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***Revised 9-11-2023**

NOTICE

IN THE MATTER OF THE NEW JERSEY ENERGY STORAGE INCENTIVE PROGRAM

REQUEST FOR INFORMATION

Docket No. [QO22080540](#)

Staff of the New Jersey Board of Public Utilities (“Staff”) hereby invites all interested parties and members of the public to provide written responses to the Request for Information (“RFI”) contained in this Notice regarding the Straw Proposal for the New Jersey Energy Storage Incentive Program (“NJ SIP”).

BACKGROUND

The National Renewable Energy Laboratory expects storage to become a critical element of a low-carbon, flexible, resilient, future electric grid, and the New Jersey Energy Master Plan (“EMP”) likewise expects energy storage to be a key component of the state’s clean energy future.

The State of New Jersey has one of the most ambitious storage targets in the nation, with a statutory mandate to achieve 600 megawatts (“MW”) of installed energy storage by 2021, growing to 2,000 MW by 2030. Energy storage resources are critical to increasing the resilience of New Jersey’s electric grid, reducing carbon emissions, and enabling New Jersey’s transition to 100% clean energy. The NJ SIP will build a critical foundation for a long-term energy storage effort in the State.

Staff issued a straw proposal on September 29, 2022 describing the initial conceptual design for the NJ SIP.¹ As proposed by Staff, NJ SIP incentives would be available to energy storage devices that are located either in-front-of-the-meter (“Grid Supply”) or behind-the-meter (“Distributed” or

¹ The NJ SIP Straw Proposal can be found [here](#). In re the New Jersey Energy Storage Incentive Program, BPU Docket No. QO22080540, Notice dated September 29, 2022.

“Customer Level”). The NJ SIP would have separate market segments for both types of storage. A portion of the Distributed storage incentive program would be reserved for projects located in, or directly serving, overburdened communities (“OBCs”). Eligibility for NJ SIP incentives will be technology neutral and based only on meeting functional requirements in a cost-effective manner. The program would also provide fixed annual incentives (“Fixed Incentive”) and include pay-for-performance mechanisms (“Performance-based Incentives”) for both market segments.

The Fixed Incentive would be paid annually in dollars per kilowatt-hour (“kWh”) (“\$/kWh”) of energy storage capacity, contingent on satisfactory up-time performance metrics. The Fixed Incentive would account for at least 30% of total incentives payments under the NJSIP. Its specific value would be established through a declining block structure in order to create a market-like incentive while providing the industry clear insights into the incentive value for energy storage devices. The Grid Supply and Distributed market segments would each have their own pricing structure.

The Performance-based Incentives would comprise the remaining NJ SIP incentive payments. For Grid Supply storage resources, payment would be based on the amount of carbon emissions abated through operation of the energy storage device. This would be determined by measuring the marginal carbon intensity of the wholesale electric grid as determined by the Marginal Emissions Rate set by PJM Interconnection, LLC (“PJM”) at the time the energy is discharged, and then subtracting the marginal carbon intensity of the energy drawn at the time the resource was charging. Performance-based Incentives for Distributed storage resources would be based on the successful injection of power into the distribution system when called upon by the electric distribution company (“EDC”) during certain performance hours, established by each EDC.

BPU Staff held three stakeholder meetings where they discussed the NJ SIP. The first on October 21, 2022 provided an overview of the program, the second on November 4, 2022 focused on the Grid Supply portion of the program, and the third on November 14, 2022 focused on the Distributed portion of the program.

Staff reviewed the comments made at each of the stakeholder meetings and the sixty-one individual written comments submitted to the docket linked above. Many commenters expressed support for the NJ SIP, and broadly agreed with Staff’s proposed definition of energy storage. They also agreed that the NJ SIP should specifically encourage and support storage that could alleviate pollution in OBCs, via carve-outs and/or enhanced incentives. Numerous commenters also recommended various changes to the NJ SIP program design.

First, many commenters argued that the size of the overall program and individual capacity blocks were both insufficient, particularly for Distributed storage. Indeed, numerous commenters contended that the Distributed energy storage element of the program was too small relative to the size of the Grid Supply element of the program. They argued that that Distributed energy storage systems, which can be placed in service without first going through the PJM interconnection queue, should be prioritized at least until PJM resolves its interconnection delays. Consequently, they recommended diverting more resources towards Distributed storage by increasing the size of the Distributed storage targets and capacity blocks. Several commenters similarly advocated for a residential storage carve-out.

Additionally, several commenters believed that the proposed mechanisms for directly measuring Greenhouse Gas (“GHG”) reductions attributable to the use of energy storage systems and providing performance incentives for such reductions may be too complex and unworkable. They suggested that a “peak shaving” approach would be a reasonable surrogate for GHG reduction-

related incentives.

