

TOWN OF MACHIAS
LOCAL LAW NO. 1 OF THE YEAR 2020
A Local Law to regulate Solar Energy Systems in the Town

ARTICLE I
Enactment and Intent

1. Title.

This Local Law shall hereafter be known, cited and referred to as the “Solar Energy Systems Law of the Town of Machias”.

2. Purpose and Intent.

The Town of Machias Town Board recognizes that solar energy is a clean, readily available source of renewable energy and intends to accommodate the use of solar energy systems in the Town. Understanding that there is growing need to properly site solar energy systems within the boundaries of the Town, this law is designed to protect land uses in the community and protect the health, safety and general welfare of citizens; preserve the overall beauty, nature and character of the Town; and promote effective and efficient use of solar energy resources. Prior to the adoption of this law, the Town had no specific procedures to address the use and siting of solar energy systems. Hence, this law seeks to:

- A. Provide property owners and business owners operators with guidance and flexibility in satisfying their energy needs.
- B. Provide an opportunity for the use of alternative sources of energy within the Town of Machias and promote clean energy.
- C. Integrate solar energy systems seamlessly into the Town’s neighborhoods and landscapes without diminishing quality of life in these areas.

ARTICLE II
Terminology

2. Definitions.

As used in this Local Law, the following terms shall have the meanings indicated:

ALTERNATIVE ENERGY SYSTEMS Structures, equipment, devices or construction techniques used for the production of heat, light, cooling, electricity or other forms of energy on a site and may be attached to or separated from the principal use.

ARRAY – Any number of electrically connected photovoltaic (PV) modules providing a single electrical output.

BUILDING-INTEGRATED PHOTOVOLTAIC (BIPV) – The incorporation of photovoltaic materials into the physical structure of a building. BIPV technologies include photovoltaic shingles or tiles, photovoltaic laminates and photovoltaic glass. Examples of placement include vertical facades, semi-transparent skylights and windows, awnings (including fixed awnings) and roofs (*See Attachment I*).

BUILDING MOUNTED SYSTEM – A solar energy system that is affixed to the side(s) of a building or other structure, either directly or by means of support structures or other mounting devices, but not including those mounted to the roof or top surface of a building. Said system is designed and intended to produce general electricity solely for use on the subject lot, potentially for multiple tenants, through a distribution system that is not available to the public (*See Attachment I*).

CELL – The smallest basic solar electric (photovoltaic) device that can generate electricity when exposed to radiant energy (visible sunlight).

COLLECTIVE SOLAR – Installations of solar photovoltaic systems that are owned collectively through a homeowners' association, "adopt a solar panel" programs or other similar arrangements.

GLARE – To shine with a harsh, bright light.

GLINT – To shine in small bright flashes.

GROUND-MOUNTED SYSTEM – A photovoltaic system mounted on a structure, pole or series of poles that are constructed specifically to support the photovoltaic system, and not physically attached to any structure (*See Attachment I*).

MODULE – A module is the smallest protected assembly of interconnected photovoltaic cells.

NET METERING AGREEMENT – An agreement with a local electric utility company that allows customers to receive a credit for surplus electricity generated by certain renewable energy systems.

PHOTOVOLTAIC (PV) – Any material or device with the capability to generate electric current or voltage when exposed to electromagnetic radiation (radiant energy), in particular visible light from the sun.

QUALIFIED SOLAR INSTALLER – A person who has skills and knowledge related to the construction and operation of photovoltaic solar equipment and installations and has received safety training on the hazards involved therein. This shall include persons who are on the list of eligible photovoltaic installers, as maintained by the New York State Energy Research and Development Authority (NYSERDA), or who are certified as a solar installer.

by the North American Board of Certified Energy Practitioners (NABCEP). Persons who are not on the NYSERDA or NABCEP lists of eligible or certified installers may be deemed to be qualified solar installers if Code Enforcement Office of the Town of Marilla determines such persons to have had adequate training to determine the degree and extent of any hazard and have the personal protective equipment and job training necessary to perform the safe and proper installation of PV systems. Such training shall include the proper use of special precautionary techniques and personal protective equipment, as well as the skills and techniques necessary to distinguish exposed energized parts from other parts of electrical equipment, and to determine the nominal voltage of exposed live parts.

ROOF-MOUNTED SYSTEM – A solar power system in which solar panels are mounted on top of the structure either as a flush-mounted system or as modules fixed to frames that can be tilted or articulated to achieve an optimal angle for tracking the sun (*See Attachment 1*).

