

April 22, 2019

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

**Re: Comments on Clean Peak Standard (CPS) Straw Proposal**

Dear Commissioner Judson:

Thank you for the opportunity to provide input on the Department's Clean Peak Standard (CPS) straw proposal, as unveiled to stakeholders at your April 2 presentation. The Northeast Clean Energy Council ("NECEC") and our member companies are encouraged by the progress made on program design to date and remain eager to offer feedback for continuing program development and refinement. We look forward to working with DOER over the coming months to help design and implement a robust and effective CPS. With the Commonwealth's CPS effort on-track to become the nation's first, we believe that Massachusetts can set a high-water mark for future initiatives around the country.

NECEC is the lead voice for hundreds of clean energy companies across the Northeast, helping to grow the clean energy economy. NECEC's mission is to create a world-class clean energy hub in the region 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 solar, wind, energy storage, energy efficiency, CHP, fuel cells and other advanced and "smart" technologies. Our members are already – or are very interested in – doing business in the Commonwealth and helping to grow the clean energy economy.

**I. Overview & Top Recommendations**

As DOER looks to move ahead from the straw proposal stage to the development of regulations and program finalization, NECEC highlights the following top-tier recommendations for consideration and incorporation.

- Compliance obligation minimum annual increase: DOER should target annual increases in the CPS obligation of at least 2% and revisit if necessary after gaining experience. The statutory minimum 0.25% annual increase is likely to translate roughly to less than 100 MW of new supply for each year,<sup>1</sup> well below the potential for eligible Clean Peak Resources that are already expected to come online in the next several years. With several hundred MW of potential clean peak resources in the ISO-NE queue, and with substantial volumes of potentially eligible projects participating in the SMART program, it is likely that substantial early Clean Peak targets could be quickly met by these resources. A minimum of at least 2% per year is necessary to stimulate new investment

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<sup>1</sup> Assuming 46,000,000 MWh per year of retail sales, a 0.25% target would result in 115,000 MWh of total requirement. Dividing this by 1,043 Clean Peak hours per year yields 110 MW per hour, not taking into account any of the core program multipliers proposed (which will tend to reduce new supply).

above and beyond what is already anticipated under business as usual.

- Eligibility for qualifying standalone energy storage resources: DOER should provide clarity to stakeholders on how the determination will be made that standalone energy storage systems do or do not “operate[] primarily to store and discharge renewable energy” when they are acting as CPS resources. Maintaining optionality in how such resources can meet this requirement will be key to avoiding unintended consequences in the development of resources to meet the CPS. We reiterate our prior recommendations that DOER provide standalone energy storage systems with the following options to conform with the statutory eligibility requirement: i) Charge during designated off-peak periods (e.g., between 12am and 6am), charge when emissions are lowest, or charge when renewable energy production is high (e.g., midday during the summer,) or when it may need to be curtailed due to low load levels;<sup>2</sup> or ii) Purchase and retire Massachusetts Class I Renewable Energy Certificates (RECs). These options would be in addition to the ability for energy storage systems to directly co-locate with and charge from a renewable energy resource.
- Technology neutrality in program design: NECEC continues to support technology neutral program design wherever discretion is left to DOER by statute. In particular, we reemphasize that the program definition of a demand response resource is and should remain technology neutral. As we stated in our early February comments, as long as a technology can facilitate a reduction in a customer’s electric usage and/or deliver clean energy during the clean peak window, and contributes to a cleaner peak, it should qualify. Comments made at the CPS Straw Proposal stakeholder meeting in support of restricting eligibility within demand response participation (e.g., to Class I renewables only) would preclude several high-efficiency technologies and solutions that are supported by Massachusetts policies and stand to fulfill the emissions- and cost-reduction objectives of the CPS, along with other benefits such as reduced criteria pollutants.
- Understanding Expected Clean Peak Certificate Values: While the straw proposal presentation provided stakeholders with enhanced understanding of many key program design elements, it remains somewhat difficult for companies to develop specific feedback on certain program elements without having a firmer understanding of the expected range of clean peak certificate (CPC) values. We strongly support and appreciate DOER’s recognition that both future CPS procurements and ACP establishment should be designed to support market needs for revenue certainty and predictability, and we highlight the importance of providing more detailed proposals for ACP establishment and procurement structure (e.g., ceiling prices, other bidding parameters) soon as possible. Doing so will allow industry to fully evaluate how important program elements will work with financing and partnership arrangements, and will enable industry to make recommendations quickly as DOER moves towards the development of draft regulations.

