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2024 Clean Peak Energy Standard (CPS) Review Comments

DOER.CPS@mass.gov

Solect Energy appreciates the opportunity to provide feedback to the Department of Energy Resources based on our experience as a participant in the CMS Program.

Question 1. How could the Clean Peak Energy Standard (“CPS”) Program be improved to better contribute to achievement of the 2050 GWSA mandates? Please include details and any supporting data and analyses.

Solect’s financing partners do not consider CPECs to be an under-writeable revenue stream, which is reflective of standard policy of climatetech lenders

We support CPower’s proposal of offering a fixed price for CPECs for a 10-year term. This would allow Solect to obtain financing that would allow us to provide more attractive pricing on PV and battery energy storage system (“BESS”) to our clients.

Although a long-term fixed price is ideal, a lesser alternative solution is setting a floor price for CPECs. Without a fixed price or a floor price, it is very difficult to underwrite this revenue stream.

Question 3. Has the CPS incentive had an impact on the decision of system owners to invest in CPS eligible technologies? Why or why not?

When combined with SMART for PV-only systems solar, it does not drive the investment decision because the value is small and highly uncertain.

CPS only marginally improves the economics for a BESS of various capacities ranging from 90 kW - 1 MW with a vast majority having output duration of 2 hours. A BESS must participate in ConnectedSolutions and receive the SMART Storage adder in order to make this a positive ROI decision.

Question 4. Please describe the portfolio of projects you have that you anticipate are within 4 years of commercial operation and that you intend to enroll in CPS. Include as many details as possible, including your projects' anticipated Commercial Operation Dates, power and energy capacities, interconnection level (i.e., front-of-the-meter, behind-the-meter), durations, technology types, intended use cases, locations, and any other pertinent information.

A majority of Solect's planned BESS installs are for public sector clients. All but one project are behind the meter PV + Battery systems that will be financed by a hybrid power purchase agreement. Clean Peak revenue is built into our proposal model, however this is considered "merchant" revenue and therefore not under-writeable by our financing partner. All projects will utilize LFP battery chemistry.

Should CPS revenues be changed to have a fixed for a 10-year term and the SMART storage adder is extended, we anticipate that we could expand our BESS offerings to our commercial and industrial customers, especially those sensitive to resilience.

County	Customer type	Battery Power (kW)	Battery Capacity (kWh)	Duration (Hrs)	PV Sys Size (kW DC)	Target PTO	Metering Strategy	Primary use	Configured for Backup Power?
Essex	Public- School	750	1,596	2.1	1,500	2027	Behind Meter	Enable PV >500 kW	No
Franklin	Public- School	100	193	1.9	218	2024	Behind Meter	Bill savings	No
Hampden	Public- Other	536	1,111	2.1	1,020	2024	Behind Meter	Enable PV >500 kW	No
Middlesex	Public- School	250	500	2.0	339	2025	Behind Meter	Bill savings	Yes
Middlesex	Public- Other	90	184	2.0	155	2024	Behind Meter	Bill savings	Yes
Norfolk	Public- Other	125	375	3.0	313	2025	Behind Meter	Bill savings	No
Plymouth	Business	1,000	2,000	2.0	2,315	2025	Front of Meter	Enable PV >500 kW	No
Plymouth	Public- School	250	532	2.1	999	2025	Behind Meter	Enable PV >500 kW	No
Suffolk	Public- Other	1,000	2,128	2.1	919	2025	Behind Meter	Enable PV >500 kW	No
Worcester	Public- Other	500	1,115	2.2	1,468	2026	Behind Meter	Enable PV >500 kW	No
Worcester	Business	803	1,606	2.0	1,446	2025	Behind Meter	Enable PV >500 kW	No
Worcester	Public- Other	750	1,596	2.1	739	2026	Behind Meter	Enable PV >500 kW	No
Worcester	Public- School	499	1,064	2.1	994	2028	Behind Meter	Enable PV >500 kW	No
		6,653	14,000		12,424				

Question 8. What modifications to CPS Multipliers, Minimum Standard, ACP Rate, and Seasonal Peak Periods as currently set forth in 225 CMR 21.00, if any, are needed? Please describe in detail and provide any supporting data and analyses.

