

Mount Vernon Solar Ordinance  
04 22 2022

**I. Amend Section 3 Definitions by adding:**

Solar Energy System (SES): a solar photovoltaic cell, module, or array, or solar hot air or water collector device, including all Solar Related Equipment, which relies upon solar radiation as an energy source for collection, inversion, storage, and distribution of solar energy for electricity generation or transfer of stored heat.

Solar Energy System, Ground-Mounted. A Solar Energy System that is structurally mounted to the ground and is not roof-mounted; may be of any size (small, medium, or large scale).

Solar Energy System, Roof-Mounted. A Solar Energy System that is mounted on the roof of a building or structure; may be of any size (small, medium, or large-scale).

Solar Energy System, Large-Scale. A Solar Energy System whose physical size based on total airspace projected over the ground is equal to or greater than 4 acres (174,240 square feet), and/or that generates a nameplate capacity of 1 MW or greater.

Solar Energy System, Medium-Scale. A Solar Energy System whose physical size based on total airspace projected over the ground is equal to or greater than 3,000 square feet but less than 4 acres (174,240 square feet), and/or that generates a nameplate capacity of 20 kW up to, but not including, 1 MW.

Solar Energy System, Small-Scale. Also known as an *Accessory-Scale System*. A Solar Energy System whose physical size based on total airspace projected over the ground is less than 3,000 square feet and/or that generates a nameplate capacity of less than 20 kW. Such a system may consist of one (1) or more freestanding ground, or roof mounted, solar arrays, or solar related equipment, and is intended to primarily reduce on-site consumption of utility power or fuels. Such a system generally occupies ~1,750 square feet of surface area or less (equivalent to a rated nameplate capacity of about 10 kW or less).

Kilowatt (kW): a unit for measuring power that is equivalent to 1,000 watts.

Megawatt (MW): a unit for measuring power that is equivalent to one million watts, or 1,000 kilowatts.

Megawatt Hour (MWh): A megawatt hour is equal to 1,000 Kilowatt hours (Kwh). It is equal to 1,000 kilowatts of electricity used continuously for one hour.

Rated Nameplate Capacity. The maximum rated output of electric power production of the photovoltaic system in watts of Direct Current (DC).

Security Measures. Measures to reduce the potential for trespass and safety issues, including, but not limited to perimeter fencing, signage, gates, cameras, and emergency communication

systems.

Solar Energy. Radiant energy (direct, diffuse and/or reflective) received from the sun.

Solar Array. A grouping of multiple solar modules with the purpose of harvesting solar energy.

Solar Farm. See Solar Energy System.

Solar Related Equipment. Items including a solar photovoltaic cell, module, or array, or solar hot air or water collector device panels, lines, pumps, batteries, mounting brackets, framing, fencing, foundations or other structures used or intended to be used for collection and management of solar energy.

Pure Tone. The simplest periodic sound: a constant sound created as a pressure disturbance that fluctuates sinusoidally as a fixed frequency.

**II. Amend Section 4(F) Table of Land Uses by adding:**

	<b>Infrastructu re</b>	LC	SP	RP	LR	RD	VD
39	Solar Energy System, Large-Scale	PB	no	no	no	PB	no
40	Solar Energy System, Medium-Scale	PB	no	no	no	PB	no
41	Solar Energy System, Small / Accessory-Scale – Ground Mounted	CEO	CEO	CEO	CEO	CEO	CEO
42	Solar Energy System, Small / Accessory-Scale – Roof Mounted	CEO	CEO	CEO	CEO	CEO	CEO

