



VIA ELECTRONIC FILING

April 17, 2023

Hon. Michelle L. Phillips  
Secretary  
New York State Public Service Commission  
Empire State Plaza, Agency Building 3  
Albany, New York 12223-1350

**Re:** Case 18-E-0130 – In the Matter of Energy Storage Deployment Program.

Dear Secretary Phillips:

The New York Battery and Energy Storage Technology Consortium (NY-BEST), along with the Alliance for Clean Energy New York (ACENY), Advanced Energy United (United), and Solar Energy Industries Association (SEIA) submits these joint reply comments in response to initial comments received on “New York’s 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage,” which was submitted by Staff of the New York State Department of Public Service and the New York State Energy Research and Development Authority (NYSERDA) on December 28, 2022.

We appreciate the opportunity to share these comments. We can be reached at [info@ny-best.org](mailto:info@ny-best.org) or by phone at 518-694-8474. Thank you.

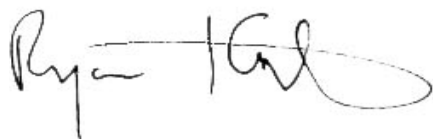
Sincerely,

A handwritten signature in black ink, appearing to read "William Acker".

Dr. William Acker  
Executive Director

A handwritten signature in cursive script, reading "Anne Reynolds".

Anne Reynolds  
Executive Director  
Alliance for Clean Energy New York

A handwritten signature in cursive script, reading "Ryan Katofsky".

Ryan Katofsky  
Managing Director  
Advanced Energy United

A handwritten signature in cursive script, reading "Valessa Souter-Kline".

Valessa Souter-Kline  
Northeast Regional Director  
Solar Energy Industries Association

**Clean Energy Industry**  
**REPLY COMMENTS**  
**New York's 6 GW Energy Storage Roadmap: Policy Options**  
**for Continued Growth in Energy Storage**

Case 18-E-0130 – In the Matter of Energy Storage Deployment Program

**INTRODUCTION**

The New York Battery and Energy Storage Technology Consortium (NY-BEST), along with the Alliance for Clean Energy New York (ACENY), Advanced Energy United (United), and Solar Energy Industries Association (SEIA), herein after referred to as the Clean Energy Industry (or “we” / “our”) submit these reply comments in response to initial comments received on “New York’s 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage,” (“Energy Storage Roadmap”) which was submitted by Staff of the New York State Department of Public Service and the New York State Energy Research and Development Authority (NYSERDA) on December 28, 2022. Although we did not file our initial comments jointly, given our closely aligned positions, we are filing joint reply comments.

The Clean Energy industry organizations include the following:

**NY-BEST** is a not-for-profit industry trade association with a mission to grow the energy storage industry in New York. We act as a voice of the energy storage industry for more than 180 member organizations on matters related to advanced batteries and energy storage technologies. Our membership includes global corporations, start-ups, project developers, leading research institutions and universities, and numerous companies involved in the electricity and transportation sectors.<sup>1</sup>

**ACE NY** is a member-based organization with a mission of promoting the use of clean, renewable electricity technologies and energy efficiency in New York State to increase energy diversity and security, boost economic development, improve public health, and reduce air pollution. Our diverse membership includes companies engaged in the full range of clean energy technologies as well as consultants, academic and financial institutions, and not-for-profit organizations interested in our mission.

**Advanced Energy United** is a national association of businesses that are making the energy we use secure, clean, and affordable. United works to accelerate the move to 100% clean energy and electrified transportation in the U.S. Advanced energy encompasses a broad range

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<sup>1</sup> NY-BEST comments represent the interests of the organization as a whole and not the views of any single member. Our members have diverse interests and the organization’s views are intended to be reflective of the energy storage industry collectively.

of products and services that constitute the best available technologies for meeting our energy needs today and tomorrow. These include energy efficiency, demand response, energy storage, solar, wind, hydro, nuclear, electric vehicles, and the smart grid. United represents more than 100 companies in the \$238 billion U.S. advanced energy industry, which employs 3.3 million U.S. workers, including 157,000 individuals in the Empire State.

