Case 18-E-0130

In the Matter of Energy Storage Deployment Program

Bulk Energy Storage Program Implementation Plan

April 18, 2025

Filed by Staff of the New York State Energy Research and Development Authority

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1. Introduction and Background

This document filed with the New York Public Service Commission (the "Commission") constitutes an updated Implementation Plan for a new Bulk Energy Storage (BES) Program to be administered by the New York State Energy Research and Development Authority (NYSERDA), as authorized under the Commission's *Order Establishing Updated Energy Storage Goal and Deployment Policy* (the "2024 Energy Storage Order"), issued and effective June 20, 2024. The Implementation Plan provides an operating framework for the program, with additional details to be provided in Bulk Energy Storage program solicitations. The plan begins with background on the 2019 Climate Leadership and Community Protection Act (the "Climate Act") and the 2022 Energy Storage Roadmap (the "Roadmap") as updated in March 2024. The plan then outlines the structure of the program, with a focus on the Index Storage Credit (ISC) incentive mechanism. Subsequent sections cover program funding, program administration, and program evaluation and reporting. The plan explicitly addresses topics specifically required for inclusion by the Order, such as program budget, quality assurance, measurement and verification, fire safety, and performance metrics. A BES Form Agreement between NYSERDA and Load Serving Entities is included as an Appendix.

This updated Implementation Plan reflects revisions from an Implementation Plan Proposal filed on October 18, 2024. Following a public comment period, the Commission approved, with modifications, the draft Implementation Plan, in its *Order Approving Bulk Implementation Plan with Modifications* (the "2025 BES Approving Order"), issued and effective March 21, 2025.

1.1 Background

In January 2022, Governor Hochul announced in her State of the State address the intent to double the state's energy storage target, from 3 to 6 gigawatts by 2030. The underlying driver of this nation-leading target was the Climate Act, enacted in 2019 and in effect since 2020, which called for New York to achieve 70% renewable electricity by 2030 and 100% zero-emissions electricity by 2040. Governor Hochul directed the Department of Public Service (DPS) and NYSERDA to update its 2018 Energy Storage Roadmap in line with the increased target, resulting in a revised Roadmap filed in December 2022. [1]

New York's 6 GW Energy Storage Roadmap: Policy Options for Continued Growth ("the Roadmap") built on energy storage programs established by the Commission in its 2018 Energy Storage Order, [2] proposing expanded or new programs for the residential, retail, and bulk sectors and providing initial program cost estimates. Public comments were received by stakeholders in the first quarter of 2023.

To support the expanded energy storage target of 6 gigawatts (GW) installed by 2030 across the residential, retail, and bulk storage segments, the Roadmap proposed a new Bulk Energy Storage program utilizing an Index Storage Credit (ISC) mechanism modeled in part on the Index Renewable

[1] Case 18-E-0130, NY DPS and NYSERDA, New York's 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage (December 28, 2022).
[2] Case 18-E-0130, State of New York Public Service Commission, Order Establishing Energy Storage Goal and Deployment Policy (Issued and Effective December 13, 2018).

Energy Certificate (REC) and Offshore Wind Index Renewable Energy Certificate (OREC) mechanisms employed in the State's Clean Energy Standard and Offshore Wind programs. The Roadmap recommended a minimum of three annual bulk procurements with the goal of achieving installations of 3 GW of bulk storage by 2030. These 3 GW, combined with additional installations from other segments and from existing State contracts in the pipeline, are projected to achieve the overall 6 GW target. The Roadmap also recommended NYSERDA be given flexibility to conduct additional bulk procurements due to attrition and other market developments.

Market dynamics in 2023 prompted DPS and NYSERDA to revisit the Roadmap's program costs and budgets in early 2024, resulting in an updated Roadmap filed in March 2024. The Roadmap was filed in the Public Register on April 4, 2024, launching a 45-day period for public comment limited to the updates. On June 20, 2024, the Commission approved the *Order Establishing Updated Energy Storage Goal and Deployment Policy*, which adopted the expanded statewide 6 GW deployment goal and approves many of the Roadmap recommendations for achieving the goal. [3] Notably, the Commission adopted the ISC mechanism for bulk energy storage procurements; directed NYSERDA to conduct a minimum of three bulk energy storage procurements, to be held at least annually, to procure 3 GW of bulk energy storage; and directed NYSERDA to issue the first RFP no later than June 30, 2025. [4]

On October 18, 2024, NYSERDA filed an Implementation Plan Proposal for public comment. Public comments were accepted through January 13, 2025. On March 20, 2025, the Commission approved, with modifications, the draft Implementation Plan in its *Order Approving Bulk Implementation Plan with Modifications,* issued and effective March 21, 2025. [5]

2. Program Incentive Design

The Roadmap considered a range of procurement options for bulk energy storage deployments to meet the 3 GW allocation, evaluating them based on implementation feasibility, development effectiveness, efficiency, compatibility, and acceptability. The result of this evaluation was the recommended creation of a new Bulk Energy Storage Program based on an Index Storage Credit mechanism, to pursue procurements to meet the 3 GW target allocation. Accordingly, the June 2024 Energy Storage Order approved and required NYSERDA to implement the Index Storage Credit Mechanism, specific design features of which are described below.

2.1 Index Storage Credit Mechanism

2.1.1 Overview

The Index Storage Credit (ISC) is a market-based mechanism modeled on the REC and OREC approaches utilized in NYSERDA's Large-Scale Renewables procurements. In both cases the REC, procured by NYSERDA following commercial operation of the contracted project, is intended to

[3] Case 18-E-0130, State of New York Public Service Commission, Order Establishing Updated Energy Storage Goal and Deployment Policy (Issued and Effective June 20, 2024).
[4] Id., p. 33, p. 94.
[5] Case 18-E-0130, State of New York Public Service Commission, Order Approving Bulk Implementation Plan with Modifications (Issued and Effective March 21, 2025).

provide project developers with greater revenue certainty through hedging, thereby improving the project's financeability and overall cost. As the Roadmap notes with respect to the implementation feasibility of the ISC: "This option builds on recent experience in the Clean Energy Standard (including the Tier 1, Tier 4, and offshore wind programs), though significant effort may still be required to structure solicitations and long-term contracts." [6]

Central to the ISC and the procurement evaluation process is the Strike Price that storage project developers bid under a competitive solicitation. This bid price is intended to approximate the revenue threshold needed to achieve project viability. The credit payment itself will consist of the difference between the Strike Price and a Reference Price developed from price indices that reflect an approximation of the available wholesale market revenue that a project could be expected to earn under reasonable commercial operation. Projects are not required to participate in these markets but are incentivized to optimize revenue under this structure. Payments will be made by NYSERDA to the developer when the Strike Price exceeds the Reference Price, and vice versa. Projects submitted to bulk energy storage solicitations will be evaluated on price as well as non-price factors.

2.1.2 Operational Availability Definition

As recommended in the Roadmap and specified in the 2024 Energy Storage Order, [7] an ISC is defined as representing one MWh of energy storage capacity that is operational and available for dispatch on a given day. This definition, combined with the Reference Price components, should incentivize storage to economically charge and discharge and more broadly to optimize availability to participate in wholesale markets. This definition also ensures that periods of non-operational availability due to planned or forced outage are accounted for in determining ISC creation.

While the Roadmap and 2024 Energy Storage Order contemplated the treatment of a storage resource as being either available or unavailable on a given day, the 2025 BES Approving Order directs NYSERDA to further address how partial availability in terms of time and capacity will be addressed under the operational availability definition. This shall include the determination of monthly availability percentages using the Generating Availability and Data Systems (GADS) on which the New York Independent System Operator (NYISO) relies. [8]

To address partial availability in calculating ISC creation, NYSERDA shall require each project owner to submit a monthly report consisting of hourly outage data using the Generating Availability and Data Systems (GADS). This data is expected to be the same real-time telemetry and outage data that must be provided to NYISO's Grid Operations department, as per its Outage Scheduling Manual, by any generator participating in ICAP markets. Non-ICAP resources must also provide this data for the purpose of calculating operational availability. NYSERDA shall then, for each project and for each month, calculate a monthly total of outage megawatt-hours that includes both planned and forced outage hours. This outage total will be compared with total monthly megawatt-hours to derive a monthly availability percentage, as shown in the indicative formula below.

[6] Op, cit. note 1, p. 40.
[7] Op. cit. note 3, p. 94.
[8] Op. cit. note 5, p. 15.

$$Monthly\ Availability\ Percentage = \frac{1 - \ Monthly\ Outage\ MWh}{Power\ Capacity\ MW\ x\ Total\ Monthly\ Hours}$$

$$where$$

$$Monthly\ Outage\ MWh = Monthly\ Planned\ Outage\ MWh + Monthly\ Forced\ Outage\ MWh$$

$$Power\ Capacity\ MW = Energy\ Storage\ System\ Rated\ MW\ Capacity$$

$$Total\ Monthly\ Hours = Total\ Number\ of\ Hours\ in\ a\ Given\ Month$$

2.1.3 ISC Creation

The 2025 BES Approving Order directs NYSERDA to describe how the monthly availability percentage is applied to the maximum potential monthly ISCs to calculate how many ISCs are created over the month.[9] To calculate monthly ISC creation, the monthly availability percentage described in the previous section will be multiplied by the maximum potential monthly ISCs to determine ISCs created for that month. The maximum potential monthly ISCs are the number of ISCs that would be created in a month of full operational availability.

Recognizing that the construct of daily ISC creation may result in unfair comparisons among longer duration resources, the 2025 BES Approving Order directs NYSERDA to limit daily ISC creation to the MWh capacity of an 8-hour resource.[10]

Below are indicative formulas describing the calculation of Monthly ISCs Created and Maximum Monthly ISCs.

$$Monthly\ ISCs\ Created = Maximum\ Monthly\ ISCs\ x\ Monthly\ Availability\ Percentage$$

$$Maximum\ Monthly\ ISCs = Power\ Capacity\ MW\ x\ Duration\ Hours\ x\ Days\ in\ Month$$

$$where$$

$$Duration\ Hours = Energy\ Storage\ System\ Duration\ Hours\ (\leq 8)$$

NYSERDA shall also propose for consideration limited modifications to the ISC mechanism for 12+ hour resources, as directed by the 2025 BES Approving Order and noted below.

