CHAPTER 1 Zoning Regulations

SECTION 101 Definitions

<u>Solar Energy System</u>. 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.

- 1) <u>Small-scale Solar Energy System</u>. A solar energy system that generates a nameplate capacity of less than 50kW.
- 2) <u>Large-scale Solar Energy System</u>. A solar energy system that generates a nameplate capacity of 50kW or more.

SECTION 106 Rural Farm and Forest - RF

106-B: **Permitted Uses**

- 6) Small-scale Solar Energy Systems
- 7) Large-scale Solar Energy Systems

SECTION 107 Low Density Residential – LDR

107-B: **Permitted Uses**

- 4) Small-scale Solar Energy Systems
- 5) Large-scale Solar Energy Systems

SECTION 108 Medium Density Residential – MDR

108-B: **Permitted Uses**

4) Small-scale Solar Energy Systems

SECTION 109 High Density Residential – HDR

109-B: **Permitted Uses**

5) Small-scale Solar Energy Systems

SECTION 110 Resource Protection - RP

110-B: **Permitted Uses**

3) Small-scale Solar Energy Systems

SECTION 111 Commercial - C

111-B: **Permitted Uses**

- 7) Small-scale Solar Energy Systems
- 8) Large-scale Solar Energy Systems

SECTION 112 Industrial – I

112-B: **Permitted Uses**

- 6) Small-scale Solar Energy Systems
- 7) Large-scale Solar Energy Systems

CHAPTER 2 General Standards

SECTION 209 Solar Energy Systems

209-A: **Review Authority.**

- 1) Small-scale Solar Energy Systems are subject to review by the Code Enforcement Officer and shall meet any base zoning requirements.
- 2) Large-scale Solar Energy Systems are subject to Site Plan Review by the Planning Board and shall meet any zoning requirements as in addition to the requirements of this section.

209-B: In addition to the site plan review application requirements identified in Chapter 3, the Applicant shall submit the following supporting materials:

- 1) Name of the owner and operator of the facility, and the names of the owner of the property.
- 2) Solar system specifications, including dimensions and number of panels, mounting, estimated power generation, and facility size.
- 3) Certification that the solar energy system is compliant with all applicable industry standards, including the National Electrical Code and fire and life safety codes.
- 4) A letter from the electrical utility confirming the substation and transmission line capacity to accept energy generated from the solar energy system.
- 5) A plan which must include the location of the proposed system, any fencing and screening, access roads and turnout locations, substations, accessory equipment to the system, overhead utility lines, and all-electric cabling from the system to other structures, substations, or utility grid connections.
- 6) A visual impact assessment, per section XX below.
- 7) A maintenance and operations plan to include regular operation and maintenance of the facility, revegetation monitoring, rehabilitation of disturbed soils, invasive plant removal, the frequency and method of vegetation management, and the frequency and scope of regular inspections.
- 8) An emergency action plan for all anticipated hazards approved by the Fire Chief or Designee.
- 9) A solar glare analysis prepared by a professional with relevant experience.
- 10) A decommissioning plan that includes:
 - a) Restoration measures to stabilize the site and mitigate erosion issues.
 - b) Above-ground structure removal and disposal of below grade equipment.
 - c) Regrading.

- d) Drainage structure repair.
- e) Access roads.
- f) Restorative work on adjacent lands.
- g) Revegetation.
- h) Property owner notification; and
- i) Timeline for the process and an engineer's cost estimate for decommissioning the system.

209-C: Dimensional Standards for Large-scale Solar Energy Systems

- 1) **Height.** The maximum height of solar energy system structures is 35 feet. For solar panels, height shall be measured at maximum tilt.
- 2) **Setbacks.** Solar energy systems shall be subject to minimum front, side, and rear setbacks as noted below. Minimum setbacks shall not be applicable to internal property lot lines within a Large-scale Solar Energy System located on contiguous lots under the common control of one developer by virtue of ownership, lease, or easement.
 - a) Rural Farm & Forest 100 feet
 - b) Low Density Residential 150 feet
 - c) Commercial 100 feet
 - d) Industrial 50 feet
- 3) At least a portion of the setback is subject to the Buffer Area standards in subsection 2) below.

