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PSEG Services Corporation

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Via Electronic Delivery Only
Sherri L. Golden
Secretary of the Board
New Jersey Board of Public Utilities
44 South Clinton Avenue, 1st Floor
Post Office Box 350
Trenton, NJ 08625-0350
Board.secretary@bpu.nj.gov

Re: In the Matter of the New Jersey Energy Storage Incentive Program 2024 Straw Proposal/ Docket No. QO22080540

Dear Secretary Golden:

Public Service Electric and Gas Company ("PSE&G" or "Company") appreciates the opportunity to provide input on the New Jersey Board of Public Utilities Staff's New Jersey Storage Incentive Program ("NJ SIP") 2024 Straw Proposal ("Straw") and associated draft rules. We incorporate by reference previous comments PSE&G submitted under the 2022 Straw Proposal[1] and 2023 Request for Information.[2]

PSE&G strongly supports the State's goals of increasing the resilience and reliability of New Jersey's electric grid, reducing carbon emissions, and enabling New Jersey's transition to 100% clean energy. PSE&G lauds the Board for continuing to solicit input on all components of NJ SIP as a means of putting energy storage on a path to achieve the State's target to have 2000 megawatts ("MW") of installed storage by 2030.

As the Board continues to pursue this ambitious target, it should utilize every available resource, specifically the Electric Distribution Companies (EDCs), to maximize the reliability benefits of storage and meet the goal cost-effectively for customers.

PSE&G wishes to emphasize the following main themes, which are expanded upon in greater detail in the below comments:

[1] PSE&G's comments under the 2022 NJ SIP Straw Proposal can be found via the following link: https://publicaccess.bpu.state.nj.us/CaseSummary.aspx?case_id=2111434. In re the New Jersey Energy Storage Incentive Program, BPU Docket No. QO22080540, Notice dated September 29, 2022 ("2022 Straw Proposal").
[2] The RFI can be found via the following link: https://www.nj.gov/bpu/pdf/publicnotice/Notice_RFI_NJEnergyStorageIncentiveProgram.pdf. In re the New Jersey Energy Storage Incentive Program, BPU Docket No. QO22080540, Notice dated August 8, 2023.

- PSE&G and the other EDCs should be expressly allowed to file for energy storage projects to help meet the State's energy storage goals.
- The current NJ SIP proposal raises significant operational challenges that need to be considered as they will impact the costs and the proposed timelines of the proposal.
- As with other BPU-approved EDC incentive programs that help meet state goals, including energy efficiency and electric vehicle ("EV") charging infrastructure programs, there should be a mechanism for PSE&G and the other EDCs to recover all prudently incurred costs to support, develop and administer the NJ SIP program and to earn a return on investment on incentives provided by the EDCs to customers who install and operate distributed storage resources.
- PSE&G also recommends the BPU consider conducting a cost-benefit analysis of the NJ SIP to assess the marginal energy cost and other financial advantages of implementing energy storage systems. The analysis would explore costs (i.e., capital, maintenance, site preparation) as well as the implied cost of carbon reduction, increased resiliency, grid stability and peak demand reduction. A transparent and thoughtful cost-benefit analysis will inform prudent decisions with the goal of saving costs for customers across the different programs.

Encouraging EDC Investment in Utility Scale Storage and Providing Cost Recovery and an Earnings Opportunity for NJ SIP Performance-Based Incentives will advance State Policy Goals

The State EDCs are a meaningful resource that should be a significant part of the energy storage solution. PSE&G remains ready and able to assist the State, as it has been since filing the CEF-EVES in 2018, in meeting its energy storage goals and advocates for the Board to reconsider the NJSIP's exclusion of utility participation.

To meet the mandate of the Clean Energy Act[3] to develop 2000 MW of installed energy storage by 2030, an "all of the above" approach is needed. PSE&G and the other EDCs should be allowed to invest in utility scale energy storage projects to help meet the State's energy storage goals in addition to investment by private developers.[4] PSE&G advocates for the Board to explore policies to enable utility investment in energy storage as distribution assets for the purpose of maintaining or enhancing distribution system reliability and resilience and expanding solar hosting capacity, considering the potential benefits for our customers and the State.

