



Docket No. QO22080540, IN THE MATTER OF THE NEW JERSEY ENERGY STORAGE INCENTIVE PROGRAM

SUBMITTED VIA EMAIL

Board.Secretary@BPU.NJ.Gov

Sherri L. Golden Secretary of the Board

State of New Jersey Board of Public Utilities 44 South Clinton Ave., 1st Floor PO Box 350 Trenton, NJ 08625-0350

RE: Docket No. QO22080540 - New Jersey Energy Storage Incentive Program

Dear Ms. Golden:

The American Clean Power Association (ACP) is a national, multi-tech clean energy industry organization, representing over 800 energy storage, wind, utility-scale solar, clean hydrogen and transmission companies. ACP is committed to meeting America's national security, economic and climate goals with fast-growing, low-cost, and reliable domestic power.

MAREC Action (MAREC informally stands for the "Mid-Atlantic Renewable Energy Coalition") is an industry organization of more than 50 utility-scale solar, wind, and energy storage developers, wind turbine and solar panel manufacturers, dedicated to promoting the growth and development of renewable energy in the Mid-Atlantic region.

Collectively, our members represent a diverse coalition of energy storage developers, owners, and operators that build energy storage facilities of varying durations all over the country – both stand-alone energy storage facilities and energy storage projects co-located with renewable energy generation.

ACP and MAREC Action thank the New Jersey Board of Public Utilities (BPU) for inviting stakeholder feedback on the 2024 updated straw proposal for the New Jersey Storage





Incentive Program (SIP). Energy storage technologies play a growing role in decarbonizing electric grids nationwide, including in New Jersey. As New Jersey advances efforts to attract renewable energy investment and meet clean energy goals, we urge the BPU to expedite SIP implementation to support the 3,700 MW of energy storage projects in the PJM interconnection queue and meet the state's 2,000 MW target. Accelerating energy storage development means clean, affordable, and reliable benefits to New Jersey residents and ratepayers.

Sincerely,

Noah Roberts

Vice President of Energy Storage, American Clean Power

Mach Roberts

Evan Vaughn

Executive Director, MAREC Action





Summary of Comments

On Dec. 12, 2022, ACP and MAREC Action submitted comments in response to the 2022 draft SIP straw proposal. In those comments, both organizations highlighted the value of incorporating energy storage systems into New Jersey's energy generation and transmission portfolio. Since filing those comments, ACP and MAREC Action members have continued to express enthusiasm for building and deploying energy storage projects that will contribute to the reliability and efficiency of New Jersey's electricity supply.

As the BPU proceeds in their planning ACP and MAREC Action offer the following summary points regarding the updated straw proposal:

- Strong support for grid supply and staffing. ACP and MAREC Action support the early 2025 launch of the Grid Supply Segment of the SIP, with a competitive solicitation program, and the establishment of a program administrator at the BPU who will oversee the program.
- Swift action will protect interest in New Jersey's energy storage market. There are 3,700 MW² of energy storage projects in the PJM Interconnection Queue enough existing commercial interest for New Jersey to meet the state's 2018 energy storage target of 2,000 MW.³ However, like several projects over the past year, further program implementation delays will likely mean future projects fall out of the queue, or project investment moves elsewhere. The BPU grid supply incentive proposal means New Jersey energy storage projects can come out of the queue and online in the near-term, providing grid services, reliability, and enabling New Jersey's clean energy transition. Our members are ready to support this initial program proposal: the current queue of projects could achieve New Jersey's goal of 2,000 MW by 2030 without the state seeking any additional project investment.

¹ Joint Comments of the American Clean Power Association and Mid-Atlantic Renewable Energy Coalition Action RE: Docket No. Q022080540 (12 Dec. 2022),

https://publicaccess.bpu.state.nj.us/CaseSummary.aspx?case_id=2111434.