2.1.4 Contract Term

As required in the 2024 Energy Storage Order, NYSERDA will establish a maximum contract length of 15 years for lithium-ion battery bulk energy storage projects, and a maximum contract length of 25 years for non-lithium-ion bulk energy storage projects.[11]

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[9] Op. cit. note 5, p. 16.
[10] Id., p. 19.
[11] Op. cit. note 3, p. 36.

2.1.5 Storage Duration

Addressing current and future duration needs is a critical design consideration of the Bulk Energy Storage program. According to Roadmap modeling, most deployments by 2030 are expected to be short duration, 4-hour resources. However, recognizing the system need for Long-Duration Energy Storage (LDES) resources as renewables penetration grows, the Roadmap also recommends that NYSERDA have flexibility to "explicitly incorporate 8-hour duration assets into the procurement program," [12] including by allocating a given amount of the procurement to these assets. The rationale for this approach is the need for learning and ramping (a "glide path") to support significant 8-hour deployment beyond 2030, as well as the recognition of their technological diversity and need for such projects to be evaluated separately. Accordingly, the 2024 Energy Storage Order directed NYSERDA "to include in each bulk procurement a target of 20 percent of long-duration, 8-hour energy storage resources, to move New York towards installing the necessary amount of LDES by the mid-2030s." [13]

NYSERDA shall therefore procure, within each solicitation, projects in two separate resource categories. The first category includes projects with a duration of up to 8 hours ("<8 hour"). To address the risk of significant capacity market price decline among 2-hour resources, which could result in high ISC payments, NYSERDA will ensure that its ISC cost evaluation accurately assesses this risk. NYSERDA shall also cap, at 10 percent of the total 3 GW of planned bulk energy storage procurements, the amount of 2-hour resources that can be awarded ISC contracts. [14]

The second resource category includes projects with a duration of 8 hours or greater ("8+ hour"). Projects in both categories will utilize the Index Storage Credit mechanism, with differences in formulas outlined below. Projects will also be evaluated on similar non-price factors, though NYSERDA shall have flexibility to vary the criteria between and within resource classes, in consultation with DPS Staff.

Applying the 8+ hour target to each procurement implies a 200 MW target for a 1,000 MW solicitation, raising questions about the treatment of 8+ hour projects larger than 200 MW. NYSERDA shall have flexibility within each solicitation to consider viable 8+ hour projects that individually exceed 200 MW. This flexibility includes the ability to adjust the overall procurement size to avoid tradeoffs with viable, high-value <8 hour projects.

Conversely, if there is an insufficient supply of viable 8+ hour projects to meet the 20 percent target, NYSERDA shall have flexibility to allocate the remaining volume to viable <8 hour projects and adjust future solicitations in pursuit of the 20 percent target. Viability will be determined by the non-price evaluation factors discussed below.

2.1.6 Geographic Distribution

The 2024 Energy Storage Order directed that "a minimum of 35 percent of procurements for bulk and off-site retail energy storage projects be located in the New York Independent System Operator (NYISO)'s G-K Capacity Zones, as they are most likely to benefit disadvantaged communities and

[12] Op. cit. note 1, p. 45.
[13] Op. cit. note 3, p. 35, p. 94.
[14] Op. cit. note 5, p. 18.

reduce peaker plant emissions." [15] The 2024 Energy Storage Order further specified that at least 30% of total procurements shall be in Zone J, given New York City's potential for peaker plant displacement and disadvantaged community benefits, and at least 5% of total procurements in Zones G-I and/or K. [16]

It is NYSERDA's interpretation that these minimum targets are to be applied on a megawatt basis and to apply to the overall program and not each individual procurement. NYSERDA intends to meet and exceed both geographic targets through its evaluation of price and non-price factors, both of which have strong locational drivers and are discussed in further detail below.

If the geographic targets are determined to be at risk, NYSERDA shall utilize a portfolio risk stage of bid evaluation. Used in the Tier 1 program, this stage allows for project award adjustments based on agreed-upon and clearly defined risks to geographic, technology, and other desired diversity outcomes. NYSERDA shall also have the flexibility to, in consultation with DPS Staff, revisit these geographic minimum targets and adjust them if deemed reasonable and desirable.

2.2 ISC Calculation

2.2.1 Formula

The Index Storage Credit shall be calculated by comparing the Strike Price bid by the Project with the Reference Price, which consists of the sum of the Reference Energy Arbitrage Price and the Reference Capacity Price.

$$ISC = Strike\ Price - Reference\ Price$$

$$where$$

$$Reference\ Price\ (RP) = Reference\ Energy\ Arbitrage\ Price\ (REAP) + Reference\ Capacity\ Price\ (RCP)$$

A positive ISC will result in a payment from NYSERDA to the developer; a negative ISC will result in a payment from the developer to NYSERDA. Further details on each price component are provided in the section below.

2.2.2 Reference Price Components

Reference Energy Arbitrage Price (REAP)

<u>Energy Market Pricing</u>

As with the Index REC structures for NYSERDA's Clean Energy Standard programs, the ISC shall utilize NYISO's hourly day-ahead energy market pricing to calculate the REAP.

[15] Op. cit. note 3, p. 59.
[16] Id., p. 59.

Location

As in existing NYSERDA programs, NYISO Zonal LBMPs (Locational-Based Market Pricing) shall be utilized for forecasting and settlement.

Round-Trip Efficiency

While the 2024 Energy Storage Order declined to adopt round-trip efficiency (RTE) as part of the REAP, [17] citing the complexity of calculating individual RTEs for each project, NYSERDA proposed utilization of uniform RTE assumptions to strike a balance between administrative complexity and REAP calculation accuracy.

NYSERDA noted that choosing no RTE assumption implicitly sets a uniform RTE (of 100%) that would overstate expected revenue. Alternatively, a uniform RTE below 100% (e.g. 85% for 4 hours) would result in a REAP that better approximates expected revenue from market participation, consistent with the intent of the ISC. Addressing the RTE issue becomes even more important with the establishment of an 8+ hour carveout, owing to the lower arbitrage opportunities in hours 5-8 and the generally lower RTE of non-lithium-ion, longer-duration storage technologies.

The 2025 BES Approving Order accepts NYSERDA's proposal to include separate uniform RTE assumptions, based on technology or duration, to be included in REAP calculations. Uniform RTE assumptions for consideration in the first RFP shall be 85% for lithium-ion technologies, 65% for non-lithium-ion technologies, and 45% for multi-day technologies. NYSERDA may alter the uniform RTEs from solicitation to solicitation, in consultation with DPS Staff. [18]

REAP Calculation Methodology

As recommended in the Roadmap, the Reference Energy Arbitrage Price shall be calculated by using the top and bottom priced hours in the day-ahead market, based on the duration of the resource, to reflect a project's arbitrage opportunity. This Top-Bottom or "TB" approach is a commonly used hedging mechanism in bulk storage markets. This means that for a 4-hour duration resource, the daily REAP shall be calculated based on the sum of the spreads between the top 4 and bottom 4 hours in the day-ahead energy market. While the Roadmap recommended calculating the daily REAP by using the difference between the averages of top and bottom hours, summing of spreads is an analogous and mathematically comparable approach that has the added benefit of enabling the exclusion of negative arbitrage situations, as discussed below. Using this approach would thus better approximate energy arbitrage revenues when round-trip efficiencies are considered.

For the <8 hour category, NYSERDA shall utilize a "TBX" approach, i.e. a 6-hour project will utilize the top 6 and bottom 6 hours and a 4-hour project will utilize the top 4 and bottom 4 hours; the intent is to capture differences between durations. For the 8+ hour category, the TBX approach becomes less workable as spreads diminish. NYSERDA shall therefore utilize a TB8 approach for the 8+ hour category, i.e. any 8+ hour project will utilize top 8 and bottom 8 hours.

[17] Id., p. 34.
[18] Op. cit. note 5, p. 13-14.

Using the "sum of spreads" approach mentioned above, a Daily REAP will be calculated by:

- Pairing hours (e.g. highest and lowest hour, second-highest and second-lowest hour, etc.);
- Incorporating round-trip efficiency into the calculation of charging cost;
- Calculating the spread of each pairing;
- Setting the value of each negative spread to zero;
- Summing the spreads; and
- Dividing by duration hours to convert to $/MWh deliverable.

A Monthly REAP will be calculated by averaging the monthly total of Daily REAPs.

Formulas

Indicative formulas for the Daily and Monthly REAP ($REAP_D$ and $REAP_M$) are provided below. Final formulas shall be published with each solicitation.

$$REAP_D = \frac{\sum_{n=1}^{x} max\left(\left[T_n - \frac{B_n}{RTE}\right], 0\right)}{x}$$

where

T_n = *Price of Top nth hour, in descending order*

B_n = *Price of Bottom nth hour, in ascending order*

RTE = *Energy Storage System Round-Trip Efficiency*

x = *Energy Storage System Duration Hours (≤8)*

$$REAP_M = \frac{\sum_{D=1}^{k} REAP_D}{k}$$

where

k = *Days in Month*

Reference Capacity Price

Market Pricing

Mirroring other NYSERDA Index REC programs, and as recommended in the Roadmap, the monthly NYISO Installed Capacity (ICAP) spot auctions shall be utilized to calculate the RCP.

Location

As recommended in the Roadmap, locality-specific pricing (i.e. the separate capacity pricing areas of the New York Control Area (NYCA)) shall be utilized to calculate the RCP.