## II. Areas of Support

NECEC supports DOER’s proposal to make use of the statutory procurement authority to structure a predictable tariff- or contract-based procurement process. Establishing such a mechanism can provide needed revenue certainty for resources that will enable greater

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<sup>2</sup> While the curtailment of renewable energy production may not be a frequent issue now, by requiring charging during off-peak periods and creating load to be absorbed by renewable production, DOER can help drive renewable development in a cost-efficient manner and prevent curtailments from occurring in the future.

development of clean resources at lower overall cost than other approaches. Unlocking long term revenues via an official program procurement will promote a scalable, robust market with many competitors and enable the best quality and most cost-effective solutions.

NECEC also supports the proposed treatment of demand response (DR) resources and technology-neutral inclusion of energy storage, electric vehicles (EVs), load curtailment, and other applicable technologies. Our member companies are eager to work with DOER on appropriate measurement and verification (M&V) processes and requirements. At a high level, with most participating DR likely to be storage-enabled in the near-term, it should be straightforward for CPS M&V to be conducted by metering the output of the battery (we note that the operating characteristics of storage-enabled demand response resources will likely justify different measurement and verification methods than traditional behavioral demand response resources<sup>3</sup>). We are optimistic that straightforward M&V requirements can be designed for all forms of participating DR.

NECEC also supports the incorporation of time-based and policy multipliers. Emulating the successful implementation of policy-based adders in the SMART program, CPS multipliers have the potential to drive both policy-prioritized resource types/use-cases as well as beneficial system performance/operation. We do urge DOER to prioritize simplicity and understandability in the development of the multipliers to avoid eroding their potential attractiveness with complexity, but we are hopeful that a core set of multipliers can help the CPS play a complementary role vis-à-vis and fill gaps between other existing state programs.

We note our continued support for complementary multi-program participation to promote value-stacking and realize incremental benefits/performance improvements, in particular for projects participating in SMART. Allowing projects to be eligible for both SMART and the CPS will ensure that the CPS will send a market signal for resources to operate in a beneficial manner, while ensuring that new resources can be designed or retrofitted to address and respond to the CPS. While SMART participation provides projects a revenue source through the energy storage adder, it is designed primarily to promote storage adoption and does not incentivize operation on a day-to-day or season-to-season basis. (DOER may consider amending the energy storage guideline under SMART to offer a compliance option in which energy storage systems could meet their cycling requirements by dispatching during the CPS periods.) In general, the CPS will send a complementary market signal to SMART assets and other resources and other resources to operate in a beneficial manner, and well-designed CPS multipliers will enhance this program benefit further.

### **III. Areas for Further Refinement**

The following areas in the straw proposal would benefit from modification and should be prioritized for refinement and clarification as DOER moves head towards the development of regulations.

First, DOER should clarify that CPCs generated by eligible resources will be owned/retained by the system owner, and will not be automatically transferred to distribution companies or any other load serving entity, including for projects constructed under the SMART and SREC II

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<sup>3</sup> For example, the performance evaluation for a storage system generating CPCs as a demand response resource should be based on the storage system's actual performance during the peak window and include both the load reduction and export value that the system delivers.

programs. Providing these CPCs for free to the EDCs would have numerous negative consequences, including: i) failing to provide an incentive for privately owned SMART and SREC II projects to target the peak because these systems would not benefit from the creation of CPCs; and ii) creating an uneven playing field between EDCs (who would receive these CPCs for free) and competitive suppliers (who would be required to purchase CPCs). DOER should clarify that such CPCs are not considered “Environmental Attributes” as that term is used in the regulations for the Department’s SREC II and SMART programs.

