



October 30, 2019

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

Re: Borrego Comments on Clean Peak Standard Draft Rules

Dear Commissioner Judson:

Borrego Solar Systems, Inc. (Borrego) appreciates the opportunity to provide comments on the proposed draft rules for the nation's first Clean Peak Standard (CPS). Borrego supports the comments of Northeast Clean Energy Council (NECEC) and offers the following additional comments for DOER to consider to strengthen the program design and control ratepayer costs.

Our most important concern is that the CPS market design is missing two key features: an adequately robust alternative compliance payment (ACP) (i.e. ceiling), and price floor stability. Improving these two features would help ensure the CPS results in a cleaner peak for Massachusetts at predictable ratepayer costs.

In addition to these two critical points, we also recommend that DOER:

- Allow resources located in areas served by Municipal Lighting Plants to generate Clean Peak Credits;
- Increase the negative multiplier for state-contracted resources;
- Move quickly to issue rules for long-term procurements; and
- Work with the legislature to address the unfortunate 2051 program cliff

In addition to these recommendations, we request that DOER allow a limited additional period for stakeholders to provide additional reply comments and supplemental data to help support DOER's decisionmaking on this exciting and complicated first-in-the-nation program.

1. DOER Should Significantly Increase the Alternative Compliance Payment (ACP) to Incentivize Investments in New Assets to Clean the Peak.

Our number one concern with the DOER's CPS proposal is that proposed ACP (ceiling) price of \$30/MWh is far too low to cover the missing revenue that is needed to encourage developers to build new energy

storage resources to clean the peak. If the CPS is designed without an adequate incentive to construct new projects to clean the peak, the proposed program will be significantly undersupplied, resulting in a program that will be met almost entirely by ACP payments and that will not result in a cleaner peak or reductions in capacity, energy, and other peak-driven costs.

We hope to be able to share a complete financial analysis to explain our position on the needed ACP levels for various project types, but we were unable to complete this analysis by the deadline for these comments. However, one major error underlying the consultant report's conclusions that we have identified appears to relate to the ability of clean peak resources to secure a Capacity Supply Obligation (CSO) in the ISO-NE forward capacity market (FCM). The consultant report appears to assume that standalone storage (as well as many other resources) participating in the CPS will also monetize FCM revenue.¹ Were projects able to successfully monetize FCM revenue by obtaining a CSO, it is likely that they could be financed at significantly lower Clean Peak credit rates than otherwise, because the CSO can provide a significant source of hedged revenue for dispatchable resources such as energy storage. Unfortunately, multiple parties, including NECEC, have described why this is currently unlikely due to the expected treatment of "out-of-market" revenues by the ISO-NE Independent Market Monitor. Consequently, the "revenue gap" in the consultant's report ("Step 2") is likely significantly understated for any resource that the consultant assumed would be able to secure a CSO.

As an alternative or complement to raising the ACP, DOER could also consider increasing the seasonal and monthly peak multipliers to create a more enticing value proposition for dispatchable resources. Increasing the multiplier would allow dispatchable resources to receive higher levels of CPECs (thus improving their ability to obtain financing) without impacting the maximum cost of the program.

2. DOER Should Provide a Price Floor to Reduce Uncertainty and to Facilitate Supply of Clean Peak Resources at Lower Overall Cost to Ratepayers.

While we understand that the idea of providing a price floor may give rise to worries that ratepayer costs could end up higher than otherwise if projects can be supplied at prices that are much lower than anticipated, DOER has long understood that providing more certainty through mechanisms like a price floor can actually reduce volatility and financing costs, resulting in greater deployment of clean energy resources at **lower** cost to ratepayers. In other contexts, DOER has successfully implemented numerous innovations to control the ratepayer impact of clean energy programs, including the state's world-class DG solar programs. For example, as far back as 2013, DOER recognized that "a strong and sufficient SREC floor price or long term contract can reduce price risk exposure to investors and the need for high ACP rates."² A floor price was a key cost containment feature of the state's previous two solar programs, and DOER took this approach even further under the SMART program by eliminating certificate price risks through an innovative feed-in-tariff approach.³ The consultant report that DOER commissioned as it was developing the SMART program was also clear about the significant cost savings that can be expected by

¹ P. 49: https://www.mass.gov/files/documents/2019/09/27/CPS_Final_Consultant_Report.pdf

² See mass.gov/files/documents/2016/08/vw/doer-post-400-mw-solar-policy-design-stakeholder-mtg.pdf at 6.

