





VIA ELECTRONIC FILING

October 27, 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), and the Solar Energy Industries Association (SEIA), submits these comments in response to the Draft Supplemental Generic Environmental Impact Statement prepared in connection with proposed actions to be taken by the New York State Public Service Commission (Commission) as proposed in "New York's 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage" and its associated update to the 2030 State target for the installation of qualified energy storage systems and programs pursuant to Public Service Law (PSL) §74.

We appreciate the opportunity to share these comments to express our support and augment the record. We can be reached at info@ny-best.org or by phone at 518-694-8474. Thank you.

Sincerely,

Dr. William Acker Executive Director

WillVAM

Anne Reynolds

Anne Reynolds Executive Director Alliance for Clean Energy New York

Valessa Souter-Kline Northeast Regional Director

Solar Energy Industries Association

Clean Energy Industry DRAFT SUPPLMENTAL GENERIC ENVIRONMENTAL IMPACT STATEMENT In Relation to

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), and the Solar Energy Industries Association (SEIA), herein after referred to as the Clean Energy Industry (or "we"/ "our") submits these comments in response to the Draft Supplemental Generic Environmental Impact Statement prepared in connection with proposed actions to be taken by the New York State Public Service Commission (Commission) regarding the update to the 2030 State target for the installation of qualified energy storage systems and programs pursuant to Public Service Law (PSL) §74, as outlined in the proposed "New York's 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage," ("6 GW Roadmap"). The 6 GW Roadmap was submitted to the Commission by Staff of the New York State Department of Public Service (DPS) and the New York State Energy Research and Development Authority (NYSERDA) on December 28, 2022.

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.¹

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.

¹ 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.

SEIA, the Solar Energy Industries Association (SEIA), is the national trade association for the United States solar and storage industries. 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.

Support For Draft SGEIS Findings

The Clean Energy Industry appreciates the comprehensive and thoughtful analysis prepared by Staff in the Draft SGEIS. We provide these comments to further augment and strengthen the record in support of the 6 GW Roadmap and for increasing the State energy storage deployment goal to 6 GW by 2030. The increased goal is essential to put the State on a path to decarbonize the State's electric grid cost-effectively and reliably by 2040, as required by the Climate Leadership and Community Protection Act (CLCPA).

Energy storage fulfills many critical roles for achieving the State's clean energy future. As intermittent power sources like wind and solar provide increasing amounts of New York's electricity, storage will be relied upon to provide flexibility and controllability, smoothing and time-shifting renewable generation and minimizing curtailment. Energy storage can be deployed to store and dispatch energy when and where it is most needed. Storage is essential to eliminating the State's reliance on fossil-fueled generation and to meeting peak power needs and displacing the State's oldest and dirtiest generating assets. Leveraged appropriately, energy storage can reduce costs associated with meeting peak electric demands and increase grid flexibility, efficiency, and energy security. Additionally, energy storage can stabilize both supply and load during peak electric usage and can help keep critical systems online.

The Draft SGEIS appropriately evaluates the environmental impacts associated with the recommendations in the 6 GW Roadmap and builds upon the 2018 GEIS adopted in conjunction with the Commission's 2018 Energy Storage Roadmap Order. It accurately notes that the recommendations in the 6 GW Roadmap are anticipated to engender overall positive environmental and social impacts, primarily by improving grid resiliency, reducing CO2 emissions and promoting job growth and that any potential adverse impacts can be mitigated through a variety of actions.

We agree with the Draft SGEIS Findings Statement:

Overall findings suggest that adverse direct environmental impacts of the 6 GW Roadmap are likely to be minimal and a variety of mitigation measures exist to minimize such impacts. The Supplemental Generic Environmental Impact Statement (SGEIS) considers three types of energy storage technologies: batteries, thermal, and mechanical storage. Risks exist across all three technology types, most notably: public safety risks from battery fires and risk of soil and groundwater contamination due to improper disposal of battery-related waste. Section 5.2 provides a summary of the environmental impacts across

the three technology types. Because battery storage is expected to be the technology deployed to cover the majority of new storage, this chapter focuses on the environmental impacts of battery storage. The analysis of environmental impacts is largely qualitative because the 6 GW Roadmap is technology agnostic and, as a result, the exact mix and location of energy storage technologies that will be implemented under the 6 GW Roadmap is uncertain. Energy storage's flexibility, in terms of modularity, potential multi-use applications, and in some cases mobility, further complicates projecting the likely types, sizes, and application of energy storage into the future.²

