

**SOLAR ENERGY FACILITIES LAW  
TOWN OF DUANESBURG  
LOCAL LAW No. OF 2023**

**BE IT ENACTED** by the Town Board of the Town of Duanesburg, in the County of Schenectady, as follows:

**SECTION ONE. TITLE**

This local law shall be known as the “Solar Energy Facilities Law,” and shall repeal and replace Local Law No. 1 of the year 2016.

**SECTION TWO. PURPOSE**

The purpose of this law shall be to provide for the siting, development and decommissioning of solar energy systems subject to reasonable conditions to reduce potential impacts on adjoining properties, while promoting the effective and efficient use of solar energy resources.

The town finds that well-planned and suitably located solar energy systems can be beneficial. This law seeks to foster thorough project planning and appropriate siting in support of the town’s Comprehensive Plan objectives of preserving its attractive and cultural landscape, and sustaining its valuable economic and natural resources, particularly agricultural land use, open spaces, natural habitats and fresh watersheds.

**SECTION THREE. AUTHORITY**

This local law is adopted pursuant to Sections 10 and 22 of the Municipal Home Rule Law.

**SECTION FOUR. DEFINITIONS**

The following terms shall have the meanings indicated. The definitions contained in the Town of Duanesburg Zoning Law shall also apply.

ANSI - American National Standards Institute

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.

Battery Management System - An electronic system that protects energy storage systems from operating outside their safe operating parameters and disconnects electrical power to the energy storage system or places it in a safe condition if potentially hazardous temperatures or other conditions are identified.

Consumer Price Index change - The Consumer Price Index for Urban Consumers, as published by the U.S. Department of Labor, Bureau of Labor Statistics. Change shall be

calculated in January each year as the percentage difference between the annual average of the most recent calendar year and that of the previous year.

Glare- The effect by reflections of light with intensity sufficient as determined in a commercially reasonable manner to cause annoyance, discomfort or loss in visual performance and visibility in any material respects.

Ground-Mounted Solar Energy System- A solar energy system that is affixed to the ground either directly or by support structures or other mounting devices and that is not attached or affixed to an existing structure. Pole mounted solar energy systems shall be considered ground-mounted solar energy systems for the purposes of this local law.

Immaterial Modifications - Changes in the location, type of material or method of construction of a solar energy system that will not: (1) result in any new or additional adverse environmental impact not already reviewed and accepted for the project by the Town Planning Board; (2) cause the project to violate any applicable setbacks or other requirements of this Law; or (3) cause the project not to conform to the State Environmental Quality Review determination or findings issued by the Planning Board.

Lot Coverage - The area measured from the outer edge(s) of the arrays, inverters, batteries, storage cells and all other mechanical equipment used to create solar energy, exclusive of fencing and roadways.

NFPA - National Fire Protection Association

Nationally Recognized Testing Laboratory - 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.

Non-Participating Property - A property not owned or leased by the solar energy system operator, nor having any land use agreement or easement related to the system.

Occupied Habitat - An area in which a species listed in 6 NYCRR Part 182, defined herein as “species in need of protection,” has been determined to exhibit one or more essential behaviors, including behaviors associated with breeding, hibernation, reproduction, feeding, sheltering, migration and overwintering.

Participating Property - A property owned or leased by the solar energy system operator, or a property having any land use agreement or easement related to the system. Where multiple adjacent properties are participating in a solar energy system, the combined lots shall be considered as one for the purposes of applying setback requirements.

Small-Scale Solar Energy System- Any solar energy system that meets the following provisions:

(a) Is an accessory use or structure, designed and intended to generate energy primarily for a principal use located on site.

(b) 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 beyond the lot. Small-scale solar energy systems located on a farm operation (as per AML §301(11) definition of that term) and located in a New York State Agricultural District can produce up to 110% of the farm's needs as per the Department of Agriculture and Markets guidance document.

Solar Collector- A solar or photovoltaic cell, plate, panel, film, array, reflector, or other structure affixed to the ground, a building, or other structure that harnesses solar radiation to directly or indirectly generate thermal, chemical, electrical, or other usable energy, or that reflects or concentrates solar radiation to a solar or photovoltaic cell, plate, panel, film, array, reflector, or other structure that directly or indirectly generates thermal, chemical, electrical, or other usable energy.

Solar Energy Equipment - Electrical material, hardware, inverters, conduit, storage devices, or other electrical and photovoltaic equipment associated with the production of electricity.

Solar Energy System - A complete system 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, combiner boxes, meters, transformers, and all other mechanical structures.

Solar Panel - A photovoltaic device capable of collecting and converting solar energy into electricity.

Species in Need of Protection - Species listed in Title 6, Part 182 of the New York Codes, Rules and Regulations as Endangered, Threatened or of Special Concern.

