

October 20, 2020

***SUBMITTED VIA EMAIL***

[board.secretary@bpu.nj.gov](mailto:board.secretary@bpu.nj.gov)

Aida Camacho-Welch, Secretary of the Board  
Board of Public Utilities  
44 South Clinton Avenue, 9<sup>th</sup> Floor  
Post Office Box 350  
Trenton, NJ 08625-0350

**RE: Docket No. EO20030203 – Investigation of Resource Adequacy Alternatives**

Dear Secretary Camacho-Welch,

Regarding the New Jersey Board of Public Utilities' ("Board") Investigation of Resource Adequacy Alternatives, the U.S. Energy Storage Association ("ESA") respectfully submits these draft comments for the Board's consideration. The issue of energy storage is relevant to the Board's investigation into resource adequacy. ESA urges the Board to issue a request for comment in a new docket dedicated to a comprehensive approach to energy storage so that the concerns raised here may be fully examined by the Board and stakeholders.

ESA is the national trade association dedicated to energy storage, working toward a more resilient, efficient, sustainable, and affordable electricity grid—as is uniquely enabled by energy storage. With over 200 members, ESA represents a diverse group of companies, including independent power producers, electric utilities, energy service companies, financiers, insurers, law firms, installers, manufacturers, component suppliers, and integrators involved in deploying energy storage systems around the globe. Further, our members work with all types of energy storage technologies and chemistries, including lithium-ion, advanced lead-acid, flow batteries, zinc-air, liquid air, compressed air, and pumped hydropower, among others.

**BACKGROUND**

On May 13, 2018, Governor Murphy signed the New Jersey Clean Energy Act ("CEA"), which directed the Board to prepare a report concerning energy storage system(s) ("ESS") needs and opportunities in the state, and no more than six months after the completion of the report to initiate a proceeding on how to achieve a goal of 600 MW of ESS by 2021 and 2,000 MW of ESS by 2030<sup>1</sup>. The Board contracted with

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<sup>1</sup> Clean Energy Act (A3723), Signed by Governor Murphy in May 2018, available at [http://www.njleg.state.nj.us/2018/Bills/AL18/17\\_.PDF](http://www.njleg.state.nj.us/2018/Bills/AL18/17_.PDF). Section 1(d) states: "No later than six months after completion of the report, the board shall initiate a proceeding to establish a process and mechanism for achieving the goal of 600 megawatts of energy storage by 2021 and 2,000 megawatts of energy storage by 2030."

Rutgers University to prepare the report, which was published on May 23, 2019.<sup>2</sup> Since then, the Board has made significant progress implementing the Clean Energy Act, opening proceedings and issuing orders to advance energy efficiency, offshore wind, solar, and electric vehicles. However, the Board has taken no further action to achieve the CEA's 2021 or 2030 ESS targets, despite statutory direction in the CEA to open such docket within 6 months of the publication of the Rutgers University report. On January 27, 2020, Governor Murphy issued an Energy Master Plan that reiterated the state's commitment to the goals of 600 MW of ESS by 2021 and 2000 MW by 2030.<sup>3</sup> ESA submits the following comments in an effort to support the Board's and the state's commitment to energy storage.

## **ENERGY STORAGE AS RESOURCE ADEQUACY**

The Rutgers report acknowledges that ESS have value at the bulk power level. "Energy storage can facilitate, and in some cases enable, the introduction of large-scale offshore wind resources or large-scale solar farms by firming the resource at or before the points of interconnection with the transmission network, time shifting to when electricity is needed, and possibly deferring new transmission investments."<sup>4</sup> As the Rutgers Report notes, the Massachusetts Department of Energy Resources and Mass Clean Energy Study found total net system benefits of \$859 million to \$1.2 billion from deploying 1766 MW of ESS.<sup>5</sup> However, in order to incorporate ESS effectively into resource adequacy planning, the Board and other policymakers must have a clear understanding of the value of ESS at the bulk power level, including accounting for mechanisms that compensate ESS. To provide context, PJM's Board of Directors recently approved reforms to the resource adequacy accreditation of energy storage, which will also update how ESS participate in PJM's capacity market<sup>6</sup>. The reforms are being drafted into tariff language and are expected to be submitted to the Federal Energy Regulatory Commission for approval shortly. Whether or not New Jersey continues its participation in the PJM capacity market or pursues an alternative resource adequacy policy, PJM's proposal will continue to control the accounting for the resource adequacy contribution of storage and is thus relevant for the valuation of ESS.

## **COMPREHENSIVE STORAGE DOCKET**

New Jersey has committed to ESS on multiple occasions, and ESA looks forward to supporting the Board to follow through on that commitment. Goal 2.3.6 of Governor Murphy's Energy Master Plan ("EMP")<sup>7</sup> commits to developing a mechanism to compensate ESS for their resilience, low carbon, and transmission and distribution system benefits. In its Final Order on Energy Efficiency and Peak Demand Reduction Programs, the Board declined to include energy storage in peak demand programs, stating,

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<sup>2</sup> New Jersey Energy Storage Analysis Final Report, Rutgers University, May 2019, available at <https://www.bpu.state.nj.us/bpu/pdf/commercial/New%20Jersey%20ESA%20Final%20Report%2005-23-2019.pdf>

<sup>3</sup> Energy Master Plan, Issued January 2020, available at [https://nj.gov/emp/docs/pdf/2020\\_NJBPU\\_EMP.pdf](https://nj.gov/emp/docs/pdf/2020_NJBPU_EMP.pdf)

<sup>4</sup> New Jersey Energy Storage Analysis Final Report

<sup>5</sup> Massachusetts Department of Energy Resources and Mass Clean Energy Center, State of Charge: A Comprehensive Study of Energy Storage in Massachusetts, September 2016, available at <https://www.mass.gov/service-details/energy-storage-study>