SOLAR ACCESS – Land area or space that is open to the sun and clear of overhangs or shade, including structures built on private property that do not infringe on the rights of adjacent properties.

SOLAR FARM – An area of land that supports an arrangement of freestanding ground-mounted or building-mounted photovoltaic devices designed to capture solar energy and convert it to electricity for commercial use or transfer to the local utility grid for sale to the general public (see “utility-scale photovoltaic system” and Attachment 1).

SOLAR PHOTOVOLTAIC SYSTEM (SPS) – A solar collection system consisting of one or more building- and/or ground-mounted, solar photovoltaic cells, modules, panels or arrays and solar related equipment that rely upon solar radiation as an energy source for collection of solar energy, conversion of solar energy to electricity, inversion of DC electricity to AC electricity and storage/distribution of electricity generated through the system.

TRACKING SYSTEM – A number of photovoltaic modules mounted such that they track the movement of the sun across the sky to maximize energy production, either with a single-axis or dual-axis mechanism.

UTILITY SCALE PHOTOVOLTAIC SYSTEM – A solar photovoltaic system that is designed and intended to supply electrical energy solely to the utility grid for sale to the general public (*See Attachment 1*).

ARTICLE III

General Provisions

4. Permitting.

A. Building, Roof and Ground-Mounted Solar Photovoltaic Systems.

- 1) A building permit shall be required for the installation of all roof and building mounted SPSs and ground mounted systems for small-scale residential use.
- 2) All review and permitting for roof, building and ground mounted systems shall be the responsibility of the Town of Machias Code Enforcement Officer.
- 3) Any post construction changes to any small-scale roof, building or ground mounted SPS required review and approval by the Town of Machias Code Enforcement Officer.

B. Utility Scale Solar Photovoltaic Systems.

- 1) All utility-scale SPSs shall require the issuance of a Special Use Permit and site plan approval from the Machias Town Board.

C. Applicability.

- 1) Two types of ground mounted SPSs are addressed herein:
 - a) SPS Type 1 - A utility (large) scale system designed for the generation of power supplied for commercial use and/or to the public utility grid by way of a net metering agreement;
 - b) SPS Type 2 - A small scale system designed to generate power for a single residence or property owner. A Type 2 system shall be permitted to supply power to the local utility grid, on a limited basis, by way of a net metering agreement at no greater than 110% of anticipated on-site demand.

D. Permitted Use and Locations.

- 1) Any SPS shall be considered and regulated as an accessory use structure in all areas of the Town.
- 2) Type 1 and Type 2 SPSs shall be permitted in all areas of the Town.
- 3) A building mounted SPS shall be integrated into the design of the building and shall not obstruct any window, door or other architectural feature of the building.
- 4) A building mounted SPS shall not extend more than six (6) feet from the building façade to which it is affixed.
- 5) A roof mounted SPS shall not be located closer than three (3) feet to any roof edge or building wall, and in no instance shall any part of the system extend beyond the roof line or parapet wall.
- 6) When affixed to a pitched or peaked roof, an SPS should generally follow the slope of the roof.

- 7) The Town of Machias Code Enforcement Officer shall require a minimum three (3) foot center walkway between panels or arrays for safety access purposes for any roof mounted SPS.

E. Minimum Lot Requirements.

- 1) The minimum lot size for Type 1 SPS is five (5) acres. The density of any solar farm shall not be greater than fifty (50%) percent of the size of the lot and shall not, in any event, exceed fifty (50) acres.
- 2) The required yard setbacks for Type 1 and Type 2 ground mounted SPSs shall be thirty (30) feet, as measured from the parcel line to the nearest part of the system.
- 3) No part of any SPS shall extend into the required setbacks, including any movement as a result of a tracking system or other adjustment of SPS related equipment or parts.
- 4) A Type 2 ground mounted SPS shall only be permitted in the rear yard of any residential or business property.
- 5) The orientation of any SPS shall not be directed at any adjacent or adjoining residential dwelling.

F. Height Restrictions.

- 1) The maximum overall height for Type 1 and Type 2 ground-mounted systems is twenty (20) feet from finished grade.
- 2) The highest part of a roof mounted SPS shall not be more than three (3) feet higher than the finished roof to which it is attached.
- 3) Roof mounted SPSs shall not be mounted flush to the roof.
- 4) The maximum height of a building mounted SPS shall be eighteen (18) feet, as measured from the lowest point where the system is affixed to the vertical façade of a building.

