

Proposed Revisions to Copake Town Code as it pertains to Solar Energy Facilities August 8, 2020

Update notes: Proposed changes modify § 232-3, Definitions, and Section § 232-16.12. Solar energy Facilities.
Additions noted in underline, deletions noted with strikethrough.

Section § 232-3.

A. Definitions:

~~SMALL SCALE SOLAR ENERGY SYSTEM~~

~~Any solar energy system that cumulatively on a lot meets all of the following provisions:~~

- ~~A. Is an accessory use or structure, designed and intended to generate energy primarily for a principal use, located on that lot.~~
- ~~B. Produces up to 10 kilowatts (kW) of energy, or is a solar thermal system which serves the building to which it is attached and does not provide energy for any other buildings beyond the lot.~~
- ~~C. Notwithstanding the above, a solar energy system located on a farm operation, as defined in § 301(11) or the relevant provision of the New York State Agriculture and Markets Law, and located in a New York State Agricultural District, which primarily serves the needs of such farm operation and produces up to 110% of the farm's needs, or other amount that may be established by resolution of the Copake Town Board in accordance with New York State Department of Agriculture and Markets guidance, shall be deemed a small-scale solar energy system.~~
- ~~D. A system that does not exceed the production or output limits and otherwise conforms to the requirements of this definition shall not be excluded from designation as a small-scale solar energy system as a result of selling or otherwise receiving credits or benefits for excess energy provided to the distribution grid.~~

~~SOLAR ENERGY SYSTEM~~

~~A system of components intended for the collection, inversion, storage, and/or distribution of solar energy and that directly or indirectly generates thermal, chemical, electrical, or other usable energy. A solar energy system consists of,~~

~~but is not limited to, solar collectors, mounting devices or structures, generators/turbines, water and energy storage and distribution systems, storage, maintenance and/or other accessory buildings, inverters, fans, combiner boxes, meters, transformers, and all other mechanical structures.~~

SOLAR ENERGY SYSTEM: A system of components intended for the collection, inversion, storage, and/or distribution of solar energy and that directly or indirectly generates thermal, chemical, electrical, or other usable energy. A solar energy system consists of, but is not limited to, solar collectors, mounting devices or structures, generators/turbines, water and energy storage and distribution systems, Battery Energy Storage Systems, storage, maintenance and/or other accessory buildings, inverters, fans, combiner boxes, meters, transformers, and all other mechanical structures. The term also includes, but is not limited to, Solar Panels and Solar Energy Equipment. The area of a Solar Energy System includes all the land inside the perimeter of the Solar Energy System, which extends to any interconnection equipment. A Solar Energy System is classified as a Tier 1, Tier 2, Tier 3 or Tier 4 Solar Energy System as follows:

- (a) Tier 1 Solar Energy Systems include the following:
 - [1] Roof-Mounted Solar Energy Systems; and
 - [2] Building-Integrated Solar Energy Systems.
- (b) Tier 2 Solar Energy Systems include Ground-Mounted Solar Energy Systems with a total surface area of all solar panels on the lot of not more than two thousand (2,000) square feet and that generate over a 12 month period not more than 110% of the electricity consumed on the site over the previous 12 months.
 - [1] Notwithstanding the above, a solar energy system located on a farm operation, as defined in § 301(11) or the relevant provision of the New York State Agriculture and Markets Law, and located in a New York State Agricultural District, which primarily serves the needs of such farm operation and produces up to 110% of the farm's needs, or other amount that may be established by resolution of the Copake Town Board in accordance with New York State Department of Agriculture and Markets guidance, shall be deemed a Tier 2 solar energy system subject to limitations on farmland conversion contained in Section§ 232-16.12 (F) and (G) .
 - [2] A system that does not exceed the production or output limits and otherwise conforms to the requirements of this definition shall not be excluded from designation as a Tier 2 solar energy system as a result of selling or otherwise receiving credits or benefits for excess energy provided to the distribution grid.
- (c) Tier 3 Solar Energy Systems are systems that are not included in the list for Tier 1, Tier 2, or Tier 4 Solar Energy Systems.