<sup>6</sup> See draft language revisions under the Reliability Assurance Agreement (RAA) related to the Joint Stakeholder Package for Effective Load Carrying Capability endorsed by stakeholders at the September 17 MRC and MC, available at <https://www.pjm.com/-/media/committees-groups/task-forces/ccstf/2020/20201008/20201008-item-03-raa-language.ashx>

<sup>7</sup> Energy Master Plan, Issued January 2020, available at [https://nj.gov/emp/docs/pdf/2020\\_NJBPU\\_EMP.pdf](https://nj.gov/emp/docs/pdf/2020_NJBPU_EMP.pdf)

“The Board is committed to exploring the use of storage as a means of reducing peak load but will address issues surrounding storage holistically as part of a separate docket.”<sup>8</sup> Now is the time to initiate that docket.

Already the delay of initiating an ESS proceeding is having negative consequences for New Jersey ratepayers. Utility peak demand reduction programs are moving forward without the ability to utilize ESS even though it may be cost effective to do so, following the Board’s statement that “utility programs looking to use storage to reduce peak demand should be deferred until the conclusion of the dedicated storage proceeding.”<sup>9</sup> Without guidance on a path forward for energy storage, New Jersey risks falling further behind other states in the region such as New York and Connecticut in the development of its energy storage industry, missing out on critical economic and ratepayer benefits. In New York, for example, Con Edison recently avoided a \$1.2 billion substation upgrade through non-wires alternatives including a 2 MW ESS.<sup>10</sup>

Energy storage is being deployed in 18 other states for resource adequacy, resilience, and in support of clean energy goals. In the Preliminary Root Cause Analysis filed on October 6 in response to this summer’s black-outs, the California Public Utilities Commission, California Energy Commission and California Independent System Operator called on the state to ensure that the 2100 MW of storage and hybrid storage resources currently under construction are online by summer 2021.<sup>11</sup> Regulators in Nevada approved NV Energy’s plan to build 590 MW of energy storage in December.<sup>12</sup> Arizona Public Service is procuring 850 MW of storage for system capacity in place of gas-fired power.<sup>13</sup> New Jersey’s neighbors are also making investments in energy storage: New York’s Climate Leadership and Community Protection Act included an energy storage target of 3,000 MW by 2030<sup>14</sup> and is already procuring hundreds of MW of storage for system capacity.<sup>15</sup> Fellow PJM state Virginia set a mandate of 3,100 MW of energy storage by 2035 as a part of Virginia Clean Economy Act,<sup>16</sup> and its utility Dominion

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<sup>8</sup> Order Directing the Utilities to Establish Energy Efficiency and Peak Demand Reduction Programs, Board of Public Utilities, June 10, 2020, available at <https://www.bpu.state.nj.us/bpu/pdf/boardorders/2020/20200610/8D--Order%20Directing%20the%20Utilities%20to%20Establish%20Energy%20Efficiency%20and%20Peak%20Demand%20Reduction%20Programs.pdf>

<sup>9</sup> Order Directing the Utilities to Establish Energy Efficiency and Peak Demand Reduction Programs

<sup>10</sup> State of Storage in New York, New York Department of Public Service, April 2020, available at <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bEE291D9C-F169-4B37-97EB-7182C5F062BF%7d>

<sup>11</sup> Preliminary Root Cause Analysis: Mid-August 2020 Heat Storm, prepared by California Independent System Operator, California Public Utilities Commission, California Energy Commission, October 2020, available at <http://www.caiso.com/Documents/Preliminary-Root-Cause-Analysis-Rotating-Outages-August-2020.pdf>

<sup>12</sup> PUCN Approves 1,190 Megawatts of New Solar Energy, 590 Megawatts of Additional Energy Storage, NV Energy <https://www.nvenergy.com/about-nvenergy/news/news-releases/pucn-approves-1190-megawatts-of-new-solar-energy-590-megawatts-of-additional-energy-storage>

<sup>13</sup> “Batteries Edge Out Natural Gas Peaking Plants in Arizona RFP,” Engineering News Record, March 20, 2019, available at <https://www.enr.com/articles/46550-batteries-edge-out-natural-gas-peaking-plants-in-arizona-rfp>

<sup>14</sup> New York Climate Leadership and Community Protection Act, available at <https://legislation.nysenate.gov/pdf/bills/2019/S6599>

<sup>15</sup> “N.Y. regulators approve, with conditions, 316-MW battery storage project in Long Island City,” Transmission Hub, October 24, 2019, available at <https://www.transmissionhub.com/articles/2019/10/n-y-regulators-approve-with-conditions-316-mw-battery-storage-project-in-long-island-city.html>

<sup>16</sup> Virginia Clean Economy Act, available at <https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+CHAP1193>  
<https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+CHAP1193>

is procuring up to 250 MW of storage in line with projections of capacity needs in its integrated resource plan.<sup>17</sup>

**Conclusion**

ESA appreciates the opportunity to provide these comments on the Investigation of Resource Adequacy Alternatives, and respectfully requests that the Board promptly initiate a proceeding to holistically explore the role of ESS in achieving New Jersey’s energy goals and offering substantial benefits to ratepayers.

Sincerely,



Julian Boggs  
State Policy Director  
U.S. Energy Storage Association

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<sup>17</sup> “Dominion Energy Virginia Quadruples Renewable Energy and Energy Storage in Long-Term Integrated Resource Plan,” May 1, 2020, available at <https://news.dominionenergy.com/2020-05-01-Dominion-Energy-Virginia-Quadruples-Renewable-Energy-and-Energy-Storage-in-Long-Term-Integrated-Resource-Plan>