# SOLAR FIELD ORDINANCE FOR THE TOWN OF PLYMOUTH, MAINE

ENACTED:	 Date
EFFECTIVE:	 Date
CERTIFIED BY:	Linda Seavey 'Signature
CERTIFIED BY:	Linda Seavey Print Name
	First Selectman

Affix Seal

## Town of Plymouth Solar Field Ordinance

**Synopsis**: Ordinance to allow Solar Fields within the town of Plymouth subject to setbacks, height, screening, maintenance, safety, and decommissioning requirements. Subject to Planning Board approval.

# Whereas the Town of Plymouth deems it in the town's best interest to enact a Solar Field Ordinance

Now therefore the Town of Plymouth does ordain as follows:

#### Section 1 Title

This ordinance shall be known as The Town of Plymouth Solar Field Ordinance.

# Section 2 Applicability

This ordinance shall apply to all Ground Mounted Solar Energy Systems applications filed with the Plymouth Planning Board after (date) for site plan reviews.

#### **Section 3 Definitions**

<u>Solar Energy System (SES)</u>: a facility whose primary purpose is to harvest energy by transforming solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical, or chemical means.

Ground Mounted Solar Energy System for the purpose of this ordinance:

- a) A solar energy system that is structurally mounted to the ground.
- b) That has physical area based on total airspace projected over the ground, is greater than 1,000 square feet and
- c) That has no direct physical non-electrical connection to a residential structure.

## **Section 4 Dimensional Requirements**

- a) Ground mounted Solar Energy System will not exceed 10 feet in height.
- b) Minimum front setback from property boundary shall be 200 feet, minimum side setback shall be 200 feet, minimum back setback shall be 200 feet.

# Section 5 Screening, security, maintenance, and regulatory compliance

- a) Subject to approval of the Plymouth Planning Board, the lots on which Ground Mounted Solar Energy Systems are located shall be buffered from roads and residences by planting berms and natural topographical features.
- b) Subject to the approval of the Plymouth Planning Board, the lots on which Ground Mounted Solar Energy Systems are located shall be protected by a perimeter fence. Signs shall be affixed to the fence identifying the owner of the facility with current emergency contact information at all access points.

- For purposes of emergency services, the owner or operator of a Ground Mounted Solar Energy System shall provide a copy of the project summary, electrical schematics, and site plan to the Plymouth Fire Chief. Upon request the owner or operator shall cooperate with the Fire Department in developing an Emergency response plan. All means of shutting down the system shall be clearly marked in the plan. A lock box or agreed equivalent, shall be provided, and installed by the operator to be used to allow emergency services personnel continuous access. All means of shutting down the SES shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
- d) The owner or operator of a Ground Mounted Solar Energy System shall maintain the facility in good condition. Maintenance shall include but not be limited to painting, structural repairs, vegetation control {vegetation must be maintained at a height to minimize fire danger and to ensure that the solar collector faces are not shaded}, and integrity of security measures. All access roads must be maintained to a level acceptable to the Plymouth Fire Chief and Plymouth Code Enforcement Officer. The owner or operator shall be responsible for the cost of maintaining the access road(s) including but not limited to snow removal unless the road(s) is accepted as a public way.
- e) The owner or operator must install an in-place fire suppression system equipped to handle the entire Ground Mounted Solar Energy System and acceptable to the Plymouth Fire Chief.
- f) The owner or operator of a Ground Mounted Solar Energy System shall build and maintain the system in compliance with Federal, State and Local Laws, Regulations and Ordinances.

#### Section 6. Fees

Application fee for Ground Mounted Solar Energy System is as follow:

Large {commercial} scale {total air space projected over the ground is equal to or greater than 4 acres (174,240 sq ft)} \$2500.00.

Medium {commercial} scale {total air space projected over the ground is greater than 1000 sq ft but less than 4 acres (174,240 sq ft) and generates less than 1mw of power} \$500.

Small {residential} {10kw or less} \$150.

Initial permit fee of \$1 per Kw with a minimum of \$25.

Operating inspection fee of \$1 per Kw with a minimum of \$25.

Inspection will be done every 5 years for the first 10 years and every 3 years thereafter for the life of the system.

# Section 7. Specific Application Requirements

An applicant for a large or medium scaled Solar Energy System permit must including, at the expense of the applicant:

- a) A description of the owner of the SES, the operator if different, and details to establish their qualifications as well as their proven experience to ensure that they are qualified to operate a facility of the size which they are applying for.
- b) If the operator is leasing the land, a copy of the agreement (minus financial compensation) clearly outlining the relationship inclusive of rights and responsibilities of the operator, landowner, and any other responsible party with regards to the SES and the life of the agreement.
- c) A description of how, to whom, and length of terms the energy will be sold.
- d) A copy of the agreement and schematic details of the connection agreement with the transmission system, clearly indicating which party is responsible for various requirements and how they will be operated and maintained.
- The layout, design, and installation shall conform with 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 Ratings and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations, and shall comply with other 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 projected operating life of the system; such a plan shall include measures maintaining safe access of 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 not to use 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 at a rate equal to that of the infiltration rate prior to the placement of the system.
- A background noise measurement for the site location as performed by a qualified professional.
- Proof that a financial capacity exists 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. i) 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 done by an independent qualified licensed estimator approved by the Plymouth Planning Board 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 and road infrastructure removal and permanent stabilization.
- Demonstration in the form of a performance bond, surety bond, letter of iv. 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 175% of the estimated total cost of decommissioning, subject to a review of such cost by the Plymouth 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 Plymouth Planning Board. The applicant may apply to the Plymouth 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 Plymouth Planning Board.

#### Section 8, Noise

No noise generated by the SES equipment shall be greater than 40 decibels at the perimeter of the system.

# Section 9. Decommissioning and removal

- 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 Plymouth Planning Board during the application process. 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, return receipt requested, of the discontinued operations and plans for removal.
- b) Decommissioning shall consist of
- c) Physical removal of all solar energy systems, structures, equipment, security barriers, and transmission lines from the site
- d) Disposal of all solid and hazardous waste in accordance with Local, State, and Federal waste disposal regulations; and
- e) Stabilize and 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 disruption to vegetation.
- f) Absent of a notice of proposed date to decommissioning or written notice of extenuating circumstances, Ground Mounted Solar Energy System shall be considered.
- g) Abandoned when it fails to generate power for one year without first obtaining written consent from the Code Enforcement Officer. Determination of abandonment shall be made by the Code Enforcement Officer.
- h) If the owner or operator of a Ground Mounted Solar Energy System fails to remove the installation in accordance with the requirements of the section within 180 days of abandonment or proposed date of decommissioning, the Town of Plymouth retains the rights 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.

#### Section 10. Authority

This ordinance is adopted pursuant to the enabling provisions of Article VIII, part 2 section 1 of the Maine Constitution., provisions of 30-A, M.R.S. 3001, Ordinance, power, and provisions of 30-A, M.R.S. 4352 zoning.

#### Section 11. Effective date and duration

This ordinance shall take effect (date) upon enactment by the Town of Plymouth and shall remain in effect until it is amended or repealed.

#### Section 12. Enforcement, violations, and penalties

This ordinance shall be enforced by the municipal officers or their designee. Violations of this ordinance shall be subject to enforcement and penalty provisions 30-A M.R.S. 4452 enforcement of Land Use Laws and Ordinances.