

SOLAR MASSACHUSETTS RENEWABLE TARGET SMART Program

Brief Timeline, Land Use Categories, and Dual-Use Guidelines

Updated full regulations can be found here:

<https://www.mass.gov/doc/225-cmr-2000-final-071020-redline/download>

BRIEF TIMELINE

Spring 2017 – Draft SMART Regulations filed (1 600MW)

Winter 2018 – Initial Competitive Procurement

Fall 2019 – 400MW Review Straw Proposal (ADD 1 600MW)

- Land-Use Categories Revised
- Proposed changes to ASTGU (dual-use) Guidelines (reverted back to original guidelines)

Summer 2020 – New Regulations filed

Fall 2020 – ASTGU Straw Proposal

- Awaiting DOER decision

Guideline Regarding Land Use, Siting, and Project Segmentation

Effective Date: April 26, 2018

Revised: July 14, 2020

Revised: October 8, 2020

Land Use and Siting Criteria

For the purposes of 225 CMR 20.05(5)(e), previously developed shall mean having pre-existing paving, construction, or altered landscapes, and does not include altered landscapes resulting from current agricultural use, forestry, or use as preserved natural area.

Land Use Categories

REVISED

- All systems are categorized according to land use
 - Category 1: No Greenfield Subtractor
 - Category 2: Greenfield Subtractor of \$0.0005/acre impacted
 - Category 3: Greenfield Subtractor of \$0.001/acre impacted
- Area impacted determined by the square footage of the PV panels
- Category is determined based on multiple factors such as, but not necessarily limited to the following:
 - Is the system located on Land in Agricultural Use?
 - What is the size of the system?
 - Is the system ground mounted?
 - What is the existing condition of the land?
 - What is the zoning of the land?
- More information can be found in DOER's *Guideline on Land Use and Siting*, which can be downloaded at:
<https://www.mass.gov/service-details/development-of-the-solar-massachusetts-renewable-target-smart-program>

No Greenfield Subtractor
\$0.00125/kWh per acre impacted
\$0.0025/kWh per acre impacted

INITIAL LAND USE CATEGORIES

Includes a revision from land in ag use and prime farmland to include “Important farmland”

Prime

Unique

of Statewide Importance

2. Category 1 Land Use. Solar Tariff Generation Units that meet one or more of the following criteria will be designated as either Category 1 Agricultural or Category 1 Non-Agricultural:

a. Category 1 Agricultural: Solar Tariff Generation Units located on Land in Agricultural Use or Important Agricultural Farmland that meet one or more of the following criteria will be designated as Category 1:

- i. Agricultural Solar Tariff Generation Units;
- ii. Building Mounted Solar Tariff Generation Units;
- iii. Floating Solar Tariff Generation Units;
- iv. Canopy Solar Tariff Generation Units;
- v. Solar Tariff Generation Units sized to meet no greater than 200% of annual operation load of an agricultural facility.

b. Category 1 Non-Agricultural: Solar Tariff Generation Units not located on Land in Agricultural Use or Important Agricultural Farmland that meet one or more of the following criteria will be designated as Category 1:

- i. Ground-mounted Solar Tariff Generation Units with a capacity less than or equal to 500 kW;
- ii. Building Mounted Solar Tariff Generation Units;
- iii. Solar Tariff Generation Units sited on Brownfields;
- iv. Solar Tariff Generation Units sited on Eligible Landfills;
- v. Floating Solar Tariff Generation Units;
- vi. Canopy Solar Tariff Generation Units;
- vii. Solar Tariff Generation Units that are ground-mounted with a capacity greater than 500 kW and less than or equal to 5,000 kW that are on land that has been previously developed; and
- viii. Solar Tariff Generation Units that are ground-mounted with a capacity greater than 500 kW and less than or equal to 5,000 kW that are sited within a solar overlay district or that comply with established local zoning that explicitly addresses solar or power generation.

REVISED

7. Land Use and Siting Criteria Effective after the Publication Date. A Solar Tariff Generation Unit must meet the performance standards and will be placed into one of three categories with respect to the land or property on which it is sited as enumerated in 225 CMR 20.05(5)(e) 1 through 6, except as noted herein.

a. Category 1 Non-Agricultural. Solar Tariff Generation Units not located on Land in Agricultural Use or Important Agricultural Farmland that are a Public Entity Solar Tariff Generation Unit will be designated as Category 1 Non-Agricultural as in 20.05(5)(e)2b.

b. Category 2 Land Use. Solar Tariff Generation Units not otherwise designated Category 1 that are ground-mounted with a capacity greater than 500 kW and less than or equal to 5,000 kW that are sited within a solar overlay district or that comply with established local zoning that explicitly addresses solar or power generation, shall be designated as Category 2 Land Use as in 20.05(5)(e)3.

