
TOWN OF JEFFERSON SOLAR FARM ORDINANCE

Certification of Proposed Ordinance by the Municipal Officers

This certifies to the municipal clerk of Jefferson that the within ordinance is a true copy of a proposed ordinance entitled TOWN OF JEFFERSON SOLAR FARM ORDINANCE to be acted upon by the voters by secret ballot on November 5, 2024.

Dated: 10/7/2024

Municipal Officers of Jefferson

Panela J. Horton
Claudia Orff-Read
Robert E. Jones

“Attest: A true copy of an ordinance entitled ‘TOWN OF JEFFERSON BUILDING ORDINANCE’ as certified to me by the municipal officers of Jefferson on the 7th day of October, 2024.”

Signature

Rachelle Bohner

Town Clerk of Jefferson

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1. Title

This Ordinance shall be known as the “Town of Jefferson Solar Farm Ordinance” and will be referred to herein as the “Ordinance”.

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” (“SF”). These standards are intended to:

- A. Establish clear guidelines and standards for the Town to regulate Solar Energy Systems, including Solar Farms.
- B. Permit the Town to fairly and responsibly protect public health, safety, and welfare.
- C. Minimize any potential adverse effect(s) of solar development on surrounding land use.
- D. Identify who is responsible for, and provide for, the decommissioning/removal of panels, associated utility structures and equipment that are no longer being used for energy generation and transmission purposes.

3. Authority

- A. This Ordinance is adopted pursuant to the Home Rule Powers as provided for in Article VIII of the Maine Constitution, provisions of Title 30-A, M.R.S. §3001 (Ordinance Power), and under the authority granted to the Town by the Maine Revised Statutes, inclusive of 30-A, M.R.S. §2101, et seq.
- B. Title 35-A §3209-B (Commercial and Institutional Net Energy Billing) shall apply when the facility intends to participate in Net Energy Billing and the nameplate capacity is less than 5 megawatts (MW). Title 35-A M.R.S. c. 34-D (Solar Energy Development Decommissioning) applies to the Decommissioning Plan.
- C. To the extent that any provision 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 valid.
- D. This Ordinance shall be administered by the Town’s Planning Board and enforced by the Town’s Code Enforcement Officer and Select Board.

4. Applicability

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- A. A Solar Farm or Solar Energy System approved for construction prior to the effective date of this Ordinance shall not be required to meet the terms and conditions of this Ordinance.
- B. Any physical modification to any existing solar farm, whether or not existing prior to the effective date of this Ordinance, that expands or relocates the footprint of the solar farm, shall require a new application under this Ordinance.
- C. Routine maintenance or replacements in kind do not require a permit.

5. Definitions

- A. **Clearcutting**. The removal of every tree stem in a wide swath so no canopy remains.
- B. **Kilowatt (KW)**. a unit for measuring power that is equivalent to 1,000 watts.
- C. **Megawatt (MW)**. a unit for measuring power that is equivalent to one million watts, or 1,000 kilowatts.
- D. **Megawatt Hour (MWh)**. A megawatt hour is equal to 1,000 Kilowatt hours (KWh). It is equal to 1,000 kilowatts of electricity used continuously for one hour.
- E. **Rated Nameplate Capacity**. The maximum rated output of electric power production of the photovoltaic system in watts of Direct Current (DC).
- F. **Solar Array**. A grouping of multiple solar modules with the purpose of harvesting solar energy.
- G. **Solar Energy**. Radiant energy (direct, diffuse and/or reflective) received from the sun.
- H. **Solar Energy System (SES)**. A solar photovoltaic cell, module, or array, including all Solar-Related Equipment relying upon solar radiation as an energy source for collection, inversion, storage, and distribution of solar energy for electricity generation or transfer of stored heat.
- I. **Solar Energy System, Ground-Mounted**. A Solar Energy System that is structurally mounted to the ground and is not roof-mounted; may be of any size (private use/small, medium, or large scale).
- K. **Solar Energy System, Roof-Mounted**. A Solar Energy System that is mounted on the roof of a building or structure; may be of any size (private use, medium, or large scale). **Solar Farm (SF)**. A Solar Energy System placed solely or primarily to generate electricity to feed power into an electrical grid or other commercial purpose. See also, *Solar Energy System*.

