

Local Law \_\_\_\_ of the year 2021  
Amending the Zoning Code of the Town of Putnam Valley

Be it Enacted that Chapter 165 of the Town Code be Amended to add a new Article XXIV  
regulating solar energy systems

## Solar Energy Systems

### § 165-111 Solar energy systems.

- A. Purpose. Because it is in the public interest to provide for and encourage renewable energy systems and a sustainable quality of life, the purpose of this section is to facilitate the development and operation of renewable energy systems based on sunlight. Solar energy systems are appropriate in certain zoning districts when measures are taken, as provided in this section, to minimize adverse impacts on neighboring properties and protect the public health, safety and welfare.
- B. Definitions. As used in this section, the following terms shall have the meanings indicated:

#### **BUILDING-INTEGRATED PHOTOVOLTAIC PRODUCT (BIPV)**

A building product that incorporates photovoltaic modules and functions as a component of the building envelope, which includes photovoltaic siding, photovoltaic canopies and awnings, photovoltaic shingles and other photovoltaic roof coverings.

#### **BUILDING-INTEGRATED PHOTOVOLTAIC SYSTEM**

A solar energy system that use building-integrated photovoltaic products.

#### **COMMERCIAL SOLAR ENERGY SYSTEM**

A solar energy system designed to produce electricity for off-site energy consumption, which is operated as a commercial or nonprofit activity. Commercial solar energy systems include net-metered systems that are designed to produce more than 110% of the average yearly energy requirements for the property on which the solar energy system is located.

#### **GROUND-MOUNTED SYSTEM**

A solar energy system that is anchored to the ground and attached to a pole or similar mounting system, detached from any other structure.

#### **LEGALLY PERMITTED STRUCTURES**

Principal and accessory structures permitted under the current Zoning Code for which a certificate of occupancy or a certificate of compliance has been issued or structures which do not require a certificate of occupancy or certificate of compliance because they were created before building permits were required or otherwise do not require the certificate.

The determination of whether a structure requires a certificate of occupancy or certificate of compliance shall be made by the Zoning Administrator.

**SOLAR ENERGY SYSTEMS FOR PRIVATE/RESIDENTIAL**

Any solar panel collection system or array utilized for the on-site consumption of a business or residence that does not generate more than 5KWh of electrical power in total.

**ROOF-MOUNTED SYSTEM**

A solar panel or panels located on a roof of a legally permitted principal use or accessory structure.

**SOLAR ENERGY EQUIPMENT**

Energy storage devices, material, hardware, or electrical equipment and conduit associated with the production of electrical energy, not including solar panels.

**SOLAR ENERGY SYSTEM**

An electrical generating system composed of a combination of both solar panels and solar energy equipment.

**SOLAR PANEL**

A device capable of collecting and converting solar energy into electrical energy.

**§ 165-112. Safety Requirements.**

1. All solar energy systems shall comply with the New York State Uniform Fire Prevention and Building Code and the New York State Energy Conservation Construction Code established pursuant to New York Executive Law § 381(2) (New York State Uniform Code).
2. In the event that the New York State Uniform Code contains more restrictive regulations covering solar energy systems than those noted in this subsection and the regulations conflict, then the New York State Uniform Code regulations shall prevail.

**§ 165-114. Solar energy systems for private/residential use.**

1. Roof-mounted systems. Roof-mounted solar energy systems for private/residential (RMSES) are permitted as an accessory use in all zoning districts when attached to a legally permitted structure, as defined in Subsection 98-54.1 B above, subject to the requirements set forth in this section:
  - a. Height. RMSES shall not exceed maximum height restrictions within any zoning district and are provided the same height exemptions granted to building-mounted mechanical devices or equipment pursuant to the Zoning Code.
  - b. Setback. RMSES are subject to the setback requirements of the underlying zoning district. Any RMSES to be placed on principal or accessory structures

which do not meet the setback requirements, whether such structures are permitted pursuant to the grant of a variance from the setback requirements or are preexisting, nonconforming, shall apply to the Zoning Board of Appeals for a special use permit from this requirement to insure that there is no adverse impact to neighboring properties.

