

TOWN OF BARRE

LOCAL LAW 1 OF THE YEAR 2019

BE IT ENACTED by the Town Board of the Town of Barre as follows:

Section I: Title.

This Local Law shall be entitled as: “A Local Law Amending the Town Code to Establish a New Article XII Entitled ‘Solar Energy Systems and Facilities’, and to Amend the Schedule of Use Regulations to Provide for those Facilities”.

Section II: Amendments to Town Code Establishing Article XII

The Town of Barre Town Code is hereby amended to establish a new Article XII entitled: “Solar Energy Systems and Facilities” as follows:

350-112 Purpose and Intent

Solar energy is a renewable and non-polluting energy resource that can prevent fossil fuel emissions and reduce a municipality’s energy load. Energy generated from solar energy systems can be used to offset energy demand on the grid where excess solar power is generated. The use of solar energy equipment for the purpose of providing electricity and energy for heating and/or cooling is a priority and is a necessary component of the Town of Barre’s current and long-term sustainability agenda. Because it is in the public interest to provide for and encourage renewable energy systems and a sustainable quality of life, the purpose of this law is to facilitate the development and operation of renewable energy systems based on sunlight while minimizing adverse impacts on neighboring properties to protect the public health, safety and welfare

350-113 Definitions

As used in this law, the following terms shall have the meanings indicated, unless the context or subject matters require others.

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

Building-Integrated Photovoltaic (BIPV) Systems – A solar energy system that consists of integrating photovoltaic modules into the building structure, such as the roof or the façade and which does not alter the line of the roof.

Collective Solar – Solar installations owned collectively through subdivision homeowner associations, condominium associations, “adopt-a-solar panel” programs, or other similar collective arrangements.

Farm – For the purposes of this section an agriculture farm is one that has an average of \$10,000 in gross sales and has at least 7 acres of land used to produce livestock, or crops for the preceding two years.

Flush-Mounted Solar Panel – A photovoltaic panel or tile that is installed flush to the surface of a roof and which cannot be angled or raised.

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

Glare – As defined by NYSERDA in the model solar energy local law: The effect of reflection of light with intensity sufficient as determined in a commercially reasonable manner to cause annoyance, discomfort, or loss of visual performance and visibility in any material respects.

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

NYSPE – New York State Professional Engineer

Permit Granting Authority – The Town’s Code Enforcement Officer who is charged with granting permits for the operation of solar systems.

Photovoltaic (PVI) System – A solar energy system that produces electricity by the use of semiconductor devices, called photovoltaic cells that generate electricity whenever light strikes them.

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

Rooftop or Building Mounted Solar System – A solar power system in which solar panels are mounted on top of the structure of a roof either as a flush-mounted system or as modules fixed to frames which can be tilted toward the south at an optimal angle.

Setback – The required minimum distance from the property line to the nearest part of the structure measured at the right angles to the property line within which a freestanding or ground-mounted solar energy system is installed.

Small-Scale Solar – Refers to solar photovoltaic systems or solar thermal that produce up to 25 Kilowatts (kW) of energy or solar thermal systems which serve the building to which it is attached or one associated on that tax parcel in accordance with section 350-116 and section 350-117 of this law.

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

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

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

Solar Energy Equipment System – Solar collectors, controls, energy storage devices, heat pumps, heat exchangers, and other materials, hardware or equipment necessary to the process by which solar radiation is collected, converted into another form or energy, stored protected from unnecessary dissipation and distributed. Solar systems include solar thermal and photovoltaic. A solar energy system does not include any solar energy system of 32 square foot in size or less.

(USSES) Utility Scale Solar Energy System (USSES)– Energy generation facility or area of land principally used to convert solar energy to electricity, whether by photovoltaics, concentrating solar thermal devices or various experimental solar technologies with the primary purpose of wholesale or retail sales of electricity.