There were also two major points of disagreement between commenters. First, while many commenters agreed with Staff's proposal to not provide incentives for utility-owned energy storage, numerous others argued that utility-owned energy storage systems should qualify for incentives. Relatedly, many commenters contended that energy storage developers and/or private owners should be able to retain control over their energy storage systems while earning performance incentives, while others argued such systems should be under utility control. Second, several commenters argued that the program should start small and scale up over time while others contended that the program should start larger and scale back over time.

Commenters also made various other comments and observations. These included assertions that:

- Staff should account for how energy storage costs are now rising due to supply chain issues instead of following their previous declining cost trajectory.
- The NJ SIP as proposed is overly complex and should be simplified.
- Additional stakeholder participation is necessary to round out the details of the program.
- A ten-to-fifteen-year contract term for Fixed Incentives was appropriate.
- Roles and responsibilities amongst the BPU, EDCs, aggregators and energy storage developers need to be further detailed.
- Staff should develop regulatory mechanisms to support value stacking.
- The NJ SIP should include provisions for schedule relief.
- The NJ SIP should impose caps on the amount of incentives that individual projects can receive.
- The Program Administrator must have a robust system in place to monitor and report on the progress of the program.
- Inverters are a suitable means of measuring the performance of energy storage systems and dedicated meters are unnecessary.
- Staff should consider allowing Distributed projects to opt-in to receive the Grid Supply Performance-based Incentive.
- Performance hours should not be established for Distributed Performance-based Incentives.

After reviewing these comments, Staff developed the questions included below in this RFI in response. Staff will use stakeholders' answers to these questions to inform an anticipated revised NJ SIP Straw Proposal.

COMMENTS

All public comments should be filed under [Docket No. QO22080540](#).

The deadline for comments on this matter is 5:00 p.m. Eastern Time on ~~September 12, 2023~~ *September 19, 2023.

Comments may be submitted directly to the specific docket listed above using the "Post Comments" button on the Board's [Public Document Search](#). Comments are considered public documents for purposes of the State's Open Public Records Act. Only public documents should be submitted using the "Post Comments" button on the Board's Public Document Search tool.

Any confidential information should be submitted in accordance with the procedures set forth in N.J.A.C. 14:1-12.3. In addition to hard copy submissions, confidential information may also be filed electronically via the Board's e-filing system or by email to the Secretary of the Board. Please include "Confidential Information" in the subject line of any email. Instructions for confidential e-filing are found on the Board's webpage <https://www.nj.gov/bpu/agenda/efiling/>.

Emailed and/or written comments may also be submitted to:

Sherri L. Golden
Secretary of the Board
44 South Clinton Ave., 1st Floor
PO Box 350
Trenton, NJ 08625-0350
Phone: 609-292-1599
Email: board.secretary@bpu.nj.gov

Please direct all questions on this matter to Michael Hornsby at michael.hornsby@bpu.nj.gov with the subject "In the Matter of the New Jersey Energy Storage Incentive Program, [Docket No. QO22080540](#)."

Staff looks forward to receiving and reviewing your responses.

Sherri Golden

Sherri L. Golden
Secretary of the Board

Dated: September 11, 2023

REQUEST FOR INFORMATION

IN THE MATTER OF THE NEW JERSEY ENERGY STORAGE INCENTIVE PROGRAM Docket No. [QO22080540](#)

This RFI contains five sections. The first four sections contain a brief summary of the applicable section of the NJ SIP, followed by questions for that section. The fifth section includes general questions or questions that address multiple topics. The questions are numbered – please number your responses accordingly.

1.0 Utility Ownership/Dispatch Control

The Straw “does not propose to allow for utility ownership or operation of devices,” but notes that “EDCs will play a key role in building the grid infrastructure necessary to enable the effective dispatch of energy storage devices.” This proposal was intended to encourage private ownership and operation of energy storage devices and the development of a robust energy storage sector in New Jersey’s restructured competitive market.

1.1 What are the advantages and disadvantages of utility control versus non-utility control of energy storage systems?

1.2 For Distributed resource Performance-based Incentives, should responding to a utility signal be compulsory or voluntary?

1.3 For Grid Supply resources Performance-based Incentives, should responding to a market signal be compulsory or voluntary?

2.0 Installed Storage Targets, Deployment Timelines and Capacity Blocks

The Straw set annual installed energy storage targets that increase over time (see section V. D. of the NJ SIP Straw Proposal for details).

2.1 How should capacity blocks be structured and proportioned, both within each component of the NJ SIP (Grid Supply and Distributed) and relative to each other?