- c. Aesthetics. Solar installation shall incorporate the following design requirements:
    1. Solar energy equipment shall be installed inside walls and attic spaces, where practical, to reduce the visual impact. If solar energy equipment is visible from a public right-of-way, it shall match the color scheme of the underlying structure to the extent possible. Marking of electrical equipment shall be in accordance with the Uniform Code, the NEC or other applicable codes.
    2. Roof-mounted solar panels facing the front yard must be mounted at approximately the same angle as the roof's surface with a maximum distance of 18 inches between the roof and highest edge of any panel.
    3. Solar panels affixed to a flat roof shall be placed below the line of sight from a public right-of-way. If topography makes this requirement impractical, then the Zoning Administrator shall make the determination relating to the enforcement of this provision.
    4. Solar panels shall be constructed of a material designed to minimize glare and shall be roof mounted in a manner to minimize impact to any neighboring property. In no way will a rooftop solar installation be permitted where snow or rain runoff will adversely affect public safety or adjacent property.
  - d. The applicant shall complete the Putnam Valley unified solar permit application which shall be developed and approved by the Building Inspector. Applications for RMSES shall be submitted to and approved by the Building Inspector in accordance with the standards and conditions set forth in this Chapter and the NYS Building and Fire Prevention Code.
2. Ground-mounted systems. Ground mounted-solar energy systems for private/residential use (GMSES) are permitted as an accessory use, and the installations will be treated as accessory structures in all zoning districts, subject to the requirements set forth in this section, as well as all other requirements set forth in the Town Code applicable to such use:
    - a. All ground-mounted solar panels in residential districts shall be installed in the side yard or rear yard.

- b. Setback. Ground-mounted solar panels are subject to setback requirements of the underlying zoning district; provided, however, that in zoning districts which have a minimum lot size of 3 access or more, a minimum setback of 100 feet from any property line is required.
- c. Height Solar panels are restricted to a height of 12 feet from the ground under the solar panel to the highest point of the solar panel or racking structure, whichever is greater.
- d. Lot coverage. The total surface area of ground-mounted solar panels shall be included in lot coverage and impervious surface calculations. If the supporting structure of a ground-mounted solar energy system is solid or in any way blocks the ability for rain to reach the ground, then the entire structure shall be included in the impervious surface calculations. In no event shall the GMSP system have a lot coverage of more than 5,000 Sq. Ft.
- e. Planning Board review and approval. All GMSES shall be subject to site plan review and approvable by the Planning Board. The Planning Board shall consider the location, siting, screening, neighborhood or viewshed impacts, stormwater runoff and other environmental impacts. Applications shall include the location of residences on all adjoining properties. Negative environmental impacts, including clearing of existing trees, shall be avoided, to the extent possible, in the siting.
- f. Verification of utility notification. Each applicant shall submit a copy of their application to the public electrical utility. Foreseeable infrastructure upgrades shall be documented and submitted and shall be subject to approval by the Planning Board. No building permit will issue for a solar energy system designed for commercial power generation (e.g. power for wholesale or retail sales).
- g. The application shall set forth the name, address, and contact information of the applicant, property owner(s), and agent submitting the proposed project.
- h. All applications shall include plans, acceptable to the consulting engineer for the Planning Board, showing the layout of the solar energy system. All equipment specification sheets shall be documented and submitted for all photovoltaic panels, significant components, mounting systems and inverters that are to be installed.
- i. Screening. GMSES shall be screened with perimeter plantings, to consist of evergreen plantings having a minimum height of four feet at the time of installation, and shall be placed in a manner to alleviate any visual impact from the systems to either public roads or neighboring properties. The screening shall be maintained at all times and shall be replaced as soon as practicable if damaged or destroyed for any reason. The Planning Board has

the authority to take the physical characteristics of the site into consideration as it relates to viewshed and screening requirements.

- j. If the Planning Board determines that a landscape buffer will not provide adequate screening, then the Planning Board may require a ground-mounted system to be fully screened from adjacent properties and roads by fencing or a combination of fencing and evergreen and deciduous plantings. Plantings used for screening shall be of such a height and width, at the time of planting, so as to obscure the ground-mounted system from adjacent properties. Said screening shall be subject to the prior review and approval of the Planning Board to ensure compliance with this requirement. The Planning Board has the authority to take the physical characteristics of the site into consideration as they relate to viewshed and screening requirements.
- k. Ground-mounted systems shall be placed in such a way to balance the benefit to the property owner with adverse impacts to neighboring properties. The Planning Board has authority to increase the setback requirements where there is an adverse impact to neighboring properties.