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

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

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

350-114 Applicability

- A. The requirements of this law shall apply to all solar energy systems and equipment installations modified or installed after the effective date of this Local Law.
- B. Solar energy system installations for which a valid building permit has been issued or, if no building permit is presently required, for which installation has commenced before the effective date of this local law, shall not be required to meet the requirements of this local law.
- C. All solar energy systems shall be designed, erected and installed in accordance with all applicable codes, regulations and industry standards as referenced in the New York State Building Code and the Barre Town Code.
- D. Solar collectors, unless part of a (USSES) or solar power plant, shall be permitted only to provide power for use by owners, lessee, tenants, residents, or other occupants of the premises on which they are erected, but nothing contained in this provision shall be construed to prohibit collective solar installations or the sale of excess power through a net-billing or net-metering arrangement in accordance with New York Public Service Law §66-j or similar state or federal statute.
- E. Notwithstanding any other provision of this Local Law, any solar energy systems installed on a farm and designed to serve only that farm, shall only require a building permit for systems under 50 kW. Agricultural farm-installed solar energy systems of 50 kW or more shall require a building permit and site plan review.
- F. This section shall not apply to any premises or property owned or controlled by the Town of Barre which shall be exempt from these solar zoning requirements.

350-115 Permitting and Approvals Required

- A. Rooftop or building mounted solar systems shall be permitted in all zoning districts pursuant to a solar system building permit granted by the Town's Code Enforcement Officer and subject to the requirements of this article.
- B. Freestanding or ground mounted solar energy systems for residential use in all districts are subject to the issuance of a solar system building permit and for systems in excess of 25 kW, a site plan approval by the Planning Board is required.
- C. (USSES)s shall be permitted only in the AR District subject to a solar system building permit and a special use permit and a site plan approval by the Planning Board.
- D. Building-Integrated photovoltaic (BIPV) systems are permitted in all zoning districts provided they are shown on the plans submitted for the building permit application for the building containing the system approved by the Town's Code Enforcement Officer.
- E. Solar thermal systems are permitted in all zoning districts, subject to the conditions set forth hereinafter.

350-116 Requirements for Rooftop, Building Mounted and Wall Mounted Solar Collectors

- A. Rooftop and building-mounted solar collectors may exceed the maximum height prescribed for principal or accessory uses for the applicable zoning district, but only extend by 3 feet higher than the finished roof to which it is mounted. The solar array must be set back a minimum of 18 inches from all edges of the rooftop and the top ridge line, to allow for firefighter access to the rooftop area.

- B. Fire safety and emergency access – All such installations shall comply with the New York State Uniform Fire Prevention and Building Code (the “State Code”) to insure firefighter and other emergency responder safety and access.

350-117 Requirements for Small Scale Freestanding and Ground-Mounted Solar Collectors

- A. Freestanding and ground-mounted solar collections shall be subject to the following conditions:
1. In all Districts, a lot must have a minimum size of 40,000 square feet for a freestanding or ground-mounted solar collector to be permitted.
 2. The location of a ground-mounted or freestanding solar collector shall comply with the setback requirements for accessory buildings, as set forth in the Barre Town Code.
 3. No ground-mounted or freestanding solar collectors shall be permitted in the front yard.
 4. The height of the solar collector and any mount shall not exceed 20 feet when oriented at a maximum tilt.
 5. Ground-mounted and freestanding solar collectors shall be screened as much as possible and practicable from adjoining lots and street rights-of-way 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, however, interfere with the normal operation of the solar collectors.
 6. Solar energy equipment shall be located in a manner to reasonably minimize blockage of sunlight for surrounding properties and shading of property to the north while still providing adequate solar access for collectors.
 7. Solar energy equipment shall not be sited within any required buffer areas.
 8. The total surface area of all ground-mounted and freestanding solar collectors on a lot 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, excluding patios, decks, and balconies, screened and open porches and attached garages. Installations on non-residential properties exceeding the size may be approved by the Planning Board subject to site plan review pursuant to Article X of the Barre Town Code.
 9. The area beneath ground-mounted and freestanding solar collectors shall be included in calculating whether the lot meets maximum permitted lot building coverage and lot surface coverage requirements for the applicable district, notwithstanding that the collectors are not “buildings”.
 10. The installation of ground-mounted and freestanding solar collectors shall be considered a development or development activity.
 11. Solar thermal systems shall comply with the following conditions:
 - a. Building permits are required for the installation of solar thermal systems.
 - b. Ground-mounted and freestanding solar thermal systems shall be subject to the same requirements set forth in subsection 350-117(A) above for ground-mounted and freestanding solar collectors.

