



CRS

center for
resource
solutions

April 12, 2019

Michael Judge
Director, Renewable & Alternative Energy Division
Massachusetts Department of Energy Resources (DOER)
100 Cambridge St., Suite 1020
Boston, MA 02114

RE: Center for Resource Solutions' (CRS's) Responses to the April 2, 2019 Clean Peak Standard (CPS) Straw Proposal

Mr. Judge:

CRS appreciates this opportunity to submit comments on the CPS Straw Proposal presented on April 2, 2019. The Straw Proposal does not address interactions and avoiding potential double counting with renewable energy certificates (RECs) (GIS certificates), or verification that Qualified Energy Storage Systems store and discharge renewable energy (as per section 1 of chapter 164 of Massachusetts General Law). CRS submitted responses to DOER Stakeholder Questions related to these issues on February 5, 2019. These comments largely reiterate and resubmit those responses, with a few important changes and clarifications, as comments on the Straw Proposal.

Background on CRS and Green-e®

CRS is a 501(c)(3) nonprofit organization that creates policy and market solutions to advance sustainable energy. CRS has broad expertise in renewable energy program design and implementation, and provides technical guidance to policymakers and regulators at different levels on matters related to policy design, renewable energy accounting, tracking and verification, market interactions, and disclosures and consumer protection. CRS also administers the Green-e programs. Green-e is the leading independent certification for voluntary renewable electricity products in North America. For over 20 years, Green-e's verification procedures have ensured that voluntary purchasers of renewable electricity products receive clear and accurate information from their providers and the full environmental benefits and sole ownership of each megawatt-hour (MWh) purchased. CRS, with oversight by the independent Green-e Governance Board, maintains a stakeholder-driven standard development process. In 2017, Green-e certified retail sales of over 60 million MWh, serving over 1.1 million retail purchasers of Green-e certified renewable energy, including 63,400 businesses.¹

Avoiding Potential Double Counting with RECs and Ensuring Regulatory Surplus for the Voluntary Renewable Energy Market

It is important that renewable generation not be double counted in programs of other states or in the voluntary renewable energy market. Where a clean peak certificate (CPC) is created as a new compliance instrument there is potential for double counting with RECs. RECs are the instrument used to verify delivery and consumption of renewable energy in both Massachusetts and neighboring states

¹ See the 2017 Green-e Verification Report here for more information: <https://resource-solutions.org/g2017/>.

and they exclusively convey the fuel type generation attribute.² Double counting can occur where, for example, a REC is issued to a renewable generator and then used for compliance with a neighboring state's Renewable Portfolio Standard (RPS) program and a CPC is also issued for the same MWh and used for CPS compliance in Massachusetts. In this case, the environmental attributes of the same MWh are being delivered to customers in different states.

Even in the case that CPCs are defined explicitly not to contain and convey generation attributes, they represent a separate compliance instrument associated with the unit of generation, the issuance and use of which may make those MWh and associated RECs ineligible or undesirable in neighboring RPS programs and the voluntary renewable energy market. In particular, voluntary buyers expect their investments to support renewable energy that is not used for compliance or otherwise required by law. This enables the voluntary market to make an incremental difference often referred to as "regulatory surplus." Regulatory surplus is an important criterion in the Green-e program, for example, and that program would need to identify RECs associated with MWh that have also been issued CPCs.

We understand that a qualified RPS resource may generate both a CPC and a REC for electricity generated and delivered to the electric grid during a seasonal peak period,³ and it may be permissible for that generation to be used for both the CPS and the Massachusetts RPS (the CPC and the REC used for each, respectively). However, it should not be permissible for the REC to be used in another state's RPS or in the voluntary market.

To avoid double counting and ensure regulatory surplus for the voluntary market, in the case that both instruments are issued for qualifying generation, the REC and CPC should remain "bundled." The sale or retirement of either should require the sale or retirement of the other to or for the same entity. If one is retired to substantiate the creation of the other, the instrument could be sold freely since in this case there is only one instrument.

If RECs can be "time-stamped" in the future, then it may be possible for RECs associated with specific generation from qualifying facilities during qualifying peak periods to be defined as CPCs rather than creating a new and separate instrument. If this is possible under the law it would be preferred and obviate potential double counting.

We strongly suggest that NEPOOL-GIS be designated as the tracking system for CPCs if they are issued separately from RECs (GIS certificates). Issuing, tracking, and retiring CPCs in the same tracking system with RECs has clear advantages in terms of avoiding double counting, transaction costs, inter-registry communications, and potential errors. RECs associated with generation that has received a CPC should be identified, e.g. "tagged," in the New England Power Pool Generation Information System (NEPOOL GIS).

Verifying that Qualified Energy Storage Systems Store and Discharge Renewable Energy

² See 225 MASS. CODE REGS. 14.02;

Also see *NEPOOL-GIS Operating Rules*, v. Effective 1/1/19. Available at: <https://www.nepoolgis.com/wp-content/uploads/sites/3/2019/01/GIS-Operating-Rules-Effective-1-1-19.doc>;

Also See Jones *et. al.* (2015) *The Legal Basis for Renewable Energy Certificates*. Center for Resource Solutions. Available at: <https://resource-solutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf>.

³ See Mass. Gen. L. c. 25A § 17(b)

RECs should also be used to substantiate storage and discharge of renewable power by a storage facility. Otherwise, there can be double counting of renewable MWh in either RPS markets or the voluntary renewable energy market. Furthermore, storage facilities should not generate unique RECs since they are not generation resources. This would also double count renewable energy generation.

Compliance with the CPS using a Qualified Energy Storage System should require all of the following:

1. a locally sourced, RPS-eligible REC retired for each MWh stored;
2. verification that electricity was stored when RPS-eligible renewable resources are generating,⁴ OR that the storage facility is directly physically or electrically connected to a renewable energy resource; AND
3. verification that electricity was discharged during a qualifying peak period.

A CPC should only be issued for these storage facilities where all three of these requirements are met. This is because the intent of the CPS is not just to increase the consumption of renewable energy (in this case, all that would be needed to substantiate compliance would be REC retirement), but also to shift renewable energy generation to peak periods. Energy storage systems can increase consumption by charging batteries at the times when there is an excess of renewable energy and increase production by discharging batteries at times of peak load. This requires information about the timing of storage *and* discharge, which is not typically information that is tracked using RECs, though RECs are needed to prevent double counting.

We do not recommend that RECs that were generated in different grid regions be eligible for Qualified Energy Storage Systems under the CPS. Whereas electricity customers may make renewable energy usage claims based on RECs that are sourced nationally in the voluntary market, in this case, the RECs are used to characterize bundled electricity that is being stored and discharged at the storage facility. Therefore, these RECs should be sourced from the same grid region where the storage facility is located.

RECs should also be required to verify consumption or delivery of renewable power from storage facilities that are directly physically or electrically connected to a renewable energy resource. In this case, a single REC should be issued once to the combined renewable storage facility for each MWh of power discharged and injected to the grid. Again, the storage equipment should not be treated as a separate generation resource.

Other scenarios that should be considered by DOER include:

- Storage facilities that do not charge exclusively when renewable resources are generating on the grid; and
- Where there are significant losses at storage facilities.

Please let me know if we can provide any further information or answer any other questions.

⁴ The regulator should have some process to historically verify that the total amount of energy stored during a period of time does not exceed the total amount of RPS-eligible renewable energy generating at that time.

Sincerely,

A handwritten signature in black ink, appearing to read 'Todd Jones', with a stylized, sweeping flourish at the end.

Todd Jones
Director, Policy and Climate Change Programs