TOWN OF FARMINGTON, MAINE
SOLAR ENERGY SYSTEMS APPLICATION

To be filled in by Code/Planning Staff:

Date Received:_____ Application # _____ SE_____

Map # _____ Lot # _____ Zone: _____ Overlay Zone(s): _____

☐ **Residential (PRSES):**		☐ **Commercial (CSES):**		☐ **Industrial (ISES):**
(</= 2,000SF / 20kW) **($50.00 FEE)**		(</= 20,000SF / 250kW) **($500.00 FEE)**		(>20,000SF / up to 800AC) **($500.00 FEE)**

APPLICANT INFORMATION

Name of Applicant: _____

Address: _____

Telephone: _____ **Email:** _____

Name of Property Owner (if different from above): _____

Address: _____

Telephone: _____ **Email:** _____

Name of Authorized Agent (if applicable): _____

Address: _____

Telephone: _____ **Email:** _____

If applicable, attach statement designating agent(s).

If applicable, attach an option to purchase the property or other documentation demonstrating right, title, or interest in the property on the part of the applicant.

LAND INFORMATION

Location of Project/Property (street/road): _____

Number of acres included in the project: _____

Total acres in the parcel: _____ Owned: _____ Leased: _____ Optioned: _____

What is the existing use of the land site? (Residential, farmland, woodlot, commercial, etc.):

_____

PROJECT INFORMATION

Description of Project: (Attach additional sheets if necessary):

_____

Does this development require extension of public infrastructure? Yes ___ No ___

If yes, please indicate below:

Roads _____ Storm Drainage _____ Fire Protection _____

Other _____

Identify the manner in which police and fire service vehicles (in emergency) will access site. (Attach additional sheets if necessary)

_____

State the estimated average number of vehicles per day anticipated on or using this site: _____

If applicable, state below the nature of any interior roads within the proposed project, and include their type, width, length, with the estimated completion schedule. (Attach additional sheets if necessary)

_____

_____

By signing below, the applicant for the Solar Energy Systems acknowledges that they are submitting a complete application.

_____ _____

Signature of Applicant Date

_____ _____

Signature of Property Owner (if different from applicant) Date

A. General Requirements

1. Applicants will be responsible for reimbursing the Code/Planning Office for postage costs and any newspaper ads prior to approval. All abutting property owners will be notified by the Code/Planning Office of the application proposal via Certified Mail.

2. All applications for Solar Energy Systems shall be submitted on application forms provided by the Code/Planning Office. The required fees, fifteen (15) sets of the application form, and fifteen (15) sets of the required plans, maps and supplemental information, along with a thumb drive or emailed PDF, shall be submitted to the Code/Planning Office. **PRSES requires only one (1) original application and plan.**

3. Maps, plans or other drawings must be of a scale sufficient to allow for review of the proposal under the performance standards of this Ordinance and other applicable ordinances. In no case shall the scale be more than one hundred (100) feet to the inch for that portion of the tract of land being proposed for the project.

4. All roof-mounted solar array panels shall be installed according to NFPA1 and 101 requirements.

B. Submission Requirements for a Complete Solar Energy Systems Application

1. Include Solar Energy System specifications, including manufacturer and model, array/module design, Certification that the layout, design, and installation conform to all State/National Code Standard.

2. Include all pertinent information as required in the Solar Energy System Performance Standards. Attach additional sheets as necessary.

3. Include plot plan identifying location of the solar energy system (meeting all setback requirements), showing physical dimensions of the property within the Town. Include location of public roads, rights-of-way, and overhead public utilities.

C. Solar Energy Systems Performance Standards (§11-8.11.K of the Zoning Ordinance)

1. **Purpose:** It is the purpose of these performance standards to enable the Town to: regulate the permitting of residential, commercial, and industrial solar energy systems; be informed of the placement of residential and commercial solar energy systems; preserve and protect public health and safety; allow for the orderly development of land; and protect property values in the Town of Farmington.

