

RPS Solar Carve-Out – Solar Credit Clearinghouse

Answers to Questions from the 12/18/09 Webinar

Qualification of PV Projects and the RPS Statement of Qualification Application (SQA)

Q: Will solar facilities have to go through the DOER certification (and get assigned a state ID for GIS) process just as all other Class I and II?

A: Yes. All projects will need to be qualified by DOER and registered at the NEPOOL GIS. Small scale project owners will find it useful to contract with an aggregator who can fill out the application on behalf of multiple owners, establish the necessary NEPOOL GIS account, and sell the SRECs for the project.

Q: Does the DOER have an application form for generators to use to submit to the DOER to qualify for participating in the Solar Credit Clearinghouse program?

A: Yes, there will be an online application available for the launch of the program in January. It will be the same Statement of Qualification Application (SQA) as RPS Class I with a new section added for SREC eligibility.

Q: When in the project development timeline can an application for qualification be completed?

A: As soon as you can answer all, or nearly all, of the questions in the application form except for the NEPOOL GIS Asset ID #. You must have selected your site, know the total MW capacity, have at least a tentative choice of make and model of PV equipment, and begun the utility interconnection process.

Q: Is there an application deadline for the project qualification process, or can this process be initiated any time during the year?

A: There is no deadline for the application; they are accepted on a rolling basis.

Q: Can you expand on eligibility of SRECs? Do you just need a parasitic load "onsite" to meet "onsite" requirements?

A: Yes, but this will be clarified in the Regulations.

Q: Can the project be sized larger than the onsite demand?

A: Yes.

Q: Must the project be grid tied to qualify?

A: Yes.

Q: Will Green Affordable Housing Initiative or Green Schools Initiative funded projects be eligible for SRECs?

A: No.

Q: Are state and federal entities qualified to apply?

A: Yes.

Q: Are non-profit entities qualified to apply?

A: Yes.

Q: Will thin film integrated roof PV be eligible for the SREC program?

A: Yes.

NEPOOL GIS, SRECs, and Trading

Q: What is NEPOOL GIS?

A: The NEPOOL Generation Information System (GIS) is an on-line database that records and reports (a) all electricity that enters New England power grid (managed by the Independent System Operator New England (ISO-NE) from generation units (“GIS Generators”) and (b) all electricity that the “retail load serving entities” (LSEs) deliver from the grid to their end-use (retail) customers. It also records other electric generation-related information that is required by New England state regulatory authorities, including air emissions from power plants, and whether the output of a generation unit is qualified for one or more state energy portfolio standards (RPS, APS, etc.).

Q: What are the mechanics of actually generating SREC's and getting paid?

A: In very simple terms: the project submits an application to DOER. If approved its metered production is recorded at the NEPOOL GIS, and the GIS mints SRECs. SRECs are sold to other entities, including retail suppliers with compliance obligations under RPS, and the owner, operator, or authorized agent of the project (possibly an aggregator) collects payment for SRECs through those sale agreements.

Q: Is there a limit to the number of years a project will generate SRECs, beyond the opt-in term?

A: There is no pre-set number of years during which a project will generate SRECs. However, the Regulation at 225 CMR 14.07(2)(i) and (j) specify the process by which DOER will determine when the Solar Carve-Out Minimum Standard and the auction process will come to an end. The determination will be based on the achievement of 400 MW of Carve-Out qualified PV installation in Massachusetts and the longest remaining auction Opt-In Term for any Carve-Out qualified Units but will be lengthened to accommodate the shelf-life on any re-minted SRECs.

Q: Do projects generate SRECs beyond the opt-in term, which can be sold on the market (not in the auction)?

A: Yes. However, the generation of SRECs will end eventually. That end will not occur before the Opt-In Term of *all* PV projects has ended (see the answer to the previous question). After the termination of the SREC program, solar projects will continue to generate RECs for compliance in the RPS Class I market.

Q: For SRECs not opted into the Auction Account, what is the normal “shelf life” for the SREC?

A: An SREC can be used by a Retail Electricity Supplier (regulated utility or competitive supplier) for its compliance with the RPS Solar Carve-Out Minimum Standard for the year during which the generation occurred. Under the SREC program, retail electricity suppliers can purchase up to 10% SRECs above their compliance obligation, and “bank” those SRECs for compliance in the following two years. Only Retail Electric Supplier can bank SRECs in this manner.

