



May 3, 2024

Via electronic filing: doer.cps@mass.gov

RE: 2024 Clean Peak Energy Standard Review Stakeholder Questions

Ms. Samantha Meserve
Director of the Renewable and Alternative Energy Division
Massachusetts Department of Energy Resources
100 Cambridge Street, 9th Floor
Boston, MA, 02114

Dear Ms. Meserve,

Nexamp appreciates the opportunity to respond to the 2024 Clean Peak Energy Standard Review Stakeholder Questions issued March 25, 2024, by the MA DOER.

As the largest developer, owner, and operator of community solar assets in the U.S., Nexamp has been at the forefront of efforts to make clean energy affordable and accessible for all Americans. Many of our community solar projects include energy storage. We are also developing a significant standalone energy storage pipeline across various jurisdictions. By managing all aspects of a project's lifecycle in-house—from development, engineering, and construction through operations and customer management—Nexamp brings rapid renewable energy deployment and high-quality jobs to the communities we serve. In 2015, Nexamp launched the first open-to-all community solar program that eliminates credit checks, up-front fees, and long-term commitments to help customers save up to 20% on annual electricity costs.

Nexamp supports the joint comments submitted by NECEC, RENEW Northeast, and Solar Energy Industries Association. We offer additional detail and thoughts on the questions posed below:

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.

Response:

- To better contribute to the achievement of the 2050 GWSA mandates, the CPS program would benefit from making changes that offer better value to longer duration BESS resources (greater than 2-hour duration). Other markets have effectively incentivized at 4+ hour duration storage, including New York and California. These markets offer greater value for storage dispatch in peak periods, and future revenue certainty is better than in Massachusetts. Specifically, New York's Value of Distributed Energy Resources (VDER) program compensates storage for dispatch during the summer demand reduction value (DRV) period, and the compensation is up to 20 times higher than CPEC prices on a \$/kWh basis. Importantly, VDER offers much better revenue certainty with the DRV rate locked for 10 years, versus the uncertainty of future CPEC prices.

2. What are the costs and benefits of participating in the CPS program?

Response: The CPS program has challenges and benefits. The following challenges (i.e., risks or costs to projects) are important:

- The uncertainty of future CPEC prices negatively impacts project economics and development potential.
- Standalone storage is not economically viable with the current value provided by CPS. Storage needs to either be paired with solar to participate in SMART or be behind-the-meter (BTM) and participate in ConnectedSolutions to justify development.
- The Distribution Circuit Multiplier (DCM) lacks sufficient transparency and predictability to facilitate targeted project development. Nexamp had a project on an eligible circuit per the October 2023 list that became ineligible in the April 2024 list, which negatively impacted project economics and likely makes the project unfeasible. This dynamic dissuades targeting development efforts on eligible circuits if they're subject to change relatively easily. Forecasts of future circuit eligibility, longer DCM circuit eligibility periods (18-30 months), detailed information on current circuit status on utility hosting capacity maps, and improved geospatial data would help to address this challenge.
- BTM projects face a challenge with stacking CPS with demand charge management in non-summer months. ConnectedSolutions is prioritized in the summer and stacks well with CPS.

The benefits of the CPS Program include the alignment and ability to stack with other storage revenue streams, including ConnectedSolutions and ICAP. Another advantage of the CPS program is that there are no penalties for non-performance, other than foregoing program compensation. This reduces risk for project financing.

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

Response: We are answering this from the perspective of battery storage only. The CPS incentive is a necessary revenue stream in the storage revenue stack; however, the incentive alone is not enough to drive BESS installations.

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.

Response:

- Nexamp is developing a number of FTM and BTM lithium-ion battery assets in MA that range in size from 1 to 50 MW and 2-to-4-hour duration. The economics favor 2-hour duration for all BTM projects of any configurations and for FTM solar + storage projects. Four-hour duration is more favorable for FTM standalone storage, though has challenging economics in general.

