New York Battery and Energy Storage Technology Consortium, Inc.

VIA ELECTRONIC FILING

March 8, 2021

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

Re: CASE 15-E-0751 – In the Matter of the Value of Distributed Energy Resources – Comments on ACOS Methodology to Develop Standby and Buyback Rates

Dear Secretary Phillips:

The New York Battery and Energy Storage Technology Consortium ("NY-BEST") submits these comments in relation to the *Staff Whitepaper on Allocated Cost of Service Methods Used to Develop Standby and Buyback Service Rates* jointly developed by the NYS Department of Public Service (DPS) and the New York State Energy Research and Development Authority (NYSERDA) that was filed on November 25, 2020, as well as the accompanying workpapers filed December 29, 2020, and the presentation materials from the Joint Utilities' (JU) and Con Edison presented at the Technical Conference held on February 23, 2021.

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

Sincerely,

Dr. William Acker
Executive Director

NY-BEST Comments
CASE 15-E-0751
In the Matter of the Value of Distributed Energy Resources – Comments on ACOS Methodology to Develop Standby and Buyback Rates

The New York Battery and Energy Storage Technology Consortium ("NY-BEST") submits these comments in relation to the Staff Whitepaper on Allocated Cost of Service Methods Used to Develop Standby and Buyback Service Rates jointly developed by the NYS Department of Public Service (DPS) and the New York State Energy Research and Development Authority (NYSERDA) that was filed on November 25, 2020, as well as the accompanying workpapers filed December 29, 2020, and the presentation materials from the Joint Utilities' (JU) and Con Edison presented at the Technical Conference held on February 23, 2021.

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]

Procedural History

This proceeding is built on nearly five years of work by the Public Service Commission ("Commission") to align Standby and Buyback rates with cost-based ratemaking principles. The current proceeding has its origins in the 2016 Order entered into the REV Docket requiring the NY utilities to make a filing that describes in detail the cost allocation methodology currently in use for the calculation of its current standby rates.[2] Case 16-M-0430 was subsequently opened to investigate this issue and resulted in National Grid's adoption of updated Commission guidance in the completion of their Allocated Cost of Service (ACOS) study for their 2017 rate case. Going further back in history, the Commission actually spelled out clear principles for the construction of Standby and Buyback rates in the 2001 Guidelines, but these principles were never fully realized in retail rates since current

[1] NY-BEST comments represent the interests of the organization as a whole and not the views of any particular member. Our members have diverse interests and the organization's views are intended to be reflective of the energy storage industry collectively.

[2] PSC Case 14-M-0101, ORDER ADOPTING A RATEMAKING AND UTILITY REVENUE MODEL POLICY FRAMEWORK, p. 130

Standby and Buyback rates originate from the 2003 Standby Matrices developed via a Stipulated Settlement.[3]

This proceeding represents an opportunity for the Commission to finally align Standby and Buyback rates using a consistent cost-based methodology for all NY utilities for the first time in living memory. New York state has important decarbonization goals that rely upon energy storage. NY-BEST stresses the importance and urgency of this issue and is grateful for Staff's diligent attention to arriving at a uniform approach to cost-based Standby and Buyback rate design. Significant progress has been made over the last two years of this proceeding and NY-BEST looks forward to a timely resolution that results in accurate, well-reasoned rates that will allow the storage sector to thrive and contribute to New York's clean energy goals.

NY-BEST's comments are focused on issues pertaining to the Decision Tree Methodology, concerns regarding Con Edison's Technical Conference ACOS workpapers, responses to points made by the Joint Utilities in the Technical Conference, and responses to Staff proposals related to Buyback demand charge exemptions and interactions with wholesale power markets.