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- L. **Solar Farm and Solar Energy System, Large Scale.** A Solar Energy System whose physical size based on total airspace projected over the ground is greater than 4 acres and no greater than 10 acres and/or that generates a nameplate capacity of 1 MW or greater.
- M. **Solar Farm and Solar Energy System, Medium Scale.** A Solar Energy System whose physical size based on total airspace projected over the ground is up to 4 acres and/or that generates a nameplate capacity of 20 KW up to, but not including, 1 MW.
- N. **Solar-Related Equipment.** Items including a solar photovoltaic cell, module, or array, or solar hot air or water collector device panels, lines, pumps, batteries, mounting brackets, framing, fencing, foundations or other structures used or intended to be used for collection and management of solar energy.

6. Permit Required

A Building Permit approved by the Planning Board shall be required for all Solar Farms, both Large- and Medium-Scale Solar Farms. All Solar Farms shall conform to the requirements of this Ordinance and other applicable provisions of the Town of Jefferson ordinances. Whenever the requirements of this Ordinance are in conflict with the requirements of any other lawfully adopted rule, regulation, or ordinance, the more restrictive provision shall apply.

7. Application Fee

- A. Solar Farm and Solar Energy System, Medium Scale: \$5,000
- B. Solar Farm and Solar Energy System, Large Scale: \$10,000
- C. Revisions to existing Solar Farms: 50% of initial fee.

8. Specific Application Requirements

An application for a Medium- or Large-Scale SF or SES must include the following information and documents, at the cost of the applicant:

- A. The name(s), address(es) and phone number(s) of the owner(s) and operator(s) (if different) of the SES or SF; and detailed information regarding qualifications and track record of owner and operator to establish and run the proposed facility;
- B. If the operator will be leasing the land, a copy of the agreement (minus 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 SF or SES and the life of the agreement;
- C. A description of how and to whom the energy produced will be sold;

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- D. A copy of the agreement and schematic details of the connection arrangement with the transmission system (most likely Central Maine Power), clearly indicating which party is responsible for various requirements and how they will be operated and maintained;
- E. Construction Documents:
- 1) A full set of Construction Drawings and Specifications.
 - a) All Construction Drawings and Specifications shall comply with all applicable statutes, regulations, standards, and ordinances issued by Federal, State and local jurisdictions.
 - b) All Construction Drawings and Specifications shall be prepared and stamped by a registered professional engineer in the State of Maine.
 - 2) A description of the panels to be installed, including make and model, and associated major system components.
 - 3) A construction plan and timeline, identifying known contractors, site control and anticipated on-line date.
 - 4) Additional drawings and specifications, including, but not limited to, the following:
 - a) **Boundary Survey:** A boundary survey for the project performed by a licensed land surveyor.
 - b) **Comprehensive Deed Research:** Investigation of the County Registry of Deeds;
 - i) Defining the limits of the property including all property corners and tangents, monuments and exceptions;
 - ii) Identification of adjacent properties with lot number, acreage and property owner;
 - iii) Locations of all major structures, roads and parking;
 - iv) Report notes containing purpose of the survey, ownership and deed references, method of measurements, past survey references, and any conflicts, exceptions, findings and opinions.
 - c) **Site Plan:** A set of large-scale drawings showing the improvements to the property. This includes:
 - i) Site boundaries and delineation of the property and adjacent properties showing Lot Numbers;