UL - Underwriters Laboratory, an accredited standards developer in the United States.

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.

Utility-Scale Solar Energy System - Solar energy generation facility designed and intended to supply energy into a utility grid for off-site consumption.

## **SECTION FIVE. APPLICABILITY**

1. The requirements herein shall apply to all solar energy system and equipment installations modified or installed after the effective date of this law, excluding general maintenance and repair.
2. 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 law shall not be required to meet the requirements of this law.
3. Modifications to an existing solar energy system that increase the system's area by more than 5 percent (exclusive of moving any fencing) shall be subject to this law.
4. 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.
5. To the extent that any other town law, rule or regulation, or parts thereof, are inconsistent with the provisions of this law, the provisions set forth in this law shall control only as they pertain to solar energy systems.
6. 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 law and any other applicable laws, codes, ordinances and regulations of the Town of Duanesburg, and any other applicable state or federal laws.

## **SECTION SIX. REQUIREMENTS FOR SMALL-SCALE SOLAR ENERGY SYSTEMS**

1. Prior to installing a small-scale solar energy system, a building permit shall be obtained from the Uniform Code Enforcement Officer of the Town of Duanesburg pursuant to the requirements set forth in the Town's Zoning Ordinance Section 14.3.
2. The installation of a solar collector or panel, whether attached to the main structure, an accessory structure, or as a detached, freestanding or ground-mounted solar collector, shall meet all requirements of this section.
3. All solar collectors and related equipment shall be surfaced, designed, and sited so as not to reflect glare onto adjacent properties and roadways.

4. A ground-mounted accessory solar energy system shall comply with the setback requirements for a major accessory structure in the zoning district in which it is located.
5. A roof-mounted accessory solar energy system shall be mounted as flush as possible to the roof. To achieve proper solar orientation, panels may exceed the roofline by five feet. Ground-mounted or freestanding solar collector height shall not exceed 15 feet when oriented at maximum tilt.
6. All solar collectors and their associated support elements shall, at the time of installation, be designed according to generally accepted engineering practice to withstand wind pressures applied to exposed areas by wind from any direction, 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.
7. Photovoltaic systems that are integrated directly into building materials such as roof shingles, and that are a permanent and integral part of and not mounted on the building or structure are exempt from the requirements of this article. However, all applicable building codes shall be met and necessary permits obtained. The Code Enforcement Officer may request assistance from the Planning Board to determine whether a solar energy system should be considered exempt or not.
8. In order to ensure firefighter and other emergency responder safety, except in the case when solar panels are installed on an accessory structure less than 1,000 square feet in area, there shall be a minimum perimeter area around the edge of the roof and pathways to provide space on the roof for walking around all solar collectors and panels.
9. Free standing or ground mounted solar collectors are permitted as accessory structures in all zoning districts of the Town subject to the following additional conditions:
  - A minimum 100-foot perimeter buffer, consisting of natural and undisturbed vegetation, shall be provided around all mechanical equipment and solar panel arrays to provide screening to adjacent properties and roadways. The Planning Board may, at its discretion, reduce the buffer to a minimum of 25 feet where sufficient screening exists or is proposed.
  - The total surface areas of all ground-mounted and freestanding solar collectors shall not exceed the area of the ground covered by the building structure of the largest building on the lot measured from the exterior walls, not including patios and decks.
10. Battery Energy Storage Systems associated with a Small-Scale Solar Energy System shall have an energy capacity of no more than 600 kWh and shall comply with all applicable

provisions of Section 1206 of the Uniform Code of New York state. A building permit and an electrical permit shall be required for installation of Small-Scale Battery Energy Storage Systems.

## **SECTION SEVEN. REQUIREMENTS FOR UTILITY-SCALE SOLAR ENERGY SYSTEMS**

### **1. Applications, Permits and Approvals Required and Applicable Zoning Districts**

- A. A special use permit and site plan approval by the Town of Duanesburg Planning Board and a town building permit shall be required for all utility-scale solar energy systems. Such systems shall only be permitted in the R-2, C-1, and C-2 Zoning Districts. The Planning Board shall concurrently review the site plan and special use permit applications.
- B. At the earliest possible date in the project planning process, the applicant shall contact the Town's Uniform Code Enforcement Officer to schedule a pre-submission conference with the Planning Board in the manner set forth in the Town Zoning Code Section 14.6.2.2. At this time, the applicant shall provide the opportunity for an on-site visit by Planning Board members.
- C. All applications for utility-scale solar energy systems shall be accompanied by applicable fees as may be established by the Town Board. When the Planning Board determines that a review will require engineering, legal, environmental or planning costs, the applicant shall provide an escrow account to pay for such costs. The escrow account shall be in an amount as determined by the Planning Board and shall be replenished when required by the Planning Board. Once the Planning Board has determined the amount of escrow, the account shall be established prior to any further Planning Board review.
- D. The public hearing that is required in connection with application for a special use permit will be held simultaneously on the proposed site plan. All adjacent property owners will be notified of the public hearing on the application for special use permit and site plan approval in the manner set forth in the Town Zoning Code Section 14.6.2.4(B).
- E. All applications for utility-scale solar energy systems shall include the following:
  - (1) A site plan prepared by a professional engineer registered in New York State including:
    - (a) Property lines and physical dimensions of the site;
    - (b) Location, approximate dimensions and types of existing structures and uses on the site, public roads, and other properties within 1,000 feet of the boundaries of the site;

