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September 19, 2023

**VIA EMAIL**

Ms. Sherri L. Golden  
Secretary of the Board  
New Jersey Board of Public Utilities  
44 South Clinton Ave., 1<sup>st</sup> Floor  
P.O. Box 350  
Trenton, New Jersey, 08625-0350

**RE: Docket No. QO22080540 - In the Matter of the New Jersey Energy Storage Incentive Program**

Dear Ms. Golden,

The Edison Electric Institute (EEI) respectfully submits this letter to the New Jersey Board of Public Utilities (BPU or Board) in response to the Request for Information (RFI) issued on August 8, 2023, in the above-referenced New Jersey Storage Incentive Program (NJ SIP) proceeding. EEI has been monitoring energy storage proceedings across the country and appreciates the opportunity to provide the Board with a national perspective on the integral role electric companies can play in supporting the deployment of energy storage.

EEI is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for 220 million Americans and operate in all 50 states and the District of Columbia. Collectively, the electric power industry supports more than 7 million jobs in communities across the United States. EEI's member companies, which include Public Service Electric and Gas Co., Jersey Central Power & Light Co., Atlantic City Electric Co., and Rockland Electric Co., deliver safe, reliable, affordable, and increasingly clean electricity that powers the economy and enhances the lives of all Americans.

EEI members annually invest more than \$130 billion to make the energy grid stronger, smarter, cleaner, more dynamic, and more secure; to diversify the nation's energy generation mix; and to integrate new technologies that benefit customers. EEI members are united in their commitment to get as clean as they can, as fast as they can, while keeping reliability and affordability front and center for the customers and communities they serve.

Throughout the United States, electric companies are leading the way on energy storage. In fact, electric companies are the largest users and operators of all forms of energy storage in the U.S., including pumped hydropower, batteries, flywheels, compressed air, and thermal storage. Accordingly, electric companies are critical partners in implementing energy storage technologies by owning, procuring, or utilizing 93 percent of all grid-connected energy storage

today.<sup>1</sup> Electric companies continue their innovation in energy storage, partnering with state and federal agencies and the private sector to deploy new, more effective storage technologies across the country.

As noted in the RFI, New Jersey has established an ambitious, statewide energy storage deployment goal of 2,000 MW by 2030.<sup>2</sup> While distributed energy storage resources can provide many benefits to customers and the grid and can help achieve New Jersey’s deployment goals, large-scale electric company energy storage is a more efficient and cost-effective method of deploying energy storage as quickly as possible. Electric company energy storage also serves to benefit all customers, not just those actively participating in the competitive market. Meeting the statewide deployment goal by 2030 will require active participation by both electric distribution companies and private entities – EEI cautions against a framework that picks only one group to participate.

### **Electric Company Ownership and Operation of Energy Storage Allows Optimal Deployment of Resources That Benefit All Customers**

Energy storage includes a host of different technologies with vastly different operating characteristics, cost structures, and benefits.<sup>3</sup> The type of energy storage technology deployed in a location is largely determined by an area’s resources, needs, and market structure. As noted in the RFI,<sup>4</sup> energy storage will be a key asset in enabling the state’s clean energy goals. Beyond integrating and supporting renewable generation and transportation electrification, energy storage’s inherent flexibility allows it to provide many other services when deployed at the appropriate location and scale. These services include enhancing electric company operations, optimizing and supporting the energy grid, and enriching the customer experience.

As explained above, electric companies are increasingly using energy storage as a tool in their toolbox to enhance flexibility, reliability, and resiliency across the energy grid. As the owners and operators of the distribution system, electric companies are best positioned to use their expertise and knowledge to identify the most valuable applications and beneficial locations, allowing them to optimally deploy energy storage resources to the energy grid. Electric companies can also leverage economies of scale, well-established financing capabilities, and strategic, long-term grid planning processes to keep deployment costs low and pass savings on to customers.