5. General provisions.

- A. All SPSs existing on the effective date of this Article shall be allowed to continue usage as they presently exist. Routine maintenance (including replacement with a new system of like construction and size) shall be permitted on such existing systems. New construction other than routine maintenance shall comply fully with the requirements of this Local Law.

- B. No SPS shall hereafter be used, erected, moved, reconstructed, changed or otherwise altered except in conformity with these regulations.
- C. Any applications, including applications for variances, pending for an SPS on the effective date of this article shall be subject to the provisions contained herein.
- D. All SPSs shall be installed by a qualified solar installer, as defined by this chapter.
- E. Any building, roof or ground mounted SPS shall be fully accessible to all emergency service vehicles and personnel.
- F. Nothing contained in this law shall be construed to prohibit collective solar installations or the sale of excess power through net billing or net metering arrangements in accordance with New York State Public Service Law §66-j or similar New York State or federal laws and regulations.
- G. All SPSs shall adhere to all applicable Federal, State, County and Town of Machias laws and regulations, including building, plumbing, electrical, and fire codes.
- H. The Town of Machias Code Enforcement Officer shall notify the Machias Fire Department upon the approval of any approved solar installations.

6. Design Criteria.

- A. Design and installation standards.
 - 1) All structures and devices used to support SPSs shall be non-reflective and/or painted a subtle or earth tone color.
 - 2) The design, construction, operation and maintenance of any SPS shall prevent the misdirection and/or reflection, glare or glint of solar rays onto neighboring properties, businesses, public roads, public parks and other public facilities in excess of that which already exists. Should this occur, proper action shall be taken to correct the problem within 30 days upon notification of the Town of Machias Code Enforcement Officer.
 - 3) Artificial lighting of any SPS shall be limited to lighting required for safety and operational purposes and shall be dark-sky compliant and shielded from all neighboring properties and public roads.
 - 4) When solar storage batteries are included as a part of any SPS, they shall be placed in secure containers or enclosures that meet the requirements of the New York State Uniform Fire Prevention and Building Code when in use. When no longer used, solar storage batteries must be disposed of in accordance with all applicable laws of New York State and Cattaraugus County regulations.

- 5) Disconnect and other emergency shutoff information must be clearly displayed at on the meter location of a Type 1 SPS for emergency personnel, as well as 24-hour emergency contact information.
- 6) The power supply cutoff device for any Type 2 roof or building mounted SPS shall be located on the outside of the structures that support such systems, in close proximity to where the power supply enters the facility, along with 24-hour emergency contact information, where it can be easily accessed by emergency personnel.
- 7) All wiring must be designed and installed to comply with the National Electrical Code (NEC).
- 8) All interconnecting cables between the SPS and accessory or servicing structures shall be installed underground or within the structure they are mounted upon.
- 9) A minimum six (6)-foot high fence shall be used to fully enclose the any Type 1 SPS to prevent unauthorized access to the site.
- 10) The SPS system must be designed and constructed to comply with the most recent Fire Code as amended and adopted by the State of New York.

B. Compliance with Building Code.

- 1) Building Permit Applications shall be accompanied by standard drawings of structural components of the SPS, including support structures, base and footings. Drawings shall be stamped, and any necessary calculations shall be certified, in writing, by a licensed New York State professional engineer or architect, to indicate that the system complies with the current New York State Building Code.
- 2) Where the installation or structural components vary from the standard design or specifications, proposed modifications shall be certified by a licensed New York State professional engineer for compliance with the seismic and structural design provisions of the New York State Building Code.

C. Compliance with electrical code.

- 1) Building Permit Applications shall be accompanied by a line drawing identifying the electrical components of the SPS to be installed in sufficient detail to allow for a determination that the manner of installation conforms to the electrical code. The application shall include a statement from a New York State licensed professional engineer or architect indicating that the electrical system conforms to sound engineering practices and complies with the National Electrical Code (NEC). This certification would normally be supplied by the manufacturer. All equipment and materials shall be used or installed in accordance with such drawings and diagrams.

- 2) Where the electrical components of an installation vary from the standard design or specifications, the proposed modifications shall be reviewed and certified by a New York State licensed professional engineer for compliance with the requirements of the NEC and sound engineering practices.

D. Maintenance and Repair Records.

- 1) An SPS shall be maintained in operational conditions at all times, subject to reasonable maintenance and repair outages. Operational condition includes meeting all approval requirements and conditions.
- 2) The SPS shall be kept free from hazards including, but not limited to, faulty wiring, loose fastenings, and creation of an unsafe condition or detriment to public health, safety or general welfare.
- 3) Owners and operators of SPSs shall be required to keep all records of maintenance activities. The Town of Machias Code Enforcement Officer shall have the right to request documentation from the owner operator of an SPS regarding the system's usage and maintenance at any time.
- 4) The owner operator of an SPS shall be required to fully inspect the system on an annual basis. A copy of the inspection report shall be provided to the Machias Building Department as part of the renewal of the Special Use Permit.
- 5) The inspection of SPSs shall comply with all requirements of the New York State Building Code.