- (d) Tier 4 Solar Energy Systems are utility scale solar energy Systems. Tier 4 systems include any solar 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, designed and intended to supply energy primarily into a utility grid for sale to the general public or to supply multiple users located off the site on which the energy system is located.

§ 232-16.12. Solar energy facilities.

A. Purpose and intent.

- (1) The Town of Copake recognizes that solar energy is a clean, readily available, and renewable energy source. It further recognizes that energy generated from solar energy systems can be used to offset energy demand on the grid where excess solar power is generated.
- (2) The Town of Copake has determined that comprehensive zoning regulations regarding the development of solar energy systems and associated Battery Energy Storage Systems are necessary to protect the health, safety, and interests of the Town, its residents, its farmland, and its businesses. This article aims to accommodate solar energy systems and associated Battery Energy Storage Systems while balancing the potential impact on neighbors, and while preserving the rights of property owners to install appropriately sited solar energy systems. This article is intended to promote the effective and efficient use of solar energy resources; set provisions for the placement, design, construction, and operation of such systems to be consistent with the Town of Copake Comprehensive Plan; to uphold the public health, safety, and welfare; and to ensure that such systems will not have a significant adverse impact on the environment or on aesthetic qualities and character of the Town.
- (3) The Town of Copake enjoys numerous local features, conditions, or circumstances of an exceptional or unique nature. Through this law the Town intends to ensure that no Solar Energy System is constructed without a rigorous review of the specific potential impacts on unique or exceptional features, conditions, or circumstances, including but not limited to:
- (a) Growing bicycle tourism industry and associated benefits to local economy;
 - (b) The Rheinstrom Hill Audubon Center and Sanctuary and other ecological resources;
 - (c) Abundance of prime farmland and associated rural character of the Town; and

(d) Copake Lake, Bash Bish Brook, Taconic State Park, Taghkanic Creek, and any other unique, exceptional, or particularly sensitive features, conditions, or circumstances.

(4) Intent: greater restrictions to prevail. It is not intended by this article to abrogate or impair existing conditions previously made or permits previously issued relating to the use of buildings. Whenever this article imposes a greater restriction upon the use of buildings or premises than is required by existing provisions of law, ordinance, or regulations, the provisions of this article shall control.

B. Enabling Authority: This section is adopted pursuant to New York Town Law §§ 261-263, New York State Municipal Home Rule Law § 10(ii)(a)(12), and Article IX, §§ 1(a) and 2(c) of the New York State Constitution.

C. Applicability.

(1) The requirements of this article shall apply to all solar energy systems and equipment installations installed or modified after the effective date of this chapter.

(2) Solar energy system installations for which a valid building permit has been issued, or if no building permit was required, for which installation commenced before the effective date of the enactment of this article, shall not be required to meet the requirements of this article. However, to the extent any such solar energy installation is proposed to be enlarged, modified, or changed, such enlargement, modification, or change shall be subject to the requirements of this article. In addition, any system for which plans have previously been submitted in connection with an issued building permit or other approval or permit from the Town, which is proposed to be enlarged, modified, or changed from the previously submitted plans, shall be subject to the requirements of this article to the extent of such enlargement, modification, or change.

(3) In order to promote innovative design and encourage the inclusion of alternative energy systems within the overall design of a building, solar energy systems determined by the Building Inspector to be building-integrated photovoltaic (BIPV) systems, as defined herein, are exempt from the requirements of this chapter.

(4) Any proposed Solar Energy System subject to review by the New York Board on Electric Generation and Siting and the Environment pursuant to Article 10 of the New York State Public Service Law, or the Office of Renewable Energy Siting pursuant to Article 94-c of the Executive Law, shall be subject to all substantive provisions of this Section and any other applicable Copake Town Law.

D. ~~Requirements for small-scale solar energy systems.~~ Tier 1 and Tier 2 Solar Energy Systems.

(1) ~~No small-scale solar energy~~ Tier 1 or Tier 2 system shall be installed or

operated in the Town of Copake except in compliance with this section.

