

Proposed Zoning Ordinance Changes Concerning Solar Energy Systems

The following changes are being proposed to expand options in energy sources by providing standards for solar energy systems. The solar energy system provisions set forth in this ordinance are intended to protect the public health and safety, promote the general welfare of the community, to conserve the environment, wildlife habitat, fisheries and unique natural areas, and to fit solar energy systems harmoniously into the fabric of the community by assuring the following standards are accomplished with the least possible regulation.

The following revisions are proposed:

Under Article 2 *Definitions*, add the following language:

Solar Energy System – A device or structural design feature used for a system principally used to capture solar energy and convert it to electrical or thermal power. A solar energy system consists of one or more free-standing ground, or roof mounted, solar arrays or modules, or solar related equipment.

- **Solar Energy System, Accessory** – A solar energy system intended primarily or solely to reduce on-site consumption of utility power or fuels. Accessory solar energy systems may be building mounted or ground mounted.
 - Accessory solar energy systems may be located on an adjacent lot to the use to which power consumption is being offset provided the other portions of this definition are met and the primary user of the power has ownership or other legal interest in the system.
 - In the case of systems which serve multiple lots under the same ownership or which are intended to serve a specific group of lots in town, a solar energy system may be considered accessory if on a non-contiguous lot owned or otherwise controlled by the same entity whose power consumption is being offset, provided the other portions of this definition are met and the primary user of the power has ownership or other legal interest in the system.
- **Solar Energy System, Principal** – A solar energy system intended primarily or solely for generation of power to be transmitted and used off-site. Principal solar energy systems may be building mounted or ground mounted and may be of any size.
- **Solar Energy System, Ground-Mounted** – A solar energy system that is structurally mounted to the ground and is not attached to a building. A ground mounted solar energy system may be of any size and may be an accessory or primary solar energy system.
- **Solar Energy System, Building-Mounted** – A solar energy system that is mounted to the roof or sides of a building. A building mounted solar energy system may be of any size and may be an accessory or principal solar energy system.

Under Article 4 Zoning Districts:

In the following sections:

- **§4.4.1.B Residential C District Permitted Uses, The following uses are permitted**
- **§4.4.2.B Village District Permitted Uses, The following uses are permitted**
- **§4.4.3.B Rural Residential District Permitted Uses, The following uses are permitted**
- **§4.4.4.B Farm and Forest District Permitted Uses, The following uses are permitted**
- **§4.4.5.C.2 Limited Residential Shoreland Permitted Uses, The following uses are permitted subject to a permit issued by the Code Enforcement Officer**
- **§4.4.7.B Residential B District Permitted Uses, The following uses are permitted**
- **§4.4.11.C The following uses are permitted in PDDA**
- **§4.4.11.C The following uses are permitted in PDDB**
- **§4.4.11.C The following uses are permitted in PDDC**
- **§4.4.14.B Upper Village District Permitted Uses, The following uses are permitted**

Add the language:

Building mounted solar energy systems and ground mounted solar energy systems which physical size based on total airspace projected over the ground are less than 1,500 square feet, subject to the performance standards herein.

In the following sections:

- **§4.4.1.B Residential C District Permitted Uses, The following uses are permitted subject to site plan review:**
- **§4.4.2.B Village District Permitted Uses, The following uses are permitted subject to site plan review**
- **§4.4.3.B Rural Residential District Permitted Uses, The following uses are permitted subject to site plan review**
- **§4.4.4.B Farm and Forest District Permitted Uses, The following uses are permitted subject to site plan review**
- **§4.4.5.C.3 Limited Residential Shoreland Permitted Uses, The following uses are permitted subject to site plan review**
- **§4.4.7.B Residential B District Permitted Uses, The following uses are permitted subject to site plan review**
- **§4.4.11.C The following uses are permitted subject to site plan review in PDDA**
- **§4.4.11.C The following uses are permitted subject to site plan review in PDDB**
- **§4.4.11.C The following uses are permitted subject to site plan review in PDDC**
- **§4.4.14.B Upper Village District Permitted Uses, The following uses are permitted subject to site plan review:**

Add the language:

Ground Mounted Solar Energy Systems which physical size based on total airspace projected over the ground is 1,500 square feet or greater, subject to the performance standards herein

In the section §4.4.9 Historic Resource Overlay District, Uses, change language as follows:

Minor additions up to 200 square feet and building mounted solar energy systems shall be allowed without site plan approval upon review and approval by the Code Enforcement Officer if the expansion or solar energy system is not visible from the road and such expansion or solar energy system otherwise meets dimensional and other ordinance requirements. [Amended 5/1/2017 5/X/2020 Town Meeting]

In the section §4.4.4.C.2 Resource Protection District Permitted Uses, The following uses are permitted subject to a permit issued by the Code Enforcement Officer, add the following language

Building mounted solar energy systems on permitted structures subject to the performance standards herein.