Secondly, DOER should consider vintaging the seasonal peak windows for specific years of CPS resources for a designated period of time (e.g., up to ten years). As a primary matter, doing so will help minimize any issues of “snap-back,” wherein peaks may reemerge if resources previously targeting one window shift operation in response to updated peak periods. In addition, assigning resources a known 4-hour window over a reasonably long horizon will help provide certainty for financing partners and lower the cost of the program. Without such certainty, financiers will apply a substantial risk premium that will increase the cost of these systems and reduce the supply of CPCs. We do recommend that DOER retain some flexibility to update peak windows based on substantial and/or unexpected shifts in peaks that threaten to cause problems for the overall effectiveness of the program. We are supportive of vintaging the 4-hour window for resources that come online during specific years and modifying the 4-hour window prospectively for new systems as system peaks shift in response to the CPS and other trends in consumption.

Finally, DOER should specify that transmission-connected resources should not be eligible for the 15x monthly peak multiplier, since transmission-connected resources cannot reduce certain allocated system costs such as RNS charges. Because only distribution-connected resources can reduce these costs, only they should be eligible to receive the 15x monthly peak multiplier as outlined in the straw proposal. On a related subject, projects that have already been or are expected to be fully contracted (e.g., via long-term contracts under the Section 83 procurements) should not be eligible for the CPS, as these projects were and will be proposed, evaluated, and selected without any expectation of the existence of the Clean Peak Standard, and as the upcoming solicitations for these larger-scale resources are contemplating energy storage more proactively and providing a separate pathway for renewable-plus-storage deployment. Extending the ability for these resources to generate Clean Peak Credits would not result in any additional investment and would indeed risk substantially undermining the CPS opportunity for new builds and retrofits of existing, non-contracted resources.

#### **IV. Input on Policy Enhancement Concepts: Resilience, Minimum Load, and Distribution Circuit Multipliers**

NECEC appreciates DOER’s proactive exploration of innovative intra-program policy support mechanisms. Regarding the resilience concept, we are supportive of structuring programs to recognize and value resilience, and we view the CPS resilience multiplier concept positively in this regard, although we do acknowledge that resilience as a topic is somewhat distinct from the main objectives of the CPS. Adding resilience capabilities to a clean energy project can meaningfully increase the cost of the project, and a multiplier would be one way to help recover that incremental investment and convince customers that might otherwise be on the fence about their system’s payback, thereby incentivizing additional clean peak resource deployment. If DOER pursues the resilience multiplier concept, we would recommend a tiered resilience multiplier, with the highest tier for mission-critical facilities that serve the public (e.g., police stations, schools, hospitals, emergency shelters, etc.). Across all tiers, the value of the

resilience multiplier should be commensurate with both the incremental cost of installing resilient capabilities and the policy benefits of enhanced customer resilience across the Commonwealth. One way to determine the value of the resilience multiplier would be to solicit resilient bids as a subset of the overall CPS procurement, even if only to gather data to inform the ultimate establishment of the multiplier.

While it could be possible to design and implement a simple resilience multiplier for immediate inclusion in the program rollout, it may ultimately prove more effective to pursue the concept as a policy enhancement after opportunity for stakeholders to debate and discuss the specifics in greater detail, possibly through a working group. This approach would also allow for consideration of whether the resilience multiplier concept could be pursued through a parallel program as an alternative to inclusion within the CPS. With this in mind, we do not have a strong view that a resilience multiplier must be prioritized for immediate inclusion, and our members are very willing to contribute to any discussions around the design of this and other potential policy enhancements. However, if DOER views the initial CPS rollout as the best near-term opportunity to pursue programmatic support for resilience, we are similarly very willing to contribute to the design of a simple and straightforward resilience multiplier as a core program element for the program launch, which could be tweaked and refined after gaining experience.