- (2) The installation of one or more solar collectors or panels, whether attached to the main structure, an accessory structure, or detached, free-standing or ground-mounted, or a qualifying solar-thermal system, is permitted as an accessory use. Such installation shall require a building permit.
- (3) Setbacks for solar energy systems by district. Solar collectors or panels are subject to the minimum setbacks and other dimensions for whatever zoning district in which they are proposed to be installed. Installation of a ground-mounted solar energy system located in a front yard is prohibited. A roof-mounted system that is wholly within the footprint of an existing structure that is subject to a prior setback area variance shall be deemed to be in compliance with setback requirements and shall not be required to obtain an additional setback variance.
- (4) Height limits for solar collectors mounted on buildings shall be five feet above the level of the permitted building height. The height of ground-mounted solar energy systems shall not exceed 15 feet when oriented at maximum height.
- (5) All solar collectors and their associated support elements shall be installed in accordance with manufacturers' specifications and in compliance with the New York State Uniform Fire Prevention and Building Code and any other applicable law, regulation, ordinance, or code.
- (6) In order to ensure firefighter and other emergency responder safety, there shall be a minimum perimeter area, not covered by any solar equipment, of 36 inches around the edge of the roof and adjacent to transitions, which include vertical walls, dormers, valleys, chimneys, vents, and other protrusions, irregularities, or changes to contour, to provide space on the roof for walking around all solar collectors and panels. For ground-mounted units, there shall be a minimum horizontal clearance of 48 inches between array rows.
- (7) In order to mitigate electrical hazard to firefighters and other emergency responders, the following shall be implemented:
 - (a) Direct current (DC) and alternating current (AC) isolation switches for the energy system shall be located in close proximity to the electrical service meter.
 - (b) A photovoltaic (PV) system shall have an isolation switch on the electrical service to prevent energy from being fed into the service during a power failure.
 - (c) The electrical meter of a building served by a photovoltaic (PV) system shall have affixed to it a utility warning sticker stating, in substance, that the building is served by a photovoltaic system.
- (8) Tier 1 solar energy systems shall not be subject to site plan review.

- (9) Tier 2 solar energy systems shall be subject to a modified site plan review by the Planning Board. No public hearing shall be required for such modified site plan review. Such review shall be limited to consideration of the following factors only, and site plan approval shall be granted by the Planning Board upon the following findings or conditions:
- (a) Materials and documents required to be submitted in support of the modified site plan review shall provide necessary information, in a form sufficient for adequate Planning Board review, but site drawings and other descriptive materials shall not be required to be produced by licensed experts unless the Planning Board determines such to be necessary for site evaluation.
 - (b) All solar collectors and related equipment shall be surfaced, designed, and sited so as not to reflect glare onto adjacent properties and roadways.
 - (c) All solar collectors and related equipment shall be designed, located, and constructed so as to minimize the migration of light or sound from the installation and to minimize the development of sight obstructions for adjacent structures or land parcels.
 - (d) Screening shall be provided when practicable from adjoining lots through the use of architectural features, earth berms, landscaping, fencing or other screening which will harmonize with the character of the property and surrounding area. The proposed screening shall not interfere with normal operation of the solar collectors.

E. Requirements for ~~unclassified solar energy systems~~ Tier 3 Solar Energy Systems

- (1) A proposed Tier 3 solar energy system ~~that is not a utility scale solar energy system, but that fails to qualify as a small-scale solar energy system,~~ shall be subject to all of the requirements applicable to ~~small-scale~~ Tier 2 solar energy systems as set out in Subsection E of this section, above. In addition, the modified site plan approval process for such system shall also require and take into consideration the following:
- (a) Plans and drawings of the ~~utility-scale solar energy~~ Tier 3 system installation signed by a professional engineer registered in New York State showing the proposed layout of the entire utility-scale solar energy system along with a description of all components, whether on site or off site, existing vegetation and proposed clearing and grading of all sites involved. Clearing and/or grading activities are subject to review by the Planning Board and shall not commence until the issuance of site plan approval.
 - (b) Details of the noise that may be generated by the system. The Planning Board may require a noise analysis to

determine potential adverse noise impacts.