E. Abatement and Removal.

- 1) If an SPS poses a safety hazard, as determined by the Town of Machias Code Enforcement Officer, the owner or operator shall take immediate action to remedy the hazard. The Code Enforcement Officer shall have the authority to cause the abatement of any hazardous situation. If the Town of Machias determines that the SPS poses a safety hazard, a Notice of Violation shall be issued and the SPS shall be made non-operational until such hazard has been remedied to the satisfaction of the Town of Machias Building Department.
- 2) If the use of an approved SPS is discontinued, the owner or operator shall notify the Town of Machias Building Department within thirty (30) days of such discontinuance. If the SPS is to be retained and reused, the owner or operator shall further inform the Town of this in writing at such time and obtain any necessary approvals within one year. Otherwise, the SPS shall be deemed automatically abandoned.
- 3) If the SPS has been non-operational or abandoned for a period of one year or more, the system shall be removed within 45 days of written notice from the Town of Machias to the property owner or operator of the system.

7. Special Use Permit Requirements.

- A. Any proposal to place, construct or modify a Type 1 utility-scale solar photovoltaic system in the Town of Machias requires the issuance of a Special Use Permit and site plan approval by the Machias Town Board.
- B. All Special Use Permit applications for an SPS shall be submitted to the Town of Machias Building Department.
- C. All special use permit applications shall include the following information.
 - 1) Completed Special Use Permit Application and checklist.
 - 2) Completed Site Development Plan Application and checklist.
 - 3) An accurate real property survey.
 - 4) Engineered drawings certified by a licensed professional engineer or architect.
 - 5) Design elevations that illustrate the potential views and height of proposed structures.
 - 6) Aerial site plan showing the location of relevant utility poles and lines, trees and structures, and the names of all adjacent property owners.
 - 7) Clearing, grading, storm water drainage and or erosion control plans, as required.
 - 8) Soils map that illustrates the location of all prime farm soils on the subject property.
 - 9) SPS Manufacturer information.
 - 10) Maintenance and removal plan.
 - 11) Decommissioning and restoration plan.
 - 12) SEQR environmental assessment form.
- D. Screening, visibility and access.
 - 1) Type 1 SPSs are required to submit a screening and landscaping plan, showing adequate measures to screen the site through landscaping, grading or other means so that the visibility of solar panels arrays and other equipment is minimized from roadways and neighboring properties. The screening and landscaping plan should include the locations, elevations, height, plant species, and or materials that will be used to screen and/or mitigate any adverse aesthetic effects of the system.

- 2) A safety plan must be submitted that specifies the measures that will be used to prevent public access to unsafe areas, and to provide for emergency response, including but not limited to the location, height, materials, and colors of fencing and other barriers to public access.
- 3) Documentation shall be provided to confirm that no element of an SPS will reflect glint or glare that could be disruptive to passing aircraft (as defined by the FAA).

E. Signage and or Graphic Content

- 1) No signage or graphic content may be displayed on any Type 1 SPS system except the manufacturer's badge, safety information and equipment specification information. Said information shall be depicted within an area no more than thirty-six (36) square inches in size.
- 2) The locations, size and text of any safety signage that will be used for any Type 1 SPS to prohibit public access to unsafe areas shall be included with the site plan.
- 3) Type 1 systems and sites may not be used for displaying advertising except for reasonable identification of the owner/operator and shall comply with all signage restrictions.

F. Maintenance and removal plan.

- 1) A maintenance and removal plan shall include a written agreement by the applicant and/or owner/operator to remove all components of the SPS if such facility becomes non-functional or ceases to be used for its originally intended purpose, as determined by the Town of Machias. The maintenance and removal plan shall remain in force for the life of the SPS.
- 2) A bond and/or surety or other form of security, acceptable to the Town Attorney, shall be required for all Type 1 projects to cover the cost of the SPS removal and site restoration. Said proof or bond or security shall be filed with the Town prior to construction, and shall remain in force for the life of the SPS.