Pricing Adjustments

As proposed in the Roadmap and owing to year-to-year variability in a resource's capacity value, the RCP shall be calculated by adjusting the Monthly NYISO ICAP auction value by the prevailing Capacity Accreditation Factor for each storage duration type.

Formula

As directed by the 2024 Energy Storage Order, NYSERDA shall publish the final RCP formula with its bulk energy storage solicitations, using NYISO's capacity accreditation. [19]

2.2.3 Interday/Multiday ISC Methodology

As resource durations extend beyond 8 hours and into interday and multiday use cases, the above Reference Price methodologies and their underlying market participation assumptions may become less accurate as reference points for estimating expected revenue. Recognizing the limitations of the current ISC approach for 12+ hour resources, the 2025 BES Approving Order directs NYSERDA to propose by September 1, 2025 an alternative methodology for estimating expected market revenue for such resources. Such timing would allow for potential inclusion of a new methodology in the 2026 solicitation. This filing will be subject to a public comment period and subsequent consideration by the Commission. [20]

2.3 Other ISC Components

Inflation Adjustment

As recommended in the Roadmap and directed by the 2024 Energy Storage Order, [21] ISC solicitations and contracts shall include a one-time inflation adjustment mechanism pursuant to which the Strike Price of an awarded project would be adjusted based on changes in pre-determined cost indices between the time at which the project is bid and the time at which the project proceeds to construction. These indices will be based on generally accepted industry indices, will not be constrained by the maximum bid price described below, and will be further specified in each solicitation. NYSERDA shall have the flexibility to make this adjustment optional or mandatory as deemed appropriate in consultation with DPS Staff.

Settlement Period

As recommended in the Roadmap and adopted in the 2024 Energy Storage Order, the settlement period for the ISC will be monthly. The Monthly ISC Payment will be calculated starting with the difference between the Strike Price and the sum of the monthly Reference Energy Arbitrage Price and the monthly Reference Capacity Price. This difference will then be multiplied by the number of Index Storage Credits created in that month. Below is an indicative settlement formula, with the final formula to be published in each RFP.

[19] Op. cit. note 3, p. 33.
[20] Op. cit. note 5, p. 21.
[21] Op. cit. note 3, p. 36.

$$Monthly\ ISC\ Payment = (Strike\ Price - Reference\ Price)\ \ x\ Monthly\ ISCs\ Created$$

where (per Section 2.1.2)

$$Monthly\ ISCs\ Created = Maximum\ Monthly\ ISCs\ x\ Monthly\ Availability\ Percentage$$

Payments shall be made following settlement calculations conducted after the end of each month, with details to be provided in each solicitation.

Limitation of Liability

The Roadmap recommended that payment caps not be applied to the ISC structure for reasons of market efficiency and ratepayer benefits. However, the 2024 Energy Storage Order did not make a determination on this topic.

While generally supporting the avoidance of payment caps or collars (combining caps and floors), NYSERDA observed that the REAP does expose developers to a low-probability scenario in which energy market price volatility or capacity market prices are extremely high and the project is unable to participate in the market, including for reasons beyond its control (e.g. timing of market dispatch). Under this scenario, a project could face a very high ISC payment obligation to NYSERDA. This scenario, however unlikely, could have implications for investor risk analysis, potentially increasing financing costs and, ultimately, Strike Prices bid by projects.

To mitigate this concern, NYSERDA proposed a limit on ISC payments to NYSERDA to the negative value of the Strike Price. Such a limit would be symmetrical with payments from NYSERDA to the project, which are implicitly capped at the Strike Price (this effective limit also exists in the Tier 1 REC and OREC programs). This payment symmetry is represented below.

$$|Monthly\ ISC\ Payment| \leq Strike\ Price\ x\ Monthly\ ISCs\ Created$$

The 2025 BES Approving Order accepts NYSERDA's proposal for limiting ISC payments. [22]

Maximum Bid Price Evaluation

As utilized in NYSERDA's Large-Scale Renewables programs and recommended in the Roadmap, ISC procurements shall apply a maximum bid price evaluation metric. This metric shall consist of a maximum levelized net ISC cost that bid prices may not exceed. This metric, which will be based on projections and calculated on an $/ISC basis, is discussed further in Section 2.5.1. The net ISC cost will be established confidentially between NYSERDA and DPS for each solicitation and include separate calculations for each duration category.

[22] Op. cit. note 5, p. 22.

Formula Amendments

As recommended in the Roadmap, ISC contracts shall be designed to enable amendments to the ISC formula in the event of changes to wholesale energy market rules that have significant and sustained impacts on the type and level of compensation received by bulk energy storage projects. These amendments will be similar to change of law provisions used in NYSERDA's Large-Scale Renewables programs.

Prevailing Wage

The 2024 Energy Storage Order directed NYSERDA to include, in its contracts with bulk energy storage developers, language that requires paying the New York State Prevailing Wage. [23] Specifically, any project participating in the NYSERDA Bulk Energy Storage program must pay the NYS prevailing wage, with this requirement explicit in the contract and with quarterly certifications by a New York State-licensed Certified Public Accountant during the construction of the project. These requirements will be further elaborated in procurements and will build on existing language in NYSERDA's Large-Scale Renewables programs.

2.4 Program Eligibility

As recommended in the Roadmap, the following eligibility criteria must be met to participate in the bulk storage program:

- Project must utilize storage technology that is electrical, chemical, mechanical, or thermo-electric.
- Project must store electrical energy for injection to the grid at a later time.
- Project must have a minimum capacity of 5 megawatts AC power.
- Project must be electrically interconnected into the transmission, sub-transmission, or distribution system.
- Project may not be receiving, have received, or plan to receive other incentives through NYSERDA's Market Acceleration Bridge Program, Tier 1 REC or OREC programs (subject to the caveats below), or the Utility Bulk Dispatch Rights Program.

NYSERDA recognizes the value of co-locating bulk energy storage with land-based renewable energy and offshore wind projects. NYSERDA shall allow a bulk energy storage project that is co-located with a renewable energy project to be eligible for the ISC program if it is not expressly included in a Tier 1 REC or OREC award. In addition, a bulk energy storage project that is expressly included in an awarded Tier 1 REC or OREC contract may nonetheless be eligible for the ISC program if the REC or OREC contract provides that, upon award of an ISC contract (or similar), the REC contract is adjusted accordingly.

NYSERDA's Build-Ready program advances renewable energy and energy storage projects on underutilized land such as brownfields, landfills, commercial and industrial sites, and dormant electricity-generating sites. [24] The program runs competitive solicitations for projects it develops, transferring them to the private sector for final completion and operation. The program procures Tier 1 RECs created from Build-Ready renewable energy projects. With the inclusion of stand-alone

[23] Op. cit. note 3, p. 54-55, p. 94.
[24] Case 15-E-0302, Order Approving Build-Ready Program (Issued and Effective October 15, 2020).

energy storage in the program,[25] NYSERDA shall similarly allow bulk energy storage projects that are awarded through Build-Ready competitive solicitations to enter into ISC contracts.

Per the 2024 Energy Storage Order, utility-owned storage, excluding NYPA- and LIPA-owned storage, remains prohibited and is therefore not eligible to participate in the bulk energy storage program.[26] Further detail on NYPA and LIPA participation and crediting can be found in Section 3.10.

2.5 Bid Evaluation Weighting and Criteria

Mirroring the approach of NYSERDA's Large-Scale Renewables procurements, and as recommended in the Roadmap and approved by the 2024 Energy Storage Order, NYSERDA shall evaluate bids using both price and non-price factors. The 2025 BES Approving Order adopts NYSERDA's proposal to utilize a 60/40 weighting of price and non-price evaluation factors. As noted, this gives project cost a majority emphasis while also allowing non-price factors such as project maturity to be a significant component of evaluation.[27]

2.5.1 Price Evaluation Factors

As recommended in the Roadmap, NYSERDA shall perform a price evaluation that reflects the projected levelized net ISC cost based on zonal energy and capacity price forecasts. This projected levelized net ISC cost metric will be calculated by determining the Net Present Value of the net ISC payments made by NYSERDA to the project over the contract term, discounted and then divided by total ISCs to arrive at a levelized $/ISC cost. NYSERDA will share with prospective bidders in each solicitation the assumptions regarding the net ISC cost calculation, including the underlying energy and capacity price forecast assumptions, but will not disclose the full datasets used to calculate projected levelized net ISC costs.

2.5.2 Non-Price Evaluation Factors

The 2024 Energy Storage Order directed NYSERDA to describe the qualitative factors it will evaluate in scoring and ranking bids.[28] NYSERDA shall include three broad categories of 1) project maturity and viability; 2) electricity system value; and 3) societal and economic benefits. Criteria and weighting shall be developed with an eye to the 2024 Energy Storage Order's geographic minimum targets and Climate Act requirements for Disadvantaged Communities, and to account for long-duration storage benefits and attributes as directed by the 2024 Energy Storage Order.

Within these non-price categories, two types of criteria shall be developed and applied to subcategories. "Minimum threshold" criteria shall constitute a minimum requirement for eligibility. "Evaluation" criteria shall represent additional value within a subcategory and generate non-price evaluation points.

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[25] NYS Executive Budget FY 2025, Transportation, Economic Development, and Environmental Conservation, Part M, p. 51-52.
[26] Case 18-E-0130, State of New York Public Service Commission, Order Establishing Updated Energy Storage Goal and Deployment Policy (Issued and Effective June 20, 2024).
[27] Op. cit. note 5, p. 12-13.
[28] Op. cit. note 3, p. 33.

Prior to each solicitation, NYSERDA will determine in consultation with DPS Staff the exact approach for evaluating non-price factors. Below is an indicative list of categories and subcategories, with weightings, that NYSERDA will consider.