- (2) Any Tier 3 solar energy system with the capacity to produce 50 kilowatts (kW) of energy greater than 4000 square feet in area, or more, except a small scale solar ~~except an~~ energy system located on a farm operation, in accordance with subsection (c)(6)(b)(1) of this section, shall, in addition, be required to obtain a special use permit in accordance with this chapter.
 - (3) Tier 3 solar energy systems are prohibited within the Scenic Corridor Overlay Zone, and on soils classified as prime farmland, or prime farmland if drained, by the United States Department of Agriculture, New York State, the Town of Copake Farmland Protection Plan, or the Natural Resources Conservation Service.
 - (4) In aggregate, Tier 3 solar energy systems shall not occupy more than 10% of all farmland of statewide importance located in Copake as classified by the United States Department of Agriculture, New York State, the Town of Copake Farmland Protection Plan, or the Natural Resources Conservation Service.
- F. Requirements for Tier 4 Solar Energy Systems. ~~utility scale solar energy systems~~
- (1) A special use permit and site plan review by the Planning Board shall be required for all Tier 4 solar energy systems.
 - (2) Tier 4 solar energy systems are prohibited within the Scenic Corridor Overlay Zone, and on soils classified as prime farmland, prime farmland if drained, or farmland of statewide importance as classified by the United States Department of Agriculture, New York State, the Town of Copake Farmland Protection Plan, or the Natural Resources Conservation Service.
 - (3) Tier 4 solar energy systems are prohibited on more than 10% of the entire area of any parcel containing soils classified as prime farmland by the United States Department of Agriculture, New York State, the Town of Copake Farmland Protection Plan, or the Natural Resources Conservation Service.
 - (4) Applications, permits and approvals required and applicable zoning districts.
 - (a) All applications for Tier 4 solar energy systems shall include an application for special use permit and site plan review, and all applicable fees as may be established by the Town Board. Both site plan and special use permit reviews and approvals are required.
 - (b) All applications for Tier 4 solar energy systems shall include the following:

- [1] Plans and drawings of the Tier 4 solar energy system installation signed by a professional engineer registered in New York State showing the proposed layout of the entire Tier 4 solar energy system along with a description of all components, whether on site or off site, existing vegetation and proposed clearing and grading of all sites involved. Clearing and/or grading activities are subject to review by the Planning Board and shall not commence until the issuance of site plan approval.
- [2] Plan for clearing and/or grading of the site.
- [3] An electrical diagram detailing the utility-scale solar energy system installation, associated components, and electrical interconnection methods, with all disconnects and over-current devices identified.
- [4] Documentation of access to the project site(s), including location of all access roads, gates, parking areas, and other vehicular accommodations.
- [5] A stormwater pollution prevention plan per New York State Department of Environmental Conservation requirements to detail stormwater runoff management and erosion control plans for the site.
- [6] Documentation of utility notification, including an electric service order number.
- [7] Photo simulations shall be included showing the proposed utility-scale solar energy system in relation to the building/site along with elevation views and dimensions, and manufacturer's specs and photos of the proposed utility-scale solar energy system, solar collectors, and all other components.
- [8] Details of the proposed noise that may be generated by inverter fans. The Planning Board shall require a noise analysis to determine potential adverse noise impacts.
- [9] Statement co-signed by the applicant and the landowner that the establishment of the proposed utility-scale solar energy system shall not result in a tax penalty, pursuant to § 305 or 306 of the New York State Agriculture and Markets Law, due to the conversion of land to a nonagricultural use, which shall also state the last year, if any, for which the subject lands received an agricultural real property tax exemption; or that the establishment of the proposed utility-scale solar energy system may result in a tax penalty, pursuant to § 305 or 306 of the New York State Agriculture and Markets Law, along

with a statement indicating the most recent year, if any, for which the subject lands received an agricultural real property tax exemption, which shall also include a statement of the number of acres to be converted from an agricultural to a nonagricultural use and an estimate of the total amount of tax penalty to be imposed, including interest.

[10] Part I of the full environmental assessment form (FEAF) filled out.