G. Decommissioning and restoration.

- 1) The applicant shall include the following information with the Special Use Permit Application regarding decommissioning of the SPS and restoration of the site:
 - a) The anticipated life of the SPS.
 - b) The estimated decommissioning costs in current dollars.
 - c) The method and schedule for updating the costs of decommissioning and restoration

- d) A method of ensuring that funds will be available for decommissioning and restoration.
- e) The anticipated manner in which the SPS will be decommissioned and the site restored.
- f) Such other and reasonable requirements as determined by the Town of Machias.

II. Additional requirements.

- 1) The applicant is required to obtain all necessary regulatory permits and approvals from all federal, state and county agencies having jurisdiction as related to the completion of the Type 1 SPS.
- 2) After completion of the Type 1 SPS, the applicant shall provide post-construction certification from a licensed New York State professional engineer that indicates that the project complies with all applicable codes and industry practices, and has been constructed and is operating in accordance with the approved design plans.
- 3) After the granting of the Special Use Permit for the Type 1 SPS, concurrent with site plan approval, the Building Permit shall be obtained within six (6) months and construction of the project completed within twelve (12) months. The applicant shall be entitled to apply to the Code Enforcement Officer for an extension of the deadline for completion of construction of the project prior to expiration of the initial twelve (12) month period. The filing fee for such extension shall be fifty percent (50%) of the original filing fee. If granted, such extension shall be for an additional twelve (12) month period. If the project is not constructed and operational within the original timeframe for construction and completion and any extension thereof, the permit and site plan approval shall lapse, and the project owner operator will be required to seek new approval from the Town Board unless otherwise determined by the Code Enforcement Officer that the project may be continued. In such case, the project must be more than 90% constructed and near completion, in which case a three (3) month extension can be granted.
- 4) Up until the time that final site plan approval has been granted by the Machias Town Board and permits have been issued by any and all governmental agencies involved with the Type 1 SPS project, the Town Board may impose additional conditions or restrictions, as it may deem necessary, prior to approving the request for a Special Use Permit.
- 5) Any post construction changes or alterations to a Type 1 SPS shall be undertaken only by amendment to the Special Use Permit (and site plan approval, if required), subject to all requirements of this Local Law.

- 6) Special Use Permits for a Type 1 SPS are assignable or transferrable as long as they are in full compliance with all requirements of this Local Law and all conditions of the permit, and the Machias Code Enforcement Officer is notified of said change, in writing, no less than fifteen (15) days prior thereto.
- 7) A Special Use Permit for a Type 1 SPS must be renewed on an annual basis. A copy of the annual maintenance and inspection report must be submitted along with the application for renewal.

I. Fees.

- 1) The applicant shall pay an initial application fee of Five Hundred dollars (\$500.00), or such other amount as the Town Board may, from time-to-time, determine by Resolution as appropriate, upon filing application for a Special Use Permit and site plan approval plus costs for Engineering and any other fees required by State or County agencies. This fee shall be appropriate to cover the costs of processing and reviewing the application.
- 2) An applicant for any Type 2 SPS shall pay a building permit fee of Fifty dollars (\$50.00), or such other amount as the Town Board may, from time-to-time, determine by resolution as appropriate for this action.
- 3) The applicant shall pay the standard fee for the filing of a site plan application for Type 1 SPS, as determined from time-to-time by Resolution of the Town Board.
- 4) In addition to any Special Permit or site plan application fees, an applicant shall also pay the required Building Permit application fee.
- 5) All Special Use Permits must be renewed on an annual basis. The renewal fee for a Special Use Permit is One Hundred dollars (\$100.00), or such other amount as the Town Board may determine, from time-to-time, by Resolution as appropriate.

8. Revocation, interpretation and severability.

- A. Violations of any of the conditions of the Special Use Permit, site plan approval or any other local, state or federal laws, rules or regulations, shall be grounds for the revocation of the Special Use Permit or site plan approval. Revocation may occur after the applicant is notified in writing of the violations and the Town of Machias Town Board holds a hearing on same.
- B. In their interpretation and application, the provisions of this Local Law shall be held to be minimum requirements, adopted for the promotion of the public health, safety and general welfare. It is not intended to interfere with, abrogate or annul other rules, regulations or laws, provided that whenever the requirements of this article are at a variance with the requirements of any other lawfully adopted regulations, rules or laws, the most restrictive, or those which impose the highest standards, shall govern.

- C. The Town Board of the Town of Machias herein reserves the right to approve variations to the regulations established pursuant to this Local Law on an individual basis as part of the application and approval process.
- D. If any section, subsection, phrase, sentence or other portion of the Local Law is for any reason held invalid, void, unconstitutional or unenforceable by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions hereof.