

April 22, 2019

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

Re: Comments on Clean Peak Standard Straw Proposal

Dear Commissioner Judson:

The Energy Storage Association (“ESA”) appreciates the opportunity to provide these comments on the Clean Peak Standard (“CPS”) Straw Proposal released by the Department of Energy Resources (“DOER”) on April 2, 2019.

ESA is the national trade association dedicated to energy storage, working toward a more resilient, efficient, sustainable and affordable electricity grid – as is uniquely enabled by energy storage. With more than 170 members, ESA represents a diverse group of companies, including independent power producers, electric utilities, energy service companies, financiers, insurers, law firms, installers, manufacturers, component suppliers and integrators involved in deploying energy storage systems around the globe.

We applaud the DOER for its ongoing effort to solicit stakeholder feedback in the development of the Clean Peak Standard. We appreciate the complexity of developing this first-in-the-nation program and the progress made in the current draft of the Straw Proposal. ESA respectfully recommends further clarity and development of program design to fully meet the public policy goals of a Clean Peak Standard. In our comments below, ESA identifies four key areas and provides several design recommendations for the DOER’s consideration: (1) ensure eligibility for standalone storage resources, (2) establish Clean Peak Certificates that correlate with actual service provided, (3) use Parallel Programs instead of Clean Peak Standard multipliers, and (4) enable long-term contracts for CPS compliance credits.

Respectfully,



Nitzan Goldberger
State Policy Director
Energy Storage Association

I. INTRODUCTION

ESA appreciates the opportunity to provide the following comments on the Clean Peak Standard Straw Proposal issued by the Department of Energy Resources (DOER) on April 2, 2019, as part of the development and design of the Clean Peak Standard (CPS) program required by Chapter 227 of the Acts of 2018.

ESA commends the DOER for engaging stakeholders on the implementation of the first-in-the-nation Clean Peak Standard program. ESA also acknowledges that the Straw Proposal reflects immense work to date to ensure that the Clean Peak Standard program provides ratepayers with the maximum benefits possible. As we noted in comments filed on February 5, 2019, ESA proposes the following design principles animate the development of this important market-based program in the Commonwealth:

- *Technology neutral approach provides greatest value to customers.* A wide variety of resources are able to contribute to the stated goals of: (i) reducing greenhouse gas emissions; and (ii) ratepayer costs during peak hours. The program design should focus on those two key objectives, otherwise allowing all technologies to participate so long as they demonstrate they are supporting those objectives.
- *Program design should aim for simplicity.* While the Clean Peak Standard program is based on a complex and dynamic set of inputs, the design of the program should focus on reducing emissions and costs during the peak periods. To the extent that there are other policy objectives, those should be developed through separate programs to complement the CPS design, rather than incorporating them into the CPS program.
- *There are several ways to demonstrate clean peak eligibility without being co-located with a renewable generator.* The goal of greenhouse gas reductions will be met more effectively and provide additional grid benefits, such as clearing areas of congestion, if the program allows respondents to demonstrate they are reducing greenhouse gases, rather than exclusively narrowing the opportunity to physically co-located resources.

ESA appreciates the DOER's interest in moving forward with the development of regulations for the CPS program; nevertheless, we respectfully submit that in order to develop a well-conceived and deliberately designed program, stakeholders need sufficient opportunity to comment on the program design as it matures from the Straw Proposal to draft rules and ultimately final rules and regulations. In our comments, ESA focuses on four key areas that require additional discussion and development: (1) ensure eligibility for standalone storage resources, (2) establish Clean Peak Certificates that correlate with actual service provided, (3) use Parallel Programs instead of Clean Peak Standard multipliers, and (4) enable long-term contracts for CPS compliance credits.

II. COMMENTS ON STRAW PROPOSAL

Ensure Eligibility for Standalone Energy Storage Resources

The current Straw Proposal's section on eligibility requirements for energy storage systems notes that inclusion of standalone energy storage systems and incremental pumped storage capacity are an eligible resource (page 6), but it does not provide clarity on how that would be evaluated or determined by the DOER (page 9). Specifically, the current description for eligibility of standalone energy storage systems in

the Straw Proposal fails to specify how the DOER intends to interpret the statute's statement that storage operates "primarily to store and discharge renewable energy." ESA would like to work with the DOER to develop a mechanism which allows standalone storage to participate in the program. Prohibiting standalone storage from participating in the program would limit the Commonwealth's ability to meet the CPS program's twin goals of reducing greenhouse gas emissions and lowering costs of peak electricity service to customers by preventing an entire subset of resources from shifting clean electricity on the system to peak periods. Standalone energy storage resources can also provide additional benefits as they can be sited in optimal areas where congestion is greatest and other grid needs can be addressed.

ESA's proposal for developing eligibility criteria for all CPS resources is in line with the DOER's stated objectives of encouraging "co-location and/or co-operation of energy storage and clean generation." The proposal would still meet the primary policy objectives of the Clean Peak Standard of reducing greenhouse gas emissions and the costs of providing electricity to customers during peak periods, while ensuring a robust participation of a variety of resource types and configurations. ESA proposes that storage resources should be able to meet *one* of the following three criteria in order to obtain a clean peak certificate for 1 MWh of avoided load or discharged electricity.