### III. Add Section 5(C)(5-A) and Section 5(C)(5-B):

#### 5-A. Small-Scaled Ground-Mounted Solar Energy Systems.

- a. Lots. SES shall not exceed 10% coverage of a lot area. Lot coverage shall be calculated based on the total SES airspace projected over the ground. All SES should be designed and located to ensure solar and physical access without reliance on and/or interference to/from adjacent properties.
- b. Setback - Structures within a SES shall be setback a minimum of 50 feet from the side and rear property lines and shall meet a front setback of 100 feet from the centerline of the road. Any solar photovoltaic cells or arrays shall be subject to a maximum height of 10 feet above the ground surface.
- c. Associated SES structures shall be subject to the maximum height regulations specified for principal and accessory buildings within the applicable zoning district.
- d. Prohibited Locations – Components of a ground mounted SES shall not be placed within any legal easement or right-of-way location, or be placed within any stormwater conveyance system, or in any other manner that would alter or impede stormwater runoff from collecting in a constructed stormwater conveyance system.
- e. Signage - Solar energy systems shall not be used for displaying any advertising.
- f. Screening - Lots on which Ground Mounted Solar Energy Systems are located shall utilize buffers/ screening from roads and residences by plantings, berms, and natural topographical features. Ground mounted SES shall be screened from view of any adjacent property that is residentially zoned or used for residential purposes, as well as any public way. The screen shall consist of a vegetative barrier which provide a visual screen. In lieu of a vegetative screen, a fence that provides visual screening, and meets requirements of the controlling ordinance, may be allowed only if a vegetative screen is deemed impractical by the Planning Board.
- g. Glare – All SES shall be situated to eliminate concentrated glare onto nearby structures or roadways.
- h. Lighting - Lighting shall be limited to that required for safety and operational purposes and shall be shielded from interference with abutting properties. Lighting of the SES shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution and shall otherwise comply with the provisions of Section 6(E)(21) and 6(E)(22) of this Ordinance. Lighting shall not be used / visible between 9pm and 7am.
- i. Preservation of Town's Character - All reasonable efforts, as determined by the Planning Board, shall be made to ensure any SES is consistent with the character of the community via visual consistency with local neighborhood area, maintenance of scenic views, maintenance of open space land and farms, and the Town Comprehensive Plan, and associated Town planning documents.

#### **5-B. Roof Mounted Solar Energy Systems:**

- a. The owner shall provide evidence certified by an appropriately licensed

professional that the roof is capable of supporting the collateral load of the SES.

- b. SES mounted on roofs of any building shall be subject to the maximum height regulations specified for principal and accessory buildings within the applicable zoning district.
- c. Glare – All SES shall be situated to eliminate concentrated glare onto nearby structures or roadways.
- d. For firefighter access, a minimum three (3) foot buffer zone is required from the ridge and one  
(1) edge of the roof or parapet.
- e. Preservation of Town’s Character - All reasonable efforts, as determined by the Planning Board, shall be made to ensure any SES is consistent with the character of the community via consistency with local neighborhood area, maintenance of scenic views, maintenance of open space land and farms, and the Town Comprehensive Plan, and associated Town planning documents.

**IV. Amend Section 5(C)(6) Land Use Standards by adding:**

n. Solar Energy Systems, large and medium scale

**V. Amend Section 5(C)(7) Allowed Uses-Village District by adding:**

26-A. Roof mounted, small scale Solar Energy Systems.

**VI. Amend Section 5(C)(7) by adding:**

33. Solar Energy Systems (“SES”) are subject to location and permitting requirements as set forth in this Land Use Ordinance. All Solar Energy Systems shall be installed, constructed, modified, expanded, or operated in Mount Vernon in accordance with applicable local, state, utility and national codes, regulations, and standards.

A. All SES shall be installed in compliance with the photovoltaic systems standards of the latest edition of the National Fire Protection Association (NFPA 1).

B. All wiring shall be installed in compliance with the photovoltaic systems standards of the latest edition of the National Electrical Code (NFPA 70).

C. Prior to operation, electrical connections must be inspected and approved by the Code Enforcement Officer or his designated Electrical Inspector. Small scale roof mounted and ground mounted SES in excess of one hundred (100) square feet shall require a building permit

from the Code Enforcement Officer prior to installation, modification, construction, or expansion. Small scale SES shall be permitted, unless the Code Enforcement, with input from the Fire Chief, determines that the SES presents one or more unreasonable safety risks, including, but not limited to weight load, wind resistance, ingress, or egress in the event of fire or other emergency, or proximity of a ground-mounted system relative to buildings.

**VII. Amend Section 5(C)(8)(a) Rural District Uses by adding:**

21. Solar Energy Systems (roof and ground mounted), small scale, medium scale, and large scale.

**VIII. Amend Section 5(C) by adding:**

**33. Modifications of Existing SES**

- A. Any physical modification to any existing SES, whether or not existing prior to the effective date of this Ordinance, shall require review and approval under this Ordinance.
- B. Any modifications to a Medium to Large Scaled Ground-Mounted Solar Energy System made after issuance of the required town permit(s) shall require approval by the Planning Board.
- C. Any modifications to a Small-Scaled Ground-Mounted Solar Energy System made after issuance of the required town permit(s) shall require approval by the Code Enforcement Officer.
- D. Application fees for modifications shall be consistent with the overall size of the SES, not solely the modification.
- E. Permit fees for modifications shall be based on the modified portion of the SES.

**VIII. Amend Section 6(B) Site Plan Review Applicability by amending the end of the last sentence of the first paragraph:**

B. ...and, PSWF-and medium and large-scale Solar Energy Systems (SES):

**VIII. Amend Section 6(D) Site Plan Review Data Requirements by adding:**

**5. Additional Data Requirements for Large and Medium SES.**

In addition to all other submission requirements, an applicant for a Large or Medium SES shall submit the following information.