² https://www.pjm.com/planning/rtep-development/stakeholder-process/developers

³ Office of the Governor | Governor Murphy Signs Measures to Advance New Jersey's Clean Energy Economy





- Future program durability requires a long-term approach. As the straw proposal and draft regulations reflect, the BPU is prioritizing an upfront incentive to ensure the state is well-positioned to take action in the coming year. In addition to an upfront incentive, ACP and MAREC Action urge the BPU to consider additional energy storage program durability by implementing a structure for *long-term*, *fixed-price contracts* between energy storage projects. Financing clean energy projects relies on the ability to plan long-term. A long-term contract structure is essential to ensuring stable, low-cost project financing, and thus, lower rate impacts to New Jersey residents.
- Partial tolling agreements are one successful model. As it relates to a long-term contract program, MAREC Action advocates for a partial tolling program for at least 10 years. This partial-toll structure balances market risk between utility customers and the developer. Under a partial toll agreement, the ratepayers guarantee a fixed price for capacity while the developer bears the risk of energy and ancillary services. Greater certainty around capacity helps lower financing costs for the project and ratepayers. California has had a partial-toll program since its program launch.
- Regular program review supports a strong program responsive to a growing market. ACP maintains that swift implementation of a BPU program to procure or incentivize the deployment of energy storage in New Jersey is the top priority. However, ACP also recommends that the BPU engage in regular review of the program and depending on results, amend or augment future procurements to ensure the State meets its deployment target and clean energy goals. In Connecticut, the Public Utility Regulatory Agency (PURA) engages in regular review of their procurement programs to ensure they are effective, while New York has deployed several different programs, including an upfront incentive, tolling agreements, and now an index storage credit, to drive deployment. The BPU should evaluate the use of partial or full tolls in the future while implementing the program as proposed in early 2025. Similar to states like New York and Connecticut, annual reviews protect the competitive solicitation process and incentive structures that support robust and affordable energy storage development.





• Flexibility in commercial operation dates. ACP and MAREC Action support ambitious milestones and incentives for projects to deliver on time. However, there are outside market forces (PJM Queue changes or delays, utility interconnection agreements and approvals, construction seasons and labor availability) over which a developer has limited influence. We encourage the BPU to establish a process to extend deadlines or waive penalties for projects which can demonstrate good cause for delays impacting project operation milestones. We recommend extending the 550-day deadline for commercial operation once an incentive is awarded.

As an additional consideration, ACP and MAREC Action encourage the BPU to consider the multi-technology scope of energy storage systems and the distinct advantages offered by short- and long-duration storage systems. The BPU acknowledged providing additional clarity to ensure the SIP does not restrict energy storage systems exceeding four hours of duration from participating in the competitive bid procurement during the Nov. 20 stakeholder presentation. ACP and MAREC Action thank the BPU for their preliminary acknowledgement and urge the BPU to clarify any language that may unintentionally hinder robust participation in the SIP.

Energy Storage Deployment Growth & The PJM Queue

As of Sept. 30, 2024, the U.S. has installed 25,135 MW of energy storage resources across the country, with 3,543 MW installed in Q3 of 2024 alone.⁴ 16,034 MW of energy storage systems installed nationwide since January 2023 have accompanied a transitional policy shift across the country, as states enact energy storage procurement targets and corresponding program initiatives to better facilitate system development construction, including New York, Maryland, and Massachusetts.

Adding energy storage has demonstrated considerable value to stabilizing the grid while accommodating demand growth. A December 2024 study concluded that significant installations of energy storage systems following extreme grid pressures during the summer of 2023 corresponded with a flattening of conservation notices issued by ERCOT

⁴ American Clean Power and Wood Mackenzie, 2024, *Clean Power Quarterly Market Report - Q3 2024*, https://cleanpower.org/resources/clean-power-quarterly-market-report-q3-2024/. Accessed 9 Dec. 2024.





to zero.⁵ Despite a three percent increase year over year in total electricity usage, and with nearly identical top summer demand hours between 2023 and 2024, the addition of nearly 5,000 MW of energy storage systems contributed to ERCOT's ability to service considerable energy demands and accommodate a growing market of electricity-intensive industries without incident, compared to the 11 conservation requests issued by ERCOT in 2023.⁶ The benefits of improved grid resiliency realized by energy storage systems ultimately contributed \$750 million in cost reductions for consumers.⁷

As other state deployments of energy storage have demonstrated, New Jersey and its ratepayers stand to benefit significantly from the increased reliability and cost savings that accompany energy storage system deployment.