A common theme throughout our comments is seeking clarity from the Commission upfront to help achieve consistency and avoid confusion, uncertainty, and more work by all stakeholders at a later juncture. Indeed, in their May 16, 2019 Order, the Commission stated, "the goal of the process is to produce a relatively consistent approach across utilities." If there is uncertainty in the decision tree or how the Commission wishes to allocate costs, there is a high risk of utilities adopting inconsistent approaches. We provide the following comments to provide a roadmap to the Commission for clarifying and improving the decision tree and facilitating consistent implementation that benefits all stakeholders.

Decision Tree Methodology

The methodology proposed in the Whitepaper is an important tactical step towards achieving a consistent and uniform approach to Standby and Buyback rate design. While NY-BEST does have some concerns with certain elements of the Decision Tree Framework, overall, it provides much needed guidance for apportionment of revenue requirements into Local, Shared, and Customer categories.

<u>Recommended Changes to Question Phrasing</u>
We have summarized the recommended changes and clarifications to the decision tree questions in the table below:

[3] Staff December 2018 Whitepaper, pp. 2-4

Question #	Recommended Change/Addition	Rationale
After Question 2 and Before Question 3	"Does a power injection have the potential to reduce the cost of the asset?" If the answer to this question is "Yes" then the Decision Tree would point directly to a Shared Allocation. If no, it would then proceed to Question 3.	Adding this question is necessary to align the Decision Tree with the principles enumerated in the May 2019 Order which stated ""*the Commission does agree that a local cost is driven by the peak flow of power, regardless of the direction, and any category of costs that has the potential to be reduced by an injection should not be classified as local.*" (p. 28)
3	Would ~~Could~~ a decrease in demand result in 'an ***entirely*** unused asset'?	"Could" needs to be replaced with "would" to reduce the chances of an outlier scenario dictating the answer. The most common outcome should determine the answer. "Entirely" needs to be added because nearly all assets are partially unused a portion of the time, despite having multiple customers continuing to utilize the asset. Advanced Energy Economy's (AEE) comments filed today on reconfiguration capture this point. If an asset is entirely unused, then it is clear that no customers are deriving benefit from it and it becomes a stranded investment. If an asset would be entirely unused if a single customer's load were to disappear, then it should be Local.
3 (from whitepaper, not decision tree)	"If an asset would be stranded if the customer's ~~(or small group of customers)~~ load on that asset declines, then the costs were most likely incurred specifically to serve that customer ~~(or~~	In previous Orders, the Commission has repeatedly defined local as "a specific customer."[4,5] To date, there is nothing in the record to justify overturning the Commission's previous definition of "Local." Guidehouse was clear during the 1/23/2021 Technical Conference that for C&I rate classes, Local should continue to be defined

[4] Case 14-M-0101, Order dated 5/19/2016, p. 128
[5] Case 15-E-0751, Order dated 5/16/2019, pp. 5-6, 28,

Question #	Recommended Change/Addition	Rationale
	~~group of customers)~~ and thus should be considered Local."	as "a specific customer" and not a "small group of customers." Therefore, at a minimum, the "or a small group of customers" should be struck for C&I application of the Decision Tree. For reasons outlined by AEE in their comments, the "small group of customers" should also not apply for residential. If the Commission decides to use "or small group of customers" for residential, the Commission should provide clear guidelines on the necessary conditions that would trigger the use of a "small group of customers" instead of "a specific customer".
4	"Does an increase in system coincident peak **or regional peak** demand increase the costs?	Shared infrastructure is required to support coincident peaks and peaks in regions of the system that may be somewhat offset from the systemwide coincident peak. The varying performance hours of Con Edison's CSRP program by zone illustrate this concept. The presence of a regional system peak that may be time shifted from the system coincident peak interval should not change the logic behind Shared vs. Local apportionments. For instance, all substations should be "Shared" even if some experience peak loads that are not fully synchronous with the system coincident peak.
5	"Does an increase in ***specific customer*** non-coincident demand increase the costs?	The Local designation is specific to assets needed to accommodate specific customer peak demand. This clarification will make it clear that the question is to be interpreted to apply to assets that serve individual customer peaks and not NCP demands for an entire rate class.