- Project Maturity & Viability (20%)
    - Ability to meet Schedule / Maturity Requirements for:
        - Interconnection
        - Permitting
        - Environmental & Safety
    - Supply Chain Strategy
    - Community Engagement Strategy
    - Development & Operating Experience
    - Creditworthiness & Financing
    - Climate Resiliency
- Electricity System Value (10%)
    - System Reliability & Peaker Displacement Potential
    - Renewables Integration & Curtailment Reduction Potential
- Societal & Economic Benefits (10%)
    - Disadvantaged Community Benefits (emissions, employment, education)
    - Other Community Benefits (outreach, relationship-building, land reuse)
    - MWBE and SDVOB Participation
    - NYS Job Creation and Economic Impact (short-term and long-term)
    - NYS Supply Chain Utilization

NYSERDA may alter the criteria and/or weightings of the subcategories from one solicitation to the next, in consultation with DPS Staff. Such subcategory criteria and weightings shall be included in the RFP documents for each solicitation.

<u>Project Maturity and Viability</u>

Project maturity and viability criteria will include interconnection, permitting, and environmental maturity requirements, with specific threshold and evaluation criteria to be provided in each solicitation. Other aspects of project viability such as community engagement and supply chain strategies, company track record, and financing may also be considered.

Project Maturity Requirements

NYSERDA shall make project maturity the core of its Project Maturity and Viability non-price evaluation. This approach has precedent in NYSERDA's Tier 1 Large-Scale Renewables procurements and is intended both to establish a minimum for deeming project readiness and to reward projects that have advanced beyond such requirements. A 20% weighting for this category will afford project maturity a proper emphasis in overall evaluation.

Citing the need to limit project attrition, the 2024 Energy Storage Order directed NYSERDA to "include certain project maturity requirements in its bulk energy storage solicitations and in its Implementation Plan." [29] The 2025 BES Approving Order recognizes, however, that the proposed

[29] Id., p. 37.

minimum maturity requirements may not align with bulk energy storage development processes and accordingly sets forth revised minimum maturity requirements, as described below. [30]

For projects with fewer than 8 hours in duration, NYSERDA shall require written confirmation of:

- An active interconnection request with the NYISO or through a relevant utility process; and
- Evidence via a permitting plan that the project has a reasonable pathway to securing all permits within the proposed schedule.

For projects with 8 or more hours in duration, NYSERDA shall require written confirmation of:

- An interconnection plan with a reasonable pathway to securing an interconnection agreement within the proposed schedule; and
- Evidence via a permitting plan that the project has a reasonable pathway to securing all permits within the proposed schedule.

Given the dynamic nature of New York's interconnection and permitting processes, and the progress of projects over time, what constitutes "project maturity" may change over the course of the program's life cycle. NYSERDA shall provide additional maturity requirements within each annual procurement, in consultation with DPS Staff, which shall be reflected in the RFP documents for each solicitation.

Electricity System Value

NYSERDA shall also evaluate the various non-price benefits that bulk energy storage projects can provide to the electrical grid. These may include evidence of the potential to support peaker plant displacement and the capability to reduce curtailment and otherwise support renewables integration. Such evaluation would require additional analysis by NYSERDA to estimate potential system impacts and evaluate projects accordingly, which may be done at the NYISO Zone level and/or specific to individual projects where appropriate.

Societal & Economic Benefits

The Commission directs NYSERDA to include details in its Implementation Plans that address Disadvantaged Community (DAC) considerations as part of program participation, building off the Roadmap recommendation to allocate 35% of program funding in areas that most benefit DACs, consistent with Climate Act requirements. [31] As with NYSERDA's Tier 1 Large-Scale Renewables program, benefits to DACs shall be considered in the non-price evaluation, with emissions, employment, and education impacts among the potential factors to be evaluated. Economic benefits to the state shall also be evaluated and may include factors such as MWBE participation and utilization of a New York-based workforce and supply chain.

Long Duration Considerations

The Commission directs NYSERDA to include in its Implementation Plan "how it would procure and account for the additional attributes and benefits of LDES." [32] NYSERDA shall apply the same non-

[30] Op. cit. note 5, p. 10-12.
[31] Op. cit. note 3, p. 59.
[32] Id., p. 35.

price evaluation categories to 8+ hour duration projects, but in consultation with DPS Staff may consider modified or new criteria in evaluating project maturity and viability and electricity system value.

Project maturity and viability criteria specific to LDES attributes and benefits may include technology readiness and eligibility to scale and serve as a Dispatchable Emission-Free Resource (DEFR). Electricity system value considerations may include attributes and benefits such as interday energy shifting, multiday resilience, or the ability to provide additional ancillary services (e.g. black start, system inertia). For this last attribute it would be important to distinguish between services that are currently compensated by NYISO and those that are not.

2.6 Solicitation Schedule and Process

The 2024 Energy Storage Order directed NYSERDA to conduct a minimum of three bulk energy storage solicitations, to be held no less than annually, with the first bulk energy storage Request for Proposals (RFP) to be issued no later than June 30, 2025. [33] NYSERDA intends to issue three annual solicitations to procure ISCs from 2025-27, with the below table providing a preliminary schedule.

Procurement Year	RFP Issued	Proposals Due	Award Notification	Contracts Finalized
2025	2Q25	3Q25	4Q25	1H26
2026	2Q26	3Q26	4Q26	1Q27
2027	2Q27	3Q27	4Q27	1Q28

NYSERDA recognizes the benefit of aligning its solicitation schedule to the extent possible to various project development processes. Early transparency on the criteria for permitting and interconnection processes, in addition, will enable developers to make decisions on whether to proceed with projects. Over the course of the program lifecycle NYSERDA may issue a Request for Information (RFI) or Draft RFP for feedback to inform an upcoming solicitation.

As this procurement schedule commences one year later than anticipated in the Roadmap, resulting in a backlog of potentially viable and valuable projects, NYSERDA shall have the flexibility to procure more than 1,000 megawatts in its first solicitation. This would not alter the 3,000 MW program total but would front-load progress toward the 2030 deployment target while enabling slightly larger 8+ hour projects to compete.

<u>Project Application Submission Process</u>
NYSERDA shall follow an application process similar to those conducted for its other Large-Scale Renewables procurements. After the RFP is issued, proposers will have a predetermined period to submit Bid Proposals. NYSERDA will then evaluate Proposals to determine whether they 1) do not exceed the Maximum Bid Price and 2) meet Minimum Threshold Requirements. Proposals that

[33] Id., p. 33, p. 94.

satisfy both criteria shall then be subject to a competitive evaluation based on price and non-price factors. Initial awardees will be notified and begin contract negotiations; only projects that reach contract closure are expected to be announced publicly.

2.7 In-Service Date

Consistent with State energy policy and the goals of the CLPCA, the 2024 Energy Storage Order requires that bulk energy projects that receive funds under the Bulk Energy Storage program be in-service by December 31, 2030. [34] Recognizing the uncertainties of development timelines, however, the 2024 Energy Storage Order gives NYSERDA the flexibility to extend this deadline for project with delays for reasons beyond the developer's control, provided that construction has commenced on or before December 31, 2030. NYSERDA shall include further details on deadline extension qualification and processes in its program solicitations and contracts.

3. Program Funding

3.1 Procurement Costs

BES program costs associated with procurement are estimated to be $701.5 million - $1.42 billion (net present value in 2024 dollars) to procure 3,000 MW of bulk storage. [35] The range of these projections reflects future uncertainties, most notably those associated with energy and capacity prices. These estimates exclude program administration and related costs.

	Lifetime Prog Cost NPV (2024$)	Lifetime Levelized Bill Impact (%)	Peak Bill Impact (%) (2030)
Bulk Program	$701-1,422M	0.21-0.42%	0.57-0.84% (2030)

3.2 Program Funding Mechanism

The 2024 Energy Storage Order adopted the Roadmap recommendation that funding for bulk energy storage program incentives be collected by jurisdictional load serving entities in proportion to their share of Statewide electrical load—an approach utilized in NYSERDA's Clean Energy Standard and Offshore Wind programs. [36] NYSERDA is responsible for including the processes for calculating and collecting bulk storage program costs from all statewide Load Serving Entities (LSEs) and NYPA and LIPA. Each utility shall file tariff amendments as necessary to effectuate recovery of costs associated with the program through an applicable supply surcharge.

While the process for an LSE Bulk Energy Storage (BES) obligation and reconciliation is similar to those of NYSERDA Large-Scale Renewables programs, some differences exist. No Renewable Energy Certificates (RECs) will be created in NYGATS for the Bulk Energy Storage program. (The use of a "BES," rather than "ISC," obligation is intended to avoid this confusion.) Instead, NYSERDA will

[34] Id., p. 60, p. 99.
[35] Op. cit. note 1, p. 59.
[36] Op. cit. note 3, p. 92, 99.

execute form contracts with LSEs, as set forth in Appendix A, that would memorialize the LSE load share obligation requirements described below.

3.3 LSE Bulk Energy Storage (BES) Obligation

To calculate each LSE's BES obligation, the program intends to use a payment methodology originally adopted through the ZEC Implementation Order. [37] Under this method, a uniform wholesale per MWh charge will be applied to each LSE's actual wholesale load to calculate its monthly BES obligation payments. This will provide NYSERDA with the necessary operating liquidity to fund the BES program and provide LSEs with a more uniform payment structure.

3.4 LSE BES Rate

Each year, NYSERDA will determine, in collaboration with DPS Staff, the dollar per MWh charge (LSE BES Rate) owed by each LSE for the next compliance year of the BES program. The LSE BES Rate shall be used by all LSEs and NYSERDA to determine the monthly payment an LSE will be responsible for making to NYSERDA. The LSE BES Rate will be a wholesale rate applied to the wholesale load data NYSERDA receives from the New York Independent System Operator (NYISO). [38] The cost component of the LSE BES Rate will be based on the total forecasted cost for NYSERDA to fund the BES program, including any Commission approved administrative adder. The load component of the LSE BES REC Rate will be based on statewide forecasted load. [39]

The LSE BES Rate to be paid by each LSE for each compliance year will be calculated according to the following formula:

$$LSE\ BES\ Rate = \frac{NYSERDA's\ estimated\ total\ cost\ to\ fund\ BES\ program}{Forecasted\ statewide\ electric\ load}$$

The proposed payment methodology relies on LSE's monthly wholesale load requirements for their retail customers. NYSERDA will utilize Version 1 [40] of the total LSE load data, as settled by the NYISO each month, as a basis for each LSE's monthly payment to NYSERDA.