2. **Classification:**

   a. Private Residential Solar Energy Systems (PRSES)**:** An area of land or other area used for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power, and supply electrical or thermal power, primarily or solely for on-site residential use, and consisting of one or more free-standing, ground mounted, solar arrays or modules, or solar related equipment, intended to primarily reduce on-site consumption of utility power and/or fuels. Solar arrays or modules that are flush mounted on the roofs or walls of private residences shall not be subject to PRSES performance standards or permit requirements for same. PRSES can be up to two thousand (2,000) square feet in surface area, with a rated nameplate capacity of up to 20kW.

b. Commercial Solar Energy Systems (CSES)**:** An area of land or other area used by a business for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power, and supply electrical or thermal power, primarily or solely for on-site commercial use, and consisting of one or more free-standing, ground or roof mounted, solar arrays or modules, or solar related equipment, intended to primarily reduce on-site consumption of utility power and/or fuels. CSES can be up to twenty thousand (20,000) square feet in surface area, with a rated nameplate capacity of up to 250 kW.

c. Industrial Solar Energy Systems (ISES)**:** An area of land or other area used by a property owner and/or corporate entity for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power, and supply electrical or thermal power, primarily or solely for off-site utility grid use, and consisting of one or more free-standing, ground-mounted, solar arrays or modules, or solar related equipment, intended to primarily reduce off-site consumption of utility power and/or fuels. ISES are a minimum of twenty thousand (20,000) square feet in surface area, and can be up to eight hundred (800) acres in surface area, and there is no limit on the rated nameplate capacity of an ISES.

3. Permits Required:

a. No person shall construct a PRSES, CSES, or ISES without obtaining a permit from the Code Enforcement Officer (CEO) or Planning Board as follows**:**

1) For PRSES, approval by the CEO is required for the construction and/or expansion of all such solar energy systems.

2) For CSES and ISES, approval by the Planning Board is required for the construction and/or expansion of all such solar energy systems.

4. Application Procedure:

a. Applications for PRSES, CSES, and ISES permits shall be filed on forms provided by the Code/Planning Office and must include the following information**:**

1) Name of owner and operator of the solar energy system, and owner of property.

2) Location of proposed solar energy system, including map/lot number, and street address. Plot plan identifying location of the solar energy system on the property and physical dimensions of the property.

3) Location of any public road or right-of-way that is contiguous with the property.

4) Location of overhead utility lines.

b. CSES and ISES permit applications will also require the following supplemental information**:**

1) Solar system specifications, including manufacturer and model.

2) Array/module design and site plans.

3) Certification that layout, design, and installation conform to and comply with all applicable industry standards, such as the National Electrical Code (NEC)(NFPA70), the American National Standards Institute (ANSI), the Underwriter's Laboratories (UL), the

American Society for Testing & Materials (ASTM), the Institute of Electric & Electronic Engineers (IEEE), the Solar Rating & Certification Corporation (SRCC), the Electrical Testing Laboratory (ETL), and other similar certifying organizations, the Federal Aviation Administration (FAA), the Maine Uniform Building & Energy Code (MUBEC), fire and life-safety codes (NFPA 1 & 101), and any other standards applicable to solar energy systems. The manufacturer specifications for the key components of the solar energy system shall be submitted in the application.

5. Standards for PRSES Permits

a. A permit for a new PRSES, including all components that comprise the system, shall be granted only in a zoning district in which such a facility is allowed (per §11-8.9.D - Table of Uses).

b. All PRSES shall be setback from abutting property lines, utility lines, and/or public roads or right-of-way by a distance no less than the standard structural setback distance applicable in the zoning district where the system is to be installed. Best Engineering Practices shall be utilized in determining the optimal placement within the above requirements.

c. All PRSES, whether ground or building mounted, shall comply with the structural height restrictions applicable in the zoning district where the system is to be installed. Best Engineering Practices shall be utilized in determining the optimal placement.

d. All ground-mounted electrical and control equipment for PRSES shall be labeled and secured to prevent unauthorized access.

e. All PRSES shall not exceed 50 dB(A), as measured at the closest property line.

f. All PRSES shall be installed so as not to cause any wire or wireless communication signal disturbance.

g. The owner of a roof mounted PRSES shall provide evidence certified by a TPI that the roof structure is capable of supporting the additional load of the PRSES.

h. All PRSES shall be situated to eliminate concentrated glare onto abutting structures and roadways.

i. The owner of a PRSES shall be required to remove all components if it hasn't produced power for a period of twelve (12) consecutive months, unless otherwise waived by the CEO or the Board.