- (c) Location and description of all solar energy system 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 the SEQRA special use permit and site plan approval;
  - (d) Location of all above and below-ground utility lines on the site as well as transformers, the interconnection point with transmission lines, and other ancillary facilities or structures, including accessory facilities or equipment;
  - (e) Locations of setback distances as required by this law;
  - (f) All other proposed facilities, including electrical substations, storage or maintenance units, fencing and laydown and storage areas to be used as part of construction;
  - (g) All site plan application materials required under Section 14.6.1.4 of the Zoning Law of the Town of Duanesburg. The Planning Board may waive those items in Section 14.6.1.4 that it deems inapplicable to a solar energy system application.
- (2) An electrical diagram detailing the solar energy system installation, associated components, and electrical interconnection methods, with all disconnects and over-current devices identified.
  - (3) Documentation of access to the project site(s), including location of all access roads, gates, parking areas, etc.
  - (4) A storm water pollution prevention plan as per NYS DEC requirements to detail storm water runoff management and erosion control plans for the site.
  - (5) Documentation of utility notification, including an electric service order number.
  - (6) Decommissioning plan, including cost estimate and description and form of financial surety as described in Section Nine of this law.
  - (7) Photo simulations shall be included showing the proposed solar energy system in relation to the building/site along with elevation views and dimensions, and manufacturer's specs and photos of the proposed solar energy system, solar collectors, and all other components.
  - (8) Part I of the Full Environmental Assessment Form filled out.
  - (9) A sound study providing details of the proposed noise that may be generated by inverter fans, or other noise-generating equipment that may be included in the project,

including actual readings of existing daytime and night time ambient noise at the boundary of the participating properties; the sound study shall predict the potential increase in noise from the project over the existing ambient noise levels.

(10) A GIS viewshed analysis of the Zone of Visual Impact (ZVI); defined as the area from which the proposed undertaking may be visible within a one-half mile (0.5) buffer around solar fields covering 4 to 40 acres in size, and a one-mile buffer around solar fields greater than 40 acres in size. Positive visibility of the solar field must be based upon bare-earth topography only (do not factor in vegetation). The analysis should be presented as an orthorectified aerial base map with the buffer boundary and project area indicated and ZVA highlighted.

(11) The results of on-site bird and bat migration, nesting and habitat surveys. Surveys must be conducted during the appropriate seasonal windows during one year prior to submittal of an application. Applicants shall use the most recent New York State Department of Environmental Conservation survey protocols for grassland birds and winter raptors. For other wildlife, applicants shall follow NYSDEC guidance on appropriate survey methods.

## **2. Permitting Requirements**

**Requirements “A” through “O” below shall apply to all utility-scale solar energy systems:**

### A. Code Compliance

All utility-scale solar energy systems shall adhere to all applicable Town of Duanesburg building, plumbing, electrical, and fire codes. Except for conditions specified in this law, all systems shall comply with the provisions of the town zoning ordinance for the zoning district in which they are located.

### B. Fencing

All electrical and control equipment, including any battery and storage cells, shall be labeled and secured to prevent unauthorized access. Such equipment shall be enclosed with a seven-foot high fence as required by the National Electrical Code. Fencing shall be located inside the tree buffer described in Requirement “D” of this subsection.

### C. Signs

Warning signage shall be placed on solar equipment to the extent appropriate. Solar equipment shall not be used for displaying advertising. All signs, flags, streamers or similar items, both temporary and permanent, are prohibited on solar equipment except: (a) manufacturer’s or installer’s identification; (b) appropriate warning signs and placards; (c) signs that may be required by a federal or state agency; and (d) signs that provide a 24-hour emergency contact phone number and warn of any danger.

