

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
DEPARTMENT OF ENERGY RESOURCES
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEPARTMENT OF AGRICULTURAL RESOURCES
DEPARTMENT OF FISH AND GAME

PRE-DETERMINATION FORM

**ELIGIBILITY FOR A FLOATING SOLAR TARIFF GENERATION UNIT UNDER THE
SOLAR MASSACHUSETTS RENEWABLE TARGET (SMART) PROGRAM**

Purpose

This pre-determination form is required for all solar PV units in advance of submitting a Statement of Qualification Application to the MA Department of Energy Resources (Department) for qualification of a Floating Solar Tariff Generation Unit (FSTGU) under the SMART program. The form is provided to demonstrate conformance with the provisions required for FSTGUs in 225 CMR 20.06(1)(i) and in the *Guideline Regarding the Definition of Floating Solar Tariff Generation Units*.

This form will be used by multiple state agencies such as, but not limited to, Massachusetts Department of Agricultural Resources (MDAR), the Massachusetts Department of Environmental Protection (MassDEP), and the Massachusetts Department of Fish and Game (MassDFG) in consultation with the Department to determine 1) site is eligible to host a FSTGU, 2) that the solar array and racking design conform with the requirements of a FSTGU, 3) that the design will minimize potential interaction with native species; and 4) will not interfere with the continued use of the water body.

A. BASIC INFORMATION

ENTITY THAT WILL APPLY FOR A STATEMENT OF QUALIFICATION

Name of Applicant: _____

Business (if applicable): _____

Mailing Address: _____

Street Address (if different): _____

Contact Phone : _____

Contact E-mail: _____

Check all that apply: ☐ Corp. ☐ Trust ☐ Partnership ☐ LLC ☐ Nonprofit ☐ Other

LANDOWNER CONTACT INFORMATION (IF DIFFERENT FROM ABOVE)

Name: _____ Business (if applicable): _____

Mailing Address: _____

Street Address (if different): _____

Contact Phone : _____ Contact E-mail: _____

Check all that apply: ☐ Applicant

SOLAR FACILITY OWNER CONTACT INFORMATION (IF DIFFERENT FROM ABOVE)

Name: _____ Business (if applicable): _____

Mailing Address: _____

Street Address (if different): _____

Contact Phone : _____ Contact E-mail: _____

B. SITE INFORMATION

Street Address: _____

Town/City: _____

Intersecting street addresses, if applicable: _____

C. SOLAR ARRAY DESIGN

Please provide the following information regarding the solar array design:

Nameplate capacity AC (in KW or MW):_____

Nameplate capacity DC (in KW or MW): _____

Expected annual generation (in MWh): _____ (Note: 1 MWh=1000 kWh)

Acreage of the water body on which the array is to be installed: _____

Total Surface area of the solar array on the water body: _____

Type of mounting structure and proposed materials (i.e., mono poles, I-Beams, racking, etc.): ____

Description of materials and process to be used for ground penetration: _____

Number of panels: _____

Panel spacing: _____

Number of rows: _____

Tilt of panels: _____

If you wish to provide additional descriptive information regarding the solar array design, you may include this information below, or in a typed attachment labeled "Solar Array Design."

[illegible]

D. Compliance with Requirements of 225 CMR 20.00 and *Guideline Regarding the Definition of Floating Solar Tariff Generation Units.*

Please respond with a description and attachments, if applicable, to each of the following relevant Regulatory and Guideline requirements to demonstrate compliance with all eligibility requirements for FSTGUs. You may refer to other sections within this document if you feel you have previously appropriately addressed a specific line item.

225 CMR 20.02 defines Floating Solar Tariff Generation Unit as a Solar Tariff Generation Unit located on a body of water that is currently, or was formerly, used for water treatment, agricultural or industrial activities, and that allows for the continued use of the water body for its intended purpose.

Please indicate which of the following activities the water body is used for, and provide supporting documentation to demonstrate that the proposed STGU meets the regulatory definition of Floating STGU.

- ☐ Water treatment
- ☐ Agricultural
- ☐ Industrial

Pursuant to Section 5)a) of the *Guideline Regarding the Definition of Floating Solar Tariff Generation Units*, if the water body has not been used for one of these purposes for more than five years, the Applicant shall request a determination of eligibility from the Department. The request shall demonstrate to the Department's satisfaction that there is preexisting contamination or other site conditions that would materially hinder the remediation of the water body for another use.