An LSE's monthly BES payment obligation will be calculated using the LSE BES Rate, the number of MWh the LSE served using the NYISO Version 1 load data, and a Load Modifier Rate if applicable, according to the following formula:

$$LSE\ BES\ Monthly\ Payment\ Obligation = LSE\ BES\ Rate\ x\ LSE's\ Version\ 1\ MWh\ x\ Load\ Modifier\ Rate$$

A final reconciliation will occur after the close of each year, as described below in Section 3.8.

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[37] Case 15-E-0302, supra, Order Approving Zero-Emissions Credit Implementation Plan with Modifications, (Issued and Effective September 20, 2019), p. 14.

[38] As the LSE RES Rate is a wholesale rate, it must be adjusted to account for delivery losses that occur between wholesale purchases from NYISO and retail sales to customers.

[39] Forecasted statewide electric load is an estimate by NYSERDA and DPS Staff based on information from the NYISO's *Load & Capacity Data Report* (NYISO Gold Book).

[40] NYISO Version 1 load data is part of the NYISO settlement process. This is the initial monthly billing period data from the NYISO.

3.4.1 Cost Component

As noted above, the proposed cost component of the LSE BES Rate will be the cost for NYSERDA to fund the BES program (plus any administrative adder). NYSERDA BES program costs, which are based on forecasted ISC costs for a given year, will vary from the actual amount NYSERDA pays for the BES program. To minimize this variation, NYSERDA will review BES cost estimates with DPS Staff to minimize the annual BES reconciliation discussed below.

3.4.2 Load Component

The proposed approach will place additional importance on load forecasting, as such forecasts will be used to determine the LSE BES Rate. If actual statewide load were to be less than the forecasted statewide load used to determine the LSE BES Rate, NYSERDA will be short in its collections to fund the BES program. Conversely, if actual statewide load were to exceed the forecasted statewide load, excess funds will be collected by NYSERDA from LSEs.

To provide further process transparency, NYSERDA and DPS Staff will use a published forecast, such as the NYCA Baseline Energy and Demand Forecasts report that Reflects Impacts of Energy Savings Programs & Behind-the-Meter Generation, which is published annually in the NYISO's *Load and Capacity Data* report, commonly referred to as the "Gold Book," as the basis for determining the statewide load component.

3.5 Load Modifier Rate

Each of New York's Investor-Owned Utilities, and some of its municipal utilities, have load modifiers which are added to their NYISO Version 2 reported load. As part of the ZEC Implementation Plan, NYSERDA conferred with the affected entities and determined that a load modifier rate could be used to adjust their monthly payments to NYSERDA. An annual load modifier rate, based on load modifier generation data from the previous year, will also be applied in this proposal. In consultation with DPS Staff and NYSERDA, affected LSEs will calculate the load modifier rate for each LSE prior to the start of each compliance year. Applying the load modifier rate will better estimate the affected entities' load, with the goal of reducing reconciliation amounts.

3.6 Notification/Publication

NYSERDA will notify, by email, each LSE of the LSE BES Rate for the upcoming year, as well as any load modifier adjustments and load modifier rate, if applicable, after these have been calculated by NYSERDA and DPS Staff. This notification will occur after Commission approval of any NYSERDA administrative adder for the compliance year but at least by November 1st. NYSERDA will also publish the LSE BES Rate on the NYSERDA website.

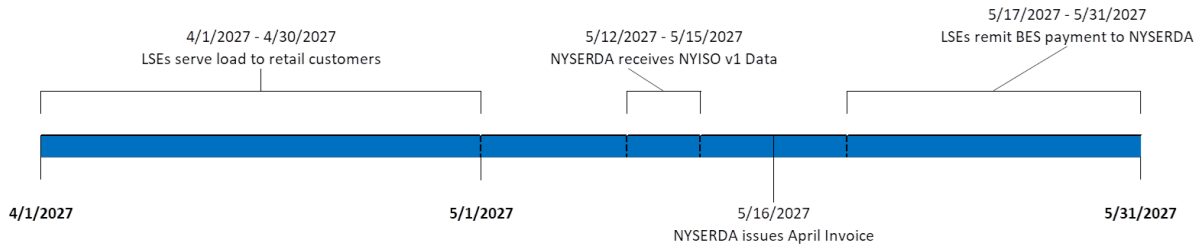
3.7 BES Obligation Payment Determination

As noted above, the BES obligation payment determination will utilize the payment methodology developed under the ZEC Implementation Plan.[41] This process relies on an LSE's monthly wholesale load requirements for its retail customers. NYSERDA will utilize Version 1 of the total LSE load data, as settled by the NYISO each month, as a basis for each LSE's monthly payment to

[41] Case 15-E-0302, supra, Final Zero Emissions Credit Implementation Plan (Issued and Effective November 14, 2019), p. 2.

NYSERDA. NYSERDA typically receives monthly load data from the NYISO on or around the 15th day of the following month. NYSERDA will then determine the LSE's BES monthly payment obligation to NYSERDA using the formula specified and issue an invoice as depicted in Figure 1. LSEs will submit their payment to NYSERDA within fifteen (15) days of the issuance of the invoice. This proposed method will likely result in LSEs having a varying payment obligation each month.

Figure 1: Timeline for LSE BES Payment Obligation



3.8 BES-Obligated LSE Reconciliation

NYSERDA proposes to reconcile financial obligations to fund the BES for a given compliance year after the compliance year ends on December 31. NYSERDA will reconcile the funds collected from each LSE to the net LSE financial obligation necessary to meet their requirement, based on the Version 2 load data that is provided from the NYISO. This load will be adjusted for load modifiers. This reconciliation will account for the actual adjusted statewide load and NYSERDA's actual BES program cost.

3.9 NYSERDA Agreements with Load Serving Entities

NYSERDA will establish new agreements with LSEs to reflect the terms of the 2024 Energy Storage Order. The contracts will be modified as needed in subsequent years. A BES Form Agreement is attached to this Implementation Plan as Appendix A. All LSEs will be required to accept the agreement within sixty (60) days of filing this Implementation Plan. NYSERDA will inform LSEs regarding acceptance procedures within thirty (30) days of filing this Implementation Plan.

3.10 NYPA and LIPA Participation and Crediting

The 2024 Energy Storage Order adopted the Roadmap recommendation that NYPA and LIPA, as non-jurisdictional LSEs, voluntarily participate and accept ISC obligations in proportion to their share of Statewide load. Consistent with the approach in the Offshore Wind Standard, if LIPA or NYPA directly procure or develop bulk energy storage projects outside of the NYSERDA procurement program, the 2024 Energy Storage Order determined that NYSERDA would take such independent storage procurement into account in its assessment of amounts of bulk storage needed through its solicitations.

The 2024 Energy Storage Order also determined that independently procured projects shall, subject to meeting the requirements of the bulk storage program, be credited towards NYPA and LIPA load share compliance obligations. NYSERDA was directed to describe the crediting process in this Implementation Plan. The 2025 BES Approving Order provides additional direction below.

3.10.1 LIPA Participation and Crediting

LIPA is a voluntary participant in multiple CES programs (ZEC, Tier 2, Tier 4) and the retail and residential storage programs, and NYSERDA anticipates its continued leadership and participation in the BES program.

To credit a project procured independently by LIPA, NYSERDA proposed to work with LIPA to determine an ISC-equivalent credit, reasonably derived from LIPA's contractual payments to developers and wholesale market revenues, to be applied against LIPA's BES Monthly Payment Obligation. Specific details will be developed in a BES contract between NYSERDA and LIPA. The 2025 BES Approving Order agrees with NYSERDA's proposal and directs that, if NYSERDA and LIPA are unable to come to an agreement, NYSERDA shall consult with DPS Staff. [42]

3.10.2 NYPA Participation and Crediting

The New York Power Authority (NYPA) is a voluntary participant in the CES program. NYPA has yet to determine its participation in the BES program.

Should NYPA decide to voluntarily participate and accept ISC obligations, NYSERDA shall work with NYPA to credit its independently procured projects using the same crediting process as with LIPA, as described above.

NYPA has stated its intent to, under its expanded authority, develop bulk energy storage projects to compete in ISC solicitations and contract for ISCs. To the extent that revenue from such projects is structured to directly benefit groups other than NYPA customers (such as in NYPA's Renewable Energy Access and Community Help (REACH) program [43]), NYSERDA proposed that such projects would be eligible to participate in ISC solicitations and receive ISC awards. However, to the extent that project revenues directly benefit NYPA customers, NYSERDA proposed that the applicable projects would be eligible to participate in ISC solicitations and receive ISC awards only if NYPA is fully participating and accepting ISC obligations as an LSE.

The 2025 BES Approving Order accepts NYSERDA's proposal for NYPA participation and crediting and directs NYSERDA and DPS Staff to work with NYPA to identify the required information necessary to determine eligibility for the ISC, such as a project's REACH support and other project-specific benefits to non-NYPA customers. [44]

4. Program Administration

4.1 Program Administration Costs

The Roadmap recommended a separate budget allocation for startup costs associated with the set-up and implementation of the BES program. These costs are estimated at $6.1M,

[42] Op. cit. note 5, p. 23.
[43] Case 24-E-0084, Petition of New York Power Authority to Establish the Renewable Energy Access and Community Help Program, Submitted January 31, 2024.
[44] Op. cit. note 5, p. 24-25.

undiscounted, and are detailed below.[45] While the "startup" period was not specified in the Roadmap, NYSERDA assumes a timeframe lasting until the end of 2026.