#### D. Visual Impact

The solar facility, including any proposed off-site infrastructure, shall be located and screened in such a way as to avoid visual impacts as viewed from public locations, public dedicated roads and highways, residences located on contiguous parcels, or other locations identified by the Planning Board. Acceptable screening would include maintenance of existing vegetation, new vegetative barriers or berms, landscape screen or other opaque enclosures, or any combination thereof acceptable to the Town capable of fully screening the site. The applicant shall guarantee that all plantings that form part of the approved landscape and screening plan will be maintained and replaced if necessary during the life of the project.

1) When the site is surrounded by existing mature trees, a buffer where no trees shall be cut shall be established and maintained as a wild zone for the life of the facility. The exception to this shall be dead or diseased trees, which will be cut and removed so as to encourage healthy growth of existing trees.

2) Trees to be included in screening shall be native and non-invasive species of evergreen, e.g. Eastern red cedar and white spruce, a minimum of 8' tall and 3" in diameter at breast height. It shall be determined and documented by the developer if at the time of planting if any species are threatened due to regional blight, disease, etc. Final decisions on appropriate plantings will be made by the Planning Board.

3) The solar facility shall provide for the creation of a buffer that has an offset, double row of densely growing evergreens with the addition of some smaller trees and shrubs in front to create more of a naturalized hedgerow habitat. The purpose of the double row is to provide additional screening early while the trees are still small. While the evergreens should be the dominant tree for screening, addition of some smaller trees and shrubs are to be provided to benefit wildlife and aesthetics.

Appropriate shrubs and small trees to include to create a hedgerow could be shadbush, flowering dogwood, flowering raspberry, maple leaved viburnum, nannyberry, and choke cherry.

4) The plans shall show maximum buffering and screening of utility-scale solar systems that are visible from the Route 20, Route 30 or Routes 7 and I-88 corridors.

5) The design, construction, operation, and maintenance of any 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. The Planning Board reserves the right to individually assess what they deem to be sensitive areas on any proposed solar facility site as part of their

review to ensure that negative impacts of solar ray reflection will be prevented. All solar panels shall have anti-reflective coating(s) not identified as a hazardous material by the U.S. Environmental Protection Agency, unless an applicant demonstrates the hazardous material is unlikely to cause harm to people, plants or animals when released into the environment. The applicant shall adhere to all federal and state laws, regulations and guidelines regarding PFAS and polytetrafluoroethylene (PTFE) films.

6) All structures and devices used to support solar collectors shall be non-reflective and/or painted a subtle or earth tone color to aid in blending the facility into the existing environment.

#### E. Panel Height

Ground-mounted solar panel arrays shall not exceed 15 feet in height when oriented at maximum tilt.

#### F. Lot Coverage

A utility-scale solar energy system shall not exceed 60 percent lot coverage, as defined herein.

#### G. Wetlands

Solar energy systems shall meet wetland requirements as provided in Title 6, Parts 663 and 664 of the New York Codes, Rules and Regulations and stream requirements as provided in Title 6, Part 608 of the NYCRR and shall meet all Clean Water Act requirements for placement of fill in Waters of the United States.

#### H. Lighting

Artificial lighting of solar energy systems shall be limited to lighting required for safety and operational purposes and shall be cast downward and shielded from all neighboring properties and public roads. Lighting shall be capable of manual or auto-shut off switch rather than motion detection.

#### I. Access and Parking

A road and parking will be provided to assure adequate emergency and service access. Maximum use of existing roads, public and private, shall be made. Any new access road will be reviewed for fire safety purposes by the Town Building Inspector and the chief of the fire company that serves the area containing the property. Site access shall be maintained at a level acceptable to the local fire department and emergency medical services, including snow removal. Solar facility access road shall be no greater than 26

feet wide. All roadways associated with the solar energy system shall remain unpaved and of pervious surfaces.

#### J. Slopes

No solar panels shall be placed on slopes of 15 percent or greater as averaged over 50 horizontal feet. No cutting or filling may be done to alter natural slopes for placement of panel arrays.

#### K. Drainage

The solar energy system shall comply with New York state stormwater regulations as set forth in GP-0-20-001, as amended. The Stormwater Pollution Prevention Plan shall demonstrate that the solar system will not create adverse drainage, runoff or hydrology conditions that could impact adjoining and other non-participating properties in violation of New York state stormwater requirements.

#### L. Road Use

Designated traffic routes for construction and delivery vehicles to minimize traffic impacts, wear and tear on local roads, and impacts on local business operations shall be proposed by the applicant and reviewed by the Planning Board.

#### M. Blasting

Blasting is prohibited for the construction of all utility-scale solar energy facilities.

#### N. Cemeteries

Utility-scale solar energy systems structures and equipment shall avoid rural cemeteries and burial grounds. The applicant shall consult with the town historian to identify any such burial grounds within the project site.

#### O. Facilities on Water

Utility-scale solar energy systems shall not be installed on town-owned bodies of water.

