



Commissioner Judith Judson
Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

February 5, 2019

Re: Clean Peak Standard Stakeholder Questions

Dear Commissioner Judson:

PowerOptions submits comments to the Massachusetts Department of Energy Resources (DOER) on the Clean Peak Energy Standard (CPS) stakeholder questions on behalf of its over 400 members who are retail electricity and natural gas consumers in the Commonwealth. As indicated by the complexity of the questions presented, designing a CPS is no easy task, especially in a restructured electricity market with robust wholesale market rules which already address many of the goals of a CPS. Further, as experienced participants in the retail electricity market, PowerOptions is aware of several pricing and product offerings that also focus on the goals of a CPS. To further complicate matters, over the years, and especially recently, the Commonwealth has launched policies to encourage renewable energy development, storage, and active demand response as part of its energy efficiency plans, which also overlap with and have implications on the design of the CPS. **We believe it is important that the design of the CPS be first and foremost complementary to those initiatives and the wholesale and retail constructs, and not be duplicative, which would add costs to customers, or be in conflict with those strategies.** To that end, before responding to the specific questions, we offer a set of guidelines to provide a framework within which to consider the questions posed by DOER.

When the CPS was first introduced by Governor Baker in *An Act Promoting Climate Change Adaptation, Environmental and Natural Resource Protection, and Investment in Recreational Assets and Opportunity*, the Governor stated that the purpose of the CPS is “to increase the usage of clean energy during periods of high, carbon intensive, and expensive electricity demand, with the long-term goal of reducing ratepayer costs while lowering greenhouse gas emissions.”¹ While the CPS underwent revisions before being included in *An Act to advance clean energy*, PowerOptions submits that the objectives outlined by Governor Baker should be the primary focus of a CPS. **Quite simply, the seasonal peak should be particularly focused on the winter season, because that is when the region burns the highest**

¹ See

<https://www.mass.gov/files/documents/2018/03/15/An%20Act%20Promoting%20Climate%20Change%20Adaptation%2C%20Environmental%20and%20Natural%20Resource%20Protection%2C%20and%20Investment%20in%20Recreational%20Assets%20and%20Opportunity.pdf>

emitting resources, i.e. coal and oil, and are facing increased costs from fears of fuel security. In addition, the targeted peak hours should coincide with the regional peak when those resources are called upon. PowerOptions recommends a seasonally bifurcated minimum standard, in which the winter minimum standard is set at a higher level than the summer minimum standard in order to heavily target the most dirty and costly hours on the system. We explain further below.

Reduce Emissions

It is well-established that, for many years, due to over-dependence on natural gas for electricity generation, constraints on the pipeline system during the winter have resulted in reliance on oil and coal generation to meet electricity demand when gas is not available. Thus, a major consideration should be how the CPS can be designed to reduce reliance on these high emitting resources in the winter. While mitigating the use of natural gas, particularly as caused by the need for ramping associated with the “duck curve” during the summer is important, the emissions benefits of heavily targeting the winter peak are far greater.

Reduce Costs

While there has been much debate at the regional level about the need for subsidies and new market rules to incentivize the availability of high emitting, “fuel secure” resources, including natural gas, during the winter, the bottom-line is that consumers are facing ever increasing costs related to these efforts. ISO-NE has taken significant actions to ensure that the region has adequate “fuel secure” resources needed to meet winter demand requirements, such as retaining the Mystic units and proposing interim compensation for inventoried energy for the next Forward Capacity Auctions. The estimated costs of these efforts dwarf what consumers have paid under the 5 year Winter Reliability program. Consequently, the CPS could play a significant role in reducing the need for these initiatives, while reducing costs to consumers as well as emissions.

