DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY MAINE LAND USE PLANNING COMMISSION

CHAPTER 10, LAND USE DISTRICTS AND STANDARDS

2025 Solar Rulemaking

Phase II: Siting and Activity Standards for Solar Energy Generation Facilities¹

June 11, 2025, Draft

The following amendments propose changes to Chapter 2, *Definitions* and 10, *Land Use Districts and Standards for Areas within the Jurisdiction of the Maine Land Use Planning Commission*. This document only includes relevant sections of Chapter 10 and indicates additions in <u>underline</u>, deletions with a <u>strikethrough</u>, and relocated text in double <u>underline</u> and double <u>strikethrough</u>. Most revisions are selfevident. Where necessary, further explanations of some changes have been included in [brackets]. These explanatory notes would not be included in the final rule.

¹ Phase I regarding definitions and use listings was enacted in 2022, but can be viewed on the Commission's rulemaking webpage (<u>www.maine.gov/dacf/lupc/laws_rules/proposed_rules/rules.shtml</u>)

Chapter 2 - Definitions

•••

##. Battery Energy Storage System.

Commercially available technology intended to serve structural development or the grid that uses chemical processes for absorbing energy and storing it for use at a later time, including but not limited to lithium-ion batteries.

##. Battery Energy Storage System Facility.

A battery energy storage system large enough to require one or more internal systems such as heating, ventilation and cooling, fire suppression, monitoring systems that are remotely monitored, or is required to decommission in accordance with 35-A M.R.S. Chapter E.

##. Solar Energy Generation Facility:

- (1) Accessory Solar Energy Generation Facility. A freestanding or standalone solar energy system that is intended to convert solar energy into electric or thermal energy for on-site use, and which has a project area of 750 square feet or less; excluding rooftop installations over existing footprint.
- (2) Small-scale Solar Energy Generation Facility. A solar energy system that is intended to convert solar energy into electric or thermal energy for on-site use or off-site use, and which has a project area of more than 750 square feet but not more than one acre.
- (3) Mid-scale Solar Energy Generation Facility. A solar energy system that generates electricity for on-site use or off-site use, and which has a project area of more than one acre but not more than ten acres.
- (4) Large-scale Solar Energy Generation Facility. A <u>s</u>olar <u>e</u>Energy <u>s</u>System that generates electricity primarily or solely for commercial sale for off-site use, and has <u>a</u> project area of more than ten acres

Project area includes, but is not limited to, all land area containing new access roads, internal roads, the solar energy generation system (e.g., panels, inverter, battery storage), electrical and communications infrastructure including generator lead lines, structures, parking, security fencing, and vegetation clearing, including shade management areas.

##. Solar Energy System:

A device or structural design feature, or group of devices or structural design features, a substantial purpose of which is to provide for the collection, storage, and distribution of solar energy for space heating or cooling, electricity generation, or water heating.

##. Solar Array:

A collection of interconnected solar panels.

##. Solar Panel:

A photovoltaic or solar heating device capable of collecting and converting solar energy into electric or thermal energy.

##. Structure:

"[A]nything constructed or erected with a fixed location on or in the ground, or attached to something having a fixed location on or in the ground, including, but not limited to, buildings, mobile homes, retaining walls, billboards, signs, piers and floats." 12 M.R.S. § 682. For purposes of regulating development in flood prone areas, a walled and roofed building. A gas or liquid storage tank that is principally above ground is also a structure. For the purposes of regulating solar energy generation facilities, a solar panel or solar array is also a structure.

Chapter 10 – Land Use Districts and Standards

•••

. . .

10.21 DEVELOPMENT SUBDISTRICTS

A. COMMERCIAL INDUSTRIAL DEVELOPMENT SUBDISTRICT (D-CI)

•••

3. Land Uses

•••

c. Uses Requiring a Permit

The following uses, and related accessory structures, may be allowed within D-CI subdistricts upon issuance of a permit from the Commission pursuant to 12 M.R.S. §685-B, subject to the applicable requirements set forth in Sub-Chapter III:

(2) Battery energy storage system facilities;

• • •

. . .

d. Special Exceptions

The following uses, and related accessory structures, may be allowed within D-CI subdistricts as special exceptions upon issuance of a permit from the Commission pursuant to 12 M.R.S. §685-A(10), the criteria of Sections 10.24,B,3 and 9, and the applicable requirements set forth in Sub-Chapter III:

•••

(1) Battery energy storage system facilities located on soils recognized by the U.S. Department of Energy as prime farmland soils.