**Requirements “P” through “V” below shall apply only in the R-2 and C-1 zoning districts:**

#### P. Deforestation

Previously cleared or disturbed areas are preferred locations for solar projects. Forested sites shall not be deforested to construct solar energy facilities. Brush and isolated trees or stands of trees in otherwise open fields or scrubland may be cut, however clear cutting of trees more than three inches in diameter at breast height in a single contiguous area

exceeding 20,000 square feet is prohibited. This clearing restriction shall not apply to trees cleared for the access road.

Site disturbance, including but not limited to, grading, soil removal, excavation and soil compaction in connection with installation of utility-scale solar energy facilities shall be minimized to the extent practicable.

#### Q. Setbacks

There shall be a minimum 200 foot buffer between any structures and equipment of the utility-scale solar energy system and the parcel boundary line with any non-participating property, public road or public area. In addition, all structures and equipment shall be set back a minimum of 450 feet from the exterior of any occupied residence located on a non-participating property. Fencing, collection lines, access roads and landscaping may occur within the setbacks.

#### R. Wildlife

Solar energy systems shall avoid or minimize adverse impacts to species in need of protection, as defined herein, or their occupied habitats, to the maximum extent practicable.

#### S. Agriculture

Solar energy systems shall limit the use of agricultural areas within their project limits to no more than 10 percent of soils classified by the NYS Department of Agriculture and Markets' Agricultural Land Classification as mineral soils groups 1 through 4. All solar energy systems shall adhere to the Department of Agriculture and Markets' Guidelines for Construction Mitigation for Agricultural Lands.

#### T. Underground Wiring

All transmission lines and wiring associated with a utility-scale solar energy system shall be buried and include necessary encasements in accordance with the National Electric Code. The Planning Board may waive 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, switchyards, 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.

#### U. Noise

Noise levels from the solar energy system will comply with the noise limits for solar energy facilities contained in the New York Office of Renewable Energy Siting regulations at 19 NYCRR 900-6.5(b) by implementing the design required by 19 NYCRR 900-2.8 except that the standards applicable to existing non-participating residences shall also be met for existing participating residences.

#### V. Construction Hours

Pre, post and during construction working hours shall be limited to Monday through Friday between the hours of 8 a.m. and 6 p.m. The Planning Board shall have discretion on whether or not to allow work on Saturdays. Work shall not be done outside these hours or on Sundays and holidays, to ensure the quiet rural characteristics of the Town. Construction lighting shall be limited consistent with Requirement "H" above.

### **3. Contractual Requirements**

Prior to obtaining site plan approval, the applicant for a utility-scale solar energy system shall execute the following contractual agreements with the Town:

#### A. Road Use

Utility-scale solar energy systems shall execute a road use agreement with the Town if town roads are to be used for the project. Prior to the issuance of the building permit and commencement of construction, an existing condition survey of the approved hauling routes using town roads shall be undertaken by the applicant at the applicant's expense. Any road damage during construction caused by the operator or its subcontractors on town roads shall be repaired or reconstructed to the satisfaction of the Town Highway Superintendent at the operator's expense.

#### B. Indemnification

The applicant for a utility-scale solar energy system shall execute an indemnification agreement with the Town. The agreement shall require the applicant/owner/operator to at all times defend, indemnify, protect, save, hold harmless and exempt the Town and its officers, councils, employees, attorneys, agents and consultants from any and all penalties, damages, costs or charges arising out of any and all claims, suits, demands, causes of action or award of damages whether compensatory or punitive, or expenses arising therefrom either at law or in equity, which might arise out of or be caused by the placement, construction, erection, modification, location, equipment's performance, use, operation, maintenance, repair, installation, replacement, removal or restoration of said solar energy system, excepting however any portion of such claims, suits, demands, causes of action or award of damages as may be attributable to the negligent or intentional acts or omissions of the Town or its employees or agents. With respect to the

penalties, damages or changes referenced herein, reasonable attorneys' fees, consultant fees and expert witness fees are included in those costs that are recoverable by the Town.

### C. Decommissioning

The applicant shall execute a decommissioning agreement as described in Section Nine of this law.