The ability to tap into multiple revenue streams and to stack the earnings to maximize an asset’s potential will be increased if electric companies are able to own, procure, operate, and manage

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<sup>1</sup> See Edison Electric Institute, “Energy Storage Status Update,” April 2023, <https://www.eei.org/-/media/Project/EEI/Documents/Issues-and-Policy/Energy-Storage/Energy-Storage-Status-Update.pdf>

<sup>2</sup> See New Jersey Board of Public Utilities, *Request for Information*, Docket No. Qo22080540, page 1, [https://nj.gov/bpu/pdf/publicnotice/Notice\\_RFI\\_NJEnergyStorageIncentiveProgram.pdf](https://nj.gov/bpu/pdf/publicnotice/Notice_RFI_NJEnergyStorageIncentiveProgram.pdf)

<sup>3</sup> See Edison Electric Institute, “Harnessing the Potential of Energy Storage,” 2021, [https://www.eei.org/-/media/Project/EEI/Documents/Issues-and-Policy/Energy-Storage/Harnessing\\_Energy\\_Storage\\_Factsheet.pdf](https://www.eei.org/-/media/Project/EEI/Documents/Issues-and-Policy/Energy-Storage/Harnessing_Energy_Storage_Factsheet.pdf)

<sup>4</sup> [https://nj.gov/bpu/pdf/publicnotice/Notice\\_RFI\\_NJEnergyStorageIncentiveProgram.pdf](https://nj.gov/bpu/pdf/publicnotice/Notice_RFI_NJEnergyStorageIncentiveProgram.pdf)

energy storage.<sup>5</sup> Electric companies are best positioned to determine how to maximize the value and cost-effectiveness of energy storage in conjunction with existing regulated assets (such as regulated energy efficiency and demand response assets) as they currently do under Board-approved programs and tariffs and as permitted under FERC Order 2222.

Additionally, as the owners and operators of the distribution system, electric companies have visibility into current grid conditions. This visibility is an additional benefit to electric company ownership and operation of energy storage; it provides electric companies with the necessary information that best maintains the reliability and safety of the distribution system. This enables them to dispatch storage resources with maximum effectiveness and efficiency, in ways that benefit all customers.

Moreover, large-scale, front-of-the-meter battery projects typically have a much greater capacity than behind-the-meter projects. Popular residential batteries, such as those offered by Tesla or LG Chem, top out at 10-20 kW and 10-20 kWh per battery.<sup>6</sup> In contrast, electric company battery projects often range from 0.5 MW/2MWh to as large as 20 MW/80 MWh or more.<sup>7</sup> Moss Landing Energy Storage Facility, one of the largest energy storage projects in the world, recently completed an expansion to 750 MW/3,000 MWh and will provide resource adequacy to Pacific Gas and Electric for the next 15 years.<sup>8</sup> If the goal of the Storage Incentive Program is to meet New Jersey's energy storage goal within the specified timeframe, the Board should design the program to prioritize large-scale energy storage projects.

When permitted to own energy storage and other forms of distributed energy resources (DER), electric companies can more easily enhance and enable the reliability and resiliency of the energy grid. Siting storage and other DER appropriately is acutely important because an individual resource can help or hurt the reliability and resiliency of the broader energy grid depending upon where it is located as well as how and when it is operated. An electric company's provision of reliable service is better facilitated and achievable through storage system ownership and control.

The RFI recognizes the September 2022 Straw's acknowledgement of the "key role" that electric distribution companies will have in building infrastructure to enable the effective dispatch of energy storage devices, but stops short of including utility ownership or operation of devices in NJ SIP. As further explained, this was intended to recognize the existence of New Jersey's restructured competitive market and to encourage private ownership and operation of energy storage devices. Concurrent with encouraging development of a private market for storage, the BPU should permit electric company ownership and operation of storage that could otherwise benefit customers and the grid, and help New Jersey meet its ambitious storage goals.

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<sup>5</sup> See Edison Electric Institute, "Harnessing the Potential of Energy Storage" 2021.