- a. A description of the owner of the SES, the operator if different, and detail of qualifications and record to run the facility.
- b. If the operator will be leasing the land, a copy of the agreement (minus financial compensation) clearly outlining the relationship inclusive of the rights and responsibilities of the operator, landowner, and any other responsible party with regard to the SES and the life of the agreement.
- c. A description of how and to whom the energy produced will be sold.
- d. A copy of the agreement and schematic details of the connection arrangement with the transmission system (most likely Central Maine Power), clearly indicating which party is responsible for various requirements and how they will be operated and maintained.
- e. The layout, design and installation shall conform to applicable industry standards, such as those of the American National Standards (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations, and shall comply with local ordinances, and with all other applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the application.
- f. A description of the panels to be installed, including make and model, and associated major system components.
- g. A construction plan and timeline, identifying known contractors, site control and anticipated on-line date.
- h. An operations and maintenance plan, including site control and the projected operating life of the system; Such a plan shall include measures for maintaining safe access to the installation, stormwater controls, as well as general procedures for operational maintenance of the installation. Additionally, such plans shall include efforts to promote beneficial flora and fauna (e.g., honeybees, butterflies, etc.) as well as a commitment to not using pest-control substances (e.g., pesticides, herbicides, fungicides, and/or insecticides).
- i. An emergency management plan for all anticipated hazards.
- j. A stormwater management plan, certified by a licensed Maine engineer, that demonstrates stormwater from the SES will infiltrate into the ground beneath the SES at a rate equal to that of the infiltration rate prior to the placement of the system.
- k. A background noise measurement for the site location as performed by a qualified

professional.

- l. Proof of financial capacity to construct and operate the proposed facility.
- m. A decommissioning plan, including:
  - i. A description of the trigger for implementing the decommissioning plan. There is a rebuttable presumption that decommissioning is required if 10% or less permitted capacity of electricity is generated for a continuous period of twelve (12) months. The Applicant may rebut the presumption by providing evidence, such as a force majeure event that interrupts the generation of electricity, that although the project has not generated electricity for a continuous period of 12 months, the project has not been abandoned and should not be decommissioned.
  - ii. A description of the work required to physically remove all Solar Energy System and Solar Related Components, including associated foundations, buildings, cabling, electrical components, and any other associated facilities to the extent they are not otherwise in or proposed to be placed into productive use. All earth disturbed during decommissioning must be graded and re-seeded unless the landowner of the affected land requests otherwise in writing and subject to Planning Board approval.

At the time of decommissioning, the Applicant may provide evidence of plans for continued beneficial use of any or all of the components of the Solar Energy System. Any changes to the approved decommissioning plan shall be subject to review and approval by the Planning Board.

- iii. An estimate of the total cost of decommissioning value of the equipment and itemization of the estimated major expenses, including the projected costs of measures taken to minimize or prevent adverse effects on the environment during implementation of the decommissioning plan. The itemization of major costs may include, but is not limited to, the cost of the following activities: panel removal, panel foundation removal and permanent stabilization, building removal and permanent stabilization, transmission corridor removal and permanent stabilization and road infrastructure removal and permanent stabilization.
- iv. Demonstration in the form of a performance bond, surety bond, letter of credit, or other form of financial assurance as may be acceptable to the Planning Board that upon the end of the useful life of the Solar Energy System the Applicant will have the necessary financial assurance in place for 150% of the estimated total cost of decommissioning, subject to a review of such cost by the Code Enforcement Officer. The financial assurance shall include a provision granting the Town the ability to access the funds and property and perform the decommissioning if the facility is abandoned or the Applicant or subsequent responsible party fails to meet their obligations after reasonable notice, to be defined in the agreement and approved by the Planning Board. For a Medium Scaled SES, the Applicant may propose securing the necessary financial assurance in phases, as long as the total required financial assurance is in place a minimum of 5 years prior to the expected end of the useful life of the Solar

Energy System.

Note the applicant may apply to the Code Enforcement Officer for release of the guarantee at such time that it or its assignees remove the system and associated abandoned structures, and such completed removal is found to be satisfactory by the Planning Board.

- n. Soils map any prime farmland or farmland of statewide significance on the site where the SES will be located.