### D. Payment-in-Lieu of Taxes

1. The applicant for a utility-scale solar energy system shall enter into an agreement for a payment in lieu of taxes (PILOT) with the Town Board pursuant to Real Property Tax Law Section 487. This PILOT agreement shall be reviewed and approved by the Town Board. A PILOT agreement executed with the county IDA, acceptable to the Town Board, in its sole discretion, for the solar energy system may serve to meet the requirements of this section.
2. No building permit shall be issued or construction commenced for a solar energy system requiring a PILOT until such time as the PILOT agreement has been executed by all parties and recorded at the Office of the County Clerk.
3. The PILOT shall run to the benefit of the Town and be executed by the operator and the owners of the real property upon which the solar energy system is to be located and such signatures be notarized in such a way that allows the PILOT agreement to be recorded at the Office of the County Clerk. Prior to commencement of construction, the PILOT agreement shall be recorded at the Office of the County Clerk as a lien on the property and indexed against the property/properties upon which the solar energy system is to be constructed. The intent of the above provisions is so that should the operator of the solar energy system default with regard to such PILOT agreement, that such obligation will become the responsibility of the then owner of the property upon which the solar energy system is sited and that failure to satisfy the terms of such agreement will permit the Town to enforce such agreement as against the owner.

### E. Community Host

The applicant shall enter into a community host agreement providing a public benefit fee to mitigate the additional burdens placed on the town as a result of the project. The fee shall be utilized as a source of funding for prospective costs and expenses associated with and related to anticipated municipal services and additional infrastructure improvements to be provided as a result of the project's presence within the town.

## **4. System Operations**

### A. Safety/Emergency Response

Before any utility-scale solar energy system becomes active, the owner of the system shall arrange an on-site meeting with the fire department having primary coverage of the project area to review the components of the system, safety issues and procedures for emergency response. This shall include details on the location of labeled warnings, access to the site, and emergency disconnection of the system. In addition, the Town may require the installation of placards that provide mutual aid responders with sufficient information to protect them when responding to calls on site.

### B. Ownership Changes

If the owner or operator of the solar energy system changes or the owner of the property changes, the special use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the special use permit, site plan approval, decommissioning plan, security and any agreements. A new owner or operator of the solar energy system shall notify the Building Inspector and the Town Supervisor of such change in ownership or operator 30 days prior to the ownership change.

### C. Annual Report

On a yearly basis, the solar energy system owner shall provide the Town a report showing the rated capacity of the system and the amount of electricity that was generated by the system and transmitted to the grid. The report shall be submitted no later than 30 days after the end of the calendar year.

### D. Vegetation

Following construction of a utility-scale solar energy system, all disturbed areas where soil has been exposed shall be reseeded with native grasses and/or planted with low-level vegetation capable of preventing soil erosion and airborne dust.

### E. Project Changes

Any post-approval changes to the solar energy system, except for immaterial modifications as defined herein, shall be done by amendment to the special use permit only and shall be subject to the requirements of Section Seven of this law.

Unless expressly limited by a condition imposed in the permit, the Town Zoning Officer, Code Enforcement Officer, Building Inspector or other Town designee may, during project construction, allow immaterial modifications to the design of the project as represented in the final set of site plans reviewed by the Planning Board. Such immaterial modifications shall only be allowed in response to a written request by the applicant or

permittee. All such requests shall be addressed to the authorized Town designee, with copies to the Chairman of the Planning Board, other Town designee, and the Town's designated consultants.

#### F. Certification

After completion of a utility-scale 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. Insurance

1. The holder of a Special Use Permit for a solar energy system shall agree to secure and maintain for the duration of the permit, public liability insurance as follows (unless waived by the Town Board for smaller systems):

- a) Commercial general liability covering personal injuries, death and property damage: \$5,000,000 per occurrence, \$10,000,000 aggregate, which shall specifically include the Town and its officers, councils, employees, attorneys, agents and consultants as additional named insured;
- b) Umbrella coverage: \$10,000,000

2. Insurance Company: The insurance policies shall be issued by an agent or representative of an insurance company licensed to do business in the State and with at least a Best's rating of "A".

3. Insurance Policy Cancellation: The insurance policies shall contain an endorsement obligating the insurance company to furnish the Town with at least 30 days prior written notice in advance of cancellation.

4. Insurance Policy Renewal: Renewal or replacement policies shall be delivered to the Town at least 15 days before the expiration of the insurance that such policies are to renew or replace.

5. Copies of Insurance Policy: No more than 15 days after the grant of the permit and before construction is initiated, the permit holder shall deliver to the Town a copy of each of the policies or certificates representing the insurance in the required amounts.

6. Certificate of Insurance: A certificate of insurance that states it is for information purposes only and does not confer sufficient rights upon the Town shall not be deemed to comply with this law.

## **SECTION EIGHT. BATTERY ENERGY STORAGE SYSTEMS**

Battery energy storage systems with capacity of more than 600 KWh are permitted in conjunction with utility-scale solar energy systems subject to the following conditions:

Code Compliance - Battery Energy Storage Systems shall comply with all applicable provisions of Section 1206 of the Uniform Code of New York state. A building permit and an electrical permit shall be required for installation.