[11] Decommissioning plan and description of financial surety that satisfies the Town of Copake that all required removals of inactive systems shall be completed. The decommissioning plan shall identify the anticipated life of the project, method and process for removing all components of the utility-scale solar energy system and returning the site to its preexisting condition, and estimated decommissioning costs, including any salvage value. The decommissioning plan applies to applicant and all subsequent owners and operators of the subject parcel or solar energy facility, or their successors.

[12] Identification and contact information of the responsible party to be notified in the event of emergency or for any other reason, including the address for notices of the utility-scale solar energy system owner/operator or designated party to receive notice in the event of decommissioning and removal of the energy system. If the party to receive notices, or the address thereof, changes at any time, the applicant is required to notify the Town Clerk, in writing, of such change. Such information shall also be provided to the fire district within which the energy facility is located.

[13] The Town of Copake shall require any applicant to pay all associated costs for any application review, including but not limited to engineering, legal, environmental, planning, and the review required under SEQRA. When the Planning Board or Zoning Board of Appeals determines that a review is anticipated to require engineering, legal, environmental, or planning costs, they shall provide an estimate to the applicant. Subsequently, funds adequate to cover such estimated costs shall be placed into escrow by the applicant prior to commencement of any further Planning Board or Zoning Board of Appeals review, and shall be replenished or increased at the direction of either of such boards.

(5) Special use permit required and additional substantive standards for Tier 4 solar energy systems.

(a) No ~~utility-scale solar energy system~~ Tier 4 solar energy system shall be permitted except upon obtaining a special use permit in

accordance with the procedure and standards for special use permits set out in this chapter. In addition to such standards, Tier 4 solar energy systems shall comply with the following substantive standards, and issuance of a special use permit shall be contingent upon satisfaction of the following substantive standards:

[1] A minimum parcel size of 15 acres is required for ~~utility-scale~~ Tier 4 solar energy systems.

[2] A ~~utility-scale~~ Tier 4 solar energy system may occupy up to 20% of the area of the parcel on which it is located; provided, however, that the area of land used for any such system shall not exceed 10 acres. This land area shall be deemed to include all land under or between any system components within the general perimeter of the system as a whole, but shall not include the area within the twenty-five-foot buffer between the system components and the surrounding security fencing.

(6) Site plan review required.

(a) Every application for a Tier 4 solar energy system shall be subject to site plan review and approval, as set out in this chapter, regardless of whether the proposed Tier 4 solar energy system exceeds any threshold for site plan review which is otherwise stated in such chapter. In conducting site plan review for a Tier 4 solar energy system, the Planning Board may waive submission that, in the planning board's judgment, are inapplicable or are not relevant to the review of the proposed solar facility. In addition to the requirements and standards set out elsewhere in this chapter, every site plan review of a utility-scale solar energy system shall include a public hearing and site plan approval shall be subject to conformance to the following with the following substantive standards, all of which shall be applicable to Tier 4 projects regardless of whether local site plan review is required or preempted by state law:

[1] All Tier 4 solar energy systems shall adhere to all applicable Town of Copake building, plumbing, electrical, and fire codes.

[2] There shall be a minimum one-hundred-foot buffer between any component of the Tier 4 solar energy system and the parcel boundary line. The Planning Board is authorized to increase the width of this buffer after analysis of site conditions and adjacent land uses.

[3] No component of any Tier 4 solar energy system may be

located within 150 feet of any roadway, other than a private service road used solely for access to the site of such energy system.