³ DOER Fall 2016- Next Solar Incentive Straw Proposal at 5 ("Long-term revenue uncertainty leads to higher financing costs, A large portion of the program costs are going to a 3rd party to pay for financing, Total program costs and ratepayer impacts are difficult to predict."), available at <https://www.mass.gov/info-details/historical-development-of-the-solar-massachusetts-renewable-target-smart-program#winter-2017--next-solar-incentive-final-proposal->

increasing investor certainty in the revenue streams being created by a certificate program such as the CPS.⁴

Although a price floor would not entirely eliminate investor price risk, and would not reduce ratepayer costs as much as a firm, long-term contract, a price floor would narrow the band of uncertainty around CPEC pricing, which should significantly reduce financing costs and enable more projects to be built at lower cost to ratepayers.

For example, DOER's own consulting report for the CPS assumes that unhedged "merchant" CPECs would be valued by investors at only 40% the ACP.⁵ With a price floor, investors seeking to finance new Clean Peak resources would be able to assign an average value to CPECs that would be somewhere between the floor and the ceiling rate, thus reducing the band of uncertainty and increasing the expected value of CPECs without increasing the actual cost to ratepayers. Indeed, by enabling the lower-cost financing of more resources, the inclusion of a floor is likely to increase supply in the market, driving **down** the average cost of CPECs for compliance entities. Conversely, absent a price floor or stronger long-term contract procurement (discussed below), projects will require a significantly higher ACP rate, and the lower supply will likely lead to **higher** overall program costs than would be the case with a reasonable price floor. For this reason, we consider a price floor mechanism to be one of the most critical features of this market and recommend DOER institute a buyer of last resort mechanism that could be similar in design to (though potentially simpler than) the approach DOER took under the SREC programs.

In addition to instituting a price floor, we also recommend DOER allow CPECs to be banked by generators as well as retail electric suppliers. Allowing generators to bank credits would provide for more flexibility and potential relief if merchant CPEC prices fall to a negligible value in any particular year, and would further facilitate financing of clean peak resources.

3. DOER Should Allow Resources Located in MLP Territories to Generate Clean Peak Credits.

DOER's proposed regulation states that "[r]esources interconnected within the service territory of a municipal lighting plant shall be ineligible to generate Clean Peak Energy Credits under 225 CMR 21.00 as municipal lighting plants are exempt from the requirements of the Clean Peak Standard pursuant to M.G.L. c. 25A, § 17(d)." Proposed Regulation, 225 CMR 21.05(1)(a). We respectfully disagree with the DOER's interpretation of the Clean Peak legislation with respect to the eligibility of resources located in areas that are served by Municipal Lighting Plants to generate clean peak credits. Specifically, while we agree that M.G.L. Chapter 25A, Sec. 17(d) exempts Municipal Lighting Plants from the obligation to meet a specified minimum level of load with clean peak credits, **we submit that this section does not explicitly prohibit the generation of clean peak credits by resources interconnected within an MLP service territory.** As we explain below, the definition of Clean Peak Resource and the DOER's past

⁴ See, e.g., <https://www.mass.gov/files/documents/2016/10/nf/developing-a-post-1600-mw-solar-incentive-program.pdf> at xi ("Relative to an SREC structure which exposes system owners to uncertain SREC and commodity revenue streams, Figure EX- 5 shows how the reduction in the cost of capital associated with the greater revenue hedging to system owners of "bundled" non-SREC alternative programs manifest themselves in terms of the average revenue requirement for an illustrative medium cost residential roof mount systems.").

⁵ P. 72: https://www.mass.gov/files/documents/2019/09/27/CPS_Final_Consultant_Report.pdf.

interpretation of similarly structured legislative mandates both argue for allowing MLP-sited resources to participate in the CPS.