### 3. Installation requirements.

- a. All solar energy system installations must be performed in accordance with applicable electrical and building codes, the manufacturer's installation requirements, and industry standards. Prior to operation, the electrical connections must be inspected by the Town Building Department and by an appropriate electrical inspection person or agency, as approved by the Town. In addition, any connection to the public utility grid must be inspected by the appropriate public utility.
- b. Connection to the public utility grid system must be accomplished without additional infrastructure in the public right-of-way necessary to connect such system to the grid. Any new connecting lines on premises to connect the public right-of-way shall be placed underground. Infrastructure required, by the utility, for utility interconnection located in the utility right-of-way and upgrades to an existing overhead utility service drop is permitted.
- c. Whole solar storage batteries are included as part of the solar energy system, they must be placed in a secure container or enclosure meeting the requirements of the New York State Uniform Code when in use and, when no longer used, shall be disposed of in accordance with the laws and regulations of Putnam County and other applicable laws and regulations.
- d. Warning signs. All warning signs and equipment markings for the solar energy systems shall be in accordance with the New York State Uniform Code, the NEC and the NFPA.

C. Commercial solar energy systems. Due to the potential for negative impacts to neighborhood character and to other environmental resources from commercial activity related to energy generation, supply and transmission in residential zones, commercial solar energy systems are strictly prohibited in all residential and CD and PD zoning districts in the Town. Commercial solar energy systems shall be permitted only as a Special Permit Use in CC-1 and CC-2 zoning districts. Commercial solar energy systems shall be subject to the following requirements (in addition to the requirements for a special permit application and site plan review):

- (1) Height and setback requirements. Commercial solar energy systems shall adhere to the height and setback requirements of the underlying zoning district. Additional restrictions and setback requirements may be imposed during the Planning Board site plan permit process at the sole discretion of the Planning Board.
- (2) Lot coverage. Solar installations as a principal use shall be subject to lot coverage regulations in all districts where permitted. However, in no event shall the lot coverage of the Commercial Solar Energy System exceed 7 acres, the maximum building area permitted for a structure in the zoning district, or 10% of the Lot Area, whichever is less.
- (3) All commercial solar energy systems shall be enclosed by fencing to prevent unauthorized access. Warning signs with the owner's contact information shall be placed on the entrance and perimeter of the fencing. The height and type of fencing shall be determined by the Planning Board during the site plan process.
- (4) In addition to the above restrictions, the following requirements shall apply:
  - a. Verification of utility notification. The applicant shall submit a copy of the electrical utility's application with the initial Town application. Required utility infrastructure upgrades shall be documented and submitted and shall be deemed part of the site plan approval required by the Planning Board. No building permit will be issued until such time that the electrical utility has provided approval, preliminary or otherwise. Utility equipment in the right-of-way is exempt from this provision. A commercial solar energy system to be connected to the utility grid shall provide a proof of concept letter from the local utility company acknowledging the commercial solar energy system will be interconnected to the utility grid in order to sell electricity to the public utility entity.

- b. The applicant shall submit the name, address and contact information of the applicant, property owner(s), and agent submitting the proposed project.
- c. If the property of the proposed project is to be leased, legal consent between all parties, specifying the use(s) of the land for the duration of the projects, including easements and other agreements, shall be submitted.
- d. Site plan approvals required pursuant to Town Code Section 165-28.
- e. Plans of the solar installation showing the layout of the system which are acceptable to the engineering consultant to the Planning Board shall be submitted.
- f. The equipment specification sheets shall be documented and submitted for all photovoltaic panels, significant components, mounting systems, and inverters that are to be installed.
- g. Property operation and maintenance plan. A property operation and maintenance plan is required, describing continuing photovoltaic maintenance and property upkeep, such as mowing, trimming, fence inspection and any needed repairs, etc.
- h. Height restrictions. The maximum height for ground-mounted commercial solar energy systems shall not exceed 12 feet in height above the ground measured from the ground under the solar panel to the highest point of the solar panel or racking, whichever is greater.
- i. Design standards.
  - 1. Screening. A ground-mounted commercial solar energy system shall be screened with perimeter planting, to consist of evergreen plantings, having a minimum height of four feet at the time of installation, and shall be set back as determined by the Planning Board in a manner to minimize the visual impact of the commercial solar energy system upon neighboring properties, public roads and public areas.
  - 2. A landscape buffer shall be provided around all equipment and solar panels to provide screening from adjacent properties and roads. The Planning Board has the authority to take the physical characteristics of the site into consideration as they relate to viewshed and screening requirements.

