities (such as from adjoining roofs);
- (ii) Ground level access to the roof area in question;
- (iii) Adequate ventilation opportunities afforded by panel set back from other rooftop equipment;
- (iv) New technology, methods, or other innovations that ensure adequate emergency responder access, pathways, and ventilation opportunities.

In the event any of the standards in this subsection B(4) are more stringent than the New York State Uniform Fire Prevention and Building Code, they shall be deemed to be installation guidelines only and the standards of the State Code shall apply.

- (5) Rooftop and Building-Mounted Solar Collectors must be properly engineered to support solar collectors. The applicant must provide a signed and sealed certification from a New York State licensed professional engineer containing the following information:

- (a) The roof structure is strong enough to support the additional weight of the solar units as per Chapter 16 “dead load” standards of the New York State Building Code.
- (b) All solar collectors are in compliance with Chapter 14 of the New York State Mechanical Code.
- (c) The solar energy system is constructed and installed in compliance with Article 690 of the National Electric Code.

In the event any of the standards in this subsection 249-112(B) is more stringent than the New York State Uniform Fire Prevention and Building Code, the standards in this subsection shall be deemed to be installation guidelines only and the standards of the State Code shall apply.

- C. **Building-Integrated Photovoltaic (BIPV) Systems:** BIPV systems are permitted in all zoning districts and shall be shown on the plans submitted for the building permit application for the building containing the system.
- D. **Free Standing and ground mounted solar collectors:** Free standing or ground mounted solar collectors are permitted as accessory structures in all zoning districts of the Town of Wallkill, subject to the following conditions.
  - (1) The location of the solar collector meets all applicable setback requirements for accessory buildings in the zoning district in which it is located.
  - (2) The solar collector must be installed in a side or rear yard.
  - (3) No unit shall exceed 10 feet in height from the ground unless an area variance is obtained from the Zoning Board of Appeals.
  - (4) Freestanding and ground mounted solar energy collectors shall be screened when possible and practicable through the use of architectural features, earth berms, landscaping, or other screening which will harmonize with the character of the property and surrounding area.
  - (5) The total surface area of all ground-mounted and freestanding solar collections on a lot shall not exceed the area of the ground covered by the building structure of the largest building on the lot, providing that non-residential placements exceeding this size may be approved by the Planning Board, subject to site place review pursuant to Article XI of this Chapter.
- E. Building permits are required for the installation of all ground-mounted and free standing solar collectors.
- F. **Solar Thermal Systems:** Solar Thermal Systems are permitted in all zoning districts subject to the following conditions:
  - (1) Building permits are required for the installation of all solar thermal systems.
  - (2) Ground mounted and free standing solar-thermal systems shall be subject

to the same requirements set forth above as for Ground Mounted and Free Standing Solar Collectors.

- G. Solar energy systems and equipment shall be permitted only if they are determined by the Town not to present any unreasonable safety risks, including, but not limited to, the following:
  - (1) Weight Load, inclusive of snow and ice loads
  - (2) Wind resistance
  - (3) Ingress and egress in the event of fire or other emergency.
- H. The Building Inspector shall have authority to determine compliance with the requirements set forth in this provision. Consideration shall be made regarding glare or other adverse effects on neighboring properties when determining compliance with this provision.

### **Section 249-113. Safety**

- A. All solar collector installations must be performed by a qualified solar installer.
- B. Prior to operation, electrical connections must be inspected by a Town Code Enforcement Officer and by an appropriate electrical inspection person or agency, as determined by the Town. **(issue a certificate of compliance?)**
- C. Any connection to the public utility grid must be inspected by the appropriate public utility.
- D. Solar energy systems shall be maintained in good working order.
- E. All solar collectors shall meet New York's Uniform Fire Prevention and Building Code Standards.
- F. If solar storage batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure meeting the requirements of the New York State Building Code when in use and when no longer used shall be disposed of in accordance with the laws and regulations of the Town and other applicable laws and regulations.
- G. If a ground mounted solar collector ceases to perform its originally intended function for more than 12 consecutive months, the property owner shall remove the collector, mount and associated equipment by no later than 90 days after the end of the twelve-month period. In the event that the property owner fails to remove the aforesaid non-functioning system within the time proscribed herein, the Town shall then be permitted to enter upon the land where such system has been installed and remove same. All expenses incurred by the Town in connection with the removal of the non-functioning system shall be assessed

against the land on which such building is located and shall be levied and collected in the same manner as provided in Article 15 of the Town Law for the levy and collection of a special ad valorem levy.

