



**Town of Greene**  
220 Main Street  
Greene, ME 04236  
Tel. (207) 946-5146 ~ Fax (207) 946-2102

## **SOLAR ENERGY SYSTEMS ORDINANCE**

### **Section 1. Title**

This Ordinance shall be known and may be cited as the “Solar Energy Ordinance”.

### **Section 2. Purpose**

The purpose of this Ordinance is to establish a municipal review procedure and performance standards for Solar Energy Systems (SES), including those typically characterized as “solar farms”. These standards are intended to:

- A. Establish clear guidelines, standards and timeframes for the Town to regulate Solar Energy Systems;
- B. Permit the Town to fairly and responsibly protect public health, safety and welfare;
- C. Minimize any potential adverse effect of solar development on surrounding land use;
- D. Provide for the decommissioning and removal of panels and assorted utility structures that are no longer being used for energy generation and transmission purposes; and
- E. Support the goals and policies of the Comprehensive Plan, including the orderly development, efficient use of infrastructure and protection of natural, scenic and agricultural resources.

### **Section 3. Applicability**

Solar Energy Systems are subject to location and permitting requirements as set forth in the Town of Greene Land Use Table (3-101.21.F) of the Land Use Ordinance. A Solar Energy System approved by the Town of Greene Planning Board for construction prior to the effective date of this Ordinance shall not be required to meet the terms and conditions of this Ordinance. Any physical modification to any existing Solar Energy System which expands or relocates the footprint of the Solar Energy System shall require approval under this Ordinance. Routine maintenance does not require a permit. Replacement of existing equipment to upgrade shall be considered maintenance.

Land Use Table

	GD	V1	V2	RES	R	SP	LR	RP
Small Scale	YES	YES	YES	YES	YES	NO	YES	NO
Medium Scale	PBSR	NO	NO	PBSR	PBSR	NO	NO	NO
Large Scale	PBSR	NO	NO	PBSR	PBSR	NO	NO	NO

**Section 4. Application and Fees**

- A. Large Scale SES \$2,500
- B. Medium Scale SES \$500
- C. Small Scale SES – Standard Building Permit Application and Fee.

License Fee is \$1.00 per kW/ac for Medium and Large scale SES.

**Section 5. Application Requirements**

1. A description of the owner of the SES, or the operator, if different, and detail of qualifications to operate such a system;
2. If leasing the land, a copy of the agreement, less 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;
3. A description of how energy will be sold;
4. A copy of the agreement and schematic details of the interconnection of the SES with the transmission system, clearly indicating which party is responsible for various requirements and how they will be operated and maintained;
5. The design, layout and installation shall conform to applicable industry standards, such as those of the American National Standards (ANSI), Underwriters Laboratories (UL), American Society for the Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL) or other similar certifying organizations, and shall comply with local ordinance, 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;
6. A description of the panels to be installed, and, if known at the time of permitting, the make and model of such panels;
7. A construction timeline, identifying any known contractors, and anticipated on-line date;
8. An operations and maintenance plan, including site control and the projected operating life of the system; The 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, plans should include any measures to promote beneficial flora and fauna (e.g. honeybees, butterflies) as well as a commitment to not use pest control substances, unless required by State or Federal permitting;

9. An emergency management plan for anticipated hazards;
10. A stormwater management plan, certified by a licensed Maine engineer, which demonstrates stormwater from the SES will be managed such that peak flows of stormwater runoff from the project site do not exceed peak flows prior to undertaking the project;
11. A demonstration that the SES will comply with the maximum sound levels set forth in Section 6-501.1.S of the Towns Land Use Ordinance;
12. Proof of financial capacity to operate the proposed facility;
13. A decommissioning plan, including:
  - A. A description of the trigger for implementing the decommissioning plan. There is a presumption that decommissioning is required if a system has not generated electricity for a period of 12 months. The applicant may rebut the presumption by providing evidence of a force majeure event that interrupts the generation of electricity, that although the system has not generated electricity for a continuous 12 months, the system has not been abandoned and should not be decommissioned.
  - B. A description of work required to physically remove all components of the SES, including buildings, foundations, cabling, etc. to the extent they are not in or proposed to be placed into use. All land disturbed during the decommissioning must be graded and reseeded, unless otherwise requested by the landowner, and subject to Planning Board approval;
  - C. An estimate of the total cost of decommissioning and removal of the components of the SES;
  - D. Demonstration in the form of a performance bond, surety bond, or other form of financial assurance as may be acceptable to the Planning Board, that upon the end of the useful life of the SES, the applicant will have the necessary financial capacity in place for 150% of the estimated cost of decommissioning of the SES. The financial assurance shall include a provision granting the Town the ability to access the funds and property to perform the decommissioning, if the facility is abandoned or the applicant otherwise fails to meet their obligation after reasonable notice. The applicant may apply to the Planning Board for release of the financial guarantee, at such time that it removes the SES to the satisfaction of the Planning Board;