The definition of Clean Peak Resource in Section 3 of Chapter 25A does not exclude resources located in MLP territories

Although Section 17(d) exempts Municipal Lighting Plants from the provisions of Section 17, the exemption is narrow, and does not apply to other section of Chapter 25A. Notably, Section 17(d) does not exclude MLPs from Section 3, which contains the definitions for Chapter 25A. That section includes a definition that is clearly broad enough to include resources that are interconnected within the geographical footprint of MLPs in the Commonwealth. Specifically, Section 3 defines a “Clean Peak Resource” 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.” M.G.L. Ch. 25A, Sec. 3. Section 3 contains no geographic limitation on the definition of a Clean Peak Resource, other than the requirement that the resource must “generate, dispatch or discharge electricity to the electric distribution system . . . or reduce load on said system.”

The structure of the Clean Peak legislation mirrors that of other portfolio standard programs, which DOER has interpreted to allow MLP-sited resources to participate.

The language in Section 17 is similar to the language in Section 11F(i) of Chapter 25A (“Renewable energy portfolio standard for retail electricity suppliers”), which exempts MLPs from the provisions of the state’s renewable portfolio standard (RPS). In that case, DOER interpreted this exemption narrowly to apply only to the obligation to purchase renewable energy credits. *See* 225 CMR 14.02 (defining “Retail Electricity Supplier”). Importantly, DOER did not prevent resources located in MLP territories from generating the renewable energy credits that are used for compliance with the RPS, and such resources are currently eligible to generate renewable energy credits.

The same is true for the state’s alternative energy portfolio standard (AEPS). Although Section 11F 1/2(d) of Chapter 25A generally exempts MLPs from the obligation to procure Alternative Energy Credits (AECs), DOER interpreted this statutory provision to allow AEPS resources located in MLP territories to be eligible to generate AECs.

While we recognize that the wording of the exclusionary language is not identical between Sections 11F(i), 11F 1/2(d), and 17(d), each subsection clearly exempts MLPs from the section in which the exclusionary clause appears but does not purport to apply the exclusion beyond that particular section. More importantly, the larger statutory structure of the Clean Peak legislation is nearly identical to the structure that legislature used in directing DOER to adopt both the RPS and the AEPS. In all cases, the legislature codified the **obligation** to procure compliance credits and for DOER to promulgate regulations within one section (along with an exclusion for MLPs), and codified key **definitions** in another section.⁶ And for both the RPS and AEPS portfolio standards, DOER interpreted this statutory structure to allow resources located in MLP territories to **generate** compliance credits, while excluding MLPs themselves from the obligation to **comply** with those standards.

⁶ *See, e.g.*, M.G.L., ch. 25A, Sec. 3 (defining “qualified RPS resource” and “marine or hydrokinetic energy” for purposes of the RPS program).

It is reasonable to infer from the similarity of structure of the CPS, RPS, and AEPS, and the plain language of section 3, that the legislature intended for resources located throughout Massachusetts (including in MLP areas) to be eligible to generate clean peak credits, even though MLPs themselves are not subject to the minimum purchase obligation under any of those programs. Moreover, as we discuss below, there are strong public policy reasons for allowing MLP-sited resources to generate clean peak credits.

Allowing resources located in MLP territories to participate in the CPS would further the goals of the CPS

Numerous MLPs currently operate inefficient fossil-fueled power plants that only generate during periods of high demand on the grid—i.e., during the peaks. In many cases, these generators are decades old, and have emission rates for greenhouse gases and conventional pollutants that exceed the more efficient new turbines that normally predominate outside of peak periods. These outsized emissions of greenhouse and conventional pollutants affect all Massachusetts residents, regardless of where they live, and reducing these emissions would benefit all ratepayers. Thus, replacing these seldom-used but highly polluting generators with clean peak resources represents one of the clearest near-term opportunities for cleaning the grid and achieving the goals of the CPS. However, MLPs typically cannot risk retiring these resources unless they are replaced with other local peaking resources that can take their place in providing reliable service to MLP customers. Allowing these replacement resources to receive CPECs would significantly improve the financeability of these typically costlier peaker replacements and could therefore encourage the retirement or curtailment of some of the dirtiest generation sources in the Commonwealth.

Consequently, interpreting the statute to allow MLP-located resources to generate CPECs (even in cases where the MLP is not subject to a compliance obligation) would further the goals of the CPS and would likely provide significant emission-reducing benefits to all ratepayers. Allowing resources sited in MLP territories to generate CPECs would also increase the supply of potential project into the program, which could help to reduce ratepayer costs. In light of the strong public policy rationale for allowing MLP-sited resource to generate clean peak credits, we urge DOER to revisit its initial interpretation that these resources are ineligible to participate in this important program.