Predictability

The stakeholder questions contemplate the ability for the seasonal peak periods to change over time, for the minimum percentage to increase at an uneven rate, and other aspects that are unknown and not set at the adoption of regulations. While we recognize that flexibility is important for programs to adapt to shifting conditions, as with other portfolio standards and requirements imposed on load serving entities, it is important that the requirements be clear and predictable so that they can be effectively reflected in retail prices. If program changes are not able to be readily anticipated by suppliers, this uncertainty will manifest either in higher prices through built-in risk factors for supply contracts and basic service, or through pass-throughs on customer bills. Both outcomes are suboptimal.

Further, while contracts signed or extended on or before December 31, 2018 are exempt by statute from the CPS, contracts that are signed in the time between December 31 and the effective date of the regulations currently have no such protections and customers are at risk of unanticipated pass-through charges from their suppliers. In order to protect customer interests, existing contracts that are signed prior to the effective date of the new regulations should also be exempt from the CPS for the duration of the contract term. It should be noted that this was done by DOER for the implementation of the solar carve-out when establishing the SREC regime.²

Simplicity

It is tempting to try and address all scenarios so as to capture all potential effective strategies to reduce the peak, but trying to be all-encompassing can result in complexity, which makes administration and verification difficult for the Department and participants. PowerOptions urges DOER to choose the simplest design elements possible to achieve the emissions and cost objectives. Simplicity lowers the barriers to entry for resource developers, enables effective administration, and provides greater predictability for suppliers.

Clean Peak Standard (CPS) Stakeholder Questions

Definitions of Key Terms

Clean Peak Resource

Clean peak resource is defined as “a qualified RPS resource, a qualified energy storage system or a demand response resource that generates, dispatches or discharges electricity to the electric distribution system during seasonal peak periods, or alternatively, reduces load on said system.”

1. Should only resources interconnected to the electric distribution system be eligible to qualify, or should resources connected to the transmission system also be eligible to qualify?

The same requirements that apply to RPS-eligible resources should apply to CPS-level resources with regards to interconnection level. That is, any resource connected to the ISO-NE system or

² 225 CMR 14.08(3)(b)(3) as part of a settlement pursuant to *TransCanada Power Marketing Ltd. v. Bowles*: “The ACP Rate for that portion of a Retail Electricity Supplier’s Solar Renewable Energy Credit obligations that were contractually committed or renewed prior to January 1, 2010, shall be equal to the RPS Class I ACP Rate as calculated for the applicable Compliance Year under 225 CMR 14.08(3)(a)2. This provision does not apply to obligations that were contractually committed or renewed on or after January 1, 2010.”

adjacent control areas, regardless of whether it is interconnected at the transmission or distribution level, should be eligible.

2. Should DOER interpret the use of the term “electric distribution system” to mean that only facilities on the electric distribution system in the Commonwealth should be eligible to qualify as clean peak resources under the CPS? Should the CPS also include all distribution and/or transmission level resources connected in the ISO-NE control area? Should it include adjacent Control Areas such as NYISO, Quebec, or New Brunswick?

No, as stated above, resources throughout New England and adjacent control areas should be eligible. Because Massachusetts is intricately linked to the ISO-NE system, regional emissions reductions are just as important as in-state emissions reductions. Geographical limitations increase the costs of the program without providing additional emissions benefits.

Demand Response Resource

Demand response resource is defined as “changes in electric usage by end-use customers in the commonwealth from their normal consumption patterns in response to: (i) changes in the price of electricity over time, including, but not limited to, time-of-use rates for residential and small commercial and industrial customers; or (ii) incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.”

3. What types of resources should be included in this definition?

DOER should not prejudice resource type. So long as an accurate and reliable baseline can be established, the resource type should be able to participate. PowerOptions notes that the statutory language here suggests that demand response must come from within the Commonwealth.

4. Should electric vehicles (EVs) qualify?

If an electric vehicle is connected to the distribution system (likely via a charger) and can either throttle charging down or export power to the grid in reaction to a demand response event, it should be able to qualify.

