

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
SOLAR MASSACHUSETTS RENEWABLE TARGET 3.0 PROGRAM
(225 CMR 28.00)

GUIDELINE

Guideline Regarding the Definition of Floating Solar Tariff Generation Units

1) Purpose and Background

The Department of Energy Resources (Department), in consultation with the Massachusetts Department of Agricultural Resources (MDAR), the Massachusetts Department of Environmental Protection (MassDEP), and the Massachusetts Department of Fish and Game (MassDFG) has developed this document to provide additional guidance regarding the manner in which a Solar Tariff Generation Unit (STGU) may qualify as a Floating Solar Tariff Generation Unit (FSTGU) under the Department's Solar Massachusetts Renewable Target (SMART) 3.0 Program. The adoption of this Guideline will provide the necessary flexibility for the Department to make modifications to key eligibility criteria as lessons are learned in constructing and operating an FSTGU.

All Applicants will be required to submit a Pre-Determination request for eligibility to qualify as an FSTGU under the SMART 3.0 Program. Applicants should submit the final Pre-Determination Application to doer.smart@mass.gov. The Department, in consultation with MDAR, MassDEP, and MassDFG, will make all final determinations on eligibility.

All capitalized terms in this Guideline are defined in 225 CMR 28.02.

2) Regulatory Provisions Specific to FSTGUs

Under the SMART 3.0 Program, STGUs are eligible to qualify as an FSTGU, which is defined under 225 CMR 28.02 as follows:

Floating STGU. An STGU located on a body of water that is currently, or was formerly, used for water treatment, agricultural or industrial activities, that allows for the continued

use of the water body for its intended purpose and meets the eligibility requirements of 225 CMR 28.07(5)(b)4.

Additionally, 225 CMR 28.07(5)(b)4. contains provisions pertaining to the eligibility of FSTGUs:

a) Project Design Requirements

- i. the STGU will not interfere with the continued use of the water body for its designated purpose;
- ii. the racking system shall be made of materials that have been tested for water quality impact and have been shown to have no or minimal impact;
- iii. the STGU shall use equipment that has been certified by the manufacturer to not contain PFAS;
- iv. the STGU 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;
- v. the ratio of the total surface area covered by the Floating STGU divided by the total surface area of the water body under standard conditions shall not exceed 50 percent;
- vi. the STGU shall be designed to minimize potential interactions with native species;
- vii. the STGU is a floating structure allowing for continued use and maintenance of the water body while generating electricity; and
- viii. the Applicant shall demonstrate to the Department's satisfaction that the water body was not constructed for the purpose of obtaining eligibility as a Floating STGU.

b) Capacity Limitation

Under 225 CMR 28.07(5)(b)4.b., the Department shall not qualify more than 40 MW of Floating STGU capacity under the SMART 3.0 Program.

c) Interconnection Application Date Requirement

Under 225 CMR 28.07(5)(b)4.c., Floating STGUs shall demonstrate that an application for an Interconnection Service Agreement was submitted to the Distribution Company prior to June 20, 2025.

3) Additional Provisions for FSTGUs

a) Environmental Impact Assessment

At the time of submission of a Pre-Determination request, Applicants shall include a proposal for an Environmental Impact Assessment (EIA) for the host site that assesses the entire footprint of the FSTGU and the host water body and demonstrates the system design

complies with the requirements of 225 CMR 28.07(5)(b)4.a. Applicants shall include any approved local permitting documentation that is available, if applicable.

MassDEP shall review and approve the EIA before it is conducted. After the EIA is completed, MassDEP shall review the results and provide any necessary feedback to the Applicant. **The EIA may include, but is not limited to, the following components:**

1. Baseline water quality analysis
2. Habitat assessment
 - i. 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.
3. Wetlands delineation and impact analysis
4. System Details
 - i. 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 documentation.
5. Relevant detailed testing documentation for the equipment that will be used to construct and anchor the array
 - i. Depending on the location of the FSTGU, the tests may include, but not be limited to:
 - Wind-tunnel test
 - Tensile strength test
 - Bending fatigue test
 - Material composition test
 - Temperature- and UV-accelerated aging test
 - Polymeric material properties
 - Fire resistance test
 - Drinking-water compatibility test
 - Corrosion-resistivity test
 - Buoyancy/puncture test
6. Equipment manufacturer certification on the absence of PFAS