- i. Nexamp is targeting up to 8 projects interconnected to the high-voltage system with sizing ranging from 20-50 MW. Of this portfolio, most of the projects will be operational in 2027-2029.
 - ii. Nexamp is also targeting up to 10 projects that are focused on the distribution system with projects ranging from 1-5 MW. This portfolio is intended to be operational in 2026-2027.
5. Are the CPS Resource eligibility criteria appropriate? If any criteria pose a barrier, please describe and provide recommended mitigation strategies.

Response: No feedback here, as Nexamp participates in CPS only through solar and storage technologies, which are eligible technologies.

6. Are CPS application processes and requirements clear? Is communication between applicants, the CPS Program Administrator, and DOER clear and effective? Please describe any improvements you believe could be made to the CPS application process.

Response:

- **Approval Timeline Insight:** Submissions for MACEC Production Tracking System (PTS)/Clean Peak Standard (CPS) are made after projects hit the Permission to Operate (PTO) utility milestone and are often working against financing deadlines. Having insight into the expected approval timeline for both PTS registration and CPS approval would be helpful.
- **SQA Delivery Timeline:** It would be beneficial for developers to receive CPS SQAs in a timelier manner. Currently, our team is waiting for SQAs for projects that were CPS approved as far back as last August 2023.
- **PV-System PTS Registration Timeline:** We need to link co-located PV/BESS systems in the CPS application, and DOER is responsible for registering co-located PV systems in PTS. There is often a delay between when our BESS systems are PTS-registered and when we can submit them for CPS approval.
- **Clarification on the required documents for SQA application:** It would be helpful to have the required documentation listed out on the SQA application, potentially as specific document upload modules. We often receive corrections asking for additional documentation that was not listed in the application requirements. It would also be helpful to be able to add/remove documents; currently once you upload something, it's permanent and can't be removed/corrected.
- **SQA Application - Communication Log:** This is a helpful record, but being able to add notes at any time in the process would be helpful. Currently, we can only submit a note when we submit the application/correction. It also doesn't log communications from both email & the portal, so it's not always consistent with all messages between applicant/DOER/CPS.

7. Are CPS Program compliance requirements clear prior to program enrollment? If any requirements are unclear, please describe and recommend clarifying language.

Response: No additional feedback, eligibility criteria before enrollment is clear to us.

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.

Response:

- **ACP Rate:** We recommend increasing the ACP rate and keeping it flat (rather than following the current declining structure) to hit a CPEC price that will allow projects to be financially viable. We conducted an analysis using flat ACP rate and looking at the revenue stack of for a FTM standalone storage asset. This includes capacity revenue, Clean Peak, and energy arbitrage. Because the ACP represents a price ceiling, the actual price of a CPEC is subject to the supply and demand of the market. A revised ACP price is necessary to effectively incentivize storage development to achieve program goals. Nexamp Supports NECEC's suggestion that DOER conduct a new analysis to set a revised ACP rate.
- **Multipliers:**
 - *Resiliency Multiplier:* BTM standalone storage assets are currently not eligible for this multiplier, which further impacts already-challenging economics for standalone storage. If it's not an option for standalone storage to become eligible for the resiliency multiplier, then we urge DOER to consider a different multiplier to promote installations of standalone storage.
 - *Distribution Circuit Multiplier (DCM):* Nexamp is concerned about the significant turnover of circuit eligibility under the Distribution Circuit Multiplier from 2023 to 2024 (28% for Eversource, 40% for National Grid). Given the significant timelines to secure the required documents for DCM reservation (ISA, right to construct documents, non-ministerial permits), we encourage DOER to investigate a pathway to an expedited reservation once a circuit is deemed eligible. For example, Nexamp targeted new development efforts based on the eligible circuits list from October 2023 and began the development process for one project. However, that circuit became ineligible in the April 2024 list, which negatively impacted project feasibility and may render the project financially unviable. One year is not enough time from learning eligible circuits to securing the required documents to make a DCM reservation for a new project. A more realistic timeline is 18-30 months.
 - *SMART:* The SMART 0.3x multiplier applied to SMART solar + storage resources that are also participating in CPS inhibits project viability. Ultimately, the multiplier lowers overall value and disincentivizes co-participation in SMART and CPS. The CPS value provided by SMART + CPS projects is barely worth the lost SMART value from RTE losses of discharging during CPS seasonal windows.
 - *Other:* Nexamp supports creating a pathway for PV saturated circuits to secure the DCM or a similar multiplier. For projects on these circuits to be effective at mitigating the impact of PV production during peak production periods, the multiplier would need to incentivize operation of the Clean Peak resource during more targeted hours than the broader program. Midday charging of energy storage, for example, would be a viable solution, but would also come with higher charging costs for the asset than overnight charging, which is more typical for projects being developed currently. This added cost, alongside the benefits of improving hosting capacity and alleviating T&D impacts from significant solar generation on these circuits, would need to be accounted for when determining