Regarding the proposed distribution circuit multiplier, we strongly support the Department's pursuit of a mechanism to value both circuit-specific peak contributions and the general ability of distributed resources to mitigate stresses imposed on the distribution system by periods of unusually high peak demand. Even if unavailable at the outset of the program, a distribution circuit multiplier could initially be linked to the program-wide Seasonal Peak Periods, and then adjusted on a circuit-by-circuit basis in consultation with the EDCs as the program progresses (and as data become available in the grid mod proceedings and other forums). While the Commonwealth has yet to implement a programmatic means of compensating distributed resources for the intrinsic value they are able to provide to the distribution system, the Clean Peak Standard presents a valuable opportunity to advance such a structure, and to learn from the experience of a closely related state energy market in New York.<sup>4</sup> The multiplier for distribution-connected resources should be straightforward (e.g., benchmarked to the baseline

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<sup>4</sup> As an example of similar program design evolution, we would refer the Department to the New York Department of Public Service's staff "Whitepaper Regarding Future Value Stack Compensation, Including for Avoided Distribution Costs": <https://www.nyserda.ny.gov/-/media/NYSun/files/DPS-Staff-VDER-Compensation-Avoided-Distribution-Cost-Whitepaper.pdf>. In the whitepaper, DPS Staff concluded that, "[t]he desire to compensate for precise grid values must be balanced with the risk that a more sophisticated tariff may result in price signals that do not fully incentivize and motivate developers and customers to make decisions based on the objective of maximizing grid value," and go on to state that programmatic compensation for distribution-level resources, "should be supplement to, and not an imitation of, the integrated planning, investment, and contracting process" for proactive distribution system planning and non-wire alternative ("NWA") solicitations. In order to incentivize and motivate developers, DPS Staff proposed that distribution system Demand Reduction Value ("DRV") be credited to distribution-level resources based on grid energy injection during the pre-established peak summer hours of 1:00 – 6:00 pm, which are substantially similar to the Department's proposed Summer Clean Peak Window of 2:00 – 6:00 p.m. Further, DPS Staff proposed to sunset the Locational System Relief Value ("LSRV") component from the overall Value of Distributed Energy Resources ("VDER") stack, which currently compensates distribution assets in specific locations in a manner similar to what the Department outlined in its Distribution Circuit Policy Enhancement, because, "it has been difficult to design a simple, stable tariff that also ties compensation to location-specific functional and performance needs." More recently, the Public Service Commission (PSC) issued an order implementing changes to the Value of Distributed Energy Resources (VDER) tariff on April 18, 2019: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b06B07A5A-893A-48CB-BB0E-E8B3ABF4A7C6%7d>. Among other things, the Order revises the method for how the DRV is determined, making its values more predictable. It also allowed for the continuation of the LSRV with modifications designed to provide short-term price signals to incentivize the placement of projects near congested areas.



CPS performance hours and assessment metrics) and meaningful/robust enough to drive program participation by developers and customers, subject to revision as the program progresses. Given the complexity of this endeavor, we do have some concerns that later implementation could be delayed at length by complicated, feeder-specific deliberations over appropriate valuation. If, however, DOER and the utilities are able to identify specific distribution circuits and substations for proactive support via Clean Peak Resources, any deferral and/or mitigation value should be evaluated for those distribution assets on a case-by-case basis via a transparent and consistent valuation methodology under a non-wires alternative (“NWA”) construct.