**IX. Amend Section 6(E) Site Plan Review Performance Standards to add:**

**37. Large and Medium Scale Solar Energy Systems (SES).** In addition to all other submission requirements and performance standards, large and medium scale SES must meet the following requirements and performance standards:

- a. Lots - SES shall not exceed 20% coverage of a lot area. Lot coverage shall be calculated based on the total SES airspace projected over the ground. All SES should be designed and located to ensure solar and physical access without reliance on and/or interference to/from adjacent properties.
- b. Legal Responsibilities - The Applicant must provide proof that it has authorization to construct, use and maintain the property and any access drive for the life of the project and including the decommissioning of the project. The roles and responsibilities of the system owner, operator, landowner, and any other party involved in the project must be clear and meet the satisfaction of the Planning Board that the public interest is protected. The owner or operator of a Ground Mounted Solar Energy System shall build and maintain it in compliance with all relevant Federal, State and Local Laws, Regulations, and Ordinances.
- c. Deed Registration – Any Large or Medium Scaled SES system shall be incorporated into the description of the real property in the lot/property deed and registered with the Kennebec County Registry of Deeds as a condition of Planning Board approval.
- d. Setback - Structures within a SES shall be setback a minimum of 200 feet from all lot lines. Any solar photovoltaic cells or arrays shall be subject to a maximum height of 10 feet above the ground surface. Associated SES structures shall be subject to the maximum height regulations specified for principal and accessory buildings within the applicable zoning district.
- e. Prohibited Locations – Components of a ground mounted SES shall not be placed within any legal easement or right-of-way location, or be placed within any stormwater conveyance system, or in any other manner that would alter or impede stormwater runoff from collecting in a constructed stormwater conveyance system.
- f. Utility Notification - No grid-intertied photovoltaic system shall be installed until



evidence has been given to the Planning Board that the applicant has an agreement with the utility to accept the power. Off-grid systems are exempt from this requirement.

- g. Fence - Ground Mounted Solar Energy Systems shall be protected by a perimeter fence. Such  ~~fences~~ shall allow for small wildlife passage and movement.
- h. Signage - A sign shall be required to identify the owner/operator and provide a 24-hour emergency contact phone number. Solar energy systems shall not be used for displaying any advertising. A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the any fence surrounding the SES informing individuals of potential voltage hazards.
- i. Screening - Lots on which Ground Mounted Solar Energy Systems are located shall utilize buffers/ screening from roads and residences by plantings, berms, and natural topographical features. Ground mounted SES shall be screened from view to the greatest extent practical of any adjacent property in the Rural District as well as any public way. Screening required by this paragraph must be:
  - a. At a height, density, and depth sufficient to accomplish complete screening from ordinary view;
  - b. Well-constructed and properly maintained at a minimum height of 10 feet;
  - c. Placed outside of the right-of way;
  - d. Acceptable to the municipal officers or county commissioners.

The screen shall consist of a solid fence which provides a visual screen. In lieu of a fence, a vegetative screen that meets requirements of this paragraph and all other provisions of this Ordinance, if the Planning Board determines that the vegetative screen is sufficient.

- j. Glare – All SES shall comply with Sections 6(E) of this Ordinance relating to lighting and reflective properties and shall be situated to eliminate concentrated glare onto nearby structures or ~~roads~~
- k. Noise – In addition to all other requirements of this Ordinance regarding noise, no noise generated by the SES or Solar Related Equipment shall be 10 decibels (dB) greater than the preconstruction / existing background level, nor generate a Pure Tone. The background noise limit will be based on background noise during the quietest period of the night, typically 3:00 am.
- l. Lighting - Lighting shall be limited to that required for safety and operational purposes and shall be shielded from interference with abutting properties. Lighting of the SES shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution and shall otherwise ~~comply~~ with the provisions of Section

6(E)(21) and 6(E)(22) of this Ordinance. Other than required lighting, lighting shall not be used / visible between 9pm and 7am.

- m. Impervious Assessment - The surface area of the arrays of a ground mounted SES, regardless of the mounted angle of any solar panels, may or may not be considered impervious contingent upon conformity with the stormwater management plan.
- n. Utility Connections - Reasonable efforts, as determined by the Planning Board, shall be made to place all utility connections from the solar photovoltaic installation 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.
- o. Emergency Services – SES owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Fire Chief. Upon request, the owner or operator shall coordinate with local emergency services in developing an emergency response plan. A “3200 Series KNOX-BOX”, or agreed equivalent, shall be provided and installed by the operator to be used to allow emergency service personnel continuous access. All means of shutting down the solar energy system shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
- p. Maintenance Conditions - The SES owner or operator shall maintain the facility in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, vegetative screening, fences, landscaping and plantings, and integrity of security measures. The SES must be properly maintained and be kept free from all hazards, including, but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety, or general welfare. Site access shall be maintained to a level acceptable to the fire chief for emergency response. The owner or operator shall be responsible for the cost of maintaining the SES and any access road(s), including regular plowing of snow to maintain road access.
- q. Satisfaction with All Aspects of Capacity and Plans Submitted -- The Planning Board must find that the Applicant has the capacity to finance, safely operate and decommission the SES.
- r. Removal - When any portion of a ground mounted SES is removed, any earth disturbance must be graded and re-seeded, unless authorized for another developed use.
- s. The SES should be sited so that no more than 34% of the project is located on land

