



**Docket No. Q022080540, IN THE MATTER OF THE NEW JERSEY ENERGY STORAGE  
INCENTIVE PROGRAM**

December 18, 2024

*SUBMITTED VIA EMAIL*

[Board.Secretary@BPU.NJ.Gov](mailto:Board.Secretary@BPU.NJ.Gov)

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

RE: Docket No. Q022080540 – New Jersey Energy Storage Incentive Program

Dear Ms. Golden:

Form Energy, Inc. (“Form Energy”) appreciates the opportunity to comment on the Board of Public Utilities’ (“BPU”) 2024 Straw Proposal for the New Jersey storage incentive program (“2024 SIP”). Energy storage technologies can provide a range of services that benefit customers and help New Jersey achieve its clean energy goals while supporting critical grid reliability and resiliency needs. Incentives like those proposed by the BPU staff in the 2024 SIP are needed to close the gap that currently exists between the average installed cost of energy storage systems, including all fixed and operating costs, and the projected revenue needed to fund debt and equity costs. Without such incentives, it will be impossible for New Jersey to meet its 2030 mandate for 2,000 MW of new energy storage.

***About Form Energy***

Form Energy, Inc. (“Form Energy”) is a U.S. energy storage technology and manufacturing company that is commercializing a new class of multi-day energy storage systems that will enable a reliable and fully renewable electric grid year-round. Our first commercial product is an iron-air battery capable of continuously discharging electricity for 100 hours at rated capacity at a total installed cost per unit of energy that is less than 1/10th of today's lithium-ion battery technology. Form's battery can achieve these low costs by using iron, one of the most abundant and cheapest minerals. Our iron-air battery is modular, safe, and can be sited anywhere on the grid.

Multi-day storage is a diverse resource class that includes iron-air batteries like Form's, as well as hydrogen energy storage, thermal storage, compressed air energy storage, and other novel technologies. In addition to being able to provide guaranteed firm energy delivery at rated capacity over consecutive days, multi-day storage can also provide other benefits and services to the grid, including: flexible, dispatchable capacity to provide hourly and sub-hourly load balancing; rapidly-deployable solutions to uneconomic grid congestion and renewable energy curtailment; resilience for critical loads; black start and other ancillary services; and a physical hedge to protect market participants and retail customers from price shocks.

### ***Comments on 2024 Storage Incentive Program***

**Ensure adequate funding is available for the incentive program.** We encourage the BPU to ensure that there is adequate funding available to support significant deployment of energy storage through the incentive structure as proposed. At the stakeholder presentation on November 20, 2024, Staff indicated that there would be \$46 million available for the first year of the SIP, which may not be sufficient to support the state's mandate. Additionally, project developers require stability and certainty to justify making investments to bring projects to market. Additional budget and program certainty beyond the first year of the SIP is necessary to stably grow the storage market in New Jersey. For example, as part of its Storage Roadmap, New York State plans to invest \$563 million on a net present value basis (2024\$) to support 1,700 MW of storage via retail and residential customers via incentives, plus another \$700 million to \$1.4 billion (2024\$) to procure 3,000 MW of bulk storage projects between 2024 and 2030 to meet its 6GW storage mandate by 2030.<sup>1</sup>

**Increase flexibility in project maturity requirements.** Form understands the need for requirements that would protect ratepayers from incentivizing speculative projects that will never get built; however, many of the proposed project maturity requirements may be prohibitive to energy storage technologies, especially emerging technologies like long-duration energy storage (LDES). We agree with the comments submitted by ACP and MAREC Action that the COD deadline should be increased from 550 days to at least the 40 months included in legislative bill S.225. We also recommend that for emerging technologies like LDES, which bring tremendous potential cost-savings and reliability benefits but have not yet been widely deployed, that the criteria for responding to a competitive solicitation be changed from having an executed System Impact Study to having a System Impact Study Agreement

**Consideration for Long Duration Storage.** In the 2024 SIP, the BPU Staff "propose to interpret the C[lean] E[nergy] A[ct]'s 2030 storage mandate as requiring New Jersey to procure 2,000 MW of storage systems capable of four hours of continuous discharge, or 8,000 MWh." We advise

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<sup>1</sup> See New York's 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage, March 15, 2024, available at <https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={9079428E-0000-C91D-A340-682288832D69}>.

against this interpretation. The intent behind the Clean Energy Act of 2018 was to jump-start the deployment of beneficial energy storage systems across New Jersey. Restricting the interpretation of this mandate to a metric based on short duration lithium ion systems would bias the program toward a single technology type and deprive the state of the reliability and cost savings benefits of a diverse portfolio of storage resources that includes both short and long duration systems. For example, a single 80 MW Form Energy project, similar to the one we are developing in Northern Maine, would provide 8,000 MWhs of energy. This would, under Staff's interpretation, achieve the entire mandate without building any other storage, which is clearly not the intent of the CEA's storage provisions. We do think it is reasonable for Staff to propose a MW discount toward meeting the 2,000 MW mandate on projects that are less than 4 hours but not the conversion of the mandate itself to a MWh goal based on a 4 hour battery.

Further, as the BPU sets deployment amounts for the Grid Supply Segment, we recommend that it consider setting aside a certain amount of MWs for long duration storage technologies, to both gain operational experience in New Jersey and to ensure the reliability and grid support benefits of LDES technologies are made available to New Jersey ratepayers. We recommend that New Jersey set aside at least 20% (400 MW) of its total program goal to support long-duration and multi-day energy storage. This target is conservative, as a recent U.S. Department of Energy report indicates that long-duration and multi-day storage resources will comprise between 34% and 92% of total energy storage needs by 2050 as part of a least-cost electric grid.<sup>2</sup>

### **Conclusion**

Thank you again for the opportunity to provide these comments. Form Energy is happy to work with the BPU on the development of the Storage Incentive Program, and we welcome any questions or concerns.

Sincerely,

***Sarah Jackson***

Sarah Jackson  
Senior Policy Manager  
Form Energy

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<sup>2</sup> DOE Pathways to Commercial Liftoff: Long Duration Energy Storage, p. 17, available at <https://liftoff.energy.gov/wp-content/uploads/2023/03/20230320-Liftoff-LDES-vPUB.pdf>