**SEIA** is leading the transformation to a clean energy economy, creating the framework for solar to achieve 30% of U.S. electricity generation by 2030. SEIA works with its 1,000 member companies and other strategic partners to fight for policies that create jobs in every community and shape fair market rules that promote competition and the growth of reliable, low-cost solar power. Founded in 1974, SEIA is the national trade association for the solar and solar + storage industries, building a comprehensive vision for the Solar+ Decade through research, education and advocacy. There are more than 730 solar companies based in New York across the entire solar value chain, including installers, manufacturers and service providers, as well as a variety of regional or national businesses with projects and operations in the Empire State.

The Clean Energy Industry appreciates the input provided by stakeholders in this proceeding and we are encouraged by the significant level of support demonstrated for the Energy Storage Roadmap in the initial comments. We support many of the comments submitted and disagree with some of the assertions made in a small number of comments. Rather than respond to every commenter, we have prioritized our reply comments and provide responses to those comments where we believe the Commission would benefit from additional information to strengthen the record.

We reiterate our support for the proposed Energy Storage Roadmap and we urge the Commission to act expeditiously to issue an Order to adopt a new energy storage goal of 6 GW by 2030, approve the Roadmap and authorize the programs that are necessary to implement it.

## **CLEAN ENERGY INDUSTRY REPLY COMMENTS AND RECOMMENDATIONS**

### **Energy Storage is a Cost-Effective Solution That is Needed Now**

The Clean Energy Industry strongly supports Staff's analysis and recommends that the Commission adopt a new energy storage deployment goal of 6 GW by 2030. We respectfully disagree with comments from parties<sup>2</sup> suggesting that the 6 GW goal is unjustified, and the State should delay deployment of energy storage until more renewable energy is deployed on the grid. The analysis performed by E3 in conjunction with the Roadmap indicates that the State will need approximately 12 GW of energy storage by 2040 and more than 17 GW by 2050 to achieve a decarbonized electric grid, as required by the Climate Leadership and Community Protection Act (CLCPA). These findings

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<sup>2</sup> See comments from NYISO and Multiple Intervenors

are consistent with other recent studies <sup>3,4</sup> which found the need for similar levels of energy storage on the State's grid. The clean energy industry reasserts that by acting now to establish a new 2030 goal and programs to achieve it, the State and developers will have the opportunity to leverage the Federal Investment Tax Credit, in tandem with new State funding mechanisms, thus putting the State on a path to meet the State's long-term energy storage needs in a timely and cost-effective manner. It will also help ensure that as renewable resources come on-line, the full system benefits of these resources are realized.

Importantly, deploying energy storage on the grid in the near term will also support the State's goals to retire fossil-fueled peaking generation by adding needed capacity to the State's electric grid. Waiting to deploy energy storage will only prolong the length of time these generators have to run, and continue harmful environment impacts in disadvantaged communities. As discussed in the Roadmap, energy storage provides many cost-effective grid services today, from relieving grid congestion to shaving peak load to supporting renewable integration.

NYISO's comments suggest that storage deployment should not outpace renewable energy resources because it would place additional burdens on the grid and costs on ratepayers. This fails to recognize that the 6 GW storage goal is aligned with the State's 70 percent renewable energy goal and that failure to timely deploy storage will severely limit the State's ability to optimize renewable resources as they come on-line. NYISO's assertion also erroneously assumes that storage system operators will ignore the basic economics of storage and charge the systems at uneconomic times, causing undo stress to the grid. This is simply not the case. Energy storage system operators are economically incentivized to charge during periods of low demand and discharge during periods of high demand, otherwise the systems would simply be economically unsustainable.

### **Establish New Index Storage Credit for Bulk Procurement**

The Clean Energy Industry reiterates its support for the Index Storage Credit (ISC) program for bulk energy storage procurements. The ISC program provides a flexible program that is compatible with markets and provides greater revenue certainty to developers through financial hedging. We appreciate the comments from several parties supporting the ISC bulk procurement program and providing suggestions for its design.

We strongly urge LIPA and NYPA to participate in the ISC program in the same manner as the State's Investor-Owned Utilities to maximize system benefits and provide a strong, clear, consistent signal from the State -- through a predictable procurement mechanism -- to energy storage developers. Such an approach is preferable to forcing potential market participants to navigate a triad of state authorities who each administer different programs and initiatives. Many of the State's other clean

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<sup>3</sup> Integration Analysis for the Final Scoping plan, NYS Climate Action Council, December 2022

<sup>4</sup> 2021-2040 System & Resource Outlook, NYISO, September 2022

energy programs are financed and administered through similar mechanisms as the proposed ISC and we do not see a reason to deviate from this approach for the State's energy storage program.

