§ 225-6 Definitions.

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AVERAGE VALUE PER ACRE -- the average per acre assessed value of single family residential land values within the Town of Topsham. The Tax Assessor calculates the Average Value Per Acre.

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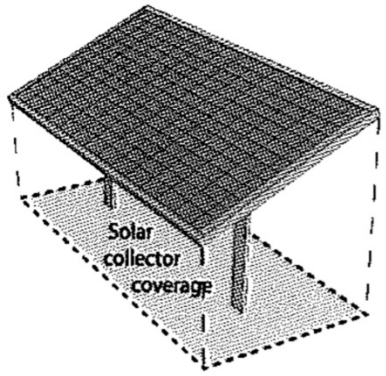
SOLAR ENERGY CONVERSION SYSTEM (GROUND-MOUNTED) -- A solar energy conversion system converts solar energy to electric or thermal energy. Solar energy conversion systems are further categorized into three types based on the size of the facility. Facility size is measured by calculating the square footage of the projection of solar panels at maximum tilt on the ground below (see diagram).

A. SMALL-SCALE ENERGY CONVERSION SYSTEM – A small-scale energy conversion system is a system with a facility size less than 40,000 square feet.
B. LARGE-SCALE ENERGY CONVERSION SYSTEM – A large-scale energy conversion system is a system with a facility size greater than or equal to 40,000 square feet, but less than 400,000 square feet.
C. UTILITY-SCALE ENERGY CONVERSION SYSTEM – An utility-scale energy conversion system is a system with a facility size greater than or equal to 400,000 square feet.



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~~§ 225-16 Use Regulations. [The Table of Use Regulations is included at the end of this chapter.]~~

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~~Habitat Impact Mitigation Fee~~

- ~~Permitted and conditional commercial uses located within the low-medium and medium rated areas of the "Town of Topsham Natural Areas Evaluation Matrix Analysis with Community Values" map ('Map ' within the Topsham Natural Areas Plan adopted by Town Meeting) shall~~

~~pay a mitigation fee of 15% of the Average Value Per Acre of disturbed area, following the guidance of §191-18C.~~

- ~~Permitted and conditional commercial uses located within the medium-high and high rated areas of the "Town of Topsham Natural Areas Evaluation Matrix Analysis with Community Values" map ('Map 1' within the Topsham Natural Areas Plan adopted by Town Meeting) shall pay a mitigation fee of 25% of the Average Value Per Acre of disturbed area, following the guidance of §191-18C.~~

~~In the case of Solar Energy Conversion Systems, the mitigation fee shall be based on the facility size or the disturbed area, whichever is greater. Such funds shall be deposited into an account for the purposes of natural resource conservation, in accordance with §225-60.15E.~~

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§ 225-60.19 Solar energy conversion systems.

A. Purpose and intent.

The Town of Topsham finds that it is in the public interest to encourage the use and development of solar energy conversion systems as a clean, renewable, energy source and to help promote sustainable initiatives. The purpose of this Section is to facilitate the effective and efficient use of solar energy conversion systems while protecting the public health, safety and welfare of Topsham citizens, with the intent to maintain the natural systems of the site.

B. Applicability.

1. The installation of all solar energy conversion systems, expansion of any existing solar energy conversion system, or installation of any associated facilities, shall be approved under this ordinance and obtain site plan approval [as required by §175-4.A(5)], a building permit, and any other necessary town or state approvals prior to its installation.
2. Any physical modification to an existing and permitted solar energy conversion system that alters the facility size, type or location of the system or its associated equipment shall require approval under this ordinance. Like-kind replacements or non-structural maintenance and repair shall not require approval under this ordinance, but shall require a building permit.

C. Submission requirements.

In addition to the site plan submission requirements identified in §175-5, the following plans and supporting materials shall be submitted:

1. An Operations, Maintenance, and Decommissioning Plan, providing:
    a. Descriptions of the regular operation and maintenance of the facility, including the frequency and scope of regular inspections and the frequency and method of vegetation management.
    b. The timeline and process of decommissioning of the system.
    c. An engineer's estimate for the cost of decommissioning of the system.
2. Solar system specifications, including manufacturer, model, and facility size.

3. Certification that layout, design, and installation conform to and comply with all applicable industry standards, such as the National Electrical Code (NEC/NFPA-70), the American National Standards Institute (ANSI), the Underwriter's Laboratories (UL), the American Society for Testing and Materials (ASTM), the Institute of Electric and Electronic Engineers (IEEE), the Solar Rating and Certification Corporation (SRCC), the Electrical Testing Laboratory (ETL), and other similar certifying organization, the Maine Uniform Building and Energy Code (MUBEC), fire and life-safety codes (NFPA 1 and NFPA 101), and any other standards applicable to solar energy conversion systems.
4. Certification that the project complies with the utility notification requirements contained in Maine law and accompanying regulations through the Maine Public Utility Commission, unless the applicant intends, and so states on the application, that the system will not be connected to the electricity grid.
5. An Emergency Action Plan approved by the Topsham Fire Chief or designee.