- (1) *The resource is co-located with a renewable energy generator.* ESA proposes that any storage system that can demonstrate that it charged or used the same number of MWh from the renewable generation during that billing period as the MWh of clean peak certificates it is receiving, and that those RECs do not receive monetary compensation.
- (2) *Retire an eligible REC to demonstrate "co-operation" with renewable energy generator.* ESA proposes that any standalone energy storage resource that can retire a Class I RPS eligible REC without compensation for every 1 MWh of clean peak certificates it obtains is just as effective from a greenhouse-gas emissions perspective as a co-located resource (plus additional MWh to account for roundtrip efficiency losses for energy storage).
- (3) *Charge during designated off-peak periods,* when emissions are lowest, when renewable energy production is high or when renewable energy may need to be curtailed due to low load levels. Since the purpose of the CPS program is to ensure that the emissions profile of the peak period is reduced and to reduce overall emissions, ESA recommends the DOER explore ways to enable resources to demonstrate that it charged during low emissions hours should be considered eligible. This would ensure that a broader representation of demand response and standalone storage technologies can participate.

Under these three eligibility scenarios, the resource is exclusively use low emissions electricity or renewable generation and therefore meets the statutory requirements that the resource be "primarily" operated to store renewable energy.

Establish Clean Peak Certificates that Correlate with Actual Service Provided

The Straw Proposal proposes to average the output of a resource over the entire peak in order to determine the amount of Clean Peak Certificates the resource should receive. ESA would appreciate greater clarity on the purpose of averaging resources rather than maintaining alignment with the RPS program design by being valued at one megawatt hour like a Renewable Energy Certificate ("REC").

Averaging CPCs may make the program more administratively complicated from a tracking perspective, particularly if the program includes pathways for standalone storage or co-located resource to demonstrate eligibility through the retirement of RECs.

ESA recommends that a clean peak certificate be the equivalent of one megawatt hour of clean energy provided during a designated peak period. A seasonal peak period is intended to be a period of between one (1) to (4) hours where the net demand of electricity is the highest. By virtue of designating the peak (assuming it is greater than one hour), each of the hours of the peak have presumably been designated the appropriate priority. If the DOER determines that certain hours of the peak have a higher value, and if those hours are found to receive lower deliveries of CPS resources, ESA recommends considering price signals or program design elements to address that deficiency.

Use Parallel Programs Instead of Clean Peak Standard Multipliers

The Straw Proposal includes several types of multipliers, both positive and negative, to send signals to the relative value of different peak periods as well as the priority locations and applications of the participating systems. The multipliers in the Straw Proposal create additional complexity to the program, at times for policy objectives that are not at the core of the Clean Peak Standard program. ESA is concerned that multipliers will be challenging to incorporate into the CPS program without impacting the outcomes negatively. First, multipliers carry the potential to reduce the overall amount of resources that are deployed in a program by diluting the overall goal, impacting the supply and demand of certificates. Second, multipliers tend to work best for spot markets, which explains the success of the Commonwealth's Alternative Portfolio Standard program. Multipliers are more difficult to implement in a market that is not entirely liquid. Therefore, Clean Peak Certificates that are provided through long term contracts would be difficult to integrate into a multiplier regime. In our comments below, ESA underscores the importance of long-term price certainty in the form of a competitive procurement or standard offer tariff. Assuming the program implementation does include long-term contracting that facilitates project financing, those contracted CPCs will be difficult to integrate into a multiplier regime.

While ESA recognizes that these multipliers were developed to target important system benefits, we recommend an alternative proposal that would still provide a signal for the most valuable hours of the peak. If the DOER would like to maintain a four hour peak period throughout the year but would like to send signals of the relative value of certain portions of the peak, ESA respectfully suggest the DOER consider alternative price signals, such as shaping the ACP in a way that differentiates certain portions of the peak would serve as a alternative price signal.

ESA also respectfully suggests that the DOER consider addressing policy objectives that are not directly linked to the CPS program's core policy objective via complementary and parallel programs instead. For example, while resilience has a clear value and benefit for the Commonwealth, a resilience incentive or other resilience-focused program that runs in tandem with the Clean Peak Standard would better encourage systems to provide those benefits without impacting the objectives and efficacy of the Clean Peak Standard program. Moreover, ESA respectfully requests additional information on the development of these multipliers, specifically how certain amounts were determined and would appreciate the opportunity to comment on the appropriateness of the specific multipliers once that information is available.

Enable Long-term Contracts for CPS Compliance Credits

ESA applauds the DOER for engaging stakeholders on the issue of long-term certainty through CPC procurement. Given that the value of clean peak certificates for the Clean Peak Standard program is uncertain, both at the outset of the program and over the years to follow, ESA strongly believes that long-term contracts will be needed to ensure competitively prices and financeable resources are able to participate. ESA notes that most new resources developed for the CPS, unless they receive substantial support from another market-based program or incentive, will require greater certainty about the values of the CPCs in order to be financed. Such uncertainty will inhibit investments in new resources like energy storage to meet CPS goals, slowing participation in the program and the availability of solutions for compliance, which may ultimately raise program costs.

The DOER can address this challenge by enabling long-term contracts to support new resources aimed primarily at participating in the Clean Peak Standard program, and ESA respectfully recommends that this should be available for most of the resources rather than a narrow subset of applications or technologies. ESA also recommends that any contracting requirements be married with development of banking or roll-over provisions for the utilities soliciting long-term contracts that are appropriate with the compliance mechanisms in the Commonwealth. Doing so will ensure that utilities purchasing CPCs greater than their obligation in a given year are able to adjust accordingly for future years. The ability to meet the exact requirements of the CPS can be done with greater certainty and cost-effectively when there is a mechanism in place to address this.

III. CONCLUSION

Thank you for your consideration of these comments in support of the DOER's implementation of the Clean Peak Standard Program. ESA looks forward to working with the DOER and other stakeholders to develop a program that achieves the public policy objectives of the legislation while maintaining program simplicity that enables participation by the widest range of technologies and applications.