Several parties shared comments in support of the ISC and provided feedback on the ISC program design, raising some valid points for consideration. In response to comments from Clearway raising concerns about the finance-ability of the ISC, we reiterate NY-BEST's recommendation that the State consider establishing a limitation on liability. Under the settlement process proposed in the Roadmap, if the Reference Price exceeds the Strike Price, the difference would be paid by the project to NYSERDA or netted from future payments from NYSERDA to the project. Project developers have raised concerns that this potential liability will undermine finance-ability and increase financing costs. To lower the cost of financing and better ensure the viability of bulk projects, we continue to urge the State to consider placing a limitation on what a project could owe NYSERDA. We provided some specific options for how this can be achieved in our initial comments.

### **Support Storage Deployment on Long Island**

As noted in the Roadmap and in our initial comments, the Long Island grid stands to benefit greatly from energy storage deployments. To realize this potential, we respectfully provide the following responses to LIPA comments and reinforce recommendations from other parties.

1. ISC Participation – We appreciate LIPA's comments indicating that they are considering the ISC program for bulk procurement. As discussed above, we strongly encourage LIPA to participate in the State's Index Storage Credit program for bulk energy storage procurement, as envisioned in the Roadmap and in the same manner as the State's investor-owned utilities, to maximize system benefits, ensure a streamlined statewide approach to procurement and reduce administrative costs. We strongly oppose LIPA's suggestion that they be permitted to compete against the private sector with their own bulk energy storage projects for ISC credits.
2. Peaker Replacement – We agree with LIPA's comments that energy storage in Zone K can significantly reduce reliance on peaker plants and produce benefits for disadvantaged communities. However, we disagree with LIPA's comments that energy storage should be required to be located on or near existing generating sites (e.g., connected to the same substations) to support peaker displacement and produce benefits for disadvantaged communities.<sup>5</sup> Energy storage systems that are strategically connected to the grid can displace peaker generation, reduce harmful emissions and benefit local communities without having to be co-located or near the generation site.
3. LIPA participation in Retail Program – The Clean Energy Industry strongly encourages the Commission and NYSERDA to ensure that the Retail Program proposed in the Roadmap is available on Long Island in the near term. We echo NineDot Energy's comments and recommend

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<sup>5</sup> LIPA Comments, p 2

that a working group be formed with DPS, NYSERDA, LIPA and PSEG-LI and industry to examine the current retail delivery and supply rate structures, including VDER rates and charging tariffs, to ensure a cohesive pathway for retail storage projects.

### **Continue to Limit Utility Ownership of Energy Storage**

The Clean Energy Industry recognizes that utilities have a critical role to play in the attainment of 70% renewable energy generation by 2030 and a zero-emissions electric grid by 2040. However, the expanded ownership and operation of energy storage as proposed in comments from the Indicated Utilities, and to a lesser degree by Con Edison and Orange & Rockland, is unjustified and undermines the Commission's previously established and well-founded regulatory framework on utility ownership, as well as the State's goals to develop a strong and thriving energy storage industry in New York State.

The Clean Energy Industry reiterates our opposition to the expanded utility ownership of energy storage, which would require regulatory changes, raises serious market fairness concerns, and would greatly reduce opportunities for the private sector. Thus, we respectfully disagree with the recommendation in Indicated Utilities' initial comments that utility-owned storage "be included within a portfolio of available pathways, reflecting an 'all-hands-on-deck' approach".<sup>6</sup>

We appreciate Con Edison's and Orange and Rockland's recognition that energy storage can and should play a key role in enabling faster electrification. Their Bridge to Wires program proposal identifies the new and fast-emerging need to establish a framework to explicitly support electrification in the downstate area with strategic storage projects. We agree that storage can and should play a significant role in enabling electrification. However, we do not agree that utility ownership of storage is essential to address this need.