D. Dimensional standards.

1. Height. Solar Energy Conversion Systems shall be subject to the building height limitations of §225-17.
2. Setbacks. Solar Energy Conversion Systems shall be subject to the setbacks of §225-17.
3. Open space ratio and impervious calculations. Solar Energy Conversion Systems shall not be included in calculations for open space or impervious cover.

E. Performance standards.

1. Siting and impact.
    a. 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 conversion systems should be sited to minimize or negate any solar glare onto nearby properties or roadways, without unduly affecting the functionality or efficiency of the solar energy conversion system.
    b. Preference should be given to locating the system on previously developed, degraded, or marginally productive portions of the property. No topsoil or prime agricultural soil shall be removed from the site for the installation of the system, except as necessary to comply with this section or other applicable laws.
2. Design.
    a. Reasonable efforts, as determined by the approval authority, shall be made to place all utility connections underground, depending on appropriate soil conditions, shape and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above-ground if required by the utility provider.
    b. Site lighting shall be limited to that required for safety and operational purposes, and shall meet the performance standards for the same in §175-9.
    c. Signage and advertising shall be limited to that which provides identification and contact information of the owner and/or operator or which provides safety or warning messages to the public.
    d. If the facility is fenced, fencing shall be elevated a minimum of six (6) inches to allow for the passage of small terrestrial animals.

e. Solar Energy Conversion Systems shall maintain a clear area of ten (10) feet around the perimeter of the installation.

3. Vegetation Management Plan.

Operators shall submit a vegetation management plan approved by the Topsham Fire Chief or designee. The plan must indicate that vegetation growth will be maintained under and around the installation at levels needed to reduce the risk of ignition from the electrical system while minimizing mowing to the extent practicable. Native, pollinator-friendly seed mixtures shall be used. Herbicide and pesticide application is prohibited.

F. Habitat Mitigation Fee

1. Solar Energy Conversion Systems located within the low-medium and medium rated areas of the "Town of Topsham Natural Areas Evaluation Matrix Analysis with Community Values" map ('Map 12' within the Topsham Natural Areas Plan adopted by Town Meeting) shall pay a mitigation fee of 15% of the Average Value Per Acre of disturbed area or facility size (whichever is greater), following the guidance of §191-18C. Such funds shall be deposited into an account for the purposes of natural resource conservation, in accordance with §225-60.15E.

2. Solar Energy Conversion Systems located within the medium-high and high rated areas of the "Town of Topsham Natural Areas Evaluation Matrix Analysis with Community Values" map ('Map 12' within the Topsham Natural Areas Plan adopted by Town Meeting) shall pay a mitigation fee of 25% of the Average Value Per Acre of disturbed area or facility size (whichever is greater), following the guidance of §191-18C. Such funds shall be deposited into an account for the purposes of natural resource conservation, in accordance with §225-60.15E.

G. Abandonment, decommissioning, and surety.

1. Removal Requirements

Any solar energy system which has reached the end of its useful life or has been abandoned consistent with this Section shall be removed. The owner or operator shall physically remove the installation no more than 150 days after the date of discontinued operations. The owner or operator shall notify the Approval Authority by certified mail of the proposed date of discontinued operations and plans for removal. Decommissioning shall consist of:

a. Physical removal of all solar energy systems, structures, equipment, security barriers and transmission lines from the site.
b. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
c. Stabilization of the site to minimize erosion. The Approval Authority may allow the owner or operator to leave landscaping or designated below-grade foundations in order to minimize erosion and disruption to extant vegetation.
d. Re-vegetation. Native, pollinator-friendly seed mixtures shall be used.

2. Abandonment

Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, the solar energy system shall be considered abandoned when it fails to operate for more than one year without the written consent of the Approval Authority. If the owner or operator of the solar energy system fails to remove the installation in accordance with the requirements of this Section within 150 days of abandonment or the proposed date of decommissioning, the town retains the right to enter and remove an abandoned, hazardous, or decommissioned solar energy system. As a condition of site plan approval, the applicant and landowner shall agree to allow entry to remove an abandoned or decommissioned installation.

3. Surety

a. The applicant will provide financial assurance for the decommissioning costs in the form of a performance bond, surety bond, or 'evergreen' letter of credit, for the total cost of decommissioning. The financial assurance mechanism shall be effective prior to the commencement of construction.
b. The value of the surety shall be based on a professional engineer's estimate submitted by the applicant and approved by the Planning Board. The Town may hire, at the applicant's expense, a qualified professional to review the engineer's estimate.
c. Every five years subsequent to the initial effective date of the surety, the owner shall submit an updated engineer's estimate and surety to the Planning Office for review and approval. The Town may hire, at the applicant's expense, a qualified professional to review the engineer's estimate.
d. The Planning Board may modify or waive the requirement for surety when the Planning Board determines that because of the special circumstances of the site or project, such application requirements or standards would not be applicable or would be an unnecessary burden upon the applicant and not adversely affect the general health, safety and welfare of the Town.