Discharge and potential charge windows should be aligned with utility interconnection engineers to accommodate feeder capacity limitations and optimize BESS' value. We find utility engineers recommending charge/discharge windows that may not align with the greater system peaks. We also hear from utility engineers that pre-set windows are problematic if they are not coordinated with the EDC preferred charge/discharge schedule. If all batteries connected to a substation are turned on at exactly the same time, this can cause disruption that makes interconnection more difficult. If utilities had more control over discharge windows perhaps more batteries would be able to interconnect without substantial upgrades and study delays.

Question 9. Please provide any comments on the necessity of, Resource eligibility for, and structure of a CPEC procurement. If in favor of a CPEC procurement, please comment on its timing, in particular if it should occur in parallel with the CPS Review or after, and any considerations DOER should make about the CPEC procurement in light of the CPS Review.

We agree with CPower that conducting an RFP for CPECs will encourage a “race to the bottom”. It’s challenging enough for a developer to propose a BESS project in New England. Adding an RFP process for the CPS program will only create more transaction cost and uncertainty during the BESS project proposal stage.

Question 10. How well does the CPS align with other Commonwealth programs, such as SMART and ConnectedSolutions, to incentivize the deployment of peak reducing resources, and how could program alignment be improved?

CPS adds another complex revenue stream to the already complex world of energy storage. It would be more efficient for storage developers, operators and regulators if CPS and ConnectedSolutions could be merged into a single program that provides reliable demand response revenues and benefits the grid.

Question 11. Are there any Commonwealth policies (e.g., renewable energy goals, land use priorities, codes and standards, etc.) that you believe the CPS program inadvertently conflicts with? Please describe any potential modifications to CPS that would alleviate these conflicts.

The CPS review should be aligned with interconnection reform. As DOER is well aware, EDCs are working with developers to streamline interconnection but there is a lack of coordination between engineering needs and the Commonwealth's goals. The charge/discharge windows for CPS should not hamper or delay any efforts to expedite the interconnection reform process.

Question 12. Please describe any factors outside of the CPS Program that impact the ability of Resources to enroll or participate in the CPS Program, and any mitigation recommendations you have for DOER.

The suggested fixed CPEC for a 10-year term discussed in question 1 is also necessary to combat the extended development timeline due to interconnection and permitting challenges. Behind-the-meter BESS projects can take years to achieve PTO which is a significant regulatory burden for a small project. In comparison, a PV project can better carry this regulatory risk by reserving a SMART incentive block. However, a BESS project does not have that kind of certainty about the future price of CPECs. ConnectedSolutions pricing is also uncertain in the

medium to long-term. Establishing a fixed 10-year price for CPECs would give the developer and customer more certainty to carry through with the BESS project through inevitable delays until interconnection and permitting barriers are addressed.

Question 14. Would any Clean Peak Resources or specific use cases for such Resources be better incentivized by a different program than CPS? If yes, please describe the proposed program and justify why the particular Clean Peak Resources and associated use cases would be better incentivized by such a program, with particular attention paid to added ratepayer benefits.

Utilities are best positioned to operate batteries on the distribution system because they are in the best position to understand the ideal time to charge and discharge each resource. However, allowing developers to deploy private capital and compete should result in the lowest cost and is in line with the goals of deregulation. An ideal program would allow utilities to pay developers a standard monthly capacity fee for storage capacity deployed on the grid, and control over charge and discharge is given to the utility. The capacity revenue would be based on the BESS available capacity, and would be much easier to underwrite. Interconnection would be easier because utilities would no longer have to worry about developers charging and discharging at times that are not aligned with grid needs. They also would not need to model all batteries discharging at exactly the same time because they would have control over this. This would allow for much higher storage penetration on existing grid infrastructure.