c. Ineligible Land Use. Solar photovoltaic Generation Units that meet ~~or~~ one or more of the following criteria shall not be eligible to qualify as Solar Tariff Generation Units under 225 CMR 20.00:

1. One or more of the criteria established in 225 CMR 20.05(5)(e)5; or
2. Solar ~~Tariff~~photovoltaic Generation Units sited on land designated as Priority Habitat, ~~or~~ Core Habitat ~~or Critical Natural Landscape~~, that do not meet the criteria of Category 1 Land Use; ~~or~~
3. Solar ~~Tariff~~photovoltaic Generation Units sited on a parcel with 50% or more of its area designated as Priority Habitat, ~~and/or~~ Core Habitat ~~and/or Critical Natural Landscape~~, that do not meet the criteria of Category 1 Land Use.

b) Category 2 Land Use

Category 2 Land Use applies to STGUs greater than 500 kW AC and less than or equal to 5,000 kW AC, that are sited on land that:

- (1) has not been previously developed and is zoned for commercial and industrial use; or
- (2) Ground-mounted STGUs sited within a solar overlay district or on land that complies with established local zoning that explicitly addresses solar or power generation.¹

c) Category 3 Land Use

Category 3 Land Use applies to projects that are greater than 500 kW AC and less than or equal to 5,000 kW AC, and do not meet the criteria for Category 1 or 2.

Ineligible Land Use

Solar photovoltaic Generation Units sited on the following types of parcels are ineligible to receive a Statement of Qualification under the SMART program:

- (1) Permanently protected open space, categorized under Article 97 of the Massachusetts Constitution, unless the STGU qualifies under Category 1 Land Use. In general, this is inclusive of land held by a state, regional, or local conservation, park, water supply, forest, or agricultural agency is protected by Article 97 (e.g. Conservation Commission, Water District, DPW Water Supply Division, etc.);
- (2) A Wetland Resource Area, unless the STGU is authorized by the regulatory body, such as an Order of Conditions issued by the local Conservation Commission; or
- (3) Properties in the *State Register*, unless the STGU is authorized by the regulatory body, such as a local Historic Commission.

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After the Publication Date, solar photovoltaic Generation Units sited on parcels listed above in items (1) through (3), in addition to the following, shall be ineligible for the SMART program:

- (4) Land designated as Priority Habitat and/or Core Habitat unless the STGU meets the criteria of Category 1 Land Use; or
- (5) a parcel with at least 50 percent of its area designated as Priority Habitat and/or Core Habitat unless the STGU meets the criteria of Category 1 Land Use.

After the Publication Date, Solar photovoltaic Generation Units seeking a Statement of Qualification for the 1600 MW of additional capacity available, sited on parcels listed above in items (1) through (5), in addition to the following, shall be ineligible for the SMART program:

- (6) Land designated as Critical Natural Landscape, unless the STGU meets the criteria of Category 1 Land Use; or
- (7) a parcel with at least 50 percent of its area designated as Critical Natural Landscape, unless the STGU meets the criteria of Category 1 Land Use.

PERFORMANCE STANDARDS: ALL GROUND-MOUNTED SOLAR TARIFF GENERATION UNITS WITH A CAPACITY GREATER THAN 500 KW MUST COMPLY WITH THE FOLLOWING STANDARDS WHEN SITED ON LAND IN AGRICULTURAL USE, IMPORTANT AGRICULTURAL FARMLAND, OR OTHER PVIOUS OPEN SPACE.

a. no removal of all field soils;

b. existing leveled field areas left as is without disturbance;

c. where soils need to be leveled, minimal overall impact with all displaced soils returned to areas affected;

d. screw-type, or post driven pilings and other acceptable minimal soil impact methods are required;

e. trenching for electrical routing shall be done with minimal soils disturbance, any displaced soils recovered and returned;

f. no concrete or asphalt in the mounting area other than code required surfaces, such as transformer or electric gear pads;

g. address existing soil and water resource concerns or avoid negative impact to soil and water conservation BMPs;

h. limited use of geotextile fabrics; and

i. maintain vegetative cover to prevent soil erosion

MA SMART ASTGU

DOER CONSULTS WITH MDAR TO DETERMINE ELIGIBILITY AND TO APPROVE THE DESIGN AND FARM PLAN:

1. will not interfere with the continued use of the land for agricultural purposes;

2. designed to optimize balance between generation of electricity and agricultural productive capacity;

3. raised structure with height enough for labor and/or machinery as it relates to tilling, cultivating, etc., and grazing animals;

4. crop(s) to be grown provided and reviewed by UMass Amherst agricultural extension services, for compatibility with the design of the agricultural solar system;

5. annual reporting of the productivity of the crop(s) and herd, herd size growth, success of the crop, potential changes, etc.

Panel Height = 8 ft fixed arrays or 10 ft tracking arrays

Maximum Direct Sunlight Reduction = 50% on every square foot of the project site