12. All solar energy systems and equipment shall be permitted only if they are determined by the Town Code Enforcement Officer not to present any unreasonable safety risks including, but not limited to, the following:
 - a. Weight load.
 - b. Wind resistance.
 - c. Ingress or egress in the event of fire or another emergency.
13. Prevention of glare.
 - a. All solar collectors and related equipment shall be surfaced, designed and sited so as not to reflect glare onto adjacent properties.

350-118 Safety

- A. All solar collector installations must be performed by a qualified solar installer.
- B. Prior to operation, electrical connections must be inspected by the Town's Code Enforcement Officer and by an appropriate electrical inspection person or agency, as determined by the Town.
- C. Any connection to the public utility grid must be inspected by the appropriate public utility.
- D. Solar energy systems shall be maintained in good working order.
- E. Rooftop and building-mounted solar collectors shall meet New York's Uniform Fire Prevention and Building Code standards.
- F. If solar storage batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure meeting the requirements of the New York State Uniform Fire Prevention and Building Code (the "State Code") when in use and when no longer used shall be disposed of in accordance with the laws and regulations of the Town and other applicable laws and regulations.
- G. If a small scale solar collector ceases to perform its originally intended function for more than 12 consecutive months, the property owner shall remove the collector mount and associated equipment by no later than 90 days after the end of the twelve-month period.
- H. Marking of equipment:
 - a. Solar emergency systems and equipment shall be marked in order to provide emergency responders with appropriate warning and guidance with respect to isolating the solar electric system. Materials used for marking shall be weather resistant. For residential applications, the marking may be placed within the main service disconnect. If the main service disconnect is operable with the service panel closed, then the marking should be placed on the outside cover.
 - b. For commercial application, the marking shall be placed adjacent to the main service disconnect in a location clearly visible from the location where the lever is operated.
 - c. In the event any of the standards in this Subsection "H" for markings are more stringent than applicable provisions of the New York State Uniform Fire Prevention and Building Code (the "State Code"), they shall be deemed to be guidelines only and the standards of the State Code shall apply.

350-119 Utility Scale Solar Energy Systems (USSES)s

(USSES)s shall be permitted in the AR District as an “electrical generating” use subject to special permit and site plan review by the Town Board. (USSES)s shall be subject, but not limited to, the following supplementary regulations in addition to the requirements of 350-117 of this Chapter:

- A. (USSES)s shall be enclosed by perimeter fencing to restrict unauthorized access at a height of 7 feet. However, the Planning Board shall have the discretion to vary or eliminate this requirement where appropriate.
- B. (USSES)s and solar power plants shall have a maximum lot coverage of 75%.
- C. The manufacturers and installer’s identification and appropriate warning signage and emergency contact information shall be posted at the site and clearly visible.
- D. (USSES)s shall be inspected by a New York State licensed professional engineer prior to obtaining a certificate of operation. Each (USSES) shall be inspected annually, or at any time that the Town Building Inspector has determined that damage may have occurred, by an NYSPE and a copy of the inspection report shall be submitted to the Town Building Inspector.
- E. (USSES) buildings and accessory structures shall, to the extent reasonably possible, use materials, colors and textures that will blend the facility into the existing environment.
- F. Appropriate landscaping and/or screening materials may be required to help screen the solar power plant and accessory structures from major roads and neighboring residences. The average height of the solar panel arrays shall not exceed 12 feet measured from the base of the solar array rack to the top of the solar panel array rack. However, the Planning Board shall have the authority to increase the average height of the solar panel array rack up to 8 feet as necessary to accomplish the purposes they are intended to serve. Such determination shall be made with consideration of the subject property’s natural and proposed characteristics including, but not limited to, topography, existing and proposed vegetative buffers, and proximity to residential and/or commercial uses etc.
- G. Artificial lighting of (USSES) facilities shall be limited to lighting required for safety and operational purposes and shall be shielded from all neighboring properties and public roads.
- H. Setbacks: Any (USSES) shall adhere to the following setbacks measured to any solar dedicated structure.
 - a. From any property lot lines: A minimum of fifty (50) feet from any property line.
 - b. From buildings or structures not on the lot proposed for the solar energy system:
 - i. A minimum of two hundred and fifty (250) feet.
 - ii. A minimum of two hundred and fifty (250) feet from any dwelling.
 - c. From buildings or structures on the lot proposed for the solar system: A minimum of one hundred (100) feet from any building, structure or dwelling.
 - d. From public roads: A minimum of one hundred twenty (120) feet from any public road (measured from the center of the road).
 - e. From schools, public parks: A minimum of five hundred (500) feet from all property lot lines bordering a school or public park.
- I. (USSES) and solar power plant panels and equipment shall be surfaced, designed and sited so as not to reflect glare onto adjacent properties and roadways.
- J. On-site power lines shall be placed underground.
- K. All applications for (USSES)s shall be accompanied by a decommissioning plan to be implemented upon abandonment, or cessation of activity, or in conjunction with the removal

of the structure, which shall be reviewed and approved by the Town Board and its consultants.