As stated in ACE NY's initial comments, the clean energy industry agrees with and continues to support the policies previously articulated by the Public Service Commission that restrict regulated utilities from owning and operating generation and storage except in limited circumstances and situations. Since the utility ownership policies were reiterated by the Commission, there have been many additional complex tasks assigned to the utilities to support New York's clean energy transition, such as transmission planning. In short, New York's utilities have a lot on their plate and changing the utility ownership policy will distract from those efforts.

Any claims that utility ownership can reduce prices is likely to be more than offset by the hollowing out of competition. Further, there is no shortage of private entities or capital looking to build renewable energy in New York. The competitive market response to the State's clean energy policies

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<sup>6</sup> See Indicated Utilities Comments in this docket.

has been robust, which is a strong indicator that New York’s current approach is viable and that the competitive market is ready and able to do its part to meet the important goals of the CLCPA.

The Clean Energy Industry agrees with the Roadmap that the following metrics clearly demonstrate the rapid growth of the storage industry’s interest in New York State, since the 2018 Roadmap: abundant storage projects in the Interconnection Queue of the New York Independent System Operator, and robust replies under, and awards pursuant to, NYSERDA’s RFPs. These metrics clearly illustrate a thriving energy storage investment by the independent private sector, thereby countering the need for IOU-owned storage.

With respect to utility-ownership of energy storage, we agree with of IPPNY’s initial comments on the Energy Storage Roadmap with respect to IOU-owned storage and would like to underscore the following points in IPPNY comments:

***Public Service Law Requires Competitive Procurement of Energy Storage – Not IOU-Ownership.***

“In compliance with Section 74 of the Public Service Law, the PSC adopted an energy storage goal for 2030 and a deployment policy that strictly limits the ability of IOUs to own storage. The PSC found no compelling reason to modify the rules it adopted in its Reforming the Energy Vision Framework Order limiting IOU-ownership of storage.” With this in mind, we urge the PSC to reaffirm its rules restricting IOU-owned storage in its order adopting the 6 GW storage goal.

***The Roadmap Cites Evidence of Successful Private Sector Energy Storage Investment.***

The Roadmap states that existing retail and residential storage programs have been successful. A total of 1,301 megawatts (MW) of storage, representing about 87% of the 2025 target, has been awarded or contracted as of October 2022 – of that, over 130 MW installed. Approximately 12,000 MW of proposed energy storage projects are presently in either distribution-level or wholesale-level interconnection queues in New York. The Roadmap also notes that over 11,000 MW of projects are presently in the NYISO queue; notably, the vast majority of these projects are not expected to move forward to completion without further economic support.

***IOU Cost of Capital May be Lower Because it Places All of the Risk on Captive***

***Ratepayers.*** The Roadmap submits that utilities be allowed to own, or contract for, storage for transmission and distribution (“T&D”) services. The Roadmap suggests that IOU-ownership of storage could reduce ratepayer costs due to the low cost of capital for IOUs. We agree with IPPNY that while “it may appear that IOUs could develop and own energy storage at lower cost due to their lower cost of capital, IOUs may have a lower cost of capital than the private sector largely because IOUs are guaranteed recovery of their costs, including cost overruns, from their captive ratepayers.” Cost overruns have been a pattern for prior monopoly IOU construction projects that were passed through to captive ratepayers. In the case of privately-owned energy storage projects, the investors bear the



risk of cost overruns and loss, not electricity consumers. There has been no demonstration why utilities cannot contract with private, independent owners of storage to meet storage as a transmission only asset need rather than allow IOUs to own these assets.”

***If IOUs Own Storage for T&D Services, They Should Not Be Allowed to Bid Such Assets into the NYISO’s Markets.*** The Roadmap’s proposal mentions the concern that if IOUs are allowed to own storage to provide T&D services, then there is the potential that the IOUs eventually will request permission to bid these projects into the wholesale market. Allowing the IOUs to own storage for T&D services could create a substantial loophole in the PSC’s long-standing policy to limit IOU-ownership of energy storage. “Thus, consistent with the recommendation in the Roadmap that such assets be used to provide only non-market T&D services, if IOUs are allowed to own storage for T&D services, they should not be allowed to bid these projects into the wholesale market at any future time.”

Finally, allowing IOUs to own storage and participate in wholesale markets would establish an uneven playing field for utilities over private sector operators of storage – utilities do not have to pay interconnection costs, charging tariffs, land acquisition costs, etc. and thus have a huge competitive advantage over the private sector. If the PSC determines IOU-owned storage projects would be valuable to the wholesale market, the PSC should require the IOUs to divest them to private companies and level the playing field.