## **Section 6. Standard of Approval**

In addition to the Site Plan Review standards in the Towns Land Use Ordinance, the following must be met:

## **Section 6.2 Large and Medium Scale Ground Mounted SES**

1. Lots – SES shall not exceed 30% coverage of lot area. Lot coverage shall be 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 or interference to adjacent properties.
2. 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, including the decommissioning of the project.
3. Lease Recorded – Any large or medium scale SES land lease shall be recorded with the Androscoggin County register of deeds.
4. Setback – All structures shall be setback a minimum of 100 feet from property boundaries and 300 feet from principal structures. Photovoltaic cells or arrays shall be a maximum height of 15 feet from grade. All other structures shall adhere to height restrictions for that district.
5. Prohibited locations – Components of a ground mounted SES shall not be placed within any legal easement or right of way, or be placed within any stormwater conveyance system, or in any other manner which would impede stormwater runoff.
6. Utility notification – The applicant shall provide proof of an agreement with a utility that the SES will be connected to that utility.
7. Fencing – Ground mounted SES shall be protected by a perimeter fence. Such fences shall allow passage for small wildlife, excluding areas where wildlife passage is prohibited by the National Electric Code. Fencing shall be colored to blend with the natural surroundings to the greatest extent practical.
8. Signage – A sign shall be required to identify the owner/operator and to provide a 24 hour contact number. SES shall not be used for display of any advertising. A clearly visible warning sign shall be placed at the base of any pad mounted transformers and substations and on the fence surrounding the SES informing of potential voltage hazard.
9. Screening – Ground mounted SES shall be screened from view to the greatest extent practical from any public way or adjacent property. Screens shall utilize buffers by natural vegetation, plantings, berms and natural topographical features. In lieu of a vegetative screen, a fence meeting the district ordinance and approval of the Planning Board may be allowed.
10. Glare – SES shall be situated to eliminate concentrated glare onto nearby structures or roadways.
11. Noise – Noise generated from the SES shall comply with the maximum sound levels set forth in Section 6-501.1.S of the Towns Land Use Ordinance.
12. Lighting – Lighting shall be limited to that required for safety and operational purposes and shall be shielded from interference with abutting properties.
13. Impervious assessment – The surface area of arrays of a ground mounted SES may be considered impervious area contingent upon conformity with the stormwater management plan.
14. Emergency services – The owner/operator of a SES shall provide a copy of the project summary, electrical schematic and site plan. Upon request, the



owner/operator shall coordinate with local emergency services in developing an emergency response plan. A “3200 Knox-Box” or agreed equivalent shall be provided by the owner to allow emergency personnel continuous access. All means of shutting the system down shall be clearly marked. Means of access should comply with the most recent version of NFPA 1141, Chapter 5, Means of Access.

15. Maintenance – The owner/operator shall maintain the SES facility in good condition.

### **Section 6.3 Small Scale Ground Mounted SES**

1. Lots – SES shall not exceed 10% coverage of lot area. Lot coverage shall be 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 or interference to adjacent properties.
2. Setback – All structures shall be setback a minimum of 50 feet from property boundaries. Photovoltaic cells or arrays shall be a maximum height of 10 feet from grade. All other structures shall adhere to height restrictions for that district.
3. Prohibited locations – Components of a ground mounted SES shall not be placed within any legal easement or right of way, or be placed within any stormwater conveyance system, or in any other manner which would impede stormwater runoff.
4. Signage - SES shall not be used for display of any advertising.
5. Screening – Ground mounted SES shall be screened from view to the greatest extent practical from any public way or adjacent property. Screens shall utilize buffers by natural vegetation, plantings, berms and natural topographical features. In lieu of a vegetative screen, a fence meeting the district ordinance and approval of the Planning Board may be allowed.
6. 10. Glare – SES shall be situated to eliminate concentrated glare onto nearby structures or roadways.
7. Lighting – Lighting shall be limited to that required for safety and operational purposes and shall be shielded from interference with abutting properties.