5. How should DOER interpret the inclusion of different types of rate designs in this definition?

It is difficult to measure reductions in demand from rate design without metering modifications which are costly. Further, the market is already providing price responsive demand reduction at both the wholesale and retail level. Rate design should not be included in the Clean Peak Standard.

6. Should this definition only be limited to active demand response?

Yes. Passive demand response does not induce customers to deviate from their normal consumption patterns in response to signals, but rather changes customers' normal consumption patterns.

7. Should standalone energy storage resources (i.e. not directly connected to another resource type) be eligible to qualify as demand response resources? What requirements, if any should standalone energy storage resources face in order to qualify as demand response resources?

Yes. However, as the definition of demand response resources is geographically limited in the statute, only standalone energy storage in the Commonwealth should be eligible to qualify. As evidenced the inclusion of storage in the 2019-2021 Three Year Energy Efficiency Plans, storage is often viewed as an active demand response resource, thus meeting the definition.

Qualified Energy Storage System

Qualified energy storage system is defined as "an energy storage system, as defined in section 1 of chapter 164, that commenced commercial operation or provided incremental new capacity at an existing energy storage system on or after January 1, 2019; provided, however, that such system operates primarily to store and discharge renewable energy as defined in said section 1 of said chapter 164."

10. How should DOER interpret the requirement that a Qualified Energy Storage System operate "primarily to store and discharge renewable energy"?

- a. Would alignment with the federal ITC requirement that storage is eligible for a credit as long as the battery is charged by a renewable energy system more than 75 percent of the time be appropriate?

Where possible, existing definitions or requirements is advisable. As such, we agree with this proposal (while noting that energy storage systems located in the Commonwealth can qualify as a demand response resource even if they do not meet these requirements).

- b. If not directly physically or electrically connected to a renewable energy resource, how can the qualified energy storage system demonstrate that it operates primarily to store and discharge renewable energy? Purchase and retirement of RECs? Some other means?

An energy storage system that is not connected to renewable energy should not be eligible to qualify. Purchase and retirement of RECs does not indicate that those RECs were generated during peak hours and, therefore, do not contribute to peak reduction and should not qualify.

Seasonal Peak Periods

Establishing Seasonal Peak Periods

DOER is required to establish seasonal peak periods, which are defined by that statute as “the daily time windows during any of the 4 annual seasons when the net demand of electricity is the highest; provided however, that a seasonal peak period shall be not less than 1 hour and not longer than 4 hours in any season, as determined by the department.”

15. Given these limitations, how should DOER establish different seasonal peak periods to both optimize cost reductions for ratepayers and emissions reductions for the Commonwealth?

Most of the costs on the ISO-NE system are driven by two seasons: summer and winter. As noted above, the highest emissions are incurred in the winter and reduction of the winter peak should be the focus of this standard.

Atypical Peak Events

Not all system peaks occur within the same 1-4 hour window throughout the course of a season (e.g. a 95-degree day on a weekday in May will almost certainly not have a peak that occurs at a similar time of day as the bulk of peak periods in the same month).

18. Should DOER establish peak periods other than the seasonal peak periods during which clean peak resources are eligible to generate clean peak certificates?

Yes, but on a retroactive basis. That is, the actual ISO annual peak should be considered a peak period, even if it occurs outside of the standard peak hours. This is not able to be predicted at the beginning of the year, but resources that perform should be compensated.

- a. If so, what criteria should DOER use to establish these periods and what mechanism(s) should be used to trigger and announce these events in advance of them occurring?

ISO-NE predicts system peaks frequently throughout the summer. Although no predictions are fool-proof, these could be relied upon as a trigger. At the end of the season, when ISO-NE has announced what the actual system peak was and when it occurred, resources that were performing during that system peak period would generate CPS credits.

- b. Should DOER specifically target ISO system peaks?

Yes, this is a primary driver for much of the costs and emissions in the region. Plus, the ISO peak is more predictable and there is more data available than potential alternatives, such as the distribution peak.