- [4] Any site containing a Tier 4 solar energy system shall be enclosed by perimeter security fencing, to restrict unauthorized access, at a height of eight feet with "HIGH VOLTAGE" warning placards affixed every 50 feet.
- [5] There shall be created and maintained within the security fence, and between such fence and the components, structures, or fixtures of the solar energy system, a clear and unobstructed buffer area at least 25 feet in width encircling the entire perimeter of the facility, with a surface and grade suitable for the safe passage of fire trucks and other emergency vehicles.
- [6] Lands which have the highest ecological values as evidenced by large, contiguous areas of forest, undisturbed drainage areas, wetlands, or NYS DEC identified critical habitats or rare plant and animal populations shall be avoided.
- [7] Development and operation of the system shall not have a significant adverse impact on fish, wildlife, or plant species or their critical habitats, or other significant habitats identified by the Town of Copake or other federal or state regulatory agencies.
- [8] Previously cleared or disturbed areas are preferred locations for solar panel arrays. The clearing of additional lands to accommodate a proposed utility-scale solar energy system may be permitted, provided the percentage of newly cleared land on any parcel does not exceed 10% of the existing woodlands on that parcel.
- [9] In addition to the limitations set forth in sections F(3)(4) and G(2)(3) of this law, arrays shall be located on a parcel in such a manner as to avoid conversion of farmland located on soils classified as prime farmland, prime farmland if drained, and soils of statewide importance by the United States Department of Agriculture, New York State, the Town of Copake Farmland Protection Plan, or the Natural Resources Conservation Service.
- [10] Native grasses and native vegetation shall be maintained below the arrays.
- [11] The Tier 4 solar energy system, including any associated fencing or proposed off-site infrastructure, shall be located and screened in such a way as to avoid or minimize visual

impacts as viewed from:

- [a] Publicly dedicated roads and highways, including State Route 22 and State Route 23;
- [b] Existing residential dwelling located on contiguous parcels.
- [c] Routes commonly used by bicyclists, both local and bicycle tourists visiting the town.

[12] A berm, landscape screen, or other opaque enclosure, or any combination thereof acceptable to the Town of Copake capable of substantially screening the site, shall be provided.

[13] The design, construction, operation, and maintenance of any Tier 4 solar energy system shall prevent the misdirection and/or reflection of solar rays onto neighboring properties, public roads, and public parks in excess of that which already exists.

[14] All structures and devices used to support solar collectors shall be nonreflective and/or painted a subtle or earth tone color to aid in blending the facility into the existing environment.

[15] All transmission lines and wiring associated with a ~~utility-scale~~ Tier 4 solar energy system shall be buried and include necessary encasements in accordance with the National Electric Code and Town of Copake requirements. ~~The Planning Board may recommend waiving this requirement if sufficient engineering data is submitted by the applicant to demonstrate that underground transmission lines are not feasible or practical.~~ The applicant is required to show the locations of all proposed overhead and underground electric utility lines, including substations and junction boxes and other electrical components for the project on the site plan. All transmission lines and electrical wiring shall be in compliance with the utility company's requirements for interconnection.

[16] Artificial lighting of ~~utility-scale~~ Tier 4 solar energy systems shall be limited to lighting required for safety and operational purposes only and shall be down-lighted and shielded from all neighboring properties and public roads.

[17] Any signage used to advertise the ~~utility-scale~~ Tier 4 solar energy system shall be in accordance with the Town of Copake's signage regulations. The manufacturers or installer's identification and appropriate warning signage shall be

posted at the site and clearly visible.

[18] The height of the solar panel arrays shall not exceed 15 feet, and no part of any system structure or equipment shall exceed 15 feet in height, when oriented at maximum height.

[19] Following construction of a Tier 4 ground-mounted solar energy system, all disturbed areas where soil has been exposed shall be reseeded with native grass and/or planted with low-level native vegetation capable of preventing soil erosion and airborne dust.

(7) Requirements after approvals.

(a) Any post-construction changes or alterations to the Tier 4 solar energy system shall be done by amendment to the special use permit and site plan review and approval, with public hearing, and subject to the requirements of this article.

(b) After completion of a Tier 4 solar energy system, the applicant shall provide a post-construction certification from a professional engineer registered in New York State that the project complies with applicable codes and industry practices and has been constructed and is operating according to the design plans. The applicant shall further provide certification from the utility that the facility has been inspected and connected.

G. Regulations for Battery Energy Storage Systems associated with Solar Energy Systems.

(1) Definitions.

(a) BATTERY(IES): A single cell or a group of cells connected together electrically in series, in parallel, or a combination of both, which can charge, discharge, and store energy electrochemically. For the purposes of this law, batteries utilized in consumer products are excluded from these requirements.

[1] Flow battery. A storage battery that stores and generates an electrical current by ion exchange through a membrane separating liquid electrolytes.