Guidance for Questions is Required to Ensure a Consistent Approach

The workpapers to accompany the Decision Tree Whitepaper were very helpful to illustrate how the methodology could be implemented in practice. NY-BEST reviewed the answers to the Decision Tree questions for the various cost categories and voltages in the "Mapping - Proposed" spreadsheet tabs. These spreadsheets demonstrated the ability to perform side-by-side comparisons of the three utilities and arrive at a transparent and uniform approach to cost allocation by asset category.

However, it also demonstrated the need for the Commission to provide direct and concrete guidance to the utilities on a framework for answering each question and related materiality thresholds to help categorize certain costs. Without such guidance, it will jeopardize the Commission's direction from the May 2019 Order to achieve "relatively consistent" results amongst utilities. Further guidance should also prevent situations where outlier scenarios could be used to justify a Local vs. Shared decision that inappropriately characterizes an asset.

To help realize the objective of "relatively consistent" results amongst utilities, NY-BEST recommends that a final Order include an appendix with a memo from Guidehouse that provides additional detail behind the logic as to how they answered the questions in the Decision Tree workpapers for the asset categories in a selected section such as Secondary Demand. Additional guidance from the Commission regarding justifications and rationales for answering each question by asset type and voltage would help facilitate the realization of this critical outcome of consistency among the utilities.

Logic Behind Some Question Answers in Decision Tree Workpapers is Unclear

Specific to the workpapers and the answers to the Decision Tree questions by cost category, NY-BEST recommends that the Commission reconsider its categorization in the following two places:

1) Question 4 states: "*Does an increase in system coincident peak demand increase the costs?"*
    a) At the Secondary Demand Level, the answer was "Yes" for Land/Land Rights and Structures & Improvements, but "No" for Conductors. The logic behind these categorizations is unclear as it would seem that Conductors are subject to cost pressures from Coincident Peak Demand events at the Secondary demand level.
2) Question 6 states: "*Could a kW of reverse power flow increase the costs?*"

a) At the Secondary Demand level, the answer was "Yes" for "Poles, Towers, and Fixtures" and "Underground Conduits." These asset categories are seemingly unaffected by reverse power flows and NY-BEST contends that the answer to Question 6 for these assets should be "No."

Allocators

The Decision Tree Whitepaper proposes using a ratio of Coincident Peak (CP) demand to Non-coincident Peak (NCP) demand to allocate costs for assets that flow through the Decision Tree with "Yes" answer to Question 5. Specifically, Shared cost allocations would be based upon the Asset or category cost multiplied by the CP/NCP ratio for the rate or customer class. Conversely, Local cost allocation would be equal to the asset or category cost multiplied by 1 - CP/NCP ratio. For the reasons outlined in the Whitepaper, NY-BEST supports this approach.

Questions and Concerns with Con Edison's Proposed Method

NY-BEST has reviewed Con Edison's workpapers presented during the February 23, 2021 Technical Conference. NY-BEST appreciates the additional transparency from Con Edison into their calculation methods and results. Despite this, there are several areas where their method significantly diverges from the Decision Tree Methodology or where their logic appears to be in conflict with Staff guidance. The table below summarizes these areas of concern.

Area of Concern	Description	Recommendation
Con Edison method precludes the ability to answer Question 6 at every voltage level	Question 6 is a core feature of the Decision Tree methodology to ensure that Buyback charges only reflect costs for assets impacted by reverse power flows. Failure to answer Question 6 will result in Buyback charges that include costs unrelated to reverse power flows and therefore will result in artificially high rates.	Require Con Edison to identify asset categories that may answer "Yes" to Question 6 and propose a way to isolate their costs from larger category groupings.
Answer to Question 5 for Substations	Con Edison provides a "Yes" answer to Question 5. This is an instance of an edge case scenario driving a question	NY-BEST recommends that the answer to Question 5 at the Substation Level should