- H. Solar Energy Systems and Equipment shall be marked in order to provide emergency responders with appropriate warning and guidance with respect to isolating the solar electric system. Materials used for marking shall be weather resistant. For residential applications, the marking may be placed within the main service disconnect. If the main service disconnect is operable with the service panel closed, then the marking should be placed on the outside cover.
- (1) For Commercial application, the marking shall be placed adjacent to the main service disconnect in a location clearly visible from the location where the lever is operated.
  - (2) In the event any of the standards in this subsection 249-113(H) for markings are more stringent than applicable provisions of the New York State Uniform Fire Prevention and Building Code they shall be deemed to be guidelines only and the standards of the State Code shall apply.

#### **Section 249-114. Solar Farms and Solar Power Plants**

Solar Farms and Solar Power Plants shall be permitted in any zone as an "Electric Generating use, subject to site plan review and approval by the Planning Board, and subject to the following supplementary regulations:

- A. Solar farms and solar power plants shall be enclosed by perimeter fencing at a height of 8 feet to restrict unauthorized access.
- (1) The fencing shall be black, rubber coated, and chain-linked.
  - (2) For any parcel of property that is primarily forested, no fencing shall be closer than 250 feet from any road.
  - (3) For any parcel of property that is primarily clear of brush, trees and other screening vegetation, no fencing shall be closer than 1,000 feet from any road.
- B. Solar Farms and Solar Plants cannot exceed 10 acres of property. No greater than 10% of a parcel of property will be permitted for use as a Solar Farm or Solar Power Plant. This restriction shall apply to all zones.
- C. The manufacturers or installer's identification and appropriate warning signage shall be posted at the site clearly visible.
- D. Solar farm and solar power plan buildings and accessory structures shall, to the extent reasonably possible, use materials, colors, and textures that will blend the facility into the existing environment.



- E. No more than 15% of the total existing brush, trees and other screening vegetation on a parcel of property may be removed in order to accommodate a solar farm.
- F. Appropriate landscaping and/or screening materials may be required to help screen the solar power plant, access roads and accessory structures from public roads.
- G. The average height of the solar panel array shall not exceed twelve (12) feet.
- H. Solar farm and Solar Power Plant panels and equipment shall be ground-mounted only, and shall be surfaced, designed and sited so as not to reflect unreasonable glare onto adjacent properties and roadways.
- I. All on-site power lines shall be installed underground with the exception of the main service connection at the utility company right of way.
- J. The following requirements shall be met for decommissioning:
  - (a) Solar farms and solar power plants which have not been in active and continuous service for a period of 1 year shall be removed at the owners or operators expense;
  - (b) The site shall be restored to as natural a condition as possible within one (1) year of removal.

**Section 249-115. Penalties.**

The provisions of Article XVI of this Chapter shall apply to any violation of this Article.

**Section 249-116. Appeals**

- A. Upon a finding of a violation of the provisions of this Local Law, appeals should be made in accordance with the established procedures and time limits of this Chapter and the New York State Town Law.
- B. If a building a permit for a solar energy device is denied based upon failure to meet the requirements of this Local Law, the applicant may seek relief from the Town of Wallkill Zoning Board of Appeals in accordance with the established procedures and time limits of this Chapter and the New York State Town Law.

**Section 249-117. Building Permit Fees for Solar Panels**

The fees for all building permits required pursuant to this Local Law shall be paid at the time each building permit application is submitted in such reasonable amount as the Town Board may by resolution establish and amend from time to time.

**Section 2. Severability**

If any part or provision of this Local Law or the application thereof to any person or

circumstance be adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part or provision or application directly involved in the controversy in which such judgment shall have been rendered and shall not affect or impair the validity of the remainder of this Local Law or the application thereof to other persons or circumstances, and the Town Board of the Town of Wallkill hereby declares that it would have passed this Local Law or the remainder thereof had such invalid application or invalid provision been apparent.

Section 3. Repeal

All ordinances, local laws and parts thereof inconsistent with this Local Law are hereby repealed.

Section 4. Authority

This Local Law is enacted pursuant to the Municipal Home Rule Law. This Local Law shall supersede the provisions of Town Law to the extent it is inconsistent with the same, and to the extent permitted by the New York State Constitution, the Municipal Home Rule Law, or any other applicable statute.

Section 5. Effective Date

This law shall become effective upon filing with the office of the New York State Secretary of State in accordance with section 27 of the Municipal Home Rule Law.