Administration Costs

NYSERDA's project planning for the Roadmap indicated that a total of approximately $4.5 million for the BES program should be budgeted for program administration, inclusive of NYSERDA employees and staff augmentation resources required for the following:

- Set-up and origination of the bulk procurement program
- Economic, financial, and programmatic analysis and forecasting activities supporting the administration of the program
- Subject matter expertise, policy engagement and tracking, and stakeholder support
- Data management and reporting activities associated with the program
- Support services including legal counsel, contracting, marketing, communications, and information technology.

Implementation Support Costs

Implementation support for the program, estimated at $1.6M, includes several distinct categories associated as detailed below:

- Technical consultant support relating to wholesale and distribution market analysis, interconnection and hosting capacity, power system modeling and economic forecasting
- Quality assurance (QA) activities conducted by NYSERDA's Quality and Market Standards (QMS) team, which includes field and photo inspections and the resolution of any issues identified during inspections
- Measurement and verification (M&V) activities, which involves NYSERDA review of the performance of the system during ongoing operations.

Program Evaluation Costs

Program evaluation costs include impact assessment, market characterization studies, and process evaluation. No startup program evaluation costs were assumed in the Roadmap.

Bulk Energy Storage Program - Roadmap Budget Allocation

	Bulk Startup
Program Administration	$4,537,071
Implementation Support	$1,600,000
Total	$6,137,071

4.2 Program Budget

The Roadmap recommended that bulk program start-up costs use legacy funding from storage programs approved in the 2018 Energy Storage Order. Additional needs related to administration and implementation of the bulk program following its origination may be requested in a subsequent petition or alternative process, if so determined by the Commission.[46]

[45] Op. cit. note 1, p. 60-62.
[46] Id., p. 62.

The program operating plan and budget for 2024-26 are as follows:

Program Administration
This budget supports bulk program startup through additional headcount in the areas of project management, settlements, legal, and contracts, as well as additional IT support. Expenditures tied to bulk program administration are projected at $4.4 million through the end of 2026, just below the $4.5M requested in the Roadmap.

Implementation Support
This budget includes plans to engage a technical consultant for a multi-year contract. This consultant will develop an ISC cost model, incorporating energy market forecasts and other assumptions, for the purpose of bid evaluation. The consultant will also provide ongoing RFP evaluation support.

Program Evaluation
While the Roadmap did not include program evaluation costs, this budget assumes modest costs during the startup phase.

2024-26 Operating Budget

	2024	2025	2026	2024-26 Total
Prog Admin	$200,000	$2,000,000	$2,200,000	$4,400,000
Impl Support		$750,000	$750,000	$1,500,000
Prog Evaluation		$100,000	$100,000	$200,000
Total				$6,100,000

4.3 Quality Assurance

NYSERDA's Quality and Market Standards (QMS) team shall conduct a reasonable number of pre-commissioning and post-commissioning field and photo inspections before, during, and after the installation of contracted projects to confirm installed equipment is as approved under the program, and to ensure general compliance with codes, standards, and accepted industry practices. The QMS team will provide Quality Assurance (QA) inspection reports and work with Parties to address nonconformances. The QMS team shall also ensure adherence to the peer review process described in Section 4.5.1. Quality Assurance requirements shall be provided in further detail in the Program Manual.

4.4 Measurement & Verification

NYSERDA shall utilize a Measurement & Verification approach similar to that used for projects funded under the prior NYSERDA bulk energy storage program. To verify that a project is operational and available for discharge, NYSERDA shall work with project owners to directly access the relevant metering data. Funded projects will undergo ongoing Measurement & Verification, over the life of the contract, by a NYSERDA quality assurance contractor using 15-minute interval data. The relevant automated data transfer process will be established prior to the commencement of incentive payments. Measurement and Verification requirements shall be provided in further detail in the Program Manual.

4.5 Fire Safety

The 2024 Energy Storage Order directed NYSERDA to indicate in its Implementation Plans the applicable recommendations of the Fire Safety Working Group (FSWG), while noting that when considering fire safety requirements, NYSERDA is not limited to the recommendations issued by the FSWG and may include more stringent requirements. If the FSWG recommendations are adopted in the future, NYSERDA shall file an updated Implementation Plan reflecting those requirements as necessary.[47] The 2025 BES Approving Order, meanwhile, specifies that, if and when the New York State Fire Prevention and Building Council makes relevant updates regarding energy storage systems to the New York State Uniform Fire and Building Code, NYSERDA shall file a revised Implementation Plan and Program Manual reflecting those updates in the program's fire safety requirements, with a letter explaining the changes.[48] Fire safety requirements will be provided in further detail in the Program Manual.

In July 2024, the FSWG published and submitted to the New York State Fire Prevention and Building Code Council (Code Council) and New York Department of State a final Fire Code Recommendations report.[49] NYSERDA shall adopt for the Bulk Energy Storage program the following applicable recommendations.

4.5.1 Peer Review Requirement

The FSWG recommends mandatory peer reviews for lithium-ion battery storage projects exceeding 600 kWh capacity. To ensure the project's compliance with the Fire Code of New York State (FCNYS) and industry best practices relating to fire risk mitigation, the Bulk program will include a Peer Review requirement for eligible lithium-ion projects sited outside New York City. This Peer Review requirement will consist of a pre-construction review of the project's product and project design documents. This review will include but not be limited to site plans, electrical drawings, and large-scale fire test reports. The review will be conducted by a qualified, independent third-party Peer Reviewer contracted by NYSERDA to ensure the project's compliance with the FCNYS and industry best practices related to fire risk mitigation. Funding necessary to implement this requirement is estimated to be approximately $3.5 million across all programs and will draw on funding authorized for implementation support activities in the 2024 Energy Storage Order.

4.5.2 Emergency Response Plan

In accordance with the Fire Code Recommendations report, bulk projects sited outside New York City will be required to provide documentation verifying that the facility is equipped with an Emergency Response Plan (ERP) for first responders. The ERP must be maintained on-site outside the fence line of the project and be shared with the local fire department. To the extent possible, this ERP should be developed in consultation with the local fire department to ensure it is in alignment with their operating procedures, capabilities, and resources.

4.5.3 First Responder Training

Lithium-ion battery storage projects sited outside New York City will be required to offer annual, site-specific training for the local fire department. This training will familiarize fire department

[47] Op. cit. note 3, p. 80-81.
[48] Op. cit. note 5, p. 14-15.
[49] New York State Interagency Fire Safety Working Group, *Fire Code Recommendations*, July 2024.

personnel with the project, hazards associated with lithium-ion battery energy storage systems, and procedures outlined in the ERP.

4.6 Program Manual

As directed by the 2025 BES Approving Order, NYSERDA shall file a Bulk Energy Storage Program Manual at least two weeks prior to program launch, interpreted here to mean the date of issuance of the first RFP.[50] This Program Manual shall set forth the specific program requirements needed to participate in the ISC solicitation process and be awarded a contract. To ensure consistency and compatibility with RFP documentation, and as noted in Sections 4.3-4.5, the Program Manual shall focus on technical requirements related to Quality Assurance, Measurement & Verification, and Fire Safety.

5. Evaluation & Reporting

5.1 Performance Metrics

NYSERDA shall continuously track program performance for the purposes of evaluation, reporting, and program improvements and reforms over time. Key program performance metrics to be tracked may include:

- Projects contracted (MW, MWh)
- Projects operational (MW, MWh)
- Program cost (total $, $/MW, $/MWh, estimated ratepayer impact)
- Project locations
- Project durations
- Project performance (MW, MWh)
- Electricity system value
    - Peaker displacement
    - Renewables integration
- Societal and economic impacts
    - Disadvantaged Community benefits
    - NYS employment/other economic impacts
    - NYS supply chain impact

5.2 Evaluation Criteria

Utilizing the above performance and other data, NYSERDA shall evaluate progress toward program goals, including:

- Progress toward 3 GW target for incremental bulk energy storage deployed by 2030
- Progress toward 35% minimum in downstate (Zones G-K), including 30% in NYC (Zone J)
- Progress toward 20% target for 8+ hour duration

[50] Op. cit. note 5, p. 26.

Other program evaluation criteria may include:

- Customer bill impacts (actual versus projected), by segment
- System reliability impacts
- Project attrition by duration category
- Societal and economic impacts
- Interconnection, permitting, and other deployment barriers

5.3 Reporting

The 2024 Energy Storage Order directed DPS Staff to prepare an annual report (DPS State of Storage Report), as well as a triennial review for Commission consideration, on the status of the energy storage programs, progress to date, and barriers to success.[51] NYSERDA's reporting role will be to provide information requested by DPS as inputs to these reports and reviews.

[51] Op. cit. note 3, p. 96.

6. Appendix A: BES LSE Form Agreement

BULK ENERGY STORAGE
LSE FORM AGREEMENT

This Agreement (the "Agreement") is made as of [_____] ("Effective Date") by and between the New York State Energy Research and Development Authority, a public benefit corporation, having a principal business address of 17 Columbia Circle, Albany, New York 12203 ("NYSERDA"), and the Load Serving Entity entering this Agreement ("LSE Party"). NYSERDA and LSE Party are each referred to herein as a "Party" and are collectively referred to herein as the "Parties."