Q: Will metering be mandatory to have production verified by a third party meter reader?

A: Metering is mandatory, as with all projects qualified for RPS. If a project's meter is not read and reported to the NEPOOL GIS by the ISO New England, then an independent Third Party Meter Reader must perform that function. Such a Meter Reader must be chosen by the project owner, operator, or authorized agent (including aggregators), be approved by DOER, and register an account at the NEPOOL GIS. DOER will provide additional guidance on metering and independent third party meter readers, especially as it pertains to small PV installations and aggregations.

Q: If a project is planning to sell its SRECs to providers exclusive of the Auction, does the project need to be qualified through the DOER-GIS application process?

A: Yes. All projects need to be qualified through the DOER Statement of Qualification Application process and also need to be registered at the NEPOOL GIS (either directly or through an Aggregation).

Q: Would this program not allow over the counter trading of long term solar REC deals? Do competitive suppliers and anyone else with an RPS mandate have to use the auction platform to procure their obligation?

A: Bilateral trading and long term contracts are not only allowed, but encouraged. Use of the auction is not mandatory, in fact the auction process should be viewed as an option of last resort for SRECs.

Q: Do utilities and competitive suppliers get compensated for the SRECs they purchase through the auction or through contracts?

A: The regulated utility companies that provide Basic Service to customers recover the cost of SRECs in their rates approved by the Department of Public Utilities. Competitive suppliers decide based on their individual business strategies how to absorb the cost of compliance.

Q: Can you show a typical example of what a REC transaction might look like and the range of possible SREC value that could be expected

A. DOER regulations provide the market rule and structure for private transactions to take place. DOER does not participate in the private transactions. The SREC transaction itself is performed electronically within the NEPOOL GIS system where both parties must approve the transfer of SRECs from one account to another. The financial transaction is separately executed. We would anticipate that a broad range of transactions will emerge in the marketplace including: spot market, one-time transactions involving a volume and price; bilateral contract specifying volume, term, and price; contract arrangements with brokers to offer SRECs over a term and price, etc.

Q: What is the maximum price that REC's may be sold for during 2010?

A: The ceiling price that a compliance entity or other party would conceivably spend for an SREC would be slightly less than the Alternative Compliance Payment Rate, which for 2010 would be \$600.

Auction Process

Q: Who exactly will manage the auction?

A: DOER, or its agent, will manage the Solar Credit Clearinghouse auction account. DOER will establish the detailed auction rules and procedures and may contract with an external firm to run the auction. The earliest an auction will be held is July 2011, and DOER will prepare the necessary rules and procedures well in advance.

Q: How is Extended Shelf Life different from banking? During its Extended Shelf Life, is an SREC considered a "current"/non-banked REC?

A: Banking of SRECs is only allowed by retail electric suppliers, and only for up to 10% of their compliance obligation in any year. The SRECs deposited in the Auction will be re-minted into Auction SRECs (previously referred to as Extended Life SRECs) and can be bought at the auction and held by any party and any quantity. Similar to banked SRECs, the Auction SRECs can be used by retail electricity suppliers for compliance in either of the following two years, and possibly for a third year in the case of Auction SRECs if the first auction does not clear. Exactly how the Auction SRECs will be electronically tracked by the NEPOOL GIS is currently being established by DOER and the NEPOOL GIS Rules Committee.

Q: How will the allocation of SRECs be determined after the Auction clears? Suppose bidders offer to purchase more SRECs than are available?

A: The SRECs will be allocated to Auction bidders proportionally, based on the volume of SRECs for which bids are received.

Q: Is there a minimum number of SRECs that needs to be deposited in the auction account in order to have an auction?

A: No. As long as there is any volume in the account, an auction will be held.

Q: How much are the auction fees?

A: 5% of \$300, or \$15 per SREC deposited and sold.

Q: Has DOER made any agreement w/ NEPOOL GIS to accommodate this program?

A: No formal agreement between DOER and NEPOOL GIS is needed. Rather, DOER has begun discussions with the appropriate GIS stakeholders to draft modifications of the NEPOOL GIS Operating Rules in order to accommodate the opening of the Solar Credit Clearinghouse Auction and the re-minting of SRECs deposited therein. DOER expects to reach a positive conclusion to these discussions well in advance of the initial minting of the 2010 Quarter 1 SREC at the GIS. Note that the auction account will not be required until May of 2011.

