

October 30, 2019

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

Re: Comments of the Northeast Clean Energy Council and Solar Energy Industries Association regarding the Department of Energy Resources' Proposed Clean Peak Standard Regulation (225 CMR 21.00 et seq.)

I. Introduction

The Northeast Clean Energy Council ("NECEC") along with the Solar Energy Industries Association ("SEIA") (together, the "Clean Energy Commenters"), on behalf of our respective members, appreciate the opportunity to provide this set of comments concerning the Department of Energy Resources' ("DOER") proposed regulation establishing a Clean Peak Energy Portfolio Standard, or "CPS."

NECEC is a clean energy business, policy, and innovation organization whose mission is to create a world-class clean energy hub in the Northeast, delivering global impact with economic, energy and environmental solutions. NECEC is the only organization in the Northeast that covers all of the clean energy market segments, representing the business perspectives of investors and clean energy companies across every stage of development. NECEC members span the broad spectrum of the clean energy industry, including energy efficiency, wind, solar, energy storage, microgrids, fuel cells, and advanced and "smart" technologies.

SEIA is the driving force behind solar energy and is building a strong solar industry to power America through advocacy and education. As the national trade association for the U.S. solar energy industry, which employs more than 242,000 Americans, we represent all organizations that promote, manufacture, install and support the development of solar energy. SEIA works with its 1,000 member companies to build jobs and diversity, champion the use of cost-competitive solar in America, remove market barriers and educate the public on the benefits of solar energy.

Our members are keenly interested in the CPS and in ensuring its efficient operation. The Clean Energy Commenters appreciate DOER's work in designing the CPS and incorporating stakeholder input to date. We believe that the draft regulation contains many of the design elements necessary for the program's success, but we highlight a few key issues that require revision to ensure the CPS operates as intended and provides ratepayer benefit efficiently. First, we put forth a number of improvements that would aid in price formation, especially in the early years, most notably the establishment of a price floor and a meaningful increase in the value of the Alternative Compliance Payment ("ACP"). Second, we urge DOER to consider program stability when contemplating program changes, as developers make long-term financial decisions based on the current design of the program. Third, we recommend a modest change to the definition of resilient facility. Fourth, we underscore the importance of metering. Lastly, we urge DOER to allow resources in municipal lighting plant districts to qualify as clean peak resources.

II. Price formation

As the CPS is a first-in-the nation program, ensuring the correct price signals are sent to developers to encourage resource operation consistent with DOER's intent is essential. The Clean Energy Commenters believe the draft CPS regulations have many of the elements of success, but we are concerned that the price signals necessary to change operational behavior and incent new development will not be strong enough with the CPS as currently designed. This has the potential to jeopardize the smooth and successful operation of the CPS. Price formation in the early years of a program is essential in ensuring that the program matures and delivers cost-effective results. There are a number of adjustments DOER should make to ensure that the program operates as intended.

Establishing a Price Floor

Price floors provide assurance to developers that a minimum level of revenue can be projected from the CPS for a given resource, reducing the risk premium developers would need to build into resources and ultimately reducing the ratepayer costs of the CPS. The Clean Energy Commenters understand that DOER projects the CPS to be undersupplied in the early years as resources come on line and developers adapt to this new market mechanism. However, as this type of program has never been instituted before, developers will have no assurance of the likelihood of undersupply in the near term. Indeed, as we have witnessed with other clean energy resources and other incentive programs – notably, solar in response to state programs and large-scale wind in response to federal tax credits – project developers can respond very quickly and enthusiastically to new opportunities, potentially leading to an oversupply in the market. Yet, the absence of a price floor might create an environment in which developers are unable to finance projects that rely on CPS revenue because of a lack of revenue certainty, constraining supply, driving up prices, and limiting the program's success. Furthermore, if the CPS is expected to be undersupplied in early years, then the price floor will not bind the market, but developers will still have a backstop on which to rely when securing financing. For these reasons, the Clean Energy Commenters recommend that DOER include a price floor for the CPS. The Clean Energy Commenters acknowledge that instituting a price floor would necessitate appointing a buyer of last resort or establishing some other price assurance mechanism. On balance, the market certainty that a floor price will provide in this nascent market outweighs the added burden associated with creating a mechanism for administering such a market feature.