- L. The following requirements shall be met for decommissioning:
1. (USSES)s and solar power plants which have not been in active and continuous service for a period of one year shall be removed at the owners' or operators' expense within six (6) months of the date of expiration of the one-year period.
 2. All above ground and below ground equipment, conduits, structures, fencing and foundations shall be removed from the site to a depth of at least three (3) feet below grade.
 3. The site shall be restored to as natural a condition as possible within six (6) months of the removal of all equipment, structures, and foundations. Such restoration shall include, where appropriate, restoration of the surface grade and soil after removal of all equipment and re-vegetation of restored soil areas with native seed mixes.
 4. Decommissioning costs shall be determined by an independent party during the application for the proposed solar energy system. The Planning Board shall, as a condition of approval, require the posting of a removal bond of the (USSES) and solar plant's equipment. The value of the bond shall be renewable annually increasing by 2.5% annually.

350-120 Penalties for Offenses

Violations of this section are subject to a maximum fine of \$250 per day, each day of violation is a separate offense.

350-121 Appeals

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

350-122 Building Permit Fees for Solar Panels

The fees for all building permits required pursuant to this article shall be paid at the time of each building permit application pursuant to the Fee Schedule of the Town of Barre.

Section III; Town of Barre Schedule of Use Regulations

The Town of Barre Schedule of Use Regulations contained in the Town Code is hereby amended as follows:

1. The list of permitted uses is hereby amended to provide for "rooftop or building mounted solar systems", as permitted use in all zoning districts.

2. The list of permitted uses is hereby amended to provide for “free-standing or ground-mounted solar energy systems”, as permitted uses in all zoning districts subject to site plan approval by the Planning Board.
3. The list of residential uses is hereby amended to provide for free-standing or ground-mounted solar energy systems”, as permitted uses in all zoning districts.
4. The list of permitted uses is hereby amended to provide for (USSES)s, as a permitted use subject to a special use permit and site plan approval by the Town Board with recommendation of the Planning Board.
5. The list of permitted uses is hereby amended to provide for solar thermal systems, as permitted uses in all zoning districts.
6. District uses are hereby amended to add six notes at the end of the section reading as follows:

Note 1 – “Rooftop or building mounted solar systems shall be permitted in all zoning districts pursuant to a solar system building permit granted by the Town’s Code Enforcement Officer, in accordance with the provisions of Article XII of the Town of Barre Code.”

Note 2 – “Free-standing or ground mounted solar energy systems shall be permitted in all zoning districts subject to the issuance of a solar system building permit and site plan approval by the Planning Board pursuant to the provisions of Article XII of the Code.”

Note 3 – Special use permits for USSES are issued to developers or the land owner and are non-transferrable.

Note 4 – “(USSES)s shall be permitted only in the RA District subject to a solar system building permit and a special use permit and site plan approval by the Planning Board, pursuant to the provisions of Article XII of the Code.”

Note 5 – “Building integrated photovoltaic (BIPV) systems are permitted in all zoning districts provided they are shown on the plans submitted for the building permit application for the building containing this system approved by the Town’s Code Enforcement Officer in accordance with the provisions of Article XII of the Code.”

Note 6 – “Solar thermal systems are permitted in all zoning districts subject to the provisions of Article XII of the Code.”

Section IV: Supersession

This local law is hereby adopted pursuant to the provisions of RPTL ~487, ~10 of the New York State Municipal Home Rule Law and ~10 of the New York State Statute of Local Governments. It is the intent of the Town Board to supersede any provisions of the New York State Law to the extent that they may be inconsistent with the provisions of this Local Law.

Section V: Effective Date

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

350-122 Tax Exemption

The town hereby exercises its right to opt out of the tax exemption provisions of the Real Property Tax Law § 487, pursuant to the authority granted by Subdivision 8 of that law.