225 CMR 20.06(1)(i) contains the following special provisions pertaining specifically to the eligibility of FSTGUs:

(i) Special Provisions for Floating Solar Tariff Generation Units. In order to qualify as a Floating Solar Tariff Generation Unit, a Solar Tariff Generation Unit must submit documentation itemized in 225 CMR 20.06(1)(i) below. All final determinations regarding the eligibility of such facilities will be made by the Department, in consultation with Massachusetts Department of Environmental Protection (MassDEP), Massachusetts Agriculture Resources (MDAR), and the Massachusetts Department of Fish and Game (MassDFG), or other state agencies as necessary.

- A. the Solar Tariff Generation Unit will not interfere with the continued use of the water body for its designed purposes;

- B. the racking system shall be made of materials that have been tested for water quality impact;

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- C. the Solar Tariff Generation Unit will not be permitted in wetland resource areas and natural waterbodies such as salt ponds, or freshwater lakes and great ponds, as defined in M.G.L. c. 91
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- D. The ratio of the total surface area covered by the Floating Solar Tariff Generating Unit divided by the total surface area of the water body under standard conditions shall not exceed 50%;
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- E. the Solar Tariff Generation Unit shall be designed to minimize potential interaction with native species;
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- F. the Solar Tariff Generation Unit is a floating structure allowing for continued use and maintenance of the water body while generating electricity;
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- G. other system design information, which shall include, but not be limited to;

a. total gross acres of open water to be integrated with the project

b. designated function of water body

c. anchoring system design and materials;

d. design drawing including mounting system type, panel tilt, panel row spacing, individual panel spacing, etc;

E. AGRICULTRAL SECTION, if applicable

SPECIFIC AGRICULTURAL INFORMATION RELATIVE TO THE FSTGU LOCATION

If the FSTGU is proposed to be located on a waterbody with active agricultural production, please list specific crops grown in the project area and anticipated annual yields:

☐ Vegetables: _____

☐ Fruits: _____

☐ Nursery: _____

☐ Other: _____

F. ENVIROMENTAL IMPACT ASSESSMENT

Please provide supporting documentation that may include, but not limited to, the following components for compliance with the Guidelines as follows:

- a) Baseline water chemistry analysis
- b) Habitat assessment
 - a. Applicants shall provide documentation that demonstrates impacts on site-specific native aquatic, bird, and plant species, including seasonal migration species, will be minimized. Such documentation should include but not be limited to shading impacts from floating solar arrays.
- c) Wetlands delineation and impact analysis
- d) System details
 - a. Applicants shall provide documentation that demonstrates the FSTGU's design and location will minimize environmental impacts. Supporting documentation for evaluation may include, but not be limited to: wind load, water movement patterns, and snow load.
- e) Relevant detailed testing for the equipment that will be used to construct and anchor the array
 - a. Depending on the location of the FSTGU, the relevant tests may include, but not be limited to:
 - i. Wind-tunnel test
 - ii. Tensile strength test
 - iii. Bending fatigue test
 - iv. Material composition test
 - v. Temperature- and UV-accelerated aging test
 - vi. Polymeric material properties
 - vii. Fire resistance test
 - viii. Drinking-water compatibility test
 - ix. Corrosion-resistivity test
 - x. Buoyancy/puncture test

G. ELIGIBILITY SECTION

In addition to the submission of an EIA proposal, Applicants shall provide confirmation if the site is located within mapped Priority and/or Estimated Habitat, as defined under 321 CMR 10.00 and 310 CMR 10.00. If the site is located within Priority or Estimated Habitat, the Applicant shall complete one of the following:

- ☐ provide documentation of a Massachusetts Endangered Species Act or Wetlands Protection Act permit(s); OR
- ☐ provide documentation of pre-filing consultations with MassWildlife indicating whether the project will require a Conservation and Management Permit.

H. SIGNATURES AND ATTESTATIONS

Prior to submitting the Pre-Determination Form, please read and sign as directed below.

Landowner

I hereby certify that I have personally examined and am familiar with the information submitted herein, and, based upon my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

Signature of Landowner: _____ Date: _____

Solar Facility Owner

I, _____, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all supporting documents accompanying this form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

Printed name

Signature

Date