• • •

K. RESOURCE-DEPENDENT DEVELOPMENT SUBDISTRICT (D-RD)

•••

2. Description.

The D-RD Subdistrict must include:

a. Areas the Commission determines meet the applicable criteria for redistricting to this subdistrict in Section 10.08, are generally suitable for the development activities proposed, and are proposed for one of the following land uses meeting the associated locational requirements:

•••

- (4) Mid-scale or <u>gridlarge</u>-scale solar energy <u>generation</u> facilities in an area:
 - (i) accessible from a public road by a legal right of access satisfying Section 10.08-A,E;
 - (ii) located a reasonable distance from emergency service providers to allow for adequate response in the event of an emergency; and
 - (iii) within one mile of the proposed point of interconnection with the existing transmission grid if no other area suitable for the facility and closer to a point of interconnection is reasonably available to the applicant seeking to establish a D-RD subdistrict; and
 - (iv) Notwithstanding Section 10.21,K,1,a,(4),(iii), the Commission may allow a distance of up to three miles from the proposed point of interconnection if the proposed facility will be sited on preferred locations such as brownfields, landfills, or gravel pits or the facility will co-locate with active agricultural uses, and, unless the applicant demonstrates that redistricting an area no more than three miles from the point of interconnection would result in a project location that is compatible with current land uses and does not expand the pattern of development beyond already developed areas.

3. Land Uses

...

c. Uses Requiring a Permit

The following uses, and related accessory structures, may be allowed within D-RD subdistricts upon issuance of a permit from the Commission pursuant to 12 M.R.S. §685-B, subject to the applicable requirements set forth in Sub-Chapter III:

(2) Battery energy storage system facilities associated with solar energy generation facilities;

•••

. . .

d. Special Exceptions

The following uses, and related accessory structures, may be allowed within D-RD subdistricts as special exceptions upon issuance of a permit from the Commission pursuant to 12 M.R.S. §685-A(10), the criteria of Sections 10.24,B,3 and 9, and subject to the applicable requirements set forth in Sub-Chapter III:

(1) Battery energy storage system facilities associated with solar energy generation facilities; and

•••

M. RESIDENTIAL DEVELOPMENT SUBDISTRICT (D-RS)

• • •

3. Land Uses

... d.

Special Exceptions

The following uses, and related accessory structures, may be allowed within D-RS subdistricts as special exceptions upon issuance of a permit from the Commission pursuant to 12 M.R.S. §685-A(10), the criteria of Sections 10.24,B,3 and 9, and subject to the applicable requirements set forth in Sub-Chapter III:

•••

(5) Solar energy generation facility: Small-scale; (5)(6) Trailered ramps:

10.28 ACTIVITY-SPECIFIC STANDARDS

...

U. SOLAR ENERGY GENERATION FACILITIES AND BATTERY ENERGY STORAGE SYSTEM FACILITIES

The following must be developed in conformance with the standards of Section 10.27,U: (i) new facilities; (ii) reconstruction of an existing facility; (iii) expansion of an existing facility footprint or capacity; or (iv) modification to an existing facility that alters safety concerns. If the requirements in the standards below are at variance with the requirements of any other provisions of this Chapter, or other lawfully adopted rules, regulations, standards, or ordinances, the more protective of existing natural, recreational and historic resources must apply.

1. Standards for All Energy Generation and Storage Facilities.

- **a.** Energy facilities producing or storing energy that is distributed through an electrical grid must provide an interconnection agreement prior to permit approval.
- b. Emergency Response Plans. The facility operator must submit an emergency response plan, including but not limited to details on facility staffing and associated roles, off-site emergency response organizations, emergency response strategy, facility safety systems, potential hazards, emergency training, and incident investigation and reporting.

2. Standards for Solar Energy Generation Facilities.

<u>a. Glare.</u>

- (1) All solar panels must have anti-reflective coating or texture whenever possible.
- (2) Facilities must be sited and oriented to reduce glare to the maximum extent possible.

b. Vegetative Visual Screening.