### **Support for Utility Investment to Facilitate Behind-the-Meter Storage**

As we indicated in our respective initial comments, Behind-the-Meter (BTM) energy storage applications bring significant value to ratepayers and the grid. The Clean Energy Industry appreciates Con Edison’s and Orange & Rockland’s comments in support of BTM storage and, we generally support their recommendations to establish a new separate utility BTM storage incentive, assuming this program would be additive to the storage MW funded through the Roadmap and would be funded by the utilities. As we understand the proposal, this new proposed BTM program would co-exist with NYSEERDA’s retail storage program to boost underutilized but beneficial BTM installations. While we are interested in learning more about the proposal and seeing the details, we agree that such utility incentives can provide meaningful value to developers and customers and spur project development.

### **Larger Distribution Connected Storage (> 5MW)**

We note that in initial comments, both NY-BEST and ACE NY/United/ACP/SEIA identified the need to provide a path to market for distribution-connected storage greater than 5 MW. There are many large customers, both existing and new, that are considering adding storage to their sites for demand management and resiliency purposes. However, the 5 MW limit on Retail projects and their lack of participation in wholesale markets leaves such projects ill-suited to either the Retail or Bulk procurement approaches. As noted by NY-BEST, these projects can provide unique benefits including

being able to site close to load, providing distribution benefits, and shorter typical interconnection timelines. We encourage the Commission to ensure a pathway to market for these projects.

### **Support Storage as a Transmission Asset**

The Clean Energy Industry strongly supports treatment of storage as a transmission asset, providing state policymakers with a cost-effective tool that can increase transmission capacity and integrate renewables in New York State much more quickly than linear transmission buildout, which can take as much as a decade from planning to energization. We commend the Roadmap for its support of the inclusion of storage as a potential transmission solution within the NYISO transmission planning processes, including the Public Policy Transmission Planning Process.<sup>7</sup> We respectfully disagree with NYISO's comments that storage simply injects (or removes) energy from the transmission system and cannot aid in moving electricity on the transmission system as do transmission facilities<sup>8</sup>. Such a characterization ignores the transmission services that the Roadmap wisely noted storage can provide, including contingency support that can serve to increase the transfer capability (both voltage and thermal) of bulk power facilities. Indeed, the NYISO's comment that storage cannot change the rating of transmission facilities misses the point that storage as transmission can act to relieve security constraints in the system, allowing customers to access transfer capability otherwise unavailable to it.

### **Incentivize Domestic/New York Content**

The Clean Energy Industry organizations individually and collectively support the development of a domestic supply chain and manufacturing base for energy storage. NY-BEST in particular is actively working to further grow New York's energy storage ecosystem from cells to packs to battery gigafactories. New York is home to a rapidly evolving energy storage ecosystem with unique resources and assets to draw upon to grow this industry.

To that end, the Clean Energy Industry joins other commentors<sup>9</sup> in urging the Commission to incorporate bonus points or other similar mechanisms into the Roadmap storage programs to reward projects that include domestic New York content. Given that the State's storage supply chain is still growing, we suggest that this not be a strict requirement at this time. However, incorporating measures that reward projects for including New York content will help incentivize the industry's use of New York suppliers and manufacturers, grow the industry in New York and create significant additional economic benefits for the State.

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<sup>7</sup> An energy storage project was removed from consideration in the ongoing Long Island Offshore Wind Export Public Policy Transmission Need because the NYISO tariff does not include provisions for evaluating or considering storage as transmission.

<sup>8</sup> See NYISO comments in this docket.

<sup>9</sup> See comments from Urban Electric Power in this docket.

## **CONCLUSION**

The Clean Energy Industry greatly appreciates the comprehensive and thoughtful comments submitted by the parties. As discussed in our above comments, we support the proposed Energy Storage Roadmap and urge the Commission to act expeditiously to issue an Order to adopt a new energy storage goal of 6 GW by 2030, approve the Roadmap and the programs – with our suggested modifications - that are necessary to implement it. We stand ready to assist the Commission and Staff with any questions you may have on these comments. Thank you for the opportunity to share these reply comments.