

Solar Energy Systems Ordinance

Town of Dedham, Maine

Effective February 4, 2021

Section 1: Purpose

1. To promote the general welfare, public health, and providing for public safety of the community.
2. To meet the goals of the Dedham Comprehensive Plan.
3. To conserve the environment, wildlife habitat, fisheries & natural areas.
4. To fit solar energy systems (SES) harmoniously into the fabric of the community by providing standards for these systems.
5. To preserve visual landscapes of scenic or aesthetic value as determined by the Dedham Planning Board (DPB) in accordance with the objectives of the Dedham Comprehensive Plan and the Dedham Land Use Ordinance.

Section 2: Authority

1. This ordinance is enacted pursuant to the Home Rule Authority granted to the Town in accordance with provisions of 30 MRSA §3001.
2. The DPB is vested with the authority to approve, approve with conditions, or reject any application for a Solar Energy System (SES) as defined in this ordinance.
3. The DPB may hire independent professional consultants to review SES applications to determine: a) the impact to nearby properties, b) public safety implications, or c) address other issues with a SES application.
4. The cost (if any) for such professional consultancy will be borne by the applicant. DPB will notify the applicant with the consultants name and qualifications, the reason for the consultation, and the estimated cost. The DPB will work with the applicant to arrange a payment schedule for this cost.

Section 3: Definitions

1. Solar Energy System (SES): A system that converts energy from sunlight into electricity using photovoltaics (PV), or indirectly using concentrated solar radiation, or a combination of the two.
2. Solar Array: Multiple solar PV panels combined to create a source of electrical power; a part of an SES.
3. Height of building: The vertical measurement from grade to the highest point of a building, excluding chimneys, television antennae, HVAC systems, and roof mounted solar arrays.
4. Array Mount: The manner in which a PV array is affixed to the roof or ground – roof mount or ground mount.
5. Solar Energy System Size Classification:
6. Residential – From 501 square feet to 5000 square feet array panel area.
 - a. Small – From 5001 to 15000 square feet array panel area.
 - b. Medium – From 15001 to 87000 square feet array panel area.
 - c. Large – 87001 and above square feet of array panel area.
7. SES Facility: A facility where solar power is produced.

Section 4: Exempt Solar Energy Systems

The following SES are exempt from this ordinance:

1. Residential Size Class roof mounted arrays on any legally permitted residential or residential accessory structure.
2. Ground or pole mounted arrays for private use with a panel area of less than 501 square feet if not within the resource protection zone.
3. Solar Energy Systems mounted on cell phone towers.

Section 5: Zoning Districts

Solar Energy Systems are allowed in the following zoning districts labelled Yes, subject to securing site plan approval and building permits:

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|------------------------|---|------------------------------------|
| 1. Resource Protection | - | No |
| 2. Growth 1 | - | Yes – with Planning Board Approval |
| 3. Growth 2A | - | Yes – with Planning Board Approval |
| 4. Growth 2B | - | Yes – with Planning Board Approval |
| 5. Rural Residential | - | Yes – with Planning Board Approval |

Section 6: Site Plan Review & Performance Standards

1. Standards for Roof Mounted and Small size Ground Mounted SES: All SES and associated wiring shall be installed in compliance with the PV systems standards of the latest edition of the National Electric Code (NEC).
2. Additional Standards for Medium and Large size Ground Mounted SES: In addition to the standards listed in section 6.1 above, Medium and Large Size Ground Mounted SES shall comply with the following:
 - A) The applicant for an SES permit will supply the Code Enforcement Officer (CEO) with a Site Plan Review application.
 - B) Visual and environmental buffers must be maintained at the project’s periphery and shall extend the width of the required setback; by the preservation of native vegetation (tree & woody-shrub species) or by the planting of native species.
 - C) If utilizing cleared land for proposed “meadow” based stormwater treatment, semi-annual (Spring & Fall) inspection of the meadow areas shall be performed until a meadow grass sod is established. Grading of washouts and reseeded of eroded “meadow” areas shall be performed according to Maine Department of Environmental Protection (ME DEP) Best Management Practices.
 - D) Meadow stormwater treatment areas shall be managed by mowing in lieu of herbicide treatment.
 - E) For safety reasons, the entire periphery of the SES shall be surrounded by an agricultural welded wire type fence 72 inches high (at a minimum) positioned 6 inches off the ground.
3. Additional Standards for Large size Ground Mounted SES: In addition to the standards listed in sections 6.1 & 6.2 above, Large Size Ground Mounted SES shall comply with the following:
 - A) Signage on the access gate to the SES will identify the owner and list a 24 hour emergency contact phone number.
 - B) The SES owner will provide to the Dedham Fire Chief, a site plan, electrical schematic of the facility, standard security measures for the facility, and an emergency response plan.

4. **Abandonment, Decommissioning & Removal of Large SES:** In addition to all standards listed in sections 6.1, 6.2, & 6.3 above, Large Size Ground Mounted SES shall comply with the following:
 - A) The owner or operator of the SES shall notify the CEO by certified mail with the date of discontinued operations, or the expiration of a lease to operate the facility, and shall physically remove the entire SES installation no more than 365 days from the date of discontinued operations.
 - B) Decommissioning & removal shall consist of the physical removal of PV panels, array support structures, foundations, to a depth of at least four (4) feet below grade, electrical switchgear, and associated transmission lines from the site.
 - C) Decommissioning & removal shall also consist of off-site disposal of all solid & liquid waste in accordance with local, state & federal regulations.
 - D) Stabilization of the site via revegetation shall be performed and shall use ME DEP Best Management Practices as necessary, to avoid erosion.
 - E) Absent a notice of decommissioning or written notice of extenuating circumstances, a Large SES will be considered abandoned when it fails to operate for more than one year. The CEO will notify the party responsible by certified mail that they must remove the facility and restore the site within one year. A copy of this notice will be sent to the Dedham Board of Selectmen.
 - F) If the owner or operator of the SES fails to remove the installation within 365 days of abandonment, the town retains the right to use all available means to cause an abandoned Large SES to be removed. All costs thus incurred will be paid from the performance bond for that purpose held by the Town of Dedham.