[https://www.eei.org/issuesandpolicy/Energy%20Storage/Harnessing\\_Energy\\_Storage\\_Factsheet.pdf](https://www.eei.org/issuesandpolicy/Energy%20Storage/Harnessing_Energy_Storage_Factsheet.pdf)

<sup>6</sup> See Tesla, *Power + Fact Sheet*, 2023, [https://digitalassets.tesla.com/tesla-contents/image/upload/powerwall-plus-datasheet-na-en\\_001](https://digitalassets.tesla.com/tesla-contents/image/upload/powerwall-plus-datasheet-na-en_001)

<sup>7</sup> See LG Product Info Website, <https://www.lgessbattery.com/us/home-battery/product-info.lg>

<sup>8</sup> See Vistra Corp., *Vistra Completes Milestone Expansion of Flagship California Energy Storage System*, August 2023, <https://investor.vistracorp.com/2023-08-01-Vistra-Completes-Milestone-Expansion-of-Flagship-California-Energy-Storage-System>

## **Electric Company Energy Storage Projects Ensure Benefits to All Customers and Help States Achieve Policy Goals in a More Efficient and Cost-Effective Manner**

When allowed, electric companies across the country are using energy storage to benefit customers and help states achieve their clean energy goals. In New Jersey, PSE&G has deployed a battery storage system in Highland Park to help integrate solar generation. The 0.5 MW/2 MWh battery system provides voltage management and power quality support to the co-located solar farm, which is part of PSE&G's "Solar 4 All" program, and also participates in wholesale markets.<sup>9</sup>

Electric companies' direct participation, ownership, and operation of both energy storage and other DERs is vital to ensure that the benefits described above are realized by all customers, regardless of socio-economic situation. Electric companies, by virtue of the regulatory compact, support markets that private investors may not find attractive. Electric companies have the role of serving all customers.

Equal opportunity and access to technology programs for all New Jersey residents, including those classified as low income, should be supported. The Board should look to successful program designs in other states to determine what makes the most sense in terms of technology targeting. Notably, states like Massachusetts, New York and Rhode Island<sup>10</sup> that have made income qualified technology adoption a priority have done so by allowing electric company ownership of those resources – a clear way to ensure greater penetration of resources, such as private solar, in communities where customers either do not have access to, authority for, or the funds necessary for deployment. These same principles can easily be applied to the deployment of battery storage in New Jersey.

Given the benefits of electric company ownership of storage described above, the Board should clearly articulate electric companies' right to own, procure, and operate energy storage as front-of-meter and behind-the-meter resources, as they do any other technology that assists in the ability to optimize and support the energy grid, to ensure grid's reliability and resiliency, and that maximizes customer benefits while meeting New Jersey's storage and other regulatory requirements. The Board should also explicitly allow electric company-owned energy storage resources to participate in NJ SIP. Some states, including California, Connecticut, Illinois, New York, Massachusetts, and Maine have established laws and/or regulations that explicitly permit investor-owned electric companies to own energy storage resources. The Board should look to these states for guidance on the benefits that can inure to all customers as a result of electric company ownership and operation of these resources.

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<sup>9</sup> See Edison Electric Institute, *Leading the Way: U.S. Electric Company Investment and Innovation in Energy Storage*, June 2021 [https://www.eei.org/-/media/Project/EEI/Documents/Issues-and-Policy/Energy-Storage/Energy\\_Storage\\_Case\\_Studies-062021.pdf](https://www.eei.org/-/media/Project/EEI/Documents/Issues-and-Policy/Energy-Storage/Energy_Storage_Case_Studies-062021.pdf)

<sup>10</sup> See p. 156-157 *Modernizing the Energy Delivery System for Increased Sustainability*. (May 31, 2019). Prepared for Public Service Commission of the District of Columbia by Smart Electric Power Alliance (SEPA). <https://dcpsc.org/PSCDC/media/PDFFiles/HotTopics/GridModernizationFinalReport.pdf>

## Conclusion

As the Board works to finalize its Storage Incentive Program, electric companies should play an integral role in owning, procuring, and operating energy storage resources. This ability will be an important and vital component of achieving New Jersey's energy storage and clean energy goals using cost-effective solutions that benefit all customers. As explained *supra*, electric companies are uniquely positioned to enhance the benefits and value of energy storage for customers and the broader energy grid and, if given the opportunity, will help encourage the deployment of energy storage and other DER technologies throughout the Garden State. Furthermore, the Board should prioritize large-scale, electric company-owned energy storage projects, as these resources will more effectively and efficiently help New Jersey achieve its ambitious storage goal by 2030.

Thank you for the time and opportunity to provide comments on these important issues.

Respectfully submitted,

A handwritten signature in cursive script that reads "Philip D Moeller".

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