RECITALS:

WHEREAS, the New York State Public Service Commission ("PSC") through its "Order Adopting Updated Energy Storage Goal and Deployment Policy" ("2024 Energy Storage Order") established a Bulk Energy Storage Program; [52] and

WHEREAS, the Order directs NYSERDA to conduct a minimum of three bulk energy storage solicitations, held no less than annually, with the first Request for Proposals issued no later than June 30, 2025; and

WHEREAS, the Order directs NYSERDA to implement a Bulk Energy Storage ("BES") mechanism and authorizes NYSERDA to enter into agreements with eligible facilities receiving competitive awards under the Index Storage Credit ("ISC") RFPs; and

WHEREAS, the Order directs that funding for the bulk energy storage program incentives shall be collected by load serving entities ("LSEs") in proportion to their share of Statewide load as described in the body of the Order; and

WHEREAS, the [_____] [53] approved this form of agreement for the funding of bulk energy storage program incentives by LSEs; and

NOW, THEREFORE, in consideration of the foregoing and of the mutual promises hereinafter set forth, which the Parties agree is sufficient, and the Parties, intending to be legally bound, agree as follows:

ARTICLE 1: DEFINITIONS

1.1 Definitions. In addition to any other terms defined herein, the following terms shall have the meaning ascribed to them below:

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[52] Case 18-E-0130, In the Matter of Energy Storage Deployment Program, "Order Establishing Updated Energy Storage Goal and Deployment Policy," issued and effective June 20, 2024.
[53] The reference will be to the order approving the implementation plan, if and when approved.

(a) "Administrative Adder" means the total annual dollar amount, of any adder or other charge approved by the Commission to be paid by LSE Party to NYSERDA in their payments to NYSERDA for the Bulk Energy Storage Program.

(b) "Agreement" means this Bulk Energy Storage LSE Form Agreement, including Exhibit A (Standard Terms and Conditions for All NYSERDA Agreements); Exhibit B (NYSERDA Prompt Payment Policy Statement)[54]; all of which are incorporated herein and made part hereof.

(c) "Annual BES Obligation Amount" shall be calculated as an amount equal to the sum of (i) the Total BES Net Expenditure plus any approved (ii) Administrative Adder *multiplied by* (iii) the LSE Party Load Share. Annual BES Obligation Amount equals (i+ii)*iii.

(d) "Compliance Year" shall mean January 1 to December 31 of each year during which NYSERDA is purchasing ISCs.

(e) "Annual Settlement Payment" shall mean the final settlement payment due to either LSE Party or NYSERDA as calculated at the end of each Compliance Year pursuant to Section 2.5.

(f) "ISCs" mean Index Storage Credit incentives based upon the Megawatt-hours (MWh) that a bulk energy storage facility is deemed operational and available for discharge.

(g) "Load Modifier" means the adjustment made by certain LSEs to account for the fact that NYISO data may not accurately capture the load in New York State served by those LSEs due to some of such load being served other than through the NYISO wholesale market.

(h) "Load Modifier Projection" means the estimated Load Modifier, if any, applicable to the LSE Party as determined by NYSERDA each Compliance Year in accordance with the CES Orders based on information provided by LSE Party.

(i) "Load Serving Entity" or "LSE" means any entity or individual that sells retail commodity electricity supply to an end-use customer located in New York State, including any ESCO and each electric distribution company regulated by the PSC, serving in their roles as electric commodity supplier of last resort, jurisdictional municipal utilities, community choice aggregators not otherwise served by an ESCO, customers purchasing power directly from NYISO, and Long Island Power Authority ("LIPA") and the New York Power Authority ("NYPA") to the extent LIPA and NYPA have voluntarily agreed to act as LSEs.

(j) "LSE Party BES Load Share" means the percentage of the total electric energy load in New York State that is served by the LSE Party, incorporating any adjustment to NYISO load share data based on the LSE Party's Load Modifier (if applicable), during such Compliance Year.

(k) "LSE Party BES Rate" means the per MWh charge used by all LSE Party and NYSERDA as calculated by the formula adopted in the Bulk Energy Storage Implementation Plan.

[54] Available at: https://www.nyserda.ny.gov/Funding-Opportunities/Standard-Forms-and-Agreements.

(l) “Monthly Obligation Payment” means the monthly payment due from LSE Party to NYSERDA, calculated as the product of (i) the wholesale load served by LSE Party, in MWh, for the applicable month based on NYISO Version 1 data~~;~~ as adjusted by the Load Modifier Projection, if any, applicable to the LSE Party, *multiplied by* (ii) the LSE Party BES Rate.

(m) “NYGATS” means the New York Generation Attribute Tracking System, the tracking system that records electricity generation attribute information within New York State, and processes generation attribute information from energy imported and consumed within New York State, as a basis for creating tradable generation attribute certificates, including Tier 4 RECs.

(n) “NYGATS Operating Rules” means the rules governing the operation of the NYGATS by NYSERDA and its designated NYGATS Administrator, and the participation in and use of the NYGATS by users. The Operating Rules describe how the system is operated and delineate the roles, requirements and responsibilities of all parties. [55]

(o) “NYISO” means the New York Independent System Operator.

(p) “New York State Public Service Commission” or “PSC” means the commission duly authorized to operate in New York State pursuant to Articles 1 and 2 of the Public Service Law.

ARTICLE 2: PAYMENT OF BES

2.1 Annual BES Obligation Amount. Subject to the terms and conditions of this Agreement, LSE Party agrees to pay the Annual BES Obligation Amount. LSE Party shall pay the Monthly Obligation Payment each month in accordance with the provisions below, and the Parties shall carry out the settlement and reconciliation process described in Section 2.5 each Compliance Year.

2.2 Monthly Invoicing. NYSERDA will provide invoices to the LSE Party on a monthly basis for the Monthly Obligation Payment.

2.3 Monthly Payments. Payments in the amount of the Monthly Obligation Payment shall be due to NYSERDA within fifteen (15) days of the invoice date. Any and all payments due to NYSERDA shall be made by wire/ACH payment using electronic banking information provided by NYSERDA. When making payment, LSE Party shall include the Customer ID that NYSERDA previously sent to LSE Party by e-mail~~and~~ available within NYGATS.

2.4 Term. The payment obligations under this Agreement shall commence in Compliance Year 2026 and remain in effect until the date on which all of NYSERDA’s obligations to incentivize BES pursuant to agreements entered into accordance with the Bulk Energy Storage Program have expired or been terminated.

2.5. Annual Settlement. After the required data becomes available following each Compliance Year, the Parties will undertake the following on a timely basis:

(a) NYSERDA shall calculate LSE Party 's Annual BES Obligation Amount for each Compliance Year based on the NYISO Version 2 of the LSE Party load data or such other data generally used by NYGATS for similar purposes at such time.

(b) Should the aggregate amount of Monthly Obligation Payments paid by LSE Party in a Compliance Year exceed the Annual BES Obligation Amount for that Compliance Year, NYSERDA shall pay LSE Party the difference between such amounts.

(c) Should the aggregate amount of Monthly Obligation Payments paid by LSE Party in a Compliance Year be less than the Annual BES Obligation Amount for that Compliance Year, LSE Party shall pay NYSERDA the difference between such amounts.

ARTICLE 3: REPRESENTATIONS AND WARRANTIES

3.1 NYSERDA Representations and Warranties. NYSERDA hereby represents and warrants to LSE Party as follows:

(a) NYSERDA has and, at all times during the Term will have, all necessary power and authority to execute this Agreement and to perform its obligations hereunder.

(b) The execution of and performance under this Agreement by NYSERDA has been duly authorized by all necessary action and does not violate any of the terms or conditions of NYSERDA governing documents, or any contract to which it is a party, or any law, rule, regulation, order, judgment or other legal or regulatory determination applicable to NYSERDA. This Agreement constitutes the valid and binding obligation of NYSERDA enforceable against it in accordance with its terms, subject to the effects of bankruptcy, insolvency, reorganization, moratorium and similar laws affecting enforcement of creditors' rights and remedies generally and to general principles of equity.

(c) There is no pending or (to NYSERDA's knowledge) threatened litigation, arbitration or administrative proceeding that materially adversely affects NYSERDA's ability to perform its obligations under this Agreement.

(d) The BES payments made by LSE Party to NYSERDA hereunder shall be made for compliance under the 2024 Energy Storage Order.

(e) EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NYSERDA EXPRESSLY DISCLAIMS ANY OTHER REPRESENTATIONS OR WARRANTIES, WHETHER WRITTEN OR ORAL, AND WHETHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY REPRESENTATION OR WARRANTY WITH RESPECT TO CONFORMITY TO MODELS OR SAMPLES, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE.

3.2 LSE Party Representations and Warranties. LSE Party hereby represents and warrants to NYSERDA as follows:

(a) LSE Party is duly organized, validly existing and in good standing and has the requisite power and authority to own, lease and operate its properties and to carry on its business as being

conducted on the Effective Date. LSE Party has, and at all times during the Term will have, all necessary power and authority to execute this Agreement and to perform its obligations hereunder.

(b) The execution of and performance by LSE Party under this Agreement has been duly authorized by all necessary action and does not violate any of the terms or conditions of LSE Party 's governing documents, or any contract to which it is a party, or any law, rule, regulation, order, judgment or other legal or regulatory determination applicable to LSE Party. This Agreement constitutes the valid and binding obligation of the LSE Party enforceable against it in accordance with its terms, subject to the effects of bankruptcy, insolvency, reorganization, moratorium and similar laws affecting enforcement of creditors' rights and remedies generally and to general principles of equity.

(c) There is no pending or (to LSE Party 's knowledge) threatened litigation or administrative proceeding against LSE Party that materially and adversely affects LSE Party's ability to perform its obligations under this Agreement.

(d) LSE Party has, and at all times during the Term will use reasonable efforts to maintain, the financial capability to perform its obligations hereunder.

(e) LSE Party is an Account Holder as defined in the NYGATS Operating Rules.