Q: Can any owner of an SREC with access to a particular auction make the deposit or must it be the generator?

A: Only the owner or operator of the eligible facility, or its authorized agent (possibly an aggregator) – but not traders or load-serving entities – shall be eligible to deposit SRECs into the Solar Credit Clearinghouse Auction Account.

Q: Assume a business owner installs a PV system in Jan 2010. Is the business owner able to "opt-in" all 10 years of his SREC's during the 2010 SREC auction in July? Or only the SREC's that the business has created from time of installation to July (about half a year).

A: There will be no auction in July 2010; the auction for any unsold SRECs generated in 2010 and deposited into the auction account will be held in July 2011 (after all the SRECs from the Compliance Year are generated on the NEPOOL GIS). Only SRECs generated in the current Compliance Year can be deposited in the auction account in the following July. Future SRECs may be sold through bilateral long-term contracts between willing parties but are not applicable for the auction.

Q: What is motivating a utility to buy an SREC ahead of the auction for a price higher than \$300/MWh when they can wait and buy one with a longer term for the fixed price of \$300?

A: SRECs purchased at the auction can only be used in future years; they cannot be used for the current year's obligation. There is no guarantee that there would be any volume in the auction account at the end of the year, so the compliance entity would have an interest in purchasing SRECs that are priced less than the applicable Alternative Compliance Payment rate.

Q: How is the ratepayer impact reduced with the Solar Credit Clearinghouse model?

A: Unlike other RPS programs, the SREC program minimum standard will be adjusted annually, maintaining market balance between SREC supply and demand. This will mitigate the condition of an extended short market with SRECs trading at near the ACP rate for multiple years. The program design encourages both buyers and sellers to hedge price risks and engage in long term contracts thereby also protecting ratepayers from high SREC prices. DOER maintains the ability to reduce the ACP rate, within bounds, if the rate is deemed unnecessarily high for continued project development. Finally, the design assures a minimum price for the SRECs through the auction only for a limited and adjustable opt-in term, after which point SRECs may be settled at below this price.

Q: What happens when the market is constantly long?

A: A long market will result in an appropriately greater increase to the next year's minimum standard such that the excess supply is met with additional obligated demand. Additionally, the opt-in term for projects qualified in the following year will be reduced, reducing the financial support and retarding development growth. In an extreme case where solar PV costs are reduced so significantly that development proceeds irregardless of public support, then the minimum standard cap of 400 MW will be quickly reached, the opt-in terms will be substantially reduced, and the SREC program will reach its termination relatively quickly. However, even in this case, only the amount of SRECs needed for compliance will be generated annually, so any unsold SRECs eligible to be deposited in the auction will still be in demand by retail electricity suppliers, and only available at the fixed auction price.

Q: The auction will be conducted starting on July 25, of CY+1 from when the SRECs are generated. How soon after that time can a solar generator expect to receive payment for the SRECs that were deposited in the auction account?

A: Shortly thereafter; it is a matter of certifying the auction results, receiving the payments from the entities that purchase the SRECs at the auction, and turning that around and paying the generators that deposited them into the account. The required time for payments to be received (or possibly up front payment) will be specified in the auction rules, and will be as short as reasonably possible.

Minimum Standard, ACP Rate, and SREC Values

Q: Is the solar carve-out (est. @ 0.068%) a carve-out of the current RPS Class 1 total 5% (2010) requirement?

A: Yes. The total RPS Class I minimum standard for 2010 will be 5%. A very small portion of that standard must be met by SRECs.

Q: Will the 13% capacity factor for calculating the Minimum Standard be stipulated in the regulations, i.e, fixed for all utilities for the life of the program?

A: Yes.

Q: Why is new MinStd = Old MinStd + (Old MinStd * 1.3) [this would double the Old MinStd and add 30%]? Holding aside the adjustments for auction volume, etc., did you intend to have the equation simply be New MinStd = Old MinStd * 1.3 OR perhaps New MinStd = Old Min Std + (Old MinStd*0.3)?