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:

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

4) Project Segmentation

Pursuant to 225 CMR 28.08(5): No more than one STGU on a single building, or one ground-mounted STGU on a single parcel shall be eligible to receive a Statement of Qualification as an STGU under 225 CMR 28.00. An FSTGU will be treated as a ground mounted STGU and will count towards a single parcel of land for project segmentation requirements.

a) Project Segmentation Exception

Under 225 CMR 28.08(5)(a)2., the following scenario is exempt from the above project segmentation requirement: an STGU 25 kW or less, a Canopy STGU, a Floating STGU, or a Building Mounted STGU, which is located on the same parcel as another STGU, provided that the STGU is separately metered from the original STGU and, in the case of an STGU 25 kW or less or a Building Mounted STGU, is located on a separate building from the original STGU.

5) Eligible Waterbodies

a) Formerly Used for Water Treatment, Agricultural or Industrial Activities

Pursuant to 225 CMR 28.02, an FSTGU shall be 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.” (emphasis added).

A water body will be considered “formerly” used for water treatment, agricultural or industrial activities if the Applicant can demonstrate that it was in use for one of those activities within five years of the date of the pre-determination application. If a water body has not been used for one of these activities 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. The Department may consult with state agencies, including MDAR, MassDEP, and MassDFG, in making eligibility determinations.

b) Wetland Resource Areas and Natural Waterbodies

Pursuant to 225 CMR 28.07(5)(b)4.a.iv., FSTGUs “will not be permitted in [R]esource [A]reas [as defined in 310 CMR 10.04] and natural waterbodies such as salt ponds, or freshwater lakes and great ponds, as defined in M.G.L. c. 91.”

An FSTGU will not be permitted in an area currently serving as a protected Resource Area under 310 CMR 10.00, even if it was “formerly” used for water treatment, agricultural or

industrial activities, pursuant to 225 CMR 28.02. Please note that pursuant to 310 CMR 10.04's definition of "Pond (Inland)," the following human-made bodies of water are not considered ponds and are therefore not considered protected wetland Resource Areas: "(a) basins or lagoons which are part of wastewater treatment plants; (b) swimming pools or other impervious human-made basins; and (c) individual gravel pits or quarries excavated from upland areas unless inactive for five or more consecutive years." Such areas may be eligible for an FSTGU provided they meet all other eligibility requirements of 225 CMR 28.00 and applicable Guidelines.

c) Other Applicable Requirements for Eligible Waterbodies

In addition to 225 CMR 28.00 and applicable Guidelines, an eligible waterbody is also subject to any applicable MassDEP programs or regulations that concern the use of water bodies. For instance, floating solar arrays may be prohibited on certain bodies of water if they qualify as protected waterways under M.G.L. c. 91 and 310 CMR 9.00, Lakes, Rivers, Streams, Ponds, Salt Ponds Estuaries, or the Ocean under 310 CMR 10.00, or drinking water resources under 310 CMR 22.00.

- FSTGU applicants should consult directly with MassDEP's Wetlands, Waterways, and Drinking Water programs and review all applicable regulations, guidance, and policies concerning waterbody eligibility.

6) Annual Report

The Annual Report pursuant to 225 CMR 28.11(5) shall include, but not be limited to, documentation of the following elements:

- Annual water quality analysis
- Annual inspection of the floating structure and anchoring system
- Annual solar production
- Annual report of the volume of agricultural crops that were produced (if applicable)

The annual report is due to the Department by December 31st of each calendar year for the life of the FSTGU. The annual report should be emailed to doer.smart@mass.gov with a subject line titled, "FSTGU Annual Report." The Department may consult with relevant state agencies in determining ongoing compliance. All Annual Reports will be published on the DOER website and shared with relevant state agencies.

a) Failure to Report

If the FSTGU fails to submit an annual report, the Department may declare the project ineligible for the FSTGU adder for one year. If the annual report is not completed for a second year, then the Department may permanently disqualify the FSTGU from continuing to receive the FSTGU adder for the remainder of the STGU's tariff term.