Alternative Compliance Payment Rate (225 CMR 21.08(3)(a)2)

In the draft regulation, the ACP rate is set at \$30 for the years 2020-2029, subsequently declining linearly to \$0 by 2051. The Clean Energy Commenters believe that the \$30 ACP rate is too low to incent the peak management activity envisioned by the legislature in establishing the CPS. If DOER's goal is to incent the development of new resources that otherwise would not be built, the consultant's report is clear that the CPS trading at the \$30 ACP rate will not cover the revenue gap for 99.9% of resources at the program's outset, and will not cover the revenue gap for a majority of resources until 2030 when the ACP level begins to decline.¹ Even if DOER's goal is not to incent new development, but rather to change the dispatch profiles of resources that will be built absent a CPS, the Clean Energy Commenters are concerned that the revenue from the CPS may not be sufficient to incent most resources to dispatch for the

¹ See ["Massachusetts Clean Peak Standard: Market Model,"](#) August 27, 2019, at 84

purposes of the CPS. The Clean Energy Commenters urge DOER to increase the initial ACP rate to ensure the success of the CPS. We understand that DOER is designing the program to mitigate rate impacts, but worry that the CPS will be undervalued and leave ratepayer benefits undelivered at the current ACP rate. We also note that a number of our member companies are working to provide more detailed data analysis to show DOER the challenge of stimulating Clean Peak activity under the current ACP. To that end, we believe it would be instructive to provide all stakeholders with the opportunity to file Reply Comments before DOER issues a final regulation.

Further, absent wholesale market participation, the incentive value to battery energy storage systems under the CPS projects to be much lower than the value under both the SMART program and the electric distribution companies' demand response programs. When considering wholesale market participation, the incentive value is even more disparate. This is because the operation of the energy storage is not as constrained under the demand response programs or the SMART program as it would be under the CPS. For example, the only constraint on energy storage under SMART is that the system must discharge at least 52 complete cycle equivalents per year. Otherwise it is free to operate in the wholesale markets to maximize value. In order to participate in the CPS, however, energy storage must be charged and ready to operate daily during peak periods leaving much less opportunity to operate in the markets. This foregone wholesale market revenue, in addition to a low ACP rate, may not convince resources to divert their participation from the wholesale energy markets to the CPS.

The Clean Energy Commenters' concern about the ACP rate is compounded by the potential for market mitigation at the ISO-NE level for resources participating in the CPS. The consultant report on which DOER based the ACP rate assumes that resources participating in the CPS will be pursuing other revenue streams.² One of those revenue streams is the ISO-NE capacity market.³ Specifically, new energy storage is subject to ISO-NE Minimum Offer Floor Price rules. Currently the floor price for energy storage is the forward capacity auction starting price, unless a resource owner can demonstrate that they need less revenue from the capacity market than the starting price to make a project economic. Based on our understanding, under the applicable ISO-NE Tariff provision below, revenues from the CPS will not be allowed to reduce the offer floor of these storage resources. Therefore, unless there is a change in the ISO-NE tariff or the CPS requirement that resources be sited in Massachusetts, energy storage will have significant challenges clearing the capacity market, as its floor price is likely to be above the FCA clearing price. Therefore, it will not be able to earn the capacity market revenue that appears to be incorporated into the consultant analysis. Particularly, the applicable ISO Tariff provision states:

- (i) The Internal Market Monitor will exclude any out-of-market revenue sources from the cash flows used to evaluate the requested offer price. Out-of-market revenues are any revenues that are: (a) not tradable throughout the New England Control Area or that are *restricted to resources within a particular state or other geographic sub-region*; or (b) not available to all resources of the same physical type within the New England Control Area, regardless of the resource owner.⁴ (emphasis added)

² Id., at 47-49

³ Id.

⁴ See [ISO New England Inc. Transmission, Markets, and Services Tariff](#) III.A.21.2.(b)(i).

Compounding these concerns is the fact that energy storage is not able to participate in ISO-NE's Competitive Auctions with Sponsored Resources ("CASPR"). CASPR is intended to allow a pathway for state-sponsored resources to participate in the capacity market but is limited to standards and goals that were in effect as of January 1, 2018, and storage was not part of any New England state's portfolio standards at that time. While not perfect, CASPR offers mitigated, state-sponsored resources an opportunity to capture capacity revenues. Energy storage's inability to participate in CASPR means that an energy storage resource participating in the CPS would have little chance of capturing the capacity market revenue assumed in the consultants' gap analysis. This fact underscores the need for a higher ACP rate, and the Clean Energy Commenters urge a re-thinking of the gap analysis to reflect these market mitigation concerns.

