New York Battery and Energy Storage Technology Consortium, Inc.

VIA ELECTRONIC FILING

September 24, 2018

Hon. Kathleen H. Burgess
Secretary to the Commission
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 the Energy Storage Deployment Program – REPLY COMMENTS

Dear Secretary Burgess:

The New York Battery and Energy Storage Technology Consortium ("NY-BEST") submits these reply comments for consideration in the above referenced case in relation to the **New York State Energy Storage Roadmap and the Department of Public Service/ New York State Energy Research and Development Staff Recommendations ("Roadmap").**

INTRODUCTION

The New York Battery and Energy Storage Technology Consortium ("NY-BEST") is a not-for-profit industry trade association with a mission to catalyze and grow the energy storage industry and establish New York State as a global leader in energy storage. Our 160 member organizations include: technology developers ranging in size from global energy storage companies to small start-ups, manufacturers, project developers, project integrators, engineering firms, law firms, leading research institutions and universities, national labs and numerous companies involved in the electricity and transportation sectors. The comments submitted herein reflect input from energy storage companies and storage industry members.

Customer-Sited Actions

NY-BEST supports the framework approach put forward by the Roadmap to recommend and implement policy actions in all three market segments: Customer-sited; distribution system; and bulk system. We disagree with parties who argue that the State's investment, and regulatory focus for the Roadmap should be primarily on larger scale and front-of-the-meter storage applications. While we most certainly strongly support significant and bold actions

and investments in the distribution and bulk markets, NY-BEST also strongly believes that State actions in the customer-sited market segment are needed and well-justified in the Roadmap.

The Joint Utilities (JU) assert that "Investment and policy action to support the distribution system and bulk system deployment use cases will produce significantly higher overall benefits for all customers that customer-sited deployments"[1] and state that "Although customer-sited applications can provide grid benefits when located in constrained areas, installations in unconstrained networks generally benefit only the installing customer."[2] We disagree with both of these assertions. As the Commission has noted and has been documented in numerous previous Reforming the Energy Vision (REV) proceedings, distributed energy resources (DER), such as energy storage, can increase system efficiency and reduce system peak, thus benefiting all customers and saving hundreds of millions of dollars annually. Customers deploying energy storage behind-the-meter (BTM) – whether they are in a constrained area or not -- can create benefits for all ratepayers (e.g. reduced peak load, reduced capacity costs, energy costs, system T&D, reduced emissions, etc.). Importantly, customer-sited energy storage that is connected to the distribution system can be used to provide the same services as front-of-the-meter (FTM) storage.

The JU's general assertion that customer-sited storage is less valuable than distribution-sited is also further contradicted by Roadmap modeling performed by E3 and others that analyzed a number of use cases for energy storage. This analysis found that, "In general, **many customer-sited and distribution system use cases and paired solar + storage projects are or will soon become viable in downstate New York between now and 2025.**"[3] Figure 8 of the Roadmap "*Economics (BICOS) of Various Storage Use Cases Comparing Revenue Streams to Total Cost"* specifically illustrates several BTM customer-sited use cases with high value.[4]

Market Acceleration Bridge Incentive

As we stated in our initial comments, the market acceleration bridge incentive proposed in the Roadmap is necessary to promote near-term deployments that will provide the basis for

[1] Joint Utilities Comments on the NYS Energy Storage Roadmap, NYS PSC Proceeding 18-E-0130, September 10, 2018, p. 4
[2] Ibid, p. 11
[3] New York State Energy Storage Roadmap and Staff Recommendations, June 21, 2018, p. 24
[4] Ibid, p.25

a self-sustaining market for the future; and accelerate the decreasing cost curves of the technology, along with accelerating soft cost declines and increased market learning mechanisms. To maximize these benefits, we agree with comments from Stem and the Energy Storage Association that the Market Acceleration Incentive "is sufficiently justified by the analysis of cost savings due to market acceleration, and as such, storage should be encouraged, not required, to provide other grid benefits as a condition of receiving the incentive."[5] Moreover, we reiterate our initial comments and further agree with Stem et.al., that the incentive should be structured in a manner that allows storage owners to deploy the systems as needed to maximize revenues associated with market participation and should avoid creating restrictive operational requirements that may create unintended consequences, limit access to market revenue streams and undermine the basic economic analysis of the Roadmap.

If the Commission wishes to incorporate into the bridge incentive additional policy considerations, such as locating systems in particular constrained areas, as suggested by the JU, or incorporate operational constraints to reward environmental performance, as suggested by other parties[6], we recommend that these additional objectives be addressed through utility programs, such as demand response, non-wires alternatives procurements or through program "adders", tariff and/or rate design, rather than incorporating restrictive requirements into the base market acceleration incentive. Again, we agree with Stem's observation that this "clean" approach "comports with the goals of REV, where services are compensated with market mechanisms, and technology growth objectives can be clearly distinguished with an incentive."[7]While we agree with the general observation from some parties that New York should learn from California's SGIP program mistakes[8], we do not agree that building complex operational requirements into the bridge incentive is the right approach to address the SGIP program's shortcomings. Rather, we believe that the key lesson from SGIP is that operational requirements built into the original program design – though well-intentioned - limited the ability of storage devices to access markets, forced uneconomic operations and produced unintended negative consequences, including increased emissions.