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- ii) Location of all structures and their relationship to the boundaries and adjacent structures. Include all new, existing and structures to be demolished;
 - iii) Location of Land Use Zones and setbacks from the Shoreland Zoning Ordinance;
 - iv) Location of all roads and parking areas and their relationship to the boundaries and adjacent structures;
 - v) Any zones; such as floodplain or wetland zones;
 - vi) Easements and other similar entitlements;
 - vii) Statement to abide by “clearcutting” restriction (see para. 9. A.);
 - viii) Other site features, components, and documentation as the Planning Board may require.
- d) **Specific SF or SES Drawings:** Such drawings shall depict the layout, design and installation of all components of the SF or SES. All components (layout, design and installation) shall conform to applicable industry standards, such as those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations, and shall comply with local ordinances and 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.
- e) **Stormwater Management Plan:** A Stormwater Management Plan developed in accordance with Maine’s Department of Environmental Protection regulations for Storm Water Management in Title 38, §420D of the Maine State Statutes, stamped and signed by a licensed Maine engineer.
- F. An operations and maintenance plan, including site control and the projected operating life of the system. Such a plan shall include measures for maintaining safe access to the installation, stormwater controls, and 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 to not using pest-control substances (e.g., pesticides, herbicides, fungicides, and/or insecticides).
- G. An emergency management plan for all anticipated hazards.

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- H. A stormwater management plan, certified by a licensed Maine engineer, that demonstrates stormwater from the SF or SES will infiltrate into the ground beneath the SF or SES at a rate equal to that of the infiltration rate prior to the placement of the system.
- I. Proof of financial capacity to construct and operate the proposed facility and to decommission the solar farm and remediate the site.
- J. A Decommissioning Plan: See Section 10.
- K. A Building Permit Application.
- L. Soil test plan for contaminants.
- M. A background noise measurement for the proposed site location as performed by a licensed professional.

9. Standards for Approval

The following standards must be met for Medium- and Large- SFs and SESs:

- A. **Clearcutting**: Clearcutting of more than 10% of the SF or SES site is prohibited.
- B. **Prohibited Locations**:
 - 1) Shall not be placed in or encroach upon the Shoreland Zone (i.e., 250 feet from shoreland);
 - 2) Components of a ground-mounted SES shall not be placed within any legal easement or right-of-way, or be placed within stormwater conveyance system, or in any other manner that would alter or impede stormwater runoff from collecting in a constructed stormwater conveyance.
- C. **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 through the decommissioning of the project. The roles and responsibilities of the system owner, operator, landowner and any other party involved in the project must be clear and demonstrate to the satisfaction of the Planning Board that the public interest is protected. The owner or operator of a Ground-Mounted Solar Energy System shall build and maintain it in compliance with all relevant Federal, State and Local Laws, Regulations, and Ordinances.
- D. **Setback and Height**: Structures within a SES shall be subject to a minimal setback of 100 feet from all lot lines. Any solar photovoltaic cells or arrays shall be subject to a maximum height of 12 feet above the ground surface. Associated SES structures shall be subject to the maximum height regulations specified for principal and accessory buildings

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contained in the Building Ordinance. Setback from public roads shall be 85 feet; setback from private roads shall be 50 feet.

- E. **Utility Notification:** No SF or SES shall be installed until satisfactory evidence has been given to the Planning Board that the applicant has an executed agreement with a utility provider to accept the power.
- F. **Fencing:** Ground-Mounted SFs and SESs shall be protected by a perimeter fence located inside any screening buffer. Such fences shall allow for small wildlife passage and movement. Fence height shall not exceed 8 feet.
- G. **Signage:** A sign shall be required to identify the owner/operator and provide a 24-hour emergency contact phone number. SFs and SESs shall not be used for displaying any advertising. A clearly-visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence surrounding the SF or SES informing individuals of potential voltage hazards.
- H. **Screening:** Lots on which Ground-Mounted Solar Energy Systems are located shall utilize buffers / screening from roads and residences by plantings, berms, and natural topographical features. A Ground-Mounted SF or SES shall be screened from view to the greatest extent practical from any adjacent property that is used for residential purposes, as well as any public way. The screen shall consist of a vegetative barrier which provides a visual screen. In lieu of a vegetative screen, a fence that provides visual screening may be allowed only if a vegetative screen is deemed impractical by the Planning Board.
- I. **Glare:** All SFs and SESs shall be situated to eliminate concentrated glare onto nearby structures or roadways.
- J. **Lighting:** Lighting shall be limited to that required for safety and operational purposes and shall be shielded from interference with abutting properties. Lighting of the SF or SES shall be directed downward and shall incorporate full cutoff fixtures to reduce light pollution. Other than lighting required for safety or by applicable federal, state, or local authority, lighting shall not be used/visible between 9pm and 7am.
- K. **Utility Connections:** Reasonable efforts, as determined by the Planning Board, shall be made to place all utility connections from the solar photovoltaic installation underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider.
- L. **Emergency Services:** SF or SES owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Jefferson Fire Department's Fire Chief. Upon request, the owner or operator shall coordinate with local emergency services in developing an emergency response plan. A "3200 Series KNOX-BOX", or