In the section §4.4.4.C.3 Resource Protection District Permitted Uses, The following uses are permitted subject to site plan review, add the following language

Accessory ground mounted solar energy systems of which physical size based on total airspace projected over the ground are less than 1,500 square feet, subject to the performance standards herein

Under Article 5 *Performance Standards*

In the section §5.1.7.A.2 Open Space Subdivisions, Purposes add the following language

- k. Provision of shared solar energy systems serving the homeowners in the subdivision in the most suitable locations for use consistent with the other purposes of this performance standard.

In the section §5.1.7.D.1 Open Space Subdivisions, Open Space Requirements, change language as follows

- e. If the open space is to be devoted, at least in part, to a shared solar energy system the developer shall submit a plan as to how that is to be implemented. If it is to be built by or on behalf of the developer as part of the development of the subdivision a full site plan application must be submitted to the board for concurrent review.

~~e. f.~~ The use of any open space may be limited by the Planning Board at the time of final plan approval where the Board deems it necessary to protect adjacent properties or uses, or to protect sensitive natural features or resources. A proposed change in use of open space land, other than that specified at the time of plan approval, shall be reviewed by the Planning Board as an amendment to the approved plan.

~~f. g.~~ Further subdivision of open space or its use for other than agriculture, forestry, recreation, solar energy systems, or conservation, except for easements for underground utilities, shall be prohibited and shall be so stated by deed restrictions except as provided in subparagraph D.3. below. Structures and buildings accessory to agriculture, recreation, solar energy systems, or conservation uses may be erected on open space, subject to Planning Board approval under the site plan review provisions of Article 7 of this Zoning Ordinance and this performance standard.

Add the following section:

§5.1.37 Solar Energy Systems

A. Submission Requirements

In addition to the submission requirements of §7.3.2.A all solar energy systems subject to site plan review must submit materials as outlined below:

1. Plan and elevation depictions of the proposed Solar Energy System.
2. General specifications of the system including dimensions and number of panels, estimated power generation, description of mountings, and any other information needed to evaluate compliance with this ordinance.
3. Certification that the Solar Energy System is compliant with the National Electrical Code and State Electrical Code as applicable.
4. A site plan meeting the requirements of §7.3.2 of the Zoning Ordinance with the added requirement of:
 - a. The location of the proposed Solar Energy System and any, fencing, access roads and turnout locations, substations(s), accessory equipment to the system, and all electrical cabling from the system to other structures, substations, or utility grid connections
5. The applicant shall provide a copy of the site plan review application to the Fire Chief for review and comment. The Fire Chief shall base any recommendation for approval or denial of the application upon review of the fire safety of the proposed system. Upon request, the owner or operator shall cooperate with the Fire Department in developing an emergency response plan.
6. Any other approvals from local, regional, State, or Federal agencies that may be required. Letters, permits, or approvals from these agencies shall be included as a part of the application and/or review. The Planning Board may choose to accept copies of applications awaiting approval. In this case any local approval granted by the planning board shall be conditioned such that no permits will be issued until all outstanding approvals have been granted.
7. Ground Mounted Solar Energy systems which physical size based on total airspace projected over the ground is greater than 10,000 square feet shall also submit a decommissioning plan including an estimated cost and a guarantee suitable to ensure decommissioning consistent with §5.1.37.D of this ordinance. The Planning Board may waive this requirement for Accessory Solar Energy Systems.

B. Dimensional Standards

1. Height

- a. Roof Mounted Solar Energy Systems shall not be considered as contributing to building height provided that they are erected only to such height as reasonably necessary.
- b. Ground Mounted Solar Energy Systems shall meet the maximum building height restrictions of the zone in which they are located.

2. Lot Size

- a. Accessory Solar Energy Systems shall be considered accessory uses and as such will not be subject to a minimum lot size separate from the principal use on site.
- b. Principal Solar Energy Systems shall be considered a principal use and will be subject to the minimum lot size requirements of the zone in which they are located.

3. Setbacks

All Solar Energy Systems shall meet the structure setbacks of the zone in which they are located. The Planning Board may reduce these setbacks during site plan review as follows:

- a. A reduction to half the required setback in that zone if required for optimal sun exposure or there is no other appropriate place on the site for the location of the array.
- b. A reduction to 5 feet in the case of side or rear setbacks which are from a lot line shared with a right of way or utility corridor if required for optimal sun exposure or there is no other appropriate place on the site for the location of the array..