4. DOER Should Increase the Negative Multiplier for Existing and Contracted Resources.

While we understand that the CPS statute makes existing and state-contracted resources eligible for the CPS, DOER clearly has the discretion to assign these resources a multiplier that reflects their actual value for cleaning the peak and makes appropriate use of ratepayer dollars. Both existing and state-contracted resources presumably already have sufficient revenues to be constructed, meaning that any revenues generated by these resources from the CPS would simply result in windfall profits for the owners of these resources. While we believe that corporate profitability is not wrong in and of itself (and indeed is essential to a sustainable clean energy industry), we submit that ratepayer dollars would be better spent to incentivize new resources that will actually result in material improvements to the cleanliness of the peak, rather than having these dollars spent to increase profits for facilities that will not be required to (or able to) change their behavior to receive the additional credits. Perhaps more importantly, an insufficiently low multiplier for existing and contracted resources will increase the likelihood that these resources will crowd out new, unsupported resources, thus harming the financeability of new, non-state-supported resources and reducing the efficacy of the CPS.

For this reason, we recommend that DOER make the negative multiplier even stronger, by changing it to 0.001 or a lower value.

5. DOER Should Move Quickly to Establish Long-Term Price Certainty Through a Procurement Process for Clean Peak Certificates.

One of the principal innovations in the transition from the SREC programs to SMART was the adoption of long-term, fixed compensation rates as a way to control ratepayer costs relative to a market-based certificate program.⁷ DOER clearly understands that long-term contracts reduce price uncertainty and therefore the discount applied to future revenues, which allows for more deployment at lower overall cost. We appreciate DOER's initial support for using procurements to reduce overall ratepayer costs and drive deployment and encourage the agency to move quickly to develop the details of these procurements, with appropriate intervals for stakeholder input.

In considering how to structure these procurements, we recommend that DOER consider the following suggestions:

- a. Set a minimum compliance volume that will be met through long-term procurement, not an "up to" volume, as the rule is currently drafted. A minimum volume will help to drive robust development and will reduce the change that the procurements are undersupplied.
- b. Consider increasing the percentage of credits that are to be procured through structured procurements, as these procurements are likely to yield the highest quantity of lower-cost credits and will help to avoid a scenario in which the program obligation is met primarily through the payment of ACPs (which benefits no one).
- c. Require that contracts under the procurement method be no shorter than 15 years. In its presentation, DOER stated that a 5-year contract would be most likely, but we note that even the ISO-NE capacity market allows projects to receive contracts as long as 7 years. All things being equal, the longer the contract period, the lower the hurdle rate will be for the project because projects with longer contract terms can be financed with more certainty for a longer term. Given that most energy storage systems have useful lives that exceed 15 years, we recommend that DOER require procurements to provide price certainty for at least this long.

6. DOER Should Recommend to the Legislature that the Termination of the CPS obligation in 2051 Be Addressed.

We understand that the language creating the CPS also included language that repeals the CPS in 2051, and that this end date is not within DOER's immediate control. However, because energy storage projects are typically financed with a 15-year lifetime, any projects with installation dates after 2035 will face higher financing risk due to the potential preemptive end of the CPS program. In other certificate programs (e.g., the RPS), it is common for the final compliance year to represent the carry-forward requirement thereafter. We recommend that DOER include a suggestion to extend the CPS indefinitely beyond 2051 when it submits the CPS rule to the legislature for review.

⁷ P.6: DOER Fall 2016- Next Solar Incentive Straw Proposal: <https://www.mass.gov/info-details/historical-development-of-the-solar-massachusetts-renewable-target-smart-program#winter-2017--next-solar-incentive-final-proposal->

DOER and the state of Massachusetts are launching a first-of-a-kind program with the CPS that will hopefully be a model for other states during a critical time for our country to reduce emissions. We strongly urge DOER to consider the points we raise here in addition to the comments submitted by NECEC, and to provide an additional, limited opportunity for reply comments to allow for further development of detailed recommendations to aid in DOER's process. We appreciate your attention to our recommendations on this important program and look forward to continued dialogue with you and your team.

Sincerely,

Haley Orvedal
Director of Policy and Business Development - East
Borrego Solar Systems, Inc.