Continued exclusion of the EDCs may further increase the likelihood that NJ fails to achieve the Clean Energy Act's target of 2,000 MW of installed energy storage by 2030. Providing EDCs with the authority to invest in utility owned energy storage facilities to support distribution grid operations and expand solar hosting capacity will promote a mix of ownership and operation models between EDCs, third parties and customers; doing so will identify the greatest number of cost-effective resource alternatives and support the use of emerging technologies. Further, utility

[3] N.J.S.A. 48:3-87.9(a)

[4] In the Matter of the Petition of Public Service Electric and Gas Company for approval of its Clean Energy Future-Electric Vehicle and Energy Storage ("CEF-EVES") Program on a Regulated Basis, Decision and Order approving Stipulation, Docket No. EO18101111 (January 27, 2021).

ownership of storage facilities will provide a greater level of certainty of operation targeted specifically to support distribution reliability and solar hosting capacity over the long term.

Notably, PSE&G proposed a modest investment in energy storage in addition to EV charging infrastructure incentives in 2018. As part of the approval for the EV program, PSE&G and the parties in that proceeding agreed to hold PSE&G's proposed energy storage investment in abeyance while awaiting BPU Staff consideration of its policies on energy storage. Now, rather than merely indicating that the NJ SIP does not prohibit EDCs from investing in this space, EDCs should be expressly allowed to submit proposals for accelerated storage investment programs, subject to BPU review of these filings and of the prudency of the eventual expenditures. Like investment in advanced meter infrastructure ("AMI") or "smart meters," the Board's policy on storage should direct EDCs to consider grid enabling technologies that can further enhance their ability to maintain safe and reliable distribution service throughout the State and provide a framework for accelerated utility-scale storage investment that is aligned with meeting state policy goals.[5]

PSE&G also recommends that the NJ SIP clearly address EDC cost recovery and earning on incentives. The Board should ensure full and timely recovery of all EDC investments and other expenditures required to support the NJ SIP and its implementation to promote certainty and to maintain the rapid pace required to meet the State's energy storage goals. The EDCs will need to dedicate internal resources and make investments in Information Technology platforms and systems to support both the grid supply and distributed energy storage programs envisioned in the proposal.

Additionally, as the proposal envisions the EDCs administering the distributed energy storage program, the Board should consider the way it incentivizes the EDCs to aggressively pursue program participation. EDCs are best positioned to determine how to maximize the value and cost effectiveness of energy storage in conjunction with existing regulatory assets – such as regulated energy efficiency and demand response assets – as they currently do under Board approved programs and tariffs. Moreover, as with other incentive programs where EDCs are helping to advance state goals, EDCs should earn a return at the currently approved Weighted Average Cost of Capital ("WACC") for the incentive portion EDCs will provide. EDCs earn a return on investing in both energy efficiency and electric vehicle infrastructure investments.[6] Similarly, EDCs should be provided an opportunity to earn on NJ SIP investments.

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[5] In re the Petition of Rockland Electric Company for Approval of an Advanced Metering Program; and for other Relief. BPU Docket No. ER16060524, Order dated February 19, 2020.

[6] In the Matter of the Petition of Public Service Electric and Gas Company for Approval of its Clean Energy Future-Energy Efficiency ("CEF-EE") Program on a Regulated Basis, Order adopting Stipulation, Docket Nos. GO18101112 and EO18101113, dated September 23, 2020; In the Matter of the Petition of Public Service Electric and Gas Company for Approval of its Clean Energy Future-Energy Efficiency ("CEF-EE") Program on a Regulated Basis, Decision and Order Approving Stipulation, Docket Nos. GO18101112 and EO18101113, dated May 22, 2024; In the Matter of the Petition of Public Service Electric and Gas Company for Approval of its Clean Energy Future-Electric Vehicle and Energy Storage ("CEF-EVES") Program on a Regulated Basis, Decision and Order Approving Stipulation, BPU Docket No. EO18101111, dated January 27, 2021; and In the Matter of the Petition of Public Service Electric and Gas Company for Approval of its Clean Energy Future Energy Efficiency II ("CEF-EE-II") Program on a Regulated Basis, Order adopting Stipulation, Docket NO. QO23120874, dated October 30, 2024.