Lastly, the JU states that "it is important to achieve net benefits for these dollars – particularly in early years when technology costs are high and project economics are most challenging."[9]

[5] Comments from Stem on the NYS Energy Storage Roadmap, September 10, 2018
[6] NRDC and Smart Dispatch Coalition comments on the Roadmap, September 10, 2018
[7] Op cit, Comments from Stem
[8] Op cit, Comments Smart Dispatch Coalition
[9] JU Comments on the NYS Energy Storage Roadmap, p.2

We disagree with this view. From a policy perspective, in the early years, stringent cost-effectiveness tests should not be required. For the purposes of a market acceleration incentive such as this, the market development is explicitly recognized as "worth it", as deven though the immediate program or technology incentive may not have a BCA greater than one.

Retail Rate Actions and Utility Programs

Rider Q

NY-BEST has consistently advocated for rate design that reflects more granular time-based and location-based rates. As indicated in our initial comments, NY-BEST supports the Roadmap recommendation for utilities across the state "to develop an optional rate, built on the current standby rate, that implements a more granular time -- and location--varying daily as-used demand rate (similar to Con Edison's "Rider Q" pilot tariff) and include rate certainty during this pilot tariff period (e.g., Con Edison's Rider Q includes a 10-year rate fix)."

The JU however, states that expanding Con Edison's Rider Q Standby pilot tariff on an opt-in basis throughout the state is "premature" [10]. We disagree. The utilities have argued that more tightly focused demand charges better align to cost, and that rates should be based on cost causation. NY-BEST supports the Rider Q tariff precisely because it does these things and because it recognizes that costs have temporal and locational components. As a result, we urge the Commission to move forward with this recommendation.

Non-Wires Alternatives

NY-BEST believes that NWAs can be a successful mechanism to competitively procure non-traditional solutions, including energy storage, that can meet electric system needs more cost effectively than a traditional solution. As stated in our initial comments, we believe that a broadening of the scope and scale of NWA is required to fully realize the benefits of storage and creation of an NWA+ program will help achieve this objective.

The JU states in its comments, "Utility customers should not be called on to support expansion of the NWS process that reduces the benefits of the core NWS portfolio or increases costs to customers." [11] NY-BEST stresses that if the Benefit Cost Analysis (BCA), after any incentives, is positive, than the project should move forward and costs should be

[10] Ibid, p. 21
[11] Ibid, p.13

allowed to increase. Any incentives would be justified outside of the BCA and therefore should be considered as a "cost reduction" in the BCA analysis.

In addition, given the uncertainty in the NYISO markets, the NWA+ program is needed to ensure that the benefits and services that a given energy storage device is capable of providing are fully utilized and compensated. More broadly, NY-BEST supports the use of utility programs to bridge the gap created by the inability to participate directly in the NYISO markets while all parties continue to work to remove barriers to storage and allow storage to properly access all markets.

Demand Load Management

NY-BEST supports the Roadmap recommendations for improving Dynamic Load Management ("DLM") Programs including the recommendation to establish an option for a multi-year DLM program, where terms of participation remain unchanged for a longer period of time. We assert that a longer-term DLM agreement and pricing option could stimulate increased battery deployment and DLM participation.

In contrast, the JU states in its comments that "the majority of the proposed DLM modifications are unnecessary"[12] and "The current DLM approach is working well."[13] In our view, the current DLM program structure results in a bias toward short-term, low-capital investment solutions because of the short horizon of the revenue stream. So, while the current DLM approach may work well to achieve short-term demand response, it is not working well to achieve longer lived, more permanent load reduction. Moreover, given that compensation in the DLM programs, especially Con Edison's, has increased over time, locking the rates for 3-5 years would provide a hedge to all ratepayers, while stimulating more participation in cost-effective programs, and therefore increasing net benefits.

We also reiterate our initial comments recommending that Staff and the Commission exercise caution against making major changes to the existing program structures, so as not to disrupt programs that are functioning well for their intended purpose. We also urge Staff to engage with Stakeholders before utilities file changes to DLM programs to ensure that the changes are fully explored and avoid unintended consequences.

Benefit Cost Analysis - Optionality

[12] Ibid, p.14
[13] Ibid, p.14

NY-BEST supports building the value of Optionality into the utility DSIP, Non-Wire Alternatives and Benefit Cost Analysis (BCA) framework. As noted in the Roadmap and in additional industry analysis[14], energy storage provides flexibility in terms of modularity, potential for multi-use applications and mobility and provides a cost-effective hedge against uncertainties in load forecasting.

The JU suggests that incorporating optionality in the BCA framework should not be implemented as a "one-off" and should be considered holistically consistent with the process used in updating the BCA Handbooks every two years.[15] While we agree that Stakeholder input would be valuable to help Staff and the Commission better define and consider the optionality values of DERs, we urge that such process occur in an expeditious manner and concurrent the implementation of main Roadmap initiatives.

Conclusion

NY-BEST is committed to achieving Governor Cuomo's energy storage deployment target of 1,500 MW by 2025 and growing 30,000 jobs in this sector by 2030. We appreciate the opportunity to provide these reply comments and look forward to assisting Staff and the Commission in achieving this vision.

Respectfully Submitted,

Dr. William Acker
Executive Director

[14] "Using Real Option Pricing Models to Value Energy Storage Optionality in T&D Investment Deferral", Taylor Sloane, May 25, 2018 http://blog.fluenceenergy.com/energy-storage-for-transmission-and-distribution-planning
[15] Ibid, p. 17