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agreed equivalent, shall be provided and installed by the operator to be used to allow emergency service personnel continuous access. The KNOX-BOX key shall be provided to the Jefferson Fire Department at the owner or operator's expense. All means of shutting down the solar energy system shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation. The access road to the SF or SES shall be mowed, plowed, sanded and maintained at the SF or SES owner's expense at all times to enable fire and emergency apparatus access, should the need arise.

- M. **Maintenance Conditions**: The SF or SES owner or operator shall maintain the facility in good operating condition. Maintenance shall include, but not be limited to, painting, structural repairs, vegetative screening, fences, landscaping and plantings, and integrity of security measures. The SF or SES must be properly maintained and kept free from all hazards, including, but not limited to, faulty wiring, loose fastenings, or being in an unsafe condition, detrimental to public health, safety or general welfare. Site access shall be maintained to a level acceptable to the Fire Chief for emergency response. The owner or operator shall be responsible for the cost of maintaining the SF or SES and any access road(s), including regular plowing of snow and sanding to maintain road access.
- N. **Satisfaction with All Aspects of Capacity and Plans Submitted**: The Planning Board must find that the Applicant has the capacity to finance, safely operate and decommission the SF or SES.
- O. **Alternatives Assessment**: As determined by the Planning Board, if a proposed ground-mounted SF or SES does not meet the standards in this Ordinance, then other potential suitable alternative area(s), on the lot(s) included in the application, where a SF or SES can meet the Town's standards, goals, and objectives shall be evaluated by the applicant. Alternative lot areas should be evaluated against those same Ordinance standards, and Town goals and objectives. Alternative lot areas shall be evaluated against those same Ordinance standards and Town goals and objectives.
- P. **Preservation of Town's Character**: All reasonable efforts, as determined by the Planning Board, shall be made to ensure any SF or SES is consistent with the character of the community via visual consistency with local neighborhood area, maintenance of scenic views and maintenance of open space land and farms.
- Q. **Sale or Transfer**: In the event of a sale of the property and/or Solar Farm, the owner/operator shall notify the Planning Board by certified mail, at least 30 days prior to the transaction.
- R. **Expert Consultants**: The Planning Board reserves the right to hire expert consultants, at the cost of the Applicant, to help evaluate the application.

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- S. **Deed Registration**: Any SF or SES shall be incorporated into the description of real property in the realm property deed and registered in the Lincoln County Registry of Deeds as a condition of Planning Board approval.
- T. **Noise**: No noise generated by the SF or SES or Solar Related Equipment shall be 10 decibels (dB) greater than the preconstruction/existing background level. The background noise limit will be based on background noise during the quietest period of the night, typically 3:00 a.m.
- U. **Impervious Assessment**: The surface area of the arrays of a ground mounted SF or SES, regardless of the mounted angle of any solar panels, may or may not be considered impervious contingent upon conformity with the Stormwater Management Plan.
- V. **Change of Ownership**: Within 30 business days of a change in ownership, the new owner(s) or designated representative shall submit a memo to the Town of Jefferson stating they have reviewed the Town's Solar Farm Ordinance, the application for the solar farm acquired with all of its related documentation and will abide by the requirements stipulated in these documents.