ARTICLE 4: EVENTS OF DEFAULT

4.1 Events of Default. For purposes of and during the Term, each of the following shall constitute an event of default ("Event of Default") by a Party:

(a) if a Party materially breaches any or all of its obligations as described in this Agreement and such breach is not cured within fifteen (15) Business Days of written notice of such breach from the other Party;

(b) if any representation or warranty made by a Party in Article 3 of this Agreement proves to have been misleading or false in any material respect when made; and/or

(c) if a Party:

(i) makes an assignment or any general arrangement for the benefit of its creditors;

(ii) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause under any bankruptcy or similar law for the protection of creditors, or has such a petition filed against it;

(iii) otherwise becomes bankrupt or insolvent (however evidenced); or

(iv) becomes unable to pay its debts as they become due.

ARTICLE 5: REMEDIES UPON DEFAULT

5.1 Remedies. Upon an Event of Default, the non-defaulting Party may (a) terminate this Agreement upon written notice to the defaulting Party, (b) withhold any payments due in respect of this Agreement, (c) set off any payments due against any other credits or payments under other agreements between the Parties, and/or (d) exercise its legal rights to secure payment of amounts due and owing to the non-defaulting Party by the defaulting Party. Notices by LSE Party pursuant to this section shall be served on NYSERDA and the PSC. NYSERDA may enforce this Agreement and pursue the collection of any unpaid portion of the Monthly Obligation Payment, Annual Settlement Payment or any other amounts due to NYSERDA under this Agreement by referring the matter to the New York State Attorney General or by any other legal means.

5.2 Exclusive Remedy. The remedies set forth in this Article 5 shall be the sole and exclusive remedies of the respective parties in the event of a default, and a party's liability shall be limited as set forth in this section. All other remedies or damages at law are hereby waived.

5.3 Limitation of Liability. In the event of a default, the defaulting party's liability shall be limited as set forth herein. In no event shall any other liability be incurred by either Party for any obligations that arise under this Agreement, including (but not limited to) liability for consequential, incidental, punitive, exemplary, or indirect damages in tort, contract, or otherwise.

ARTICLE 6: NOTICES

6.1 Notices.

(a) All notices, requests, consents, approvals and other communications which may or are required to be given by either party to the other under this Agreement shall be in writing and shall be transmitted either:

(1) via certified or registered United States mail, return receipt requested;

(2) by personal delivery;

(3) by expedited delivery service; or

(4) by e-mail, return receipt requested.

Such notices shall be addressed as follows, or to such different addresses as the parties may from time-to-time designate as set forth in paragraph (c) below:

To LSE PARTY:	At address, electronic mail addresses confirmed through prior communications
To NYSERDA:	NYSERDA Attn: Office of the General Counsel 17 Columbia Circle Albany, New York 12203-6399 Email address: ceslegal@nyserda.ny.gov
With a copy to:	NYSERDA Attn: Large Scale Renewables 17 Columbia Circle

Albany, New York 12203-6399
Email address: ces@nyserda.ny.gov

(b) Any such notice shall be deemed to have been given either at the time of personal delivery or, in the case of expedited delivery service or certified or registered United States mail, as of the date of first attempted delivery at the address and in the manner provided herein, or in the case of facsimile transmission or email, upon receipt of an email acknowledgement of receipt.

(c) The parties may, from time to time, specify any new or different address in the United States as their address for purpose of receiving notice under this Agreement by giving fifteen (15) days written notice to the other party sent in accordance herewith. The parties agree to mutually designate individuals as their respective representatives for the purposes of receiving notices under this Agreement. Additional individuals may be designated in writing by the parties for purposes of implementation and administration/billing, resolving issues and problems and/or for dispute resolution.

6.2 The addresses for notice and payment specified in Section 6.1 may be changed from time to time by written notice by either Party to the other Party without amendment of this Agreement.

ARTICLE 7: MISCELLANEOUS

7.1 Force Majeure. Neither party hereto shall be liable for any failure or delay in the performance of its respective obligations hereunder if and to the extent that such delay or failure is due to a cause or circumstance beyond the reasonable control of such party, including, without limitation, acts of God or the public enemy, expropriation or confiscation of land or facilities, compliance with any law, order or request of any Federal, State, municipal or local governmental authority, acts of war, rebellion or sabotage or damage resulting therefrom, fires, floods, storms, explosions, accidents, riots, or strikes. In the event that such failure or delay occurs, the claiming Party shall notify the other Party of the occurrence thereof as soon as possible, shall use reasonable efforts to resume performance as soon as possible, and shall regularly consult with the other Party during the pendency of the force majeure event. In the event that the force majeure event lasts more than forty-five (45) days, NYSERDA may terminate this Agreement with no further obligation or liability to LSE Party.

7.2 Severability. If any provision of this Agreement shall be declared by any court of competent jurisdiction to be illegal, void or unenforceable, all other provisions of this Agreement shall not be affected and shall remain in full force and effect. If any provision of this Agreement is so broad as to be unenforceable, that provision shall be interpreted to be only so broad as will enable it to be enforced.

7.3 Waiver. No delay or omission by a Party in the exercise of any right under this Agreement shall be taken, construed or considered as a waiver or relinquishment thereof, and any such right may be exercised from time to time and as often as may be deemed expedient. If any of the terms and conditions hereof are breached and thereafter waived by a Party, such waiver shall be limited to the particular breach so waived and is not deemed to waive any other breach hereunder.

7.4 Forward Contract. Each Party represents and warrants to the other that it is a “forward contract merchant” within the meaning of the United States Bankruptcy Code, that this Agreement is a

"forward contract" within the meaning of the United States Bankruptcy Code, and that the remedies identified in this Agreement shall be "contractual rights" as provided for in 11 U.S.C. § 556 as that provision may be amended from time to time.

7.5 Assignment. Except as specifically provided otherwise in this Section 7.5, the assignment, transfer, conveyance, subcontracting or other disposal of this Agreement or any of the LSE Party's rights, obligations, interests or responsibilities hereunder, in whole or in part, without the express consent in writing of NYSERDA shall be void and of no effect as to NYSERDA. Such consent shall not be unreasonably withheld. Either Party may, upon written notice, assign its rights and obligations hereunder, or transfer such rights and obligations by operation of law, to any entity with which or into which such Party shall merge or consolidate or to which such Party shall transfer all or substantially all of its assets, provided that such other entity agrees to be bound by the terms hereof and provided further, that such other entity's creditworthiness is comparable to or higher than that of such Party at the time this Agreement was executed and such Party is not relieved of any obligation or liability hereunder as a result of such assignment.

7.6 Entire Agreement; Amendment. This Agreement embodies the entire agreement and understanding between NYSERDA and the LSE Party and, excepting any BES reconciliation process provided for by prior agreement, supersedes all prior agreements and understandings relating to the subject matter hereof, including but not limited to any prior agreement between the parties regarding payments made pursuant to the Bulk Energy Storage Program. Except as otherwise expressly provided for herein, this Agreement may be amended, modified, changed, waived, discharged or terminated only by an instrument in writing, signed by the party against which enforcement of such amendment, modification, change, waiver, discharge or termination is sought.

7.7 All Legal Provisions Deemed Included. It is the intent and understanding of LSE Party and NYSERDA that each and every provision of law required by the laws of the State of New York to be contained in this Agreement shall be contained herein, and if, through mistake, oversight or otherwise, any such provision is not contained herein, or is not contained herein in correct form, this Agreement shall, upon the application of either NYSERDA or the Seller, promptly be amended so as to comply strictly with the laws of the State of New York with respect to the inclusion in this Agreement of all such provisions.

7.8 Governing Law/Venue. This Agreement shall be governed by, and construed in accordance with, the laws of the State of New York applicable to contracts executed and to be performed in New York State without regard to its conflicts of laws principles. The parties irrevocably acknowledge and accept that all actions arising under or relating to this Agreement, and the transactions contemplated hereby and thereby shall be brought exclusively in a United States District Court or New York State Court located in Albany, New York having subject matter jurisdiction over such matters, and each of the Parties hereby consents to and accepts such personal jurisdiction of, and waives any objection as to the laying of venue in, such courts for purposes of such action.

7.9 Intentionally left blank.

7.10 Headings. The Article and Section titles in this Agreement are only for purposes of convenience and do not form a part of this Agreement and will not be taken to qualify, explain or affect any provision thereof.

7.11 No Third-Party Beneficiaries. Nothing herein is intended to or should be construed to create any rights of any kind whatsoever in third persons not parties to this Agreement.

7.12 Freedom of Information Law. Seller acknowledges that NYSERDA is subject to and must comply with the requirements of New York's Freedom of Information Law ("FOIL;" see Public Officers' Law Article 6); 21 NYCRR Part 501. The FOIL Law (Public Officers Law § 87(d)(2)) provides an exception to disclosure for records or portions thereof for numerous reasons, including but not limited to protected material that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." If NYSERDA receives a request from a third party for information or a document received from Seller and which has been marked "Confidential" or "Proprietary," NYSERDA will process such request under the procedures provided by NYSERDA's FOIL regulations (21 NYCRR Part 501).

7.13 Claim of Confidentiality. Information of any tangible form including any document that LSE Party wishes to be protected from disclosure to third parties, including this Agreement must be marked "Confidential" or "Proprietary" at the time such information is provided to NYSERDA. Notwithstanding the foregoing, NYSERDA shall be permitted to report to the New York State Department of Public Service through its Records Access Officer seeking confidential treatment as appropriate, as to the amounts received from LSE Party for BES payments as against the total due each month and on LSE Party's compliance or non-compliance, generally, with the terms of this Agreement.

7.14 Electronic Execution. LSE Party acknowledges, confirms and agrees that any signature (including any electronic symbol or process attached to, or associated with, this standard Bulk Energy Storage LSE Form Agreement or other record and adopted by LSE Party with the intent to sign, authenticate or accept such contract or record hereto or to any other certificate, agreement or document necessary to this transaction shall have the same legal validity and enforceability as a manually executed signature or use of a paper-based recordkeeping system to the fullest extent permitted by applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, and the parties hereby waive any objection to the contrary.

[Signature page follows]

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

Signature:_____

Name:

Title:

LSE PARTY

Signature will be set forth in a separate signature page