Generation of Certificates

Some clean peak resources may only be capable of generating clean peak certificates during a portion of a seasonal peak period. For example, a solar resource trying to deliver energy for the duration of a summer seasonal peak period that lasts from 6-9 PM may generate a significant number of certificates in the early part of that window compared to the latter.

19. Should only resources that can provide value for the entire duration of a peak period be able to generate certificates?

No. A clean peak certificate should be generated for a MWh of energy delivered during a seasonal peak, even if it does not deliver for the entire seasonal peak period. The resource is still delivering value to the system by providing some offsetting of cost and emissions.

20. Should there be different values provided to resources that can provide value for a portion of a peak period versus the entire peak period? If so, how should DOER differentiate these value streams?

No. Such a differentiation would only add to an already complex program. The fact that resources that perform for the entire event will receive more credits is sufficient to incentivize performance.

21. Should there be a penalty (i.e. negative credits) if a resource under-produces during the actual monthly peak?

In an effort to keep the standard simple, no. If a resource doesn't produce, it does not receive credits.

22. How should resources participating in other state programs (e.g. section 83 procurements, SMART, EE programs, etc.) interact with the CPS?

Resources participating in other state programs should be allowed to participate in the CPS as well. This should help to provide additional incentive to resources, such as storage, that need multiple revenue streams. For the Section 83 procurements, this could help drive down the costs of those procurements if bidders incorporated expected CPS revenues into their bid price.

Long-term Contracts

In establishing certificate values, DOER "may include a process by which electric distribution companies competitively procure clean peak certificates from clean peak resources and enter into long-term contracts, subject to the approval of the department of public utilities."

31. If DOER does require competitive procurements:

- a. What types of facilities should be able to participate in solicitations? Should it be limited to certain types of facilities (e.g. facilities that are either new and/or not already supported by another type of long-term contract or financing tool)?

DOER should not require competitive procurements. The goal of any market-based program, such as the CPS, is to foster the creation of a market that will satisfy the program's goals. Markets drive efficiencies. A competitive procurement for CPS resources is not sustainable and would prevent the CPS market from flourishing as the RPS market has.

b. How frequently should solicitations take place?

N/A

c. How large should the procurements be (e.g. percentage of total load or annual requirement)?

N/A

d. How should the contract price be established? Pay as bid? Reverse auction mechanism with a single clearing price for all resources? Other?

N/A

Post-2019 Minimum Standard Requirements

DOER has established a baseline Minimum Standard requirement of 0% for 2019. Each year after 2019, DOER is required to establish a Minimum Standard requirement for retail suppliers that increases at a rate of at least 0.25% of total retail sales annually.

32. How large should the minimum standard be?

As noted above, PowerOptions advocates for a seasonally bifurcated minimum standard. For 2020, the summer minimum standard should be no more than 0.25% to allow suppliers to adjust to the market, and the winter minimum standard should be some amount higher than the summer minimum standard that induces further emissions reductions without leading to outsized program costs for customers. We believe that a higher winter standard will provide the correct incentive to the market that the state is committed to targeting the most emissions- and cost-intensive periods.

As previously noted, in order to provide for a smooth transition and protect customer interests, existing supply contracts that are signed prior to the effective date of the new regulations should be exempted from the CPS for the duration of the contract term, as was done by DOER for the implementation of the solar carve-out when establishing the SREC regime.³

³ 225 CMR 14.08(3)(b)(3) as part of a settlement pursuant to *TransCanada Power Marketing Ltd. v. Bowles*: "The ACP Rate for that portion of a Retail Electricity Supplier's Solar Renewable Energy Credit obligations that were contractually committed or renewed prior to January 1, 2010, shall be equal to the RPS Class I ACP Rate as calculated for the applicable Compliance Year under 225 CMR 14.08(3)(a)2. This provision does not apply to obligations that were contractually committed or renewed on or after January 1, 2010."