Currently, the PJM interconnection queue is processing a projected 3,700 MW of energy storage projects in development in New Jersey. While not all these projects may be developed, New Jersey is positioned to take meaningful steps towards achieving its 2,000 MW energy storage procurement target by 2030 with the initiation of the first competitive procurement for grid supply projects in 2025.

Responses to Specific Questions Raised in the 2024 Straw Proposal

The BPU has solicited feedback on several specific questions included in the updated straw proposal. ACP and MAREC Action recognize that launching this program requires significant time and staff resources and are eager to see the program succeed. To that end, both organizations share the following feedback on questions posed in the updated straw proposal regarding grid supply considerations and policy differences between the straw proposal and ongoing legislative initiatives to incentivize energy storage systems. The BPU should consider this feedback to the extent it does not further delay the establishment and implementation of the SIP.

⁵ American Clean Power, 2024, *Significant Energy Storage Capacity Additions Keep Costs Low and Power Reliable in Texas*, https://www.energystorage.org/resources/analysis-significant-energy-storage-capacity-additions-keep-costs-low-and-power-reliable-in-texas. Accessed 9 Dec. 2024.

⁶ Id.

⁷ *Id*. [−]





Grid Supply Questions

Should a performance incentive based on net avoided emissions be proposed only if PJM or another entity produces a day-ahead, marginal emissions signal?

ACP and MAREC Action reiterate the importance of program launch in 2025 with a long-term performance incentive program. In our 2022 comments to the first straw proposal, ACP and MAREC Action advocated for a fixed, upfront incentive that is paired with a performance payment. As the industry and market conditions have evolved, MAREC Action believes that a long-term fixed price for capacity is the best way to structure a performance payment.

ACP and MAREC Action emphasize the need for effective program design and the necessity for accurate and timely data to ensure that any performance incentive program does not detract from the state's primary objective of deploying energy storage resources that enable and accelerate the transition to clean energy and grid decarbonization.

In 2022, PJM expressed that their marginal emissions data was not fully developed, which might impact the effectiveness of a performance incentive. As of today, that marginal emissions data is still not fully developed. Without the data, ACP and MAREC Action recommend that the BPU delay implementation of any performance-based incentive until the BPU, and stakeholders can develop a program that accurately incentivizes the environmental value of energy storage, including its facilitation of the decarbonization of the power sector. The 2024 straw proposal appears to give the BPU sufficient space to make such a determination in the future without impeding the development of a competitive procurement bid.

In the absence of a day-ahead emissions signal, should the SIP institute another form of performance incentive for Grid Supply projects?

What other changes or alternatives would you propose to the GHG Performance Incentive?

ACP and MAREC Action previously recommended that, absent a satisfactory day-ahead emissions signal informing a performance-based incentive and in the interim development

⁸ *Id.*, pg. 8.





period of such signal, the BPU might consider utilizing a peak reduction framework to provide performance payments to grid supply energy storage resources. In response to both grid supply questions regarding prospective alternative performance incentives, both organizations reiterate this recommendation and acknowledge the likely need for stakeholder engagement to develop and implement this program. ACP and MAREC Action further reiterate the recommendation that the BPU conduct additional analysis and gain industry feedback regarding the design of a peak-based program once the SIP has been established and a competitive procurement process for grid-supply projects has been initiated.

How can the BPU mitigate the risk of Grid Supply projects not operating/performing after receiving upfront incentives?

Grid supply energy storage projects involve significant upfront capital investment and long-term financial planning between multiple stakeholders, making it unlikely that these projects will fail to operate after applying for and receiving a state-funded incentive. ACP and MAREC Action encourage the BPU to consider any risk mitigation strategy that fosters ongoing dialogue with energy storage system operators to resolve any operational issues. Based on discussions with our members, we recommend the BPU adopt strategies that encourage ongoing communication with energy storage operators to address any perceived operational issues.

As discussed in a later response, members of both organizations also acknowledged that the 550-day construction timeline once an incentive is awarded does not accurately reflect the typical total length of operationalizing a project. The consensus across both organizations is that a project on average takes between 36 and 60 months to construct and initiate commercial operations. Additionally, the BPU would be well-suited to expand on the circumstances in which it will recognize "good cause for such relief" that an incentive awardee must demonstrate to be spared potential penalties, as provide in Section 14:8-14.3(l)(4) of the updated straw proposal.