Operational Considerations with Proposed Distributed Storage Resource Program

PSE&G has operational concerns related to Distributed Storage Resource incentive program that the EDCs are expected to implement in 2026.

First, EDCs should be motivated to manage and support this program through recovery of expenses associated with program administration and operation. Allowing the EDCs to utilize recovery mechanisms like those that exist for EDCs to earn on energy efficiency programs will lead to increased program size, allowing the State to meet its 2000MW goal of installed energy storage in a shorter timeframe.

Creating and implementing the performance incentive portion of the Distributed program will involve significant technological and operational challenges that may take the EDCs time to resolve. It may be in the best interest of the Board and the customers for this portion of the NJ SIP to be coordinated with time-of-use rates and the Board's completion of its review of net metering rules and regulations. Both outcomes may have a significant impact on the overall incentives and market signals for customers.

For example, under PSE&G's current tariffs, customers are not able to export from their behind-the-meter storage systems. They may only reduce their metered load as in a traditional demand response program. As the Board indicated, the NJ SIP proposes the incentive be paid for by either lowering load or export to the grid, the latter of which will require policy changes.

Additionally, when the Distributed program is implemented, PSE&G supports the following changes to the current program:

1. All behind-the-meter battery systems may participate in the performance incentive to increase ratepayer participation and overall load reduction effect of the program.
2. On bill repayment programs for remaining battery storage system costs after the NJ SIP upfront incentive may be run by EDCs.

EDCs will need to utilize distributed energy resource management systems ("DERMS") to support the energy storage program, but the specific DERMS system should be left up to the EDC to define as it creates its program.

The proposal does not specifically state how long the performance incentives will be available to customers that participate in the program. The final program rules should be clear on this point. It should be noted that if the incentives are limited in duration, there will be no long-term guarantee to the utility that the resources will be available to support grid reliability or solar hosting capacity.

In addition, PSE&G is preparing to deploy a Demand Response Virtual Power Plant program through its Board-approved CEF-EE II program. This program will provide up front incentives to customers to install behind the meter storage resources. This program should be allowed to work in parallel with the Board energy storage program.

Operational considerations with the Grid Supply Resource Program

Performance incentives – The Company believes that the Board should consider specific operational criteria beyond the reduction of net emissions, which we agree cannot be implemented at this time. If the Board believes that grid supply resources should also be used to support gird reliability, reduce peak load, and support greater solar hosting capacity, then it should require resources to respond to such signals from the EDC and/or PJM. Without such requirements, the resource owner will be free to respond to market signals that only financially benefit the owner, which may be misaligned with the State's policy goals.

Additionally, while the proposal envisions the Board administering the grid supply program with respect to provision of the up-front incentives, the Board needs to consider administration of the program over time. The EDCs have the expertise and systems to manage such a program operationally. Even with these capabilities, additional investments to fully operate such a program would be required.

EDCs have vast knowledge and experience managing the distribution system and should play an important role in investing in energy storage solutions and ensuring that energy storage projects are safely implemented with the goals to enhance reliability and resiliency. The Grid Supply storage program should have a meaningful performance metric or revenue-based incentive to perform in a way that will not detract from the stability of the grid, i.e., charging during peak demand hours.

Response to Straw Proposal Request for Comments

Below, PSE&G offers input on a selection of the Straw Proposal's request for comments.

Grid Supply

Question No. 4: How can the Board mitigate the risk of Grid Supply projects not operating/performing after receiving upfront incentives?

Grid supply projects may participate in the PJM capacity market. While the capacity market already effectively incentivize action through punitive measures for failure to call, there is no assurance that they will participate. Further, there is no PJM requirement that supports policy goals such as distribution reliability or increasing solar hosting capacity. Therefore, stand-alone grid supply battery storage either participating in PJM or through an Interconnection Agreement with the EDC would require a performance enforcement mechanism that would include some type of real-time monitoring, a means/method to analyze the "performance" and an incentive clawback process. The Board should consider other categories for a performance incentive such as load reduction and/or increasing solar hosting capacity. As stated above, the Grid Supply storage program requires a performance metric or revenue-based incentive to perform in a way that will not detract from the stability of the grid, i.e., charging during peak demand hours.

a. *Are the reporting requirements herein sufficient?*
PSE&G reserves the right to respond in the future.