A: The formula you question above is the proper formula only for the calculation of the minimum standard for 2011. In terms of MWs, and given the initial 2010 minimum standard of 30 MW, the formula would result (holding aside adjustments due to auction volume, etc.) in a 2011 minimum standard of 69 MW. This is correct, because we would anticipate that the solar industry that installed 30 MW in 2010, can grow by 30% and install 39 MW in 2011 – producing a total installed capacity of 69 MW.

In subsequent years (2012 and on) the formula for the minimum standard is different from what is cited in the question. The correct formula is $\text{MinStd} = \text{Old MinStd} + [(\text{Old MinStd} - 2\text{-yrOld MinStd}) * 1.3]$. In this case, the minimum standard again is determined (holding aside adjustments due to auction volume, etc.) such that the annual growth rate of new solar installations is 30%. For 2012, this formula would result in $\text{Min Std} = 69 + (69-30)*1.3 = 119.7$ MW (requiring additional installation of 50.7 MW).

Q: Are you expecting to meet the min standard cap of 455,520 MWh in year 2020?

A: There is no way of knowing what year we will hit the 400 MW cap.

Q: Can ACP be reduced 10% per year in multiple years?

A: Yes.

Other

Q: What month do you expect 30A public hearings will happen?

A: February 2010. The entire 30A process should be completed by the end of May, when a final regulation will replace the Emergency Regulation. In the meantime, the Emergency Regulation is fully effective in governing the Solar Carve-Out.

Q: Fee based training or free?

A: Free. Watch for a notice of the training.

Q: Who are the local aggregators that could represent residential customers and other small PV generators?

A: DOER will host a list of Aggregators, Third Party Meter Readers and Brokers on the Solar Credit Clearinghouse website. However, DOER will not recommend any particular entities for the use of Solar Carve-Out participants. Also, DOER will not limit anyone's choice to those currently listed. As the market develops new companies will be added to the list. See answer to the next question.

Q: How do I add my name to be listed as an Aggregators / Third Party Meter Readers / Broker?

A: Brokers need to register as such at the NEPOOL GIS in order to transact business as such using the GIS. Some Third Party Meter Readers (a.k.a., Verifiers) are already listed in a public report at the NEPOOL GIS website, and DOER will post a list at its own website of those that have been qualified by MA RPS by means of the standard RPS Statement of Qualification Application (SQA) process for particular PV projects or aggregations of projects. Aggregators are approved by DOER for a particular aggregation of multiple projects by means of the standard RPS SQA process. Owners or Operators of PV projects need to establish private arrangements with these types of entities.

Q: Can I claim I am powering my house with solar power if I sell my SRECs?

A: No, if you sell your SRECs, you have sold the claiming rights for consuming the *solar* energy. However, you can state that you are “hosting” the generation of solar energy on your roof. If you retire your SRECs within your NEPOOL GIS account without offering them for sale, you are then retaining ownership of the environmental attributes of the system and can claim your own electricity consumption is solar energy.

Q: What happens to the people who installed a project under Commonwealth Solar I or another program and are ineligible for SRECs? What do they do with their RECs?

A: Projects that were built under previous incentive programs presumably went forward based on the economics at that time. They will continue to be eligible for conventional MA RPS Class I RECs, just not for SRECs.

Q: What other incentives are available to residential customers for solar PV?

A: There are solar tax credits on the state and federal level. There is also a new Commonwealth Solar II program that will provide rebates for residential (and other small) projects.

Q: How is the ratepayer impact calculated?

A: For Compliance Year 2010, the compliance obligation is 34,164 MWh or SRECs. The maximum cost of compliance assumes that all compliance is met with SRECs purchased at the Alternative Compliance Payment rate of \$600/MWh, or by ACP payments. Hence, this total maximum cost would be $34,164 \text{ MWh} * \$600/\text{MWh} = \20.5 million . The total retail load served in MA (in 2008) that is under RPS obligation is 50,243,788 MWh, so distributing the total maximum cost across the load ($\$20.5 \text{ million} / 50,243,788 \text{ MWh}$) results in an incremental maximum cost of \$0.41/MWh, or \$0.00041/kWh, or 0.041 cents/kWh. Again, this represents the maximum cost. Additionally, not all this cost would necessarily be recovered from ratepayers – competitive suppliers may bear some of the costs themselves.