Are the reporting requirements proposed herein sufficient?

⁹ See Joint Comments, supra note 1, pg. 8





ACP and MAREC Action appreciate the thought undertaken by the BPU to establish the proposed reporting requirements. While no issues to the reporting requirements have been raised by either organizations' members, both organizations encourage the BPU to add additional clarity or examples to what the BPU will consider "key operational metrics," as provided in Section 14:8-14.3(n)(2) of the updated straw proposal.

 Should there be a clawback clause to recover fixed incentive payments from energy storage systems that cease operating shortly after coming online?

Recognizing that the ultimate fiscal responsibility to New Jersey ratepayers is paramount to ensuring the development of a reliable and useful incentive program, ACP and MAREC Action appreciate the consideration in which the BPU has approached potential recovery of incentive payments for non-operational projects. The reasons, and duration, for which an energy storage system may need to temporarily cease operations often fall within the regular course of operation and maintenance, and both organizations caution the board against enacting a clawback system that, by the structure and severity of its penalties, may influence system operators to keep systems online rather than safely address and preserve the system for future use. Further, ACP and MAREC Action request that any attempt to claw back incentive payments for projects that have ceased operations should be weighed with, at minimum, the same factors assessed to waive incentive forfeiture for good cause, as contemplated in Section 14:8-14.3(l)(4) of the proposal.

- What should be the metric of success for a specific project be (e.g., discharging power during peak demand periods) for Grid Supply energy storage systems? In other words, what metrics should the Board consider when evaluating operation?

ACP and MAREC Action encourage the BPU to consider utilizing a peak reduction framework as a potential metric for evaluating system operations. ¹⁰ Both organizations reiterate that operational metrics are only measurable with constructed and functional energy storage systems, reinforcing the paramount importance of establishing a competitive bid procurement to facilitate the construction of storage projects already under review within PJM that can help meet the state's 2,000 MW target.

¹⁰ See Joint Comments, supra note 1, pg. 8.





Should Grid Supply energy storage projects that replace or demonstrably reduce the run-time of fossil-based peaker plants in overburdened communities be evaluated solely on price or receive additional weight or a preference in competitive solicitations? If additional weight or preference is warranted, please specify how.

ACP and MAREC Action defer to the perspectives shared by member organizations and other stakeholder commenters but does encourage a holistic approach to weighing factors contributing to project benefits, including impacts to overburdened communities most likely to realize benefits stemming from the development of nearby energy storage projects.

Other Questions

Do any aspects of this program need to be modified to address NJ Legislature Bills S225/A4893, should the bill be signed into law?

ACP and MAREC Action thank both the BPU and the New Jersey Legislature for undertaking initiatives to establish a more robust market for energy storage systems. In reviewing the legislation compared to the proposals laid out in the updated straw proposal, ACP and MAREC Action would like to draw attention to the notable differences in construction and operational deadlines a project developer must meet at the risk of financial penalty or revocation of any incentive. Both organizations believe the 40-month construction timeline as proposed in S. 225 reflects a more accurate representation of the timeline project developers utilize to accommodate potential grid interconnection, supply chain and labor-related construction delays. ACP and MAREC Action encourage the BPU to consider the factors informing the 550-day construction deadline in the straw proposal and how those could be more sufficiently weighed with a timeline closer to the 40-month timeline as proposed in S225, including opportunities for developers to demonstrate good-cause constraints to meeting their construction goals.

Conclusion

ACP and MAREC Action again thank the BPU for taking a significant step towards the establishment of the New Jersey Energy Storage Incentive Program. As the BPU considers the feedback provided in these comments to help finalize program details and launch a competitive procurement process for grid supply projects in 2025, ACP and MAREC Action reiterate the need to enact program requirements without further delay in order to





capitalize on the significant interest and opportunity from which New Jersey and its ratepayers can benefit by incorporating energy storage systems to build a cleaner and more resilient grid that can accommodate the state's bright future.