Area of Concern	Description	Recommendation
	outcome. A customer would have to be extremely large for an increase in NCP demand to increase substation costs.	be a "No" and that all Substation costs should be Shared instead of allocated.
Overhead (OH) and Underground (UG) Lines appear mischaracterized at Secondary Demand level	Con Edison provides the following answers to Questions 3-5 Question 3: "Yes" Questions 4-5: "N/A" This results in all OH and UG lines categorized as "Local"	Lines are too broad of an asset to be stranded by a decrease in demand from a specific customer.[6] NY-BEST asserts that the answers to the Decision Tree questions for OH and UG Lines should be as follows: Question 3: No Question 4: "Yes" Question 5: "Yes" This would have the result of OH & UG Lines allocated between Local and Shared.
No differentiation in mesh vs. radial networks	The architecture of mesh networks suggests that they have an inherently higher shared proportion than radial networks.	Differentiate overhead assets and underground assets by the percentage of underground assets that belong to mesh networks

In determining whether to accept the proposed Con Edison methodology, the Commission needs to determine its commitment to achieving a uniform approach to categorization across all NY utilities. With some modifications such as the ability to answer Question 6 and Commission guidance regarding the logic and rational behind the answers to each question, the Con Edison method may be workable but it will still have significant differences from the three utilities analyzed by Guidehouse.

[6] Con Edison also includes Poles, Towers, & Fixtures (Acct 364) and Underground Conduits (Acct 366) in its "Lines" category.

NY-BEST has the same concerns regarding Orange & Rockland and Central Hudson as there is scarce information in the record of this proceeding as to how they could implement the Decision Tree methodology consistent with the other New York utilities.

Buyback Charges

Proposed Time Limited Exemptions

The Decision Tree whitepaper includes a recommendation to exempt stand-alone storage from Buyback charges to *"to enable these stand-alone storage systems to gain greater penetration in the market."* (Whitepaper p. 25) Specifically, Staff recommends a 20-year exemption from Buyback charges for all stand-alone energy storage projects interconnected and operational by 12/31/2025. (p. 27) NY-BEST strongly supports this proposal but reminds the Commission that energy storage project development cycles are often two years or more. A requirement for projects to be operational by 12/31/2025 has the potential to create a boom-and-bust scenario where development sprints ahead in the near term, but grinds to a halt in early 2024 due to uncertainty regarding the ability to meet the cutoff date.

In its justification for the proposed exemption, Staff postulates that stand-alone storage systems "*are creating new load, potentially decreasing rates for all customers as they contribute to fixed costs. Cost shifts arise when a customer is given an incentive for installing behind the meter equipment that is greater than the value of the distribution system costs avoided by reducing or shifting energy use with that equipment. Stand-alone storage systems are designed to consume electricity for the sole purpose of supplying electricity at a different time, presumably when the value of injections is higher than the costs of charging. As a result, these customers are creating new load by charging the battery, paying the Standby Service rates for that electricity service, and incrementally contributing to grid fixed charges while covering costs their new load creates."* (p. 28) Staff then concludes that a potential cost shift attributable to the time limited exemption from Buyback demand charges is "*likely to be far outweighed by other ratepayer benefits, including the achievement of economic savings and beneficial system operations that storage provides*" (p. 28) NY-BEST strongly supports this conclusion by Staff, but it begs the question as to why New York has Buyback demand charges in the first place. If the potential cost shift due to an exemption from Buyback demand charges, which is purely speculative as it's never been rigorously studied, is "far outweighed by ratepayer benefits", then it's unclear why these charges continue to exist.

To the best knowledge of NY-BEST and its consultants, New York is the only state to authorize Buyback rates on injections into the grid exceeding standby demands. This makes New York a significant outlier relative to the rest of the United States and as Staff clearly recognizes, Buyback charges represent an unnecessary hurdle to energy storage

development.[7] The storage market in New York is still at a very nascent stage. For instance, there are limited vendors for installation, many local jurisdictions are still working on permitting processes that hold back project development, and many end-use customers are unfamiliar with storage.