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

In order for these resources to be used to help ensure or support the reliability of the grid, the Board should evaluate the use of some type of penalty for resources that do not perform when needed.

c. *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?*

To develop "metrics for success", storage benefits will need to be clearly measured. As cited above, the proposed performance incentive for Grid connected projects appear to be driven by Greenhouse Gas ("GHG") emission reduction. In this case, success may be determined by an emission reduction metric, but it is unclear how to accurately define and measure a GHG emissions reduction metric. For Grid connected projects with an Interconnection Agreement with the EDC, where the EDC would issue calls to operate, the benefits would need to be determined by the EDC. PSE&G will need time to clearly determine benefits, which may include reliability benefits, deferred capital investment, GHG reduction or other to be determined.

Question No. 5: 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 solicitation? If additional weight or preference is warranted, please specify how.

PSE&G believes it would be challenging to quantify the impact to fossil fuel generation by any particular energy storage project in a particular community. However, the consideration of energy storage that can benefit overburdened communities is of itself appropriate.

The Board should consider how it would measure the degree to which a resource would "replace or demonstrably reduce the run time of fossil-based peaker plants in overburdened communities". Since peaker plants are used infrequently, the Board would need to develop a methodology to determine this displacement, as well as assign a party to perform such calculations, or confirm the calculations of the resource developer. Incentives for operational performance would need to be aligned to this predictive methodology to assure that resources, once built, actually achieve the goal. Once established, Grid Supply energy storage projects in overburdened communities should receive the additional upfront incentive outlined in the straw proposal. Additionally, an adder for performance incentives should be offered to ensure that the systems are operating to mitigate the run times of fossil-based peaker plants.

Distributed

Question No. 8: How far along are the EDCs in implementing the technology needed to issue calls for the performance incentive portion of the SIP? Will this affect the design of the performance incentive?

Currently PSE&G does not have the technology needed to issue calls or measure performance and will need to make investments to enable such services. The design of the performance incentive program will be affected by the method chosen by the EDCs to call on the storage systems, but the incentive level should not be affected as the program itself should earn recovery of and on the investments made by the EDCs.

Question No. 9: Should the Board require EDCs to implement a designated distributed energy resources management system (DERMS) to effectively manage and dispatch resources across their systems?

The safe and reliable integration of energy storage resources at accelerating levels will require greater EDC monitoring and control. A DERMS platform is essential to the automatic nature of the resource calling mechanism specified in the straw proposal; however, the decision for selecting which DERMS platform to implement should be left to the discretion of the EDCs. A long-term solution like a utility owned and operated DERMS may not be fully implementable under the timeframes contemplated under the Straw Proposal.

Other

Question 10: Do any aspects of this program need to be modified to address NJ Legislature Bills S225/A4893, should the bill be signed into law?

Yes. PSE&G believes that the following aspects of the proposed program need to be further developed to provide clarity to energy storage resource developers, owners and the EDCs, should S225/A4893 be signed into law:

(a) Cost recovery: The NJ SIP program rules need to clearly define how the EDCs will recover expenditures related to supporting this program.
(b) Grid Supply Resource Call Events: The NJSIP program should explain the impacts to retail customers with behind the meter solar facilities that install energy storage devices.
(c) Net Metering Rules: The NJ SIP program should clarify the impacts to retail customers with behind the meter solar facilities that install energy storage devices. Current regulations disallow solar customers from receiving net metering benefits once a storage device is installed behind the same meter.

Conclusion

Thank you for the opportunity to provide comments on the 2024 NJSIP Straw Proposal. PSE&G looks forward to working with the Board and interested stakeholders to develop the NJSIP Program that achieves the goals set forth in the Clean Energy Act of 2018.

Please do not hesitate to contact me should you have any questions.

Very Truly Yours,

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