



RPS Solar Carve-Out Program Overview

What is the RPS Solar Carve-Out?

The RPS Solar Carve-Out, which is a part of the Massachusetts Renewable Portfolio Standard, is designed to facilitate the development of solar photovoltaic (PV) energy. It mandates that a certain percentage of the state's total electricity supply must be provided by solar PV. This percentage shall increase each year until 400 Megawatts (MW) of PV is installed, providing approximately 1% of the state's total electricity supply. Percentages for the RPS are applied to the total load served by all of the state's Load Serving Entities (regulated utilities and competitive electric suppliers) or LSEs. In order to demonstrate compliance with their obligation, LSEs must purchase Solar Renewable Energy Certificates (SRECs).

What are RECs?

Electricity produced by new renewable energy generators qualified for the RPS program are broken into two products: 1) The electricity production that is used on-site or delivered to the grid, and 2) The positive environmental attributes associated with this clean energy production.

Renewable Energy Credits (RECs) represent the second product. One REC is created each time a qualified system generates 1 MWh (or 1000 kWh) of electricity. In order for LSEs to meet the RPS compliance obligations, they must purchase the number of RECs equal to the percentage required for that particular compliance year. RECs are created on the New England Power Pool Generation Information System (NEPOOL GIS). However, before a REC can be created on NEPOOL GIS, a generator unit must first apply for, and receive a Statement of Qualification to sell RECs from the DOER. Currently, there are eleven technologies eligible from which RECs can be purchased. In order to determine the prices for RECs, DOER has set an Alternative Compliance Payment (ACP) Rate, which is approximately \$64/MWh. Essentially, for every MWh that LSEs fall short of meeting their obligation, they must provide an alternative payment of \$64 to the DOER, thus incentivizing LSEs to purchase RECs from qualified projects.

What are SRECs?

SRECs are essentially the same as RECs, but are specifically designated for energy output from solar PV systems, which are likely to have a significantly higher market value. This results from the DOER's established ceiling price with an ACP rate of \$550/MWh, as well as a price support auction account at \$300/MWh.

Who is eligible for the RPS Solar Carve-Out?

In order to participate in the RPS Solar Carve-Out, solar PV Generation Units must (1) Have a capacity of 6 MW DC or less per parcel of land, (2) be located in the Commonwealth of Massachusetts, (3) Use some of its generation on-site and be interconnected to the utility grid, and (4) Have a Commercial Operation Date of January 1, 2008 or later.

Solar projects owned by the regulated utility companies as provided in the Green Communities Act of 2008 are eligible. Projects that have received funding from programs administered by the Massachusetts Clean Energy Center or Renewable Energy Trust prior to the start date of the Solar Carve-Out Program (January 1, 2010) and those that received substantial funding (over 67% of total installed cost) from the American Recovery and Reinvestment Act (ARRA) are **not** eligible.

How do I participate?

If you own or are planning to install a solar PV project that meets the eligibility requirements, you may submit a Statement of Qualification Application located on DOER's website (www.mass.gov/doer). You may apply as a single unit or as a member of an Aggregation of multiple units (lists of qualified and potential aggregators can be found on the program's website). Once your application has been received, DOER will review it and then issue a Statement of Qualification, thus enabling your PV system to generate SRECs at NEPOOL GIS. This Statement of Qualification will state the unit's eligibility and specify an Opt-In Term, in calendar quarters, of the eligibility of the unit to participate in the Solar Credit Clearinghouse Auction.



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Generating and Selling SRECs

At the time you receive a Statement of Qualification from DOER, you will also receive a Project Completion Form. If this form asks for additional information, you will need to fill it out and sign it before you can begin reporting your monthly production. Once the DOER has received this completed form, your system will be registered in the Massachusetts Clean Energy Center's Production Tracking System (PTS). You will be notified of this via email and given a username, password, and instructions on how to report your system's production data. Systems larger than 10 kW, require installation of a Data Acquisition System that will automatically upload your production data to the PTS. Systems smaller than 10 kW, enable you to enter your production data manually. At the end of each month, you or your Data Acquisition System Provider will be required to enter the information on your PV system's production meter into the PTS. The Clean Energy Center will then verify this data and submit it to NEPOOL GIS on a quarterly basis for the purposes of generating SRECs. The NEPOOL GIS will then mint these SRECs on a quarterly schedule. As soon as the first SRECs you generate are minted, you or your aggregator may begin marketing them to LSEs.

Price Support Mechanisms

Certain price support mechanisms built in to the Solar Carve-Out may adjust based upon market conditions, with the goal of keeping the market in balance.

Opt-In Term

The Auction Opt-In Term is defined as the number of years (expressed in calendar quarters) that a project is eligible to deposit SRECs into the Solar Credit Clearinghouse Auction Account. For all projects qualified through the first half of 2013, this is set at 10 years, or 40 quarters. Any changes to the Opt-In Term are announced in July of each year. SRECs generated while a project's Opt-In Term is in effect will be eligible to participate in an auction that will potentially be held each July, where they will be assured a price of \$300/MWh for their SRECs (minus a \$15 auction fee assessed by DOER). This mechanism sets a price for SRECs and gives projects long-term price assurance should they be unable to sell them directly to LSEs or there is an oversupply of SRECs.

Once a project's Opt-In Term has expired, its owner may continue to sell their SRECs until the program officially ends, but will not have the price assurance guaranteed by the ability to "opt-in" to the auction. Certain triggers may adjust the Opt-In-Term on a yearly basis. More information can be found on the RPS Solar Carve out page on the DOER website (www.mass.gov/doer).

ACP Rate

The ACP rate for 2013 is set at \$550/MWh and helps to define the ceiling price of SRECs, which could be approached in the event that there are not enough SRECs in the market for LSEs to meet their compliance obligations. The ACP rate for the next 10 years is provided in Guideline by DOER.

Minimum Standard

The Minimum Standard is the percentage of their total load served that LSEs will need to meet each year to fulfill their compliance obligations for the RPS Solar Carve-Out.

Compliance Years after 2011:

The Minimum Standard will be calculated each year to account for growth in solar installations. The standard is adjusted each year by a base new installation growth rate of 30%, but is also adjusted to account for the over or under supply of SRECs from the compliance year two years previous. This adjustment will affect the Compliance Year starting the following January.

When does the program end?

The Minimum Standard is capped at 455,520 MWh (sufficient to enable the installation of approximately 400 MW DC capacity of solar PV). When DOER determines that sufficient applications have been qualified to meet this cap, qualification of all additional solar installations will be transferred back to the RPS Class I Program. Once the cap has been met, the Minimum Standard for the RPS Solar Carve-Out remains constant at the Minimum Standard cap of 455,520 MWh. The RPS Solar Carve-Out program remains in effect until all the Auction Opt-In Terms of existing qualified projects and the full shelf-life years of any auction SRECs have expired, thereby maintaining the price certainty promised to all solar generators. Once the last of these Opt-In Terms/shelf-life years has ended, all projects previously qualified to sell SRECs will be transferred to the RPS Class I Program as well. For more information please consult the RPS Solar Carve-Out page located on DOER's website at www.mass.gov/doer. If you have any questions or concerns please contact DOER via email at DOER.SREC@state.ma.us.