Recommendations for Draft SGEIS

The Clean Energy Industry offer the following additional information to augment the Draft SGEIS:

1. Battery Storage - Public Health and Safety

The Clean Energy Industry appreciates the discussion in the Draft SGEIS of public health and safety, particularly in relation to lithium-ion batteries. As discussed in the SGEIS, batteries, and Li-ion batteries in particular, are flammable, and fire risk associated with battery storage is an important safety consideration that must be managed. Battery Energy Storage Systems (BESS), operate under a controlled regulatory regime with oversight at federal, state, and local levels, and must go through several layers of testing in a multi-year permitting process to mitigate fire risk. Thermal runaway events are generally rare and adequate preventive measures can decrease the chances of thermal runaway and limit the impact of such events. Battery management and thermal management systems, proper installation, safe transport, compliance with codes, standards and regulations can mitigate these hazards.

The energy storage industry is committed to safely deploying BESS and is continuously working to develop and strengthen standards and best practices for BESS deployment. International, national and state codes and standards related to BESS are regularly reviewed and updated based on increased research, scientific findings, field experience and lessons learned. To that end, the Clean Energy Industry supports the Inter-agency Battery Safety Working group established by Governor Hochul in response to battery storage fires in New York this past summer. We look forward to working with the Working Group to review its key findings and implement recommendations to support the continued safe deployment of BESS in New York. In the interim, the industry has re-doubled its efforts to ensure full compliance with all applicable codes and standards in the safe operation of BESS systems.

² Draft SGEIS p. 5-1.

2. Minerals extraction

The Draft SGEIS briefly discusses the complex value chains involved in sourcing metals and materials for lithium-ion batteries and includes references to various studies quantifying life cycle associated with lithium mining.

Missing from the analysis is the larger context within which battery mineral extraction is occurring. In a 2020 Report, the International Energy Agency estimated clean energy technologies, including wind turbines, solar panels, energy storage, EVs and other clean-energy infrastructure required 7 million tons of minerals³ and approximately half of this was for batteries and EVs. The IEA also projects that clean energy related minerals extraction will grow to more than 28 million tons by 2040.

Notably, the oil, gas and coal industry, by contrast, collectively extracted the equivalent of 15 billion metric tons in 2019.⁴ And importantly, these industries will need to extract these levels annually into the future to keep supplying energy. Clean energy technologies, on the other hand, can typically use extracted materials in their products for several years to decades or, if recycled, even longer.

Further, the Inflation Reduction Act and other Federal initiatives, such as the Department of Energy's Li-Bridge program, are working to incentivize and secure the mineral supply chain for clean energy technologies and batteries. Battery manufacturers are also advancing new battery chemistries and committing to the use of recycled minerals to limit certain mineral extractions.

3. <u>Waste Management</u>

The Draft SGEIS includes a full discussion on battery recycling and includes a reference to the battery recycling facility operated by the global company, Li-Cycle Corp in Rochester. Li-Cycle is an industry leader in lithium-ion battery resource recovery and the leading lithium-ion battery recycler in North America. Li-Cycle's process yields an up to 95% recycling efficiency rate to return valuable materials in lithium-ion batteries back to the supply chain. Li-Cycle's New York Spoke is a fully operational lithium-ion battery recycling facility. The facility can currently now process up to 18,000 tonnes of lithium-ion batteries and battery manufacturing scrap per year through its main line and ancillary processing capabilities. Li-Cycle's in-state capabilities help to provide qualified end of life service to BESS operators operating in NYS.

³ The Role of Critical Minerals in Clean Energy Transitions, International Energy Agency, 2020

⁴ Data from US Energy Information Administration; https://www.sustainabilitybynumbers.com/p/mining-low-carbon-vs-fossil#footnote-3-97284603

CONCLUSION

The Clean Energy Industry greatly appreciates and support the comprehensive and thoughtful Draft SGEIS prepared by Staff. We reiterate our support for the proposed 6 GW 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.

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.