### **Section 6.4 Roof Mounted SES**

1. The owner shall provide evidence certified by an appropriately licensed professional that the roof is capable of supporting the collateral load of the SES, including anticipated snow load.
2. SES mounted on roofs of any building shall be subject to the maximum height regulations specified for principal and accessory buildings within that district.
3. Glare - SES shall be situated to eliminate concentrated glare onto nearby structures or roadways.
4. For firefighter safety, a minimum 3 foot buffer must be maintained from the ridge and edges of the roof and the SES.

## **Section 7. Decommissioning and Removal**

1. Any ground mounted SES that has reached the end of its useful life, ceases to generate power for a period of 12 months or has been abandoned shall be removed pursuant to a plan approved by the Planning Board during the application process. The owner/operator shall remove the installation no more than 180 days after the date of discontinued operations.
2. Decommissioning shall consist of:
  - A. Physical removal of all solar energy systems, structures, equipment, security barriers and transmission lines;
  - B. Disposal of all solid and hazardous waste in accordance with local, state and federal waste disposal regulations;
  - C. Stabilization or revegetation of the site. The Code Enforcement Officer may allow some foundations and below grade structure to remain to minimize erosion and disruption to vegetation. Additionally, the Code Enforcement Officer may allow other components of the SES to remain in place by agreement with the landowner.
3. If the owner/operator fails to remove the SES in accordance with the requirements of this section within 180 days of abandonment, the Town reserves the right to use the performance guarantee and any and all legal means necessary to cause the removal of the SES.

## **Section 8. Modifications**

1. Any physical modification other than De Minimus Changes to an existing SES, whether or not existing prior to this Ordinance, shall require review and approval under this Ordinance.
2. Any modification other than De Minimus Changes to medium or large scale SES, after approval of the Planning Board, shall require review and approval of the Planning Board. De Minimus Changes to a medium or large scale SES may be approved by the Code Enforcement Officer.
3. Any modification to small scale SES, after approval of the Code Enforcement Officer, shall require review and approval of the Code Enforcement Officer.
4. Permit fees for modifications shall be based on the modified portion of the SES.

## **Section 9. Definitions**

De Minimus Changes – Changes that involve the redesign of any of the SES components that do not expand the footprint of the SES, do not result in any new impacts to natural resource and do not increase the nameplate capacity of the SES.

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

Megawatt (MQ) – A unit for measuring power that equivalent to one million watts or 1,000 kilowatts.

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

Principal Structure- A structure other than one which is used for purposes wholly incidental or accessory to the use of another structure or use on the same lot.

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 stored heat.

SES, Ground Mounted – A solar energy system which is structurally mounted to the ground. May be of any size. (Small, medium, large)

SES, Roof Mounted – A solar energy system which is mounted to the roof of any building or structure. May be any size. (Small, medium, large)

SES, Large Scale – A solar energy system that occupies an area equal to or greater than 4 acres (174,240 square feet) and/or generates a nameplate capacity of 1 MW or greater.

SES, Medium Scale – A solar energy system whose physical size is equal or greater than 3,000 square feet, but, less than 4 acres (174,240 square feet) and/or generates a nameplate capacity of 20 kW up to 1 MW.

SES, Small Scale – A solar energy system whose physical size is less than 3,000 square feet and/or generates a nameplate capacity of less than 20 kW. Also known as an Accessory Scale System.

Solar Energy – Radiant energy 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.

## **Section 9. Authority**

1. This Ordinance is adopted pursuant to the enabling provisions of Article VIII, Part 2, Section 1 of the Maine Constitution and provisions of 30-A M.R.S. §3001.
2. To the extent that any portion of this Ordinance is deemed invalid by a court of competent jurisdiction, such provision shall be removed from the Ordinance and the balance of the Ordinance shall remain.

## **Section 10. Effective Date**

This Ordinance shall be in effect on the 5<sup>th</sup> day of August, 2023, as enacted by the voters of the Town of Greene and shall remain in effect until amended or repealed.

## **Section 11. Enforcement**

This Ordinance shall be enforced by the municipal officers or their designee. Violation of this Ordinance shall be subject to the enforcement and penalty provisions of 30-A M.R.S. §4452.

Adopted: August 5, 2023

Clerk: \_\_\_\_\_