Commissioning Plan - Such plan shall document and verify that the system and its associated controls and safety systems are in proper working condition per requirements set forth in the Uniform Code. Where commissioning is required by the Uniform Code, Battery Energy Storage System commissioning shall be conducted by a New York state-licensed professional engineer after the installation is complete but prior to final inspection and approval. A corrective action plan shall be developed for any open or continuing issues that are allowed to be continued after commissioning. A report describing the results of the system commissioning and including the results of the initial acceptance testing required in the Uniform Code shall be provided to the town code enforcement officer prior to final inspection and approval, and maintained at an approved on-site location.

Fire Safety Compliance Plan - Such plan shall document and verify that the system and its associated controls and safety systems are in compliance with the Uniform Code.

Operation and Maintenance Manual - Such plan shall describe continuing battery energy storage system maintenance and property upkeep, as well as design, construction, installation, testing and commissioning information and shall meet all requirements set forth in the Uniform Code.

System Certification - Battery Energy Storage Systems and equipment shall be listed by a nationally recognized testing laboratory to UL 9540 (Standard for Battery Energy Storage Systems and Equipment) or approved equivalent, with subcomponents meeting each of the following standards, as applicable:

- 3) UL 1973 (Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail Applications),
- 2) UL 1642 (Standard for Lithium Batteries),
- 3) UL 1741 or UL 62109 (Inverters and Power Converters),
- 4) Certified under the applicable electrical, building and fire prevention codes as required,

5) Alternatively, field evaluation by an approved testing laboratory for compliance with UL 9540 (or approved equivalent) and applicable codes, regulations and safety standards may be used to meet system certification requirements.

Safety - Battery Energy Storage Systems, components and associated ancillary equipment shall have required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with NFPA 70.

Noise - Battery Energy Storage Systems shall be located as close as practicable to the center of the solar panel array and shall not cause the Solar Energy System to exceed the noise limits specified in Section Seven of this law.

Signage - Signs shall comply with ANSI Z535 and include the type of technology associated with the Battery Energy Storage System, any special hazards, the type of suppression system installed in the area of the battery system, and 24-hour contact information, including reach-back phone number.

Vegetation and Tree-Cutting - Areas within 20 feet on each side of the Battery Energy Storage System shall be cleared of combustible vegetation and other combustible growth. Single specimens of trees, shrubbery or cultivated ground cover such as green grass, ivy, succulents or similar plants may be used as ground cover provided they do not form a means of readily transmitting fire.

Emergency Operations Plan - The applicant shall prepare a safety/emergency response plan in cooperation with town emergency service providers.

A copy of the approved Emergency Operations Plan shall be given to the system owner, the local fire department, and local fire code official. A permanent copy shall also be placed in an approved location to be accessible to facility personnel, fire code officials and emergency responders. The emergency operations plan shall include the following information:

1. Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions.
2. Procedures for inspection and testing of associated alarms, interlocks, and controls.
3. Procedures to be followed in response to notifications from the solar energy system and/or battery energy storage system that, when provided, could signify potentially dangerous conditions, including shutting down equipment, summoning

service and repair personnel, and providing agreed upon notification to fire company personnel for potentially hazardous conditions in the event of a system failure. All means of shutting down the solar energy system shall be clearly marked.

4. The property must be inspected after a National Weather Service designation of a Severe Weather Watch or Severe Weather Warning to ensure that the property did not sustain damage. Reports of such inspection shall be filed with the Town Building Inspector.

5. Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions. Procedures can include sounding the alarm, notifying the fire department, evacuating personnel, de-energizing equipment, and controlling and/or extinguishing the fire.

6. Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required.

7. Procedures for dealing with solar energy system and/or battery energy storage system equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely remove damaged equipment from the facility. System owner shall provide guaranteed non-emergency and emergency response times of a qualified subject matter expert to the Building Department and local emergency responders.

8. Other procedures as determined necessary by the Town to provide for the safety of occupants, neighboring properties, and emergency responders, that shall include but not be limited to a smoke plume test for evacuation purposes.

9. Procedures and schedules for conducting drills of these procedures and for training local emergency responders on the contents of the plan and appropriate response procedures. Training shall be done annually and shall include local and mutual aid emergency responders.

10. The system owner shall notify the local fire department, county emergency management office and the town building inspector at least one week prior to any scheduled maintenance or battery swap out.

11. In the event of a fire, all contaminated soil must be removed and disposed of properly, in accordance with all applicable laws.

Retention Pond - The applicant for a utility-scale solar energy system shall consult with the fire department with primary coverage of the project area on the best fire suppression

system for the planned battery technology. If the fire department determines that water is necessary, the applicant shall develop a well or retention pond(s) holding a sufficient amount of water as determined in site plan review, with dry hydrants (arrangement of piping with one end in the water and the other extending to dry land), for emergency firefighting use. The Planning Board may waive this requirement if it determines that the project area is adequately served by public water supply.