[2] Lead acid battery. A storage battery that is comprised of lead electrodes immersed in sulfuric acid electrolyte, including vented (flooded) or valve regulated lead acid (VRLA) batteries.

[3] Lithium-ion (Li-ion) battery. A storage battery in which an electrical current is generated by lithium ions embedded in a carbon graphite or nickel metal-oxide substrate placed in a high-viscosity carbonate mixture or gelled polymer electrolyte.

[4] Nickel cadmium (Ni-Cd) battery. An alkaline storage battery in which the positive active material is nickel oxide, the negative active material contains cadmium, and the electrolyte is potassium hydroxide.

[5] Nickel metal hydride (NiMH) battery. An alkaline storage battery in which the positive active material is nickel oxide, the negative active material is a hydrogen absorbing alloy, and the electrolyte is potassium hydroxide.

(b) Battery Energy Storage System: One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time, not to include a stand-alone 12-volt car battery or an electric motor vehicle.

[1] Small Battery Energy Storage System: Battery Energy Storage Systems for one to two family residential dwellings within or outside the structure with an aggregate energy capacity less than or equal to:

[a] 70 kWh for Lead Acid, Ni-Cd, and NiMH batteries; and

[b] 20 kWh for Li-ion and Flow batteries.

[2] Medium Battery Energy Storage System: battery energy storage systems with aggregated rated energy capacity:

[a] Greater than 70 kWh and less than 500 kWh for Lead Acid, Ni-Cd, and NiMH batteries;

[b] Greater than 20 kWh and less than 250 kWh for Li-Ion batteries; and

[c] Greater than 20 kWh and less than 500 kWh for Flow batteries.

[3] Large Battery Energy Storage System: Battery energy storage systems that have an aggregate energy capacity greater than 500 kWh for Lead Acid, Ni-Cd, NiMH, and Flow Batteries, and greater than 250 kw for Li-ion Batteries.

(2) Small, medium, and large battery energy storage systems shall meet the requirements of any applicable fire prevention code, building code, and design requirement when in use and, when no longer used, shall be disposed in accordance with the laws and regulations of the Town of Copake and any applicable federal, state, or county laws or regulations. Fire prevention codes, building codes, design requirements, and applicable federal, state, and county laws or regulations include but are not limited to standards and requirements

set forth in the:

- (a) Energy Code: The New York State Energy Conservation Construction Code adopted pursuant to Article 11 of the Energy Law, as currently in effect and as hereafter amended from time to time;
 - (b) Fire Code: The fire code section of the New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law, as currently in effect and as hereafter amended from time to time;
 - (c) Nationally Recognized Testing Laboratory (NRTL): A U.S. Department of Labor designation recognizing a private sector organization to perform certification for certain products to ensure that they meet the requirements of both the construction and general industry OSHA electrical standards;
 - (d) NEC: National Electric Code;
 - (e) NFPA: National Fire Protection Association.;
 - (f) UNIFORM CODE: the New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law, as currently in effect and as hereafter amended from time to time.
- (3) Small battery energy storage systems are a permitted use in all zoning districts and do not require site plan approval.
 - (4) Medium battery energy storage systems are permitted in all zoning districts and require site plan review and a building permit.
 - (5) Large battery energy storage systems are not permitted on soils classified as prime farmland, prime farmland if drained, or soils of statewide importance by the United States Department of Agriculture, New York State, the Town of Copake Farmland Protection Plan, or the Natural Resources Conservation Service. In addition, large battery energy storage systems shall not be sited on more than 10% of any parcel containing prime farmland, prime farmland if drained, or soils of statewide importance.
 - (6) Large battery energy storage systems require a special use permit, site plan review, and a building permit.

H. Abandonment or decommissioning of Tier 3 and Tier 4 solar energy systems and associated Battery Energy Storage Systems.