While we expect that the industry to grow over the next two to three years, applying the buyback charge to projects that enter the development process in 2024 (since they wouldn't be constructed until after 2025) or after will be a major setback and creates market uncertainty. If the Commission decides to end the exemption, we recommend that they keep the exemption in place until 2030, when the market has had more time to mature.

Buyback Rates Applicable to Wholesale Customers

On page 27 of the Whitepaper, Staff requested that Stakeholders provide comments detailing the expected interaction between charges related to participation in the wholesale market and utility Standby and Buyback Service charges.

NY-BEST is familiar with Con Edison's Wholesale Distribution Service (WDS) Rate O. NY-BEST is not aware of other WDS rates filed at FERC by other NY utilities at the present time, but if they exist, we encourage the Joint Utilities to identify them in reply comments.

While NY-BEST's comments are specific to Con Edison Rate O, we believe that they would apply to any other WDS rate filing from a NY utility. Despite being filed at FERC, Con Edison's Rate O is derived from its Buyback Tariff SC 11. In its original filing when Rate O was created, Con Edison used the deference argument to persuade FERC to accept the rate since the NY PSC had approved the underlying SC 11 rate. In its 2020 filing, Con Edison stated "*Con Edison requests that the Commission consider the filed rates and terms in light of the NY PSC's approval and afford them a measure of deference commensurate with the NY PSC's endorsement. The Commission has recognized in a prior Order that deference to the NY PSC was appropriate with respect to the rates for Con Edison's delivery service. Because of the strong local interest in that service, the Commission determined that it would*:

> *exercise our jurisdiction over this service, in this and future filings by Con Ed, by accepting the rate determinations of the NYPSC in the absence of a showing that the NYPSC has abused its discretion or violated a public policy, such as the policy against undue discrimination.*

[7] The only other utility known to NY-BEST that imposes Buyback Rates on injected power is LADPW

The Deference Order concluded that, under the circumstances, deference to the NY PSC's findings satisfied the Commission's statutory regulatory responsibility, while serving "the ends of comity and administrative efficiency, and . . . foster[ing] parity of rates between customers.[8]

A plain reading of Con Edison's Rate O clearly indicates that the NY PSC has authority over nearly all aspects of the rate. The terms of Con Edison's retail tariff PSC No. 10 are referenced repeatedly in the Terms & Conditions and Section 1.1 clearly states that PSC No. 10 is incorporated by reference.[9]

NY-BEST expects that if and when other NY distribution utilities file WDS tariffs at FERC, they will be either identical or extremely similar to the NY PSC approved Buyback rates. As a result, the outcome of this proceeding has major implications for the ability of storage to provide services to the wholesale power market.

NYISO has made significant progress in its ability to integrate DERs into wholesale markets, but Buyback charges pose a formidable barrier to the ability of storage to respond to market price signals. NYISO allows for energy duration limited resources to participate in the capacity market with derates based on resource duration and incremental penetration of Energy Storage Resources (ESRs) in the market.[10] Buyback charges effectively cap the amount of capacity that storage resources are able to offer into the market because the present Buyback charges are in excess of the capacity clearing prices in many months.

Buyback charges also pose a formidable barrier to storage participation in reserve markets. Presently, NYISO permits storage resources to provide 10 minute spinning reserves and 30 minute reserves[11]. Reserve events are often short in duration, occur at irregular intervals, and require fast ramping. Storage resources cannot participate fully in the reserves market where revenues are unpredictable when subject to high levels of fixed monthly Buyback demand charges. The excessive penalties for exceeding Buyback contract demands will preclude storage from fully maximizing injections regardless of the price signals from NYISO market or in the presence of emergency conditions.[12]