3. Ground cover under and between the rows of solar panels shall be low-maintenance, drought-resistant natural fauna, or pervious pavers when approved by the Planning Board.
4. Any new roadways within the site shall be constructed of pervious materials and shall be designed to minimize the extent of roadways constructed and soil compaction.
5. All on-site utility and transmission lines shall, to the extent feasible, be placed underground.
6. All commercial solar energy system facilities shall be designed and located in order to prevent reflective glare toward any inhabited building and adjacent properties as well as public roads.
7. All mechanical equipment of a commercial system, including any structure for batteries or storage cells, shall be completely enclosed by a minimum six-foot high fence with a self-locking gate and provided with landscape screening in accordance with the landscaping provisions of this chapter.
8. Commercial solar energy systems must meet the safety regulations as set forth in Subsection C above; and must be kept in good repair and condition.

(5) Signs.

- a. A sign not to exceed eight square feet shall be attached to the fence adjacent to the main access gate and shall list the facility name, owner and phone number.
- b. A clearly visible warning sign must be placed at the base of all pad-mounted transformers and substations, clearly marked "Danger", and list all voltages present.

(6) Abandonment.

- a. All applications for commercial solar energy systems shall be accompanied by a decommissioning plan to be implemented upon abandonment, or cessation of activity, or in conjunction with removal of the structure. Prior to issuance of a building permit, the owner or operator of the facility or structure shall post a performance bond or other suitable guarantee in a face amount of not less than 150% of the estimated cost, or other approved method of addressing the solar energy system's end of life, as determined by the Town Engineer, to



ensure removal of the solar energy system or facility or structure in accordance with the decommissioning plan described below. The form of the guarantee must be reviewed and approved by the Town Engineer and Town Attorney, and the guarantee must remain in effect until the system is removed. Review of the guarantee by the Town Engineer and Town Attorney shall be paid from an escrow established by the applicant. Prior to removal of a solar energy system production facility or structure, a demolition permit for removal activities shall be obtained from the Town.

- b. If the applicant ceases operation of the solar energy system or structure for a period of 18 months or begins but does not complete construction of the project within 18 months after receiving final site plan approval, the applicant will submit a decommissioning plan that ensures that the site will be restored to a useful, nonhazardous condition without delay, including but not limited to the following:
  1. Removal of aboveground and below-ground equipment structures and foundations.
  2. Restoration of the surface grade and soil after removal of equipment.
  3. Revegetation of restored soil areas with native seed mixes, excluding any invasive species.
  4. The plan shall include a time frame for a completion of site restoration work.
- c. In the event that construction of the solar energy system or structure has been started but is not completed and functioning within 18 months of the issuance of the final site plan, the Town may notify the operator and /or the owner to complete construction and installation of the facility within 180 days. If the owner and/or operator fails to perform, the Town may notify the owner and/or operator to implement the decommissioning plan. The decommissioning plan must be completed within 180 days of notification by the Town.
- d. Upon cessation of activity of a fully constructed solar energy system or structure for a period of one year, the Town may notify the owner and/or operator of the facility to implement the decommissioning. Within 180 days of notice being served, the owner and/or operator can either restore the system to equal to 80% of approved capacity or implement the decommissioning plan or provide a restoration plan for the unused portion of the solar energy system.

- e. If the owner and/or operator fails to fully implement the decommissioning plan within the one-hundred-eighty-day time period, and restore the site as required, the Town may, at its own expense, provide for the restoration of the site in accordance with the decommissioning plan and may, in accordance with the law, recover all expenses incurred for such activities from the defaulted owner and/or operator. The cost incurred by the Town shall be assessed against the property, shall become a lien and tax upon said property, shall be added to and become a part of the taxes to be levied and assessed thereon, and shall be enforced and collected with interest by the same officer and in the same manner as other taxes.