the value of the multiplier and the conditions of operation for securing it.

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, 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.

Response:

- A CPEC procurement could favor lowest cost responses, but that structure may end up awarding projects with low chance of ultimately becoming operational. If a procurement is used, careful consideration should be given to project maturity requirements for bid eligibility. Any procurement should be limited to storage resources only.
- Nexamp supports the recommendation by NECEC, RENEW, and SEIA that the DOER should implement a CPEC procurement program as quickly as possible. The current 8-year rate lock does not provide a sufficient level of revenue certainty to support development. A longer-term contract of 10 to 15 years would permit the amortization of costs over a longer term and create a lower annual cost for consumers.

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?

Response: There is room for improvement in the alignment of CPS, SMART, and ConnectedSolutions. We recommend adjusting the CPEC SMART multiplier, which currently erodes Clean Peak revenue so that discharging during seasonal CPS windows is barely worth the lost SMART energy value from RTE losses.

Periodic review of the Commonwealth's programs in a wholistic manner would improve program alignment, rather than reviewing each program individually. These reviews should assess the available revenue streams and whether they support storage deployment goals of the Commonwealth. Regular assessments are required due to the dynamic nature of price and revenue environments.

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.

Response: No additional feedback at this time.

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.

Response: No additional feedback at this time.

13. Is there any additional information you believe DOER should consider in its 2024 CPS Review?

Response:

- **Peak days:** The CPEC monthly peaks are only on weekdays, but there are instances of weekend ISO-NE peaks. However, the CPEC monthly peak 25x multiplier does not apply to the weekend peaks. It is rare to observe, but we think it would be preferred to compensate systems for discharging during the peak itself.
- **CPEC price certainty:** Long-term certainty on CPEC prices—at least 10 years—would benefit the CPS program and lower the cost of financing projects. This has the potential to significantly improve storage project economics, thereby increasing deployment and progressing the Commonwealth's goals.
- **CPEC value:** Should CPECs be getting less valuable or more valuable or staying the same? Solar incentive compensation has historically declined over time due to solar becoming cheaper and because PV was increasing in saturation. On the other hand, while battery costs are declining, they are not declining at the rate that was observed pre-Covid or observed for PV. Moreover, demand charges are increasing due to distribution networks getting more expensive. In theory, demand charges rising could mean an increase in CPEC value. Perhaps distribution system-connected CPECs should be worth more because they are closer to the final customer and thus are directly providing value to distribution networks. CPECs only represent 5 to 8% of a FTM SMART project's revenue and represent around 20 to 30% of a FTM standalone storage project's revenue. Either more value in the CPEC itself or more volatility in the market is required to drive increased storage deployment. Of course, DOER has more control over the former than the latter.

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.

Response: Nexamp supports the recommendations by NECEC, RENEW, and SEIA on this matter.

Please do not hesitate to reach out if there are any questions.

Thank you,

Rob Ritchie
Director, Energy Storage
Nexamp
rritchie@nexamp.com