209-D: Performance Standards for Large-Scale Solar Energy Systems

- 1) Siting
 - a) Preference should be given to locating the Large-scale Solar Energy System on previously developed, degraded, or marginally productive portions of the property.
 - b) Large-scale Solar Energy 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 Large-scale Solar Energy System.

2) Buffer Area

- a) A vegetated buffer area of fifty (50) feet must be provided around the Large-scale Solar Energy System to provide screening to soften and naturalize the visual impact of all Large-scale Solar Energy Systems.
- b) This vegetated buffer may consist of undisturbed woods and shrubby vegetation. In areas where existing vegetation is not adequate for screening purposes, the Planning Board may require plantings of native trees.
- c) Along any portions of the Large-scale Solar Energy Systemw that abut pasture or meadow conditions, the applicant must plant at

- minimum a staggered double row of evergreen trees for a visual buffer.
- d) Access drives may cross the buffer area, but parking areas or internal access drives may not be located within this area.

3) Visual Impact Assessment

- a) The visual impact assessment must be prepared by a Maine licensed landscape architect or other professional with relevant experience.
- b) The visual impact assessment shall include:
 - (i) visual description of the project covering all elements visible from public viewpoints,
 - (ii) identification and characterization of publicly accessible scenic resources near or potentially impacted by the proposed project,
 - (iii) determination of the type and extent of any impact on the identified scenic resources as identified in the Comprehensive Plan, and
 - (iv) proposed mitigation measures such as buffers and screening to minimize potential visual impacts from the project.

4) Land Clearing

- a) Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of ground-mounted Large-scale Solar Energy Systems or as otherwise prescribed by applicable laws, regulations, and bylaws/ordinances.
- b) Removal of mature trees shall be avoided to the extent possible.
- c) No prime Farmland soil or topsoil shall be removed from the site for installation of the system.
- d) Native, pollinator-friendly seed mixtures shall be used to revegetate cleared areas following construction and installation of the system.

5) Protection of Natural Resources

a) If any portion of the Large-scale Solar Energy System lies within an area identified by the Maine Natural Areas Program (MNAP) as containing rare or exemplary natural communities, including any critically imperiled (S1) or imperiled (S2) natural communities or plant species, the applicant shall demonstrate that the proposal will cause no or minimal impact to any such identified resources. The plan shall provide for protection of the identified resources in a manner acceptable to MNAP or in accordance with the recommendations of a biologist with demonstrated experience with the identified resources. b) If any portion of the Large-scale Solar Energy System lies within an area identified and mapped by the Maine Department of Inland Fisheries and Wildlife (MDIFW) as containing rare, endangered, threatened, and special concerned species; designated essential and significant wildlife habitat; or fisheries habitat concern, the applicant shall demonstrate that the proposal will cause no or minimal impact to any such identified resources. The plan shall provide for protection of the identified resources in a manner acceptable to MDIFW or in accordance with the recommendations of a wildlife biologist with demonstrated experience with the identified resources.

6) Vegetation Management

- 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.
- b) Any herbicide and pesticide application must be carried out by a licensed applicator. Details regarding herbicide or pesticide application must be detailed in the operations and maintenance plan.

7) Ownership changes

- a) If the applicant sells the project to another party before development or operation the new owner must demonstrate financial and technical capacity before the new owner can begin development of the project. This process will follow procedures for an Amended Site Plan with the Planning Board, and the scope of review will be limited to financial and technical capacity only.
- 209-E: Any physical modification to any solar energy system, whether or not existing prior to the effective date of this ordinance, shall require review and approval under this ordinance.