6. Standards for CSES and ISES Permits:

a. A permit for a CSES or ISES, including all components that comprise the system, shall be granted only in a zoning district in which such a facility is allowed (per §11-8.9.D - Table of Uses), and only upon proof of right, title, or interest, such as ownership, easement, lease, or purchase option for the location being considered.

b. A site location map shall be provided which shows the boundaries of the proposed facility, property boundary lines, contiguous properties under the total or partial control of the applicant, scenic resources or historic sites within one mile of the proposed development, and any significant wildlife habitat (per MeDEP under the Site Location of Development Act and/or the Natural Resource Protection Act) which may be impacted.

c. There shall be written evidence in the form of letter copies that all applicable State regulatory agencies with jurisdiction over the project have been notified of the pending application and the location of all system components covered by the application.

d. All CSES and ISES panel arrays and/or modules shall be setback from abutting property boundaries by a distance of seventy-five (75) feet. In no case may the setback be less than the required setback distance in the zoning district, shoreland area, or floodplain where the system is to be installed. Best Engineering Practices shall be utilized in determining the optimal placement within the above requirements.

e. All CSES and ISES, whether ground or building mounted, shall comply with the structural height restrictions in the applicable zoning district.

f. The application shall include a description of the proposed CSES or ISES facility to include all non-proprietary manufacturer's specifications for the solar panels, components, controls, and other equipment, sound emission levels, normal and emergency operational shutdown procedures, the number and individual ratings of panels in the array and/or modules, and the aggregate generating capacity of the total system. A description of all associated facilities shall also be included.

g. To the greatest practical extent, CSES and ISES shall possess a manufactured finish appropriate to and compatible with the surroundings, with reflective characteristics that minimize negative visual impacts. The Board may require photos of the existing proposed site from various locations and similar photos from the same locations with the system superimposed to aid in evaluating the visual impact, and will take into consideration the limitations of available manufactured finishes.

h. All ground-mounted electrical and control equipment for CSES and ISES shall be fenced and labeled or secured to prevent unauthorized access. The solar array and/or modules shall be designed and installed to prevent access by the public, and access to same shall be through a locked gate.

i. To the greatest practical extent, all electrical wires and utility connections for CSES and ISES shall be installed underground, except for transformers and controls. The Board will take into consideration prohibitive costs and site limitations in making their determination.

j. Exterior lighting for CSES and ISES shall be limited to that required for safety and operational purposes, and shall meet the performance standards for same in §11-8.11.F.

k. All signs, other than the manufacturers or installer's identification, appropriate warning signs, or owner identification on a solar panel array and/or modules, building, or other structure associated with a CSES and ISES shall be prohibited. No CSES or ISES shall have any signage, or writing or pictures that may be construed as advertising placed on it at any time.

l. The CSES or ISES applicant shall certify that they will comply with the utility notification requirements contained in Maine law and accompanying regulations through the Maine Public Utility Commission, unless the applicant intends, and so states on the application, that the system will not be connected to the electricity grid.

m. All CSES and ISES shall not exceed 60 dB(A), as measured at the property line.

n. The installation of a CSES or ISES shall be appropriate to the surroundings and shall be located according to Best Engineering Practices. The application shall include site line, photographic and, if applicable, screening information to aid the Board in evaluation of the environmental and visual impact of the construction and operation of the system. The system site shall also be enclosed within an eight (8) foot tall fence with locking gate.

o. All CSES and ISES shall be installed so as not to cause any wire or wireless communication signal disturbance.

p. Ground-mounted CSES and ISES shall be screened from view by any abutting residential property, using vegetation, topography, or fencing.

q. The owner of a roof mounted CSES or ISES shall provide evidence certified by a TPI that the roof structure is capable of supporting the additional load of system.

r. All CSES and ISES shall be situated to eliminate concentrated glare onto abutting structures and roadways.

s. Decommissioning of the entire facility will begin if twelve (12) consecutive months of no generation occurs at the facility.