Battery Management System - Battery Energy Storage Systems shall use a Battery Management System, which will incorporate an HVAC system to maintain environmental temperature and manage humidity for optimal operating conditions for batteries. The BMS must be capable of collecting data at the battery cell and module levels, monitoring temperature, voltage, current, state of charge, and state of health to detect abnormal battery conditions and provide information to prevent and mitigate potential emergency events.

Monitoring - Battery Energy Storage Systems shall be monitored 24 hours a day, seven days a week, from a remote operations center that can shut off project components when abnormal conditions are identified. The BESS shall also have smoke alarms and fire detection systems that will trigger audio/visual alarms on the BESS containers and be monitored remotely by the operations center, where operators will contact local personnel immediately and ensure that local emergency responders are notified in the event of an emergency.

Delivery - No batteries will be delivered to the project site until they are ready to be activated and placed into service. On-site storage of batteries for more than 72 hours prior to activation is prohibited.

## **SECTION NINE. ABANDONMENT OR DECOMMISSIONING OF SYSTEMS**

### **1. Decommissioning Plan**

An owner or operator of a utility-scale solar energy system that has not generated electricity for a period of six consecutive months must notify the Town Supervisor and the Town Building Inspector in writing that the system is no longer operating. If the system ceases to operate for an additional 12 consecutive months, the system shall be deemed to be abandoned and shall be decommissioned within six months by the owner or operator. A decommissioning plan shall be submitted as part of the special use permit application to the Planning Board. The decommissioning plan shall be signed by the owner and/or operator of the solar energy system, identify the anticipated life of the project, and include, but not be limited to, the following provisions:

- a. The removal of all energy facilities, structures and equipment including any subsurface wires and footings from the parcel. Any access roads created for

building or maintaining the system shall also be removed and re-planted with vegetation.

- b. The cost of removing the entire solar energy system based upon prevailing wages and any other requirements applicable to municipalities under state or federal law and no salvage value shall be attributed to any of the components of the solar energy system and/or the solar energy equipment.
- c. A schedule and methods for the removal of the solar energy system and/or the solar energy equipment, including any ancillary structures.
- d. The time required to restore the property to its pre-installed condition and to repair any damage caused to the property by the installation and removal of the solar energy system.
- e. A plan for restoring the property to its pre-installed condition, including grading and vegetative stabilization to eliminate any negative impacts to surrounding properties, and, where if it was previously used for farming, with vegetation suitable for farming purposes, i.e. a hay field, crops or grazing.
- f. A proposed Decommissioning Agreement, which shall be provided by the applicant and approved by the Town Board. No building permit shall be issued for a solar energy system until the Decommissioning Agreement between the applicant and the town has been executed and financial security provided as below set forth.

## 2. Security

- a. Security shall be in an amount sufficient to ensure the good faith performance of the terms and conditions of the permit issued pursuant hereto and to provide for the removal of the solar energy system and restoration of the site subsequent to removal. The Security shall be an evergreen letter of credit issued by an A-rated financial institution (relating to Standard & Poor's Rating Services, Inc. ("S&P") or any successor agency thereto) or an A3 rating financial institution (relating to Moody's Investor Services ("Moody's") or any successor rating agency thereto)) on behalf of the company, substantially in the form attached hereto as Exhibit A. The amount of the bond or security shall be 125 percent of the estimated cost of removal of the solar energy system and restoration of the property, with an escalator of 2 percent annually (or Consumer Price Index change if more than the annual escalator of 2 percent) for the life of the solar energy system, and shall not take into account the net salvage value of any such project components. The security established by the agreement shall not be subject to disclaimer or rejection in a bankruptcy proceeding.

- b. In the event of default upon performance of such conditions, after proper notice and expiration of any cure periods, the security shall be forfeited to the Town, which shall be entitled to maintain an action thereon. The security shall remain in full force and effect until 90 days after the restoration of the property, as set forth in the decommissioning plan, is completed.

**SECTION TEN. PUBLIC UTILITY USE**

A solar energy facility shall not be considered a Public Utility Use as that term is defined in Section 3.5.119 of the Town of Duaneburg Zoning Ordinance adopted by the Town Board on June 11, 2015.

**SECTION ELEVEN. SEVERABILITY**

The invalidity of any clause, sentence, paragraph or provision of this local law shall not invalidate any other clause, sentence, paragraph or part thereof.

**SECTION TWELVE. EFFECTIVE DATE**

This local law shall take effect immediately upon the filing in the office of the New York State Secretary of State in accordance with Section 27 of the Municipal Home Rule Law.