4. Impervious surface

All structures, roads, and other impervious surfaces associated with a Solar Energy System shall count towards the maximum lot coverage of the zone in which the system is located. Roof Mounted Solar Energy panels do not change the impervious surface of the building to which they are attached.

Ground Mounted Solar Panels will not be considered impervious surface provided that they meet the following criteria:

- a. Panels must be positioned to allow water to run off their surfaces.
- b. Soil with adequate vegetative cover must be maintained under and around the panels.
- c. The area around the panels must be adequate to ensure proper vegetative growth under and between the panels.

C. Performance standards

1. A licensed electrician shall connect Solar Energy Systems to transmission lines, electrical equipment, or any residence or other structure to which power is being provided.
2. Solar Energy Systems must meet all applicable Building and Fire Codes.
3. Solar panels are designed to absorb (not reflect) sunlight; and, as such, solar panels are generally less reflective than other varnished or glass exterior housing pieces. However solar energy system design and placement should be prioritized to minimize or negate any solar glare onto nearby properties, roadways, or flightpaths to the extent practical
4. Exterior lighting shall be shielded so as not to contribute to light pollution
5. For ground mounted solar energy systems, all on-site electrical wires connecting the system to other structures or to utility connections shall be installed underground except for 'tie-ins' to public utility company transmission poles, towers and lines. This standard may be modified by the Planning Board during site plan review if the project terrain is determined to be unsuitable due to reasons of need such as excessive excavation, grading or similar factors.
6. For ground mounted solar energy systems all means of shutting down the system shall be clearly marked. The owner or operator shall provide to the Code Enforcement Officer and the Fire Department the name and contact information of a responsible person for public inquiries throughout the life of the installation. The owner or operator shall cooperate with the Fire Department to ensure there is safe emergency access to the site.

D. Decommissioning and abandonment

1. A Ground Mounted Solar Energy systems which physical size based on total airspace projected over the ground is greater than 10,000 square feet, which has reached the end of its useful life or has been abandoned consistent with this ordinance shall be removed. The owner or operator shall physically remove the installation no more than 180 days after the date of discontinued operations. The owner or operator shall notify the Code Enforcement Officer by certified mail of the proposed date of discontinued operations and plans for removal. The Code Enforcement Officer may grant a one-time extension of up to an additional 180 days at the request of the owner or operator of the system. Decommissioning shall consist of:
 - a. Physical removal of all solar energy systems, structures, equipment, security barriers and transmission lines from the site that will not be used by other approved uses on the site.
 - b. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
 - c. Stabilization and/or re-vegetation of the site as necessary to minimize erosion. The Code Enforcement Officer may allow the owner or operator to

leave landscaping or designated below-grade foundations in order to minimize erosion and disruption to vegetation.

2. A ground-mounted solar energy system which physical size based on total airspace projected over the ground is greater than 10,000 square feet shall be considered abandoned when it fails to operate for more than one year. The Planning Board may extend this initial period for an additional twenty-four (24) months at the request of the owner of the system and with consent of the land owner and/or operator if different from the system owner.
3. Unless waived by the Planning Board as allowed under §5.1.37. A.7 an applicant for Site Plan Review of a ground-mounted solar energy system which physical size based on total airspace projected over the ground is greater than 10,000 square feet shall submit a method for ensuring the decommissioning of the system. This may take one of the following forms:
 - (1) A monetary performance guarantee in the amount of 125% of the expected decommissioning costs, including inflation over the expected life of the system, in the form of a certified check payable to the Town of New Gloucester, a performance bond running to the Town of New Gloucester, an irrevocable letter of credit in the name of the Town of New Gloucester or some other form of surety that is acceptable to the Town Manager.
 - (2) A binding, contractual guarantee such as in a lease agreement between a system owner and land owner.
 - (3) Other legally enforceable agreement acceptable to the Planning Board
4. If the owner or operator of the solar energy system fails to remove the installation in accordance with the requirements of this section within 180 days of abandonment or the proposed date of decommissioning as approved by the Code Enforcement Officer, the Town retains the right to use the performance guarantee or other available means to cause an abandoned, hazardous, or decommissioned ground-mounted solar energy system to be removed.

Under Article 7 Site Plan Review

In section §7.4.1.E.3 Review Procedure, Expedited Review, Eligible Activities add the following language

b. Historic Resource Overlay District

i. Small addition, enclosure or deck (attached to rear of building), or accessory structure, of 200 square feet or less

ii. Accessory Ground Mounted Solar Energy Systems which physical size based on total airspace projected over the ground are less than 1,500 square feet

iii. Building Mounted Solar Energy Systems which are visible from the road