In order to facilitate and ensure appropriate removal of the energy generation equipment of a CSES or ISES when it reaches the end of its useful life, or if the applicant ceases operation of the facility, applicants are required to file a decommissioning plan which details the means by which decommissioning will be accomplished. This plan must include a description of implementing the decommissioning, a description of the work required, a cost estimate for decommissioning, a schedule for contributions to its decommissioning fund, and a demonstration of financial assurance.

In the event of a force majeure or other event which results in the absence of electrical generation for twelve months, by the end of the twelfth (12) month of non-operation the applicant must demonstrate to the Town that the project will be substantially operational and producing electricity within twenty-four (24) months of the force majeure or other event. If such a demonstration is not made to the Town's satisfaction, the decommissioning must be initiated eighteen months after the force majeure or other event. The Town considers a force majeure to mean fire, earthquake, flood, tornado, or other acts of God and natural disasters, and war, civil strife or other similar violence.

The applicant will provide financial assurance for the decommissioning costs in the form of a performance bond or a surety bond, for the total cost of decommissioning. The applicant will have the financial assurance mechanism in place prior to construction and will re-evaluate the decommissioning cost and financial assurance at the end of years five, ten and fifteen. Every five (5) years after the start of construction, updated proof of acceptable financial assurance must be submitted to the Town for review. Proof of acceptable financial assurance will be required prior to the start of commercial operation.

11.12.3.2 One- and Two-Family Dwellings and Townhouses.

11.12.3.2.1
Photovoltaic systems installed on one- and two-family dwellings and townhouses shall provide roof access in accordance with 11.12.3.2.

11.12.3.2.2
Designation of ridges shall not apply to roofs with 2 in 12 or less pitch.

11.12.3.2.3 Access Pathways.

11.12.3.2.3.1
Not less than two 36 in. (914 mm) wide access pathways on separate roof planes, from gutter to ridge, shall be provided on all buildings.

11.12.3.2.3.2
One access pathway shall be provided on the street or driveway side of the roof.

11.12.3.2.3.3
For each roof plane with a PV array, a 36 in. (914 mm) wide access pathway from gutter to edge shall be provided on the same roof plane as the PV array, on an adjacent roof plane, or straddling the same and adjacent roof planes.

11.12.3.2.3.4
Access pathways shall be located in areas with minimal obstructions such as vent pipes, conduit, or mechanical equipment.

11.12.3.2.4 Setbacks at Ridge.

11.12.3.2.4.1
For PV arrays occupying up to 33 percent of the plan view roof area, a minimum 18 in. (457 mm) setback shall be provided on either side of a horizontal ridge.

11.12.3.2.4.2
For PV arrays occupying more than 33 percent of the plan view roof area, a minimum of 36 in (914 mm) setback shall be provided on either side of a horizontal ridge.

11.12.3.2.5 Alternative Setbacks at Ridge.

11.12.3.2.5.1
For one- and two-family dwellings with an automatic sprinkler system installed within the dwelling in accordance with 13.3.2.18, for PV arrays occupying up to 66 percent of the plan view roof area, a minimum 18 in. (457 mm) setback shall be provided on either side of a horizontal ridge.

11.12.3.2.5.2
For PV arrays occupying more than 66 percent of the plan view roof area on sprinklered one - and two - family dwellings, a minimum 36 in. (914 mm) setback shall be provided on either side of a horizontal ridge.