[8] FERC Docket ER20-0934, Con Edison Transmittal Letter dated 1/31/2020, p. 2

[9] FERC Docket ER20-934, Coned Rate O, accepted 3/13/2020

[10] NYISO Installed Capacity Manual (eff Feb 2021) Section 4.1.1

[11] NYISO Ancillary Services Manual (eff Nov 2020), Section 6

[12] Con Edison Tariff Leaf 472, Rev 3 SC 11 Demand Provisions "*If the monthly maximum demand exceeds the contract demand by ten percent or less, a surcharge equal to twelve times the monthly contract demand rate for the excess in demand will apply to the monthly bill. If the monthly maximum demand exceeds the contract demand by more than ten percent, a surcharge equal to twenty-four times the monthly contract demand rate for the excess in demand will apply to the monthly bill.*

There are several load pockets in Zone J where Local Reliability Requirements (LRRs) are met by Out of Merit fossil generators. NYISO has proposed the creation of subzonal reserve pockets within Zone J to address this issue and reduce the need to rely on out of merit fossil assets[13,14]. Buyback demand charges will stymie the ability of storage to meet NYISO's objectives for improving the Zone J reserves market and reducing emissions from out of merit fossil generation.

Adjustments to Existing Contract Prices

Staff proposes that any project receiving a NYSERDA Market Acceleration Bridge Incentive under Rest of State Blocks 1-3, Con Edison Westchester Block 1, or Con Edison NYC Blocks 2-3, forfeit $50 per kilowatt-hour (kWh) of the incentive amount awarded by NYSERDA if it takes advantage of the exemption from Buyback demand charges. The Whitepaper also proposes specifically excluding utility Non-Wires Alternative (NWA) projects that did not receive a NYSERDA Market Acceleration Bridge Incentive.

Based on the information available to NY-BEST, most projects receiving NYSERDA Market Acceleration Bridge Incentives were not subject to Buyback rates. This retroactive clawback of incentives for certain projects, which Staff admit "have higher costs with permitting, siting, and financing, as these are the first of any stand-alone storage VDER projects built in the state." (Whitepaper p. 29) will represent another significant challenge for early mover projects that already assumed a high degree of risk.

The exclusion of NWA projects appears to represent an instance of discriminatory ratemaking. Any "windfall" realized by an NWA project developer, if realized, should be subject to negotiation between the contract counterparties. NY-BEST recommends against imposing a clawback or exclusion of NWA projects.

Buyback Rate Conclusion

The ability of the distribution grid to handle injected power is studied during the interconnection process and required upgrades are addressed at that time. As a result, injections that drive material costs to the grid or those that can be damaging should be precluded if the interconnection studies and necessary upgrades are implemented correctly.

New York State's ambitious storage goals of 1,500 MW and 3,000 MW by 2025 and 2030, respectively will only be met if there is a vibrant merchant energy storage development

[13] Presentation to NYISO ICAP Working Group/Market Issues Working Group, More Granular Operating Reserves, 9/24/2019

[14] NYISO 2020 Master Plan, April 2020 pp. 11, 25-27

ecosystem. Buyback demand charges are unique to New York and pose a material barrier to many types of storage projects.

Summary and Conclusion

NY-BEST commends Staff on its constructive Whitepaper and the degree to which it has advanced the process of reforming Standby and Buyback rates in New York. NY-BEST has suggested several ways in which the Decision Tree Methodology could be improved including clarified Question language and guidance regarding the logic behind the answers to questions. A critical objective of this entire process has been to achieve a consistent and uniform approach to Standby and Buyback rate design. NY-BEST recommends that the Commission require Con Edison, Orange & Rockland, and Central Hudson to provide ECOS data of sufficient granularity and format to be able to answer the Decision Tree questions including Question 6. Failure to take this step will preclude a consistent and uniform approach to Standby and Buyback rate design and stymie achievement of this critical goal.

New York decarbonization goals are reliant upon a vibrant merchant storage sector and through the record developed in this proceeding, the Commission now has the information required to develop rational and cost based Standby and Buyback rates that will enable the storage market to achieve New York's ambitious targets for storage deployment.

We appreciate your consideration of our comments and stand ready to assist Staff should you have any questions about our comments and recommendations.