Because of the potential impact of ISO market mitigation, as well as a general desire for clarity, the Clean Energy Commenters request that DOER provide a more detailed explanation of its decision to choose its proposed ACP rate, whether the \$30 in the original proposal or a higher value in response to stakeholder comments, and its proposal to limit CPS participation to resources interconnected in the Commonwealth. Specifically, clarification regarding the assumptions and constraints that DOER relied upon would be beneficial for stakeholder analysis of the ACP rate.

Clean Peak Certificate Procurement (225 CMR 21.05(8))

The draft regulations direct the electric distribution companies ("EDCs") to enter into long-term contracts for up to 30% of the total market compliance obligation in a given year. The draft regulations also contemplate that the request for proposals for the procurement will be developed by the EDCs in consultation with DOER. This RFP development process would be enhanced by a robust stakeholder process, which would elicit a wide range of insight and perspective to assist in an efficient request for proposals design.

At the outset, the Clean Energy Commenters offer two recommendations regarding the request for proposals. First, we urge that the procurement recognize the difficulty that smaller resources may have in participating. These resources have long struggled to participate in EDC procurements. One way to mitigate (but not eliminate) this barrier is to allow aggregations of small systems to participate. This allows smaller systems, as an aggregation, to achieve the economies of scale that are often necessary to be successful in EDC procurements. Another way to ensure smaller resources are able to meaningfully participate would be to implement a tariff-based program for resources below a certain size, modeled on existing "bring your own device" programs.

Second, the EDCs should be prohibited from "self-procuring." That is, no EDC-owned (or affiliate-owned) resource should be eligible to participate in any procurement of CPS resources. This insures against the appearance of favoritism and is generally good practice.⁵ These two recommendations illustrate the need for stakeholder involvement in the development of a request for proposals.

⁵ On a related note, contracted resources should not be eligible for the procurement as they already have a contract that provides a level of revenue certainty.

DOER should also consider increasing the total percentage of long-term contracting for CPS resources to overcome project financing hurdles and accelerate the deployment of CPS resources.

Existing or Contracted Resource Multiplier (225 CMR 21.05(6)(d))

The proposed regulations set the multiplier for existing and contracted resources at 0.1. The Clean Energy Commenters are concerned that, even at 10% of CPEC, there is a significant risk that existing or contracted resources will receive an unnecessary windfall for continuing to operate as they already do. Implicit in this multiplier level is the assumption that existing and contracted resources will be able to provide 10% more value, by participating in the CPS, than they provide in their current operational profiles. Because there is a risk that existing and contracted resources will not provide this level of value, and will displace higher value resources from being developed, the Clean Energy Commenters recommend a level substantially lower multiplier than currently envisioned.

Retrofits

The Clean Energy Commenters appreciate that the draft regulation targets the CPS towards reducing electric system peaks, as well as the associated emissions and costs. There are over 2,400 MW of solar installed or in the SMART queue (and 800 MW of offshore wind waiting to be built), little of which is paired with energy storage. As the economics of energy storage have improved dramatically in recent years, encouraging the siting of energy storage with existing clean generation will unlock the potential of the Commonwealth's existing distributed generation to target periods of peak demand. However, the economics of retrofitting existing distributed generation with energy storage often do not support the retrofit without incentives. As such, DOER should consider whether a modest multiplier for retrofitting existing resources with eligible Clean Peak Resources would enhance the goals of the CPS.

III. DOER Should Ensure Program Stability

Resources that are developed on the expectation of CPS revenue require a level of confidence that the program will not substantially and unexpectedly change over the resource's lifetime. The Clean Energy Commenters appreciate the clarity provided throughout the draft regulations, especially with regards to the compliance level, seasonal peak periods, and multiplier levels. However, the Clean Energy Commenters do have concerns with two aspects of the draft regulations that could lead to market disruptions. Specifically, DOER should not adopt a Distribution Circuit Multiplier that penalizes a CPS resource and should refine the qualification process to protect sensitive company information.