10. Decommissioning and Removal

- A. **End-of-Life SF or SES**: Any SF or SES that has reached the end of its useful life, ceases to generate power or has been abandoned shall be removed pursuant to a Decommissioning Plan approved by the Planning Board as part of the application process or a more effective process that may have evolved since the application was approved. The landowner, or SF or SES 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 proposed date of the discontinued operations and plans for removal. Decommissioning and removal of the SF or SES is at the full expense of the owner/operator.
- B. **Decommissioning Plan**: A decommissioning plan must be submitted with any application for a Large- or Medium-Scale SF or SES and shall include an estimate of the total cost of decommissioning, a complete description of the work required to complete decommissioning, value of the equipment, and itemization of the estimated major expenses, 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, transmission corridor removal and permanent stabilization and road infrastructure removal and permanent stabilization. Requirements

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in Title 35-A M.R.S. c. 34-D (Solar Energy Development Decommissioning) shall be supported.

- C. **Financial Assurance**: Before an application is approved for a Large- or Medium-Scale SF or SES, the applicant shall submit a performance guarantee in the form of a performance bond, surety bond, irrevocable letter of 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 SF or SES the Applicant will have the necessary financial assurance in place for 150% of the estimated total cost of decommissioning, subject to a review of such cost by the Planning Board. 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 Planning Board. For a Medium-Scale SF or SES, the Applicant may propose securing the necessary financial assurance in phases, as long as the total required financial assurance is in place a minimum of 5 years prior to the expected end of the useful life of the Solar Energy System.
- D. **Releasing the Guarantee**: The Applicant may apply to the Select Board 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 Planning Board.
- E. **Decommissioning**: Decommissioning shall consist of:
- 1) Physical removal of all solar energy systems, structures, equipment, security barriers and transmission lines from the site;
 - 2) Disposal of all solid and hazardous waste in accordance with Local, State and Federal waste disposal regulations; and
 - 3) Stabilization or revegetation 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 disruptions to vegetation.
 - 4) Perform soil test for contaminants.
- F. **Determination of Abandonment**: Absent a notice of a proposed date of decommissioning or written notice of extenuating circumstances, a SF or SES shall be considered to be abandoned when it fails to generate 10% or less permitted capacity of electricity for a continuous period of twelve (12) months without having first obtained the written consent of the Code Enforcement Officer. Determination of abandonment shall be made by the Code Enforcement Officer.

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As a key indicator to assess the Solar Farm's viability, the operator shall send the town an annual report on or about February 1st that indicates, at a minimum, for the previous calendar year, a monthly comparison of electricity produced vs. capacity.

- G. **Use of Performance Guarantee.** If the owner or operator of a Ground Mounted SF or SES fails to remove the installation in accordance with the requirements of this section within 180 days of abandonment or the proposed date of decommissioning, the Town of Jefferson retains the right to use the performance guarantee and any and all legal or available means necessary to cause an abandoned, hazardous or decommissioned s SF or SES to be removed.

11. Modifications

- A. Any physical modification to any existing SF or SES, whether or not existing prior to the effective date of this Ordinance, shall require review and approval under this Ordinance.
- B. Any design modifications prior to completion of construction to a Medium- or Large-Scale Ground-Mounted SF or SES made after issuance of the required town permit(s) shall require reapproval by the Planning Board.
- C. Application fees for modifications shall be consistent with the overall size of the SF or SES, not solely the modification.
- D. When any portion of a ground mounted SF or SES is removed, any earth disturbance must be graded and re-seeded, unless authorized for another developed use.

12. Effective Date and Duration

This Ordinance shall take effect on mmm.xx, 2024 upon enactment by the Town of Jefferson, unless otherwise provided, and shall remain in effect until it is amended or repealed.

13. Appeals

Appeals shall be in accordance with the standards established in the Town of Jefferson Building Ordinance.

14. Enforcement of Violations and Penalties

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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, MRSA § 4452.