5. **General Standards Applicable to all SES:**
 - A) The property owner of record will be the responsible party for maintaining & operating the SES on a parcel, unless a lease or equivalent instrument is executed between the property owner of record and a proposed operator of the SES. A copy of the instrument shall be submitted to the CEO.
 - B) Approval of an SES application via this ordinance is conditional upon compliance with the Dedham Land Use Ordinance, Maine Natural Resources Protection Act, Maine Site Location of Development Law, and Maine Stormwater Management Law.
 - C) An SES shall not be constructed until an SES application has been approved, or approved with conditions, by the Dedham Planning board, and a building permit has been issued by the CEO.
 - D) Any SES site lighting shall be shielded & downcast such that light does not spill onto an adjacent parcel or the night sky.

Section 7: Application and Permit Fees

1. SES building permit applications shall be accompanied by a permit fee as outlined in the Dedham Fee policy.
2. If SES construction is not completed within two years of the date of issuance of the building permit for the SES, the building permit will expire. All permits will expire upon decommissioning.

Section 8: Site Plan Review & Application Materials

The following materials shall be submitted for evaluation of all non-exempt SES permit applications as part of the DPB site plan review process.

- 1) A site plan showing proposed system components and their dimensions, exterior lighting, and vegetation clearing areas, stamped and certified by a State of Maine Licensed Professional Engineer.
- 2) Proof of title, right, or interest, such as ownership, easement, lease, or purchase option for the location being considered.
- 3) A site location map which shows the boundaries of the proposed facility, property boundary lines, contiguous properties under total or partial control of the applicant, any significant resources or historic sites within one (1) mile of the proposed development, and any significant wildlife habitat (per ME DEP under the Site Location of Development Law) and the ME Natural Resources Protection Act which may be impacted.
- 4) Written confirmation that all applicable State agencies with jurisdiction over the project have been notified of the application and the location of all system components covered by this application.
- 5) A description of the proposed facility to include specifications for, and numbers of, the solar panels, transformers, rectifiers, other components, and all associated equipment. A listing of nominal sound levels at the SES periphery, and an outline of emergency shutdown procedures.
- 6) A revegetation plan for any cleared areas.
- 7) A decommissioning plan that meets the requirements of Section 4 above; signed by the party responsible for the removal of the SES and the owner of the parcel where the SES is proposed. This plan shall be recorded in the Hancock County Registry of Deeds prior to SES operation.
- 8) A Waste Stream Management Plan (including recycling percentages) for demolition waste & debris at the SES site. This waste includes concrete, wood, scrap metal & wire, and clearing & grading waste.
- 9) Documentation of abutting property owner notification by certified mail of the application for SES. This notification by the applicant at least 15 days prior to the initial DPB or CEO consideration, shall indicate the time, place, and date of the initial consideration. If a public hearing is called by the DPB or CEO, a notice will be posted by the town at least 15 days prior to the hearing, and include the date, time, and place of the hearing.
- 10) The applicant will submit seven (7) copies of the above materials at least 10 days in advance of a DPB meeting date when the applicant wishes to be on the agenda.
- 11) The DPB will review the application packet for completeness; if incomplete, a list of outstanding items will be sent to the applicant in a timely fashion. When complete, the application will be preliminarily reviewed by the DPB for compliance with the ordinance standards.
- 12) A final DPB review documenting any conditions of approval will take place subsequent to the preliminary review. If approved, the application will be sent to the CEO for the issuance of a construction permit.

Section 9: Guarantee of Removal

At the time of approval of a proposed SES, and prior to starting construction of an SES, the applicant must guarantee to cover the costs of removal of the facility.

- 1) The amount of the guarantee shall be equal to the estimated SES removal cost provided by a licensed professional engineer; or an estimate provided by a professional array construction company. These estimates to be provided by the applicant. An updated estimate shall be provided by the applicant to the town every 5 years from the date of the permit issued, using these types of estimate sources.
- 2) An updated estimate shall be provided by the applicant to the town every 5 years from the date of the permit issued, using these types of estimate sources. If the estimated costs increases more than 15% from the previous estimate, the facility owner shall provide additional security in the amount of the increase.
- 3) Type and contents of guarantee – Interest Bearing Escrow Account.

A cash contribution equal to the estimated removal cost shall be made by either a certified check made out to the Town of Dedham and deposited into a savings account, or the purchase of a certificate of deposit:

For any account opened by the applicant, the Town of Dedham shall be named as the owner or co-owner, and the consent of the Town of Dedham shall be required for a withdrawal. Any interest earned on the escrow account shall be returned to the applicant unless the town has found it necessary to draw on the account, in which case, the interest earned shall be proportionally divided between the amount returned to the applicant and the amount withdrawn to perform the necessary work.

- 4) Type and contents of guarantee – Performance Bond.

A Performance Bond shall detail the condition of the bond, the method for release of the entire bond or portions thereof to the Town of Dedham, and the procedures for collection by the Town. The bond documents shall specifically reference the SES facility for which approval is sought.

Section 10: Severability

This ordinance is severable; if any phrase, clause, sentence, or provision is declared to be contrary to law, the validity of the remainder shall not be affected, unless the application of any remaining portion of the ordinance would result in action which would be inconsistent with the objectives of this ordinance.