containing soils defined by the USDA Natural resources Conservation Services as “Prime Agricultural Land” or “Farmland of Statewide Importance,” as determined by a field-based survey conducted by a licensed soil scientist. The owner or operator may seek a waiver of the 34% limitation upon a showing that land is not suitable for farming due to levels of PFAS or other contaminants that exceed federal, state, or local limits. No topsoil or prime agricultural soil shall be removed from the site for installation of the system. Efforts will be made to minimize the impact on existing agricultural uses by developing dual-use solar projects where possible.

- t. Alternatives Assessment - As determined by the Planning Board, if a proposed ground-mounted SES does not meet the standards in this Ordinance, , or goals and objectives as established in the Town’s Comprehensive Plan, then other potential suitable alternative area(s), on the lot(s) included in the application, where a SES can meet the Town’s standards, goals, and objectives needs to be evaluated by the applicant. Alternative lot areas should be evaluated against those same Ordinance standards, and Town goals and objectives.
- u. Preservation of Town’s Character - All reasonable efforts, as determined by the Planning Board, shall be made to ensure any SES is consistent with the character of the community via visual consistency with local neighborhood area, maintenance of scenic views, maintenance of open space land and farms, and the Town Comprehensive Plan, and associated Town planning documents.
- v. Security. All ground mounted SES shall be completely enclosed by fencing that consists of a minimum 10-foot-high fence with a locking gate. A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence surrounding the SES informing individuals of potential voltage hazards.
- w. Access drives shall be maintained to allow for maintenance and emergency management vehicles. As a minimum, drives must meet the Town’s Back Lot driveway standards in Section 9(D) of this Ordinance.

38. Roof Mounted Solar Energy Systems:

- a. The owner shall provide evidence certified by an appropriately licensed professional that the roof is capable of supporting the collateral load of the SES.
- b. SES mounted on roofs of any building shall be subject to the maximum height regulations specified for principal and accessory buildings within the applicable zoning district.
- c. Glare – All SES shall be situated to eliminate concentrated glare onto

nearby structures or roadways.

- d. For firefighter access, a minimum three (3) foot buffer zone is required from the ridge and one (1) edge of the roof or parapet.
- e. Preservation of Town's Character - All reasonable efforts, as determined by the Planning Board, shall be made to ensure any SES is consistent with the character of the community via consistency with local neighborhood area, maintenance of scenic views, maintenance of open space land and farms, and the Town Comprehensive Plan, and associated Town planning documents.

### **39. SES Decommissioning and Removal of Solar Energy System**

- a. Any Ground Mounted Solar Energy System that has reached the end of its useful life, ceases to generate power or has been abandoned shall be removed pursuant to a plan approved by the Planning Board during the application process. The landowner, or SES 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, return receipt requested, of the proposed date of the discontinued operations and plans for removal.
- b. Decommissioning shall consist of:
  1. physical removal of all solar energy systems, structures, equipment, security barriers and transmission lines from the site;
  2. disposal of all solid and hazardous waste in accordance with Local, State and Federal waste disposal regulations; and
  3. stabilize 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 to minimize erosion and disruptions to vegetation.
- c. Absent a notice of a proposed date of decommissioning or written notice of extenuating circumstances, a Ground Mounted Solar Energy System shall be considered abandoned when it fails to generate 10% or less permitted capacity of electricity for a continuous period of twelve (12) months without having first obtained the written consent of the Code Enforcement Officer. Determination of abandonment shall be made by the Code Enforcement Officer.
- d. If the owner or operator of a Ground Mounted 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, the Town of Mount Vernon retains the right to use the performance guarantee and any and all legal or available means necessary to cause an abandoned, hazardous or decommissioned solar energy system to be removed.

**X. Amend Section 11(D) Fees, Table 10-1, Permit Fee Schedule by Adding:**

Solar Energy System, Large-Scale. The Application Fee is \$2,500.

Solar Energy System, Medium-Scale. The Application Fee is \$500.

Solar Energy System, Small-Scale. The Application Fee is the building permit fee.

Permit Fee is \$1.00 per kW with a minimum fee of \$25.