Finally, as relates to the proposed minimum load negative multiplier concept, we support the Department’s attention to the hosting capacity constraints that are emerging as a concerning barrier to the robust deployment of clean energy resources required to meet the Commonwealth’s renewable generation goals. However, we are concerned that a negative multiplier on production during maximum renewable generation timeframes would disincentivize renewable resources to participate in the Clean Peak Standard, and depending on implementation, may negatively impact the deployment of renewable resources overall; for instance, by creating a penalty for behind-the-meter demand charge reduction resources to perform their primary use-case if non-coincident facility peak load occurs during the proposed window for negative CPS pricing. Instead, the Department should consider structuring the Minimum Load Negative Multiplier as a positive incentive for resources capable of absorbing generation (e.g., energy storage) to remove generation from the grid during the minimum load events.

## **V. Outstanding Questions and Clarifications**

NECEC has identified the following areas for further clarification and description as program design continues.

First, regarding the proposed minimum size ratio and storage duration for existing renewable retrofits (slide 8), we request that DOER clarify that these restrictions would not apply for retrofits of behind-the-meter/customer-sited renewables, or rather that customers would be able to bypass these requirements by participating as a demand response resource. Particularly for behind-the-meter applications, a 4-hour duration could be a difficult constraint to meet, with 2-3 hour systems commonly used for shaving facility peak demands. Given the many beneficial opportunities that will exist for BTM retrofits across the Commonwealth (through SREC I, SREC II, and other programs), DOER should clarify that the proposed eligibility requirements for existing renewables will not govern BTM applications. Furthermore, it would be beneficial for DOER to offer some latitude to allow “equivalent” 4-hour storage (e.g., a 2-hour duration could also be eligible, but would require 50% of nameplate facility power). Even shorter durations of storage will be able to shift clean energy to peak times, and in focusing on hitting the actual peaks, they will maximize the value derived from their shorter duration.

Secondly, DOER should clarify that resources connected within municipal lighting plants (MLPs) in the Commonwealth may participate. Projects developed in MLPs can provide system benefits to all MA ratepayers that are similar to resources located in EDC territories and elsewhere in ISO-NE. While it is true that MLP ratepayers are not obligated to purchase CPCs, the same is true of ratepayers in neighboring states that may be hosting transmission-level resources that are eligible for the CPS. This fact should not be considered in determining whether MLP-located resources can generate CPCs. If transmission-level resources in other states are allowed to

participate in the CPS, so too should in-state resources located in MLPs.

Next, DOER should work to provide greater clarity about the potential for utility participation under the CPS. While we acknowledge utilities' ability to own energy storage and want to encourage their deployment of storage in appropriate circumstances (e.g., as a distribution system asset), we generally do not believe utilities should be permitted to participate in the CPS with resources they own or seek to build and own. Because utilities bear compliance obligations under the CPS as load serving entities, and because of potential conflicts and complications that would emerge from their asymmetric insights into certain program elements, including but not limited to the distribution circuit multiplier, it would be most appropriate for utilities to pursue storage deployment through existing means of funding and approval (e.g., general rate cases, grid-facing grid modernization plans, etc.) and preserve CPS participation for competitive solutions providers.

Finally, some members have inquired about the analysis supporting the proposed fall peak period with a morning peak hour in HE9 (slide 18). Members' review of the fall peak analysis suggests that HE9 may not truly be a daily peak, indicating that it may be more effective to extend/lengthen the afternoon/evening peaks. We would appreciate additional information as to why HE9 was chosen as a peak time for the fall season, and we look forward to working with DOER on this and any other technical issues of program implementation.

## **VI. Conclusion**

NECEC is grateful to the Department for its consideration of these comments. We look forward to continuing to work with DOER and other stakeholders throughout the remainder of the CPS program design and rulemaking process in 2019. We would be glad to discuss any of our recommendations with DOER and reiterate that we are available as a resource throughout this process. Please do not hesitate to contact us if you have any questions or we can provide any assistance.

Sincerely,



Peter Rothstein  
President



Jamie Dickerson  
Senior Policy Manager

Cc: Will Lauwers, DOER  
Mike Judge, DOER