- (1) To ensure the proper removal of utility-scale solar energy systems, a decommissioning plan shall be submitted as part of the special use application. Compliance with this plan shall be made a condition of the issuance of a special use permit under this section. The decommissioning plan applies to the applicant and to any subsequent owner or operator of the subject parcel or solar energy facility, or their successors. A cost estimate detailing the projected cost of executing

the decommissioning plan shall be prepared by a professional engineer or contractor. Cost estimates shall take into account inflation. Removal of utility-scale solar energy systems must be completed in accordance with the decommissioning plan.

- (2) A utility-scale solar energy system which has been inactive for a period of one year shall be decommissioned and removed at the owner's or operator's expense, and the site remediated. Upon such failure to maintain operation and activity, all approvals and permits issued in relation to such system or facility, including special use permit and site plan approval, shall terminate. Decommissioning and remediation shall include removal of the energy system and all its components, associated structures, fixtures, equipment, fencing, and other improvements, including any subsurface wires, footings, or other elements from the parcel. Any access roads created for building or maintaining the system shall also be removed and replanted with vegetation. The site terrain shall be restored and regraded, if necessary, to a condition generally comparable to its original condition and replanted with native vegetation.
- (3) All safety hazards created by the installation and operation of the utility-scale solar energy system shall be eliminated and the site remediated within six months of the removal of the utility-scale solar energy system.
- (4) Prior to the issuance of any permits, the Zoning Board will require the applicant to submit a performance/removal bond or other financial surety, as directed by and satisfactory to the Zoning Board, upon advice of the Town's attorney, engineer, or other professional experts, based upon the decommissioning cost estimate in an amount satisfactory to the Town of Copake, to ensure the removal of the system, its components, and associated structures, fixtures, equipment, fencing, or other improvements, and the remediation of the site. The amount of financial security shall not be reduced by the expected salvage value of the facility components. In the event that the utility-scale solar energy system is not removed within one year of becoming inactive or the site is not remediated as required, the Town of Copake, by resolution of the Town Board after 30 days' written notice and opportunity of the landowner and system operator to be heard, may cause the same to be removed and the site remediated using the funds from the performance/removal bond or surety. Notice sent by first-class United States mail to the property owner, as reflected in the Town real property records, to the mailing address set forth therein, and to the energy system owner/operator, at the address for notice set forth in the application, as may be amended or superseded by written notice to the Town Clerk, shall be sufficient notice. Notwithstanding the forgoing, any Tier 4 solar energy system and any associated battery energy storage systems sited pursuant to Article 10 of the Public Service Law or Article 94-c of the Executive Law shall be required to obtain a letter of credit in an amount satisfactory to the Town of Copake, to ensure

the removal of the systems, their components, and associated structures, fixtures, equipment, fencing, or other improvements, and the remediation of the site. The amount of the letter of credit shall not be reduced by the salvage value of facility components.

I. Indemnification and insurance.

- (1) Indemnification. The applicant, owner, and operator of the Tier 3 or Tier 4 solar energy system shall release and hold harmless the Town of Copake and all of its officers, officials, employees, appointees, agents, and servants from and against any and all liability and responsibility for any and all accidents, injuries, and/or damages of any kind to persons (including death) or property arising out of the installation, construction, operation, maintenance, repair or removal of such system. The applicant, owner, and operator shall indemnify and hold harmless the Town of Copake and its officers, officials, employees, appointees, agents, and servants from any and all claims, suits, actions, damages, awards, judgments and costs of every nature, including reasonable attorneys' fees, arising out of the installation, construction, operation, maintenance, repair or removal of such system or of the Town of Copake providing services related to the utility-scale solar energy system.
- (2) Insurance. The operator of a Tier 3 or Tier 4 solar energy system shall obtain and maintain insurance, issued by an insurer authorized to do business in New York State, to the specifications and in an amount approved by the Planning Board. Such insurance shall name the Town of Copake as an additional insured party. The certificate of insurance shall contain a provision that coverage afforded under the applicable policy shall not be cancelled or terminated until at least 30 days' prior notice has been provided to the Town. In the event of a termination, cancellation, or lapse of the required insurance coverage, the special use permit to operate the energy system shall be immediately suspended and operation of the system shall cease. Upon restoration of the required insurance coverage, to the satisfaction of the Town, permission to operate may be restored.