Distribution Circuit Multiplier (225 CMR 21.05(6)(e))

As proposed, the distribution circuit multiplier will be developed in consultation with the EDCs, may be greater than or less than one, and may not be implemented until December 31, 2022. Any potential distribution circuit multiplier should not be less than one. The difficulty and cost of interconnecting distributed energy resources on saturated distribution circuits already creates significant headwinds to deployment and there is no need for further disincentive. Further, not all resources have the same impact on distribution circuit saturation and a unilateral disincentive to deploy resources at a particular location is misguided.

Should DOER decide to move forward with a distribution circuit multiplier, clean peak resources that are qualified prior to the effective date of a distribution circuit multiplier should be exempt from the multiplier. As a general rule, we believe retroactive application of future multipliers is unfair to developed resources and would potentially jeopardize developer confidence in the CPS. Further, any future distribution circuit multiplier should undergo a public input process beyond DOER consultation with the EDCs. This will allow interested stakeholders to share valuable insight on the impact of a distribution circuit multiplier.

Qualification Process (225 CMR 21.06)

As drafted, the regulation would provide for a qualification process for clean peak resources that opens the applicant to the possibility that the application will be open to public comment, at DOER's sole discretion. This has the potential to expose proprietary commercial data and should be removed. We understand that similar language is found in the Renewable Portfolio Standard ("RPS") regulations, but we do not believe that this provision increases transparency; moreover, it is unclear as to the circumstances under which DOER would open an application to public comment. Additionally, this provision creates fear of discriminatory treatment in which one resource is noticed for public comment, while all others are not subjected to such a standard. Overall, this provision is unnecessary to include in the CPS, particularly in the absence of clearly defined scenarios under which DOER would open an application to public comment.

IV. Resilient Facilities

The draft regulations' definition of "resilient facility" requires that qualified energy storage be paired with a qualified RPS resource (among other requirements) in order to qualify for the resilience multiplier. Energy storage, whether paired with an RPS resource or not, can provide resilience value when it is able to provide energy to on-site load during an outage condition. While the resilience value from energy storage may be higher when paired with an RPS resource, the resilience value from standalone storage is not necessarily much lower and is certainly not zero. Thus, the definition of "resilient facility" should be revised to allow standalone storage assets to qualify as a resilient facility.⁶

V. Metering

Existing and contracted resources are subject to a reduced multiplier, whereas any storage paired with the existing or contracted resource is not subject to said multiplier. For paired systems, then, it is imperative that there be granular interval metering to ensure each resource's output is accurately measured. Customer-owned revenue grade metering is able to provide this granular metering and should be accepted in the program. The Clean Energy Commenters understand that the standards and protocols for metering will be established by a third-party program administrator, and DOER should ensure that this level of data is required in order to promote efficiency in the metering regime.

⁶ DOER should consider providing additional guidance related to the operating characteristics that qualify a facility as a "Resilient Facility."

VI. Facilities in Municipal Lighting Districts

The enabling statute for the CPS, *An Act to Advance Clean Energy*, explicitly exempts municipal lighting plants from the compliance with the CPS.⁷ However, the statute does not preclude resources located in a municipal lighting plant's service territory from qualifying as a clean peak resource; nevertheless, the draft regulations prohibit resources located in municipal lighting plant territory from participating in the CPS. These resources, despite being located in a territory that is exempt from the CPS, are still able to provide the same peak benefits as resources that are not located in municipal lighting plant territory. Providing these resources with the price signals necessary to target seasonal peak windows will benefit all ratepayers. Thus, 225 CMR 21.05(a) should be revised to remove the sentence excluding resources located in municipal lighting plant territories from participating.

VII. Conclusion

The Clean Energy Commenters believe a well-designed CPS can stimulate investment and help the Commonwealth achieve its climate and clean energy goals, while driving down ratepayer costs. Certain program changes would allow the CPS to develop a market that would adequately incent projects to operate as DOER intends. Further, developers require a level of certainty that the CPS will not substantially change over a project's lifetime, underscoring the need for program stability. Lastly, program modifications regarding resilient facilities, metering, and facilities in municipal lighting districts would create a more efficient CPS. The Clean Energy Commenters appreciate the opportunity to comment and look forward to engaging further with DOER and stakeholders as the program moves forward.

Respectfully submitted,



Jeremy McDiarmid
Vice President, Policy & Government Affairs
Northeast Clean Energy Council

⁷ M.G.L. c. 25A, § 17(e).