- (1) All solar energy generation facilities are subject to the vegetation clearing standards of Section 10.27,B;
- (2) Notwithstanding Section 10.27,B,4, the Commission may require revegetation of cleared openings legally in existence as of June 7, 1990 in accordance with standards of Section 10.27,B; and
- (3) Mid-scale and large-scale solar energy generation facilities must maintain vegetative visual screening on side and rear property lines to the maximum extent possible.
- c. Wildlife Movement. All solar energy generation facilities must design and plan for wildlife movement using current Maine Department of Inland Fisheries and Wildlife recommendations including, but not limited to, wildlife permeable fencing and release plans for large mammals that may become trapped by fencing. An exception may be made to wildlife movement requirements for facilities where the Commission finds that risk to wildlife movement is not applicable.
- **d. Decommissioning.** Solar energy generation facilities three or more acres in size are subject to the decommissioning standards of Section 10.27,V.

3. Standards for Battery Energy Storage System Facilities.

a. **Decommissioning.** Battery energy storage system facilities with a capacity of two or more megawatts are subject to the decommissioning standards of Section 10.27,V.

V. DECOMMISSIONING

Development subject to decommissioning not in conformance with the standards of Section 10.27, V, is prohibited.

Decommissioning may be required by the Commission or by law, pursuant to 35-A M.R.S. Chapters 34-D and E. To obtain a permit, facilities subject to decommissioning must meet the General Criteria for Approval, Section 10.24, and applicable requirements in Sections 10.25, 10.26, and 10.27, in addition to any applicable requirements set forth in Section 10.27, V. As used in this section, unless the context otherwise indicates, the following terms have the meanings as defined in 35-A M.R.S. Chapters 34-D and <u>E</u>.

- 1. Decommissioning plan. The Commission may not approve an application, unless adequate provision has been made for:
 - **a.** The removal of all components of a development to a depth of at least 24 inches or to the depth of bedrock, whichever is less, to the extent the components of the development are not otherwise in or proposed to be placed in productive use or otherwise authorized to remain in place;
 - <u>b.</u> The removal of all components of the development to a depth of at least 48 inches or to the depth of bedrock, whichever is less, for any portion of a development located on land classified as farmland any time within five years preceding the start of construction of the development, to the extent such components are not otherwise in or proposed to be placed in productive use or otherwise authorized to remain in place;
 - c. Removal under normal operating conditions and in the event of damage to a facility;
 - **d.** Returning site conditions to pre-development conditions to the maximum extent possible including grading to postconstruction grade and revegetation;
 - e. Dismantling development aspects with hazardous materials;
 - f. Emergency response in the event of an emergency during decommissioning;
 - g. Calculating the full cost of decommissioning and site stabilization;
 - **h.** Updating decommissioning costs current throughout the lifetime of the development;
 - i. Maintaining necessary and regular communications with the Commission; and
 - j. Providing financial assurance to cover the total cost of decommissioning, in the form of a performance bond, surety bond, irrevocable letter or credit or other form of financial assurance.
- 2. Procedures and Submission Requirements.
 - **a.** A draft decommissioning plan will be required with the full permit application.
 - **b.** The final decommissioning plan must be submitted for approval prior to construction.
 - **c.** The decommissioning plan, addressed in Section 10.27,V,1, must be updated and submitted to the Commission for approval 15 years after approval of the plan and no less than every five years thereafter.
 - **d.** Any proposed changes to an approved decommissioning plan must be submitted to the Commission for approval.
 - e. The applicant or the Commission may request an update to the decommissioning plan at any time.
 - f. Decommissioning plans are subject to transfer requirements of Chapter 4, Section 4.07,I.
- 3. Decommissioning Timeline.

- **a.** Decommissioning is required for a portion or all of the development if:
 - (1) An approved facility that begins but does not complete construction by the permit expiration date;
 - (2) The development ceases operations or generation of electricity on a continuous basis for a period of 12 months; and
 - (3) The development is deemed, by the Commission, to pose a risk to public health, safety and general welfare.
- **b.** Decommissioning must be completed within 24 months of implementation of decommissioning activities in accordance with the approved decommissioning plan.

4. Release of Financial Assurance.

- **a.** The financial assurance mechanism will be released upon completion of stated objectives in Section 10.27,V,1.
- **b.** If the party responsible fails to comply with decommissioning when required, the Commission may, at its discretion, utilize the financial assurance mechanism for decommissioning of the development in accordance with the decommissioning plan.