2.2 Should the proposed first-come, first-served application process be changed to a “First-Ready, First-Served” process?

2.3 How should the program be designed to avoid or minimize interconnection delays? Should the interconnection process be modified for accommodating energy storage and if so, how?

3.0 Incentive Structure

The NJ SIP incentives are proposed to be comprised of two incentive payments, a Fixed Incentive and a Performance-based Incentive (see section V. E. of the NJ SIP Straw Proposal for details).

3.1 Incentives are meant to cover a portion of the fully installed cost of an energy storage system. What is the fully installed unit cost (in \$/kWh) for energy storage systems at present, and estimated to be each year through 2030? How do New Jersey-specific costs vary from these estimates? Please provide links to your references.

- 3.2 What are the best public data sets for energy storage costs?
- 3.3 Should Fixed Incentives be assignable to an aggregator?² Why or why not?
- 3.4 Should a Distributed energy storage resource that can provide grid services have the ability to opt in to either the Grid Supply or the Distributed storage program, for both the Fixed and Performance-based incentives?
- 3.5 The Straw proposes the use of the PJM Marginal Emission Rate (“MER”) signal as a basis for Performance-based Incentives for Grid Supply energy storage systems. Is or will the PJM MER be sufficiently developed to use to calculate NJ SIP Performance-based Incentives?
- 3.6 Is there a different methodology that can be used to determine Performance-based Incentives, such as a Peak Demand Reduction program?
- 3.7 If a Peak Demand Reduction program were to be developed, how should it be structured? What other states have similar programs that New Jersey should use as a benchmark?
- 3.8 What degree/percentage of Peak Demand should be targeted for reduction? What effect would such a program have on GHG emissions?
- 3.9 The Straw proposed that each EDC establish its own level of Performance-based Incentives. Should EDCs establish EDC-specific performance incentives, or should the incentive be standardized and common to all EDCs?
- 3.10 Should energy storage owners be permitted to opt in, or be subject to utility control, in order to be eligible for Distributed performance incentives?
- 3.11 How should incentives be structured for thermal storage systems?
- 3.12 Under what circumstances, if any, should Distributed resources be able to opt in to Grid Supply Performance-based Incentives?
- 3.13 Large projects and long duration projects have the potential to qualify for significant incentives. Should incentive caps be applied in this program? If so, how (for example, by customer, project, developer, duration or meter), or other method?
- 3.14 Should a cap be set such that the sum of federal and state incentives does not exceed a certain amount? If so, please provide details.
- 3.15 What provisions should be included in the program for monitoring, reporting and evaluation in order for deployed projects to maintain eligibility for incentives that are paid over time?
- 3.16 How can BPU structure NJ SIP Performance-based Incentives to both promote value stacking and prevent double compensation?

² An aggregator is a third party that has an agreement with the owners of multiple energy storage systems to manage the energy storage systems on behalf of the owner.

4.0 Overburdened Community Incentives

The Straw proposed three methods to support OBCs with energy storage incentives.

- An incentive adder in kWh
- A separate incentive block
- An additional up-front incentive

4.1 Staff is considering establishing both an adder and a capacity block for OBCs. What size should the capacity blocks be over time as a percentage of the overall Distributed segment? How much should the adder be in 1) \$/kWh or 2) as a percentage of the base incentive?

4.2 How can BPU assure that the incentive structure chosen will in fact provide benefits to OBCs?

5.0 Other Questions

5.1 What actions, if any, should BPU take to improve access to the energy storage value stack as part of implementing the NJ SIP?

5.2 How will Federal Energy Regulatory Commission ("FERC") Order 2222 affect New Jersey's energy storage market? What changes should the Board make to the NJ SIP to take advantage of PJM's pending implementation of FERC Order 2222?

5.3 Are modifications to the NJ SIP needed to maximize the ability of energy storage developers to access federal investment tax credits or other federal incentives?

5.4 What provisions, if any, should be established for interconnection of zero-export energy storage facilities (that is, energy storage facilities that do not inject power back into the grid and only supply power to on-site load)?

5.5 What specific best practices regarding rates and tariffs from other states should be incorporated?

5.6 Should energy storage be utilized and compensated in the Triennium 2 Energy Efficiency /Demand Response proceeding as an allowable Demand Response resource? If so, what changes, if any, should be made to the NJ SIP design to avoid potentially providing double compensation for the same service?

5.7 How should energy storage systems be metered and measured? Can an inverter serve this function? What role should advanced metering infrastructure ("AMI") play in the NJ SIP?

5.8 Please provide any other comments on the NJ SIP.