

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on February 13, 2025

COMMISSIONERS PRESENT:

Rory M. Christian, Chair
James S. Alesi
David J. Valesky
John B. Maggiore
Uchenna S. Bright
Denise M. Sheehan, recusing
Radina R. Valova

CASE 18-E-0130 - In the Matter of Energy Storage Deployment
Program.

ORDER APPROVING IMPLEMENTATION PLAN WITH MODIFICATIONS

(Issued and Effective February 14, 2025)

BY THE COMMISSION:

INTRODUCTION

On June 20, 2024, the Public Service Commission (Commission) issued the Order Establishing Updated Energy Storage Goal and Deployment Policy (2024 Energy Storage Order or Order). The Order directed the New York State Energy Research and Development Authority (NYSERDA) to submit a draft implementation plan to "detail the implementation strategies and program goals" of the retail and residential energy storage programs for Commission review and approval. On August 19, 2024, NYSERDA filed the draft "Residential and Retail Energy Storage Market Acceleration Incentives, 2024-2030 Implementation Plan" (Implementation Plan). Consistent with the analysis and directives in the Order, the proposed Implementation Plan addresses budget details, performance metrics, incentive structure, project submission requirements, quality assurance,

measurement and verification, other technical requirements, fire safety, and disadvantaged community access considerations.

By this Order, the Commission approves the Implementation Plan, with modifications, and directs NYSERDA to file a revised Implementation Plan within 30 days of the effective date of this Order.

BACKGROUND

On December 13, 2018, the Commission issued the Order Establishing Energy Storage Goals and Policy (2018 Energy Storage Order). The 2018 Energy Storage Order outlined a variety of initiatives intended to spur energy storage development and deployment in New York to meet the 3 gigawatts (GW) by 2030 statewide energy storage goal described in Public Service Law (PSL) §74. Subsequently, on December 28, 2022, NYSERDA and Department of Public Service staff (DPS Staff) filed "New York's 6 GW Energy Storage Roadmap Policy Options for Continued Growth in Energy Storage" (Roadmap). The Roadmap proposed new energy storage procurement programs and funding to help New York achieve 6 GWs of statewide energy storage deployment by 2030, building upon the previous 3 GW goal in response to Governor Hochul's 2022 State of the State address. After conducting analyses under the State Environmental and Quality Review Act and the Climate Leadership and Community Protection Act, the Commission approved the energy storage programs described in the Roadmap in the 2024 Energy Storage Order.

The 6 GW goal established in the 2024 Energy Storage Order was divided to ensure adoption across the retail, residential, and bulk energy storage sectors. As relevant here, the 2024 Energy Storage Order established a goal of deploying 1,500 megawatts (MW) of retail energy storage and 200 MW of

residential energy storage by 2030. To support these deployment goals, the 2024 Energy Storage Order required NYSERDA to submit a draft implementation plan, for Commission review and approval, that outlined the methods that will be used to achieve the residential and retail energy storage deployment targets.

DRAFT IMPLEMENTATION PLAN SUMMARY

Residential Storage Program

For the residential energy storage program, consistent with the directives in the 2024 Energy Storage Order, the draft Implementation Plan describes proposals for customer and project eligibility, contractor and builder program participation requirements, application submission process, the megawatt hour (MWh) block design and incentive levels, disadvantaged community program design, payment, fire safety, and quality assurance measures.

The draft Implementation Plan also details the proposed customer and project eligibility requirements, including that energy storage systems must be new, meeting all applicable IEEE and UL standards, approval by the interconnecting distribution utility, a 10-year system warranty, and be in service by December 31, 2030 among other requirements.

Additionally, the draft Implementation Plan describes the proposed process to become a qualifying contractor and/or builder and their associated obligations, including contractor responsibility for the builder's performance, and builder responsibility for installing the project, maintaining liability insurance, and employing at least one installer that holds at least one of the following four builder credentials: 1) North American Board of Certified Energy Practitioners (NABCEP) Energy Storage Installation Professional Certification; 2) NABCEP Photo voltaic Installation Professional Certification with at least 40

hours of energy storage-specific training; 3) Journeymen Electrician with documented International Brotherhood of Electrical Workers-National Electrical Contractor Association energy storage training and experience, either a minimum of 40 hours of energy storage training or the Energy Storage and Microgrid Training and Certification Program; or 4) Underwriters Labs PV System Installer with at least 40 hours of energy storage specific training. Contractors, once approved, would be considered Participating Contractors, and would have access to an online NYSEERDA portal to submit project applications.

NYSEERDA proposes different MWh block incentives depending on location. For Con Edison Block 1, NYSEERDA proposes a 10 MW/25 MWh capacity and energy target with an incentive rate of \$250/kWh, with total funding of \$6.25 million. For Rest of State,¹ NYSEERDA proposes a 10 MW/25 MWh capacity and energy target with an incentive rate of \$200/kWh, with a total of \$5 million for Block 1.

NYSEERDA plans to allocate 40 percent of total program capacity, or a total of 80 MWs, towards the Residential Inclusive Storage Incentive (Residential ISI) for projects located throughout the State. If the proposal is adopted, eligible projects would be required to satisfy all the requirements of the Residential MWh block incentive program and meet one of the following criteria: 1) be located within a disadvantaged community census tract as identified by the Climate Justice Working Group; 2) service the owner-occupied

¹ "Rest of State" encompasses the territories of Orange and Rockland Utilities, Inc. (O&R), Central Hudson Gas & Electric Corporation (Central Hudson), Niagara Mohawk Power Corporation d/b/a National Grid (National Grid), New York State Electric & Gas Corporation (NYSEG), and Rochester Gas and Electric Company, Inc. (RG&E).

residence with household income less than 80 percent of the Area Median Income or State Median Income, whichever is higher;
3) service a residential (1-4 unit) affordable housing property;
or 4) service a customer who has notified their utility of a serious illness or condition that could become life-threatening if electricity is disconnected. For the Residential ISI, NYSERDA proposes a Block 1 capacity and energy target of 10 MW/25 MWh with an incentive rate of \$450/kWh and total funding of \$11.25 million.

NYSERDA describes how it would select a representative sample of completed projects for onsite field inspections and/or as-built photo evaluation as part of quality assurance. The field inspection would be done by a third-party using field and photo inspection checklists. Through the inspection, NYSERDA would ascertain the accuracy of site analysis and design paperwork, verify the system was correctly installed according to applicable code and program requirements, and evaluate other health, safety, and performance attributes. NYSERDA proposes to produce a Quality Assurance inspection report which determines whether the project complies with all program requirements. Any project that has a major health, safety, or system performance issue will fail inspection, while projects that have minor deficiencies may pass the inspection depending on the number and type of nonconformance. Participating Contractors would be responsible for rectifying any deficiencies or risk being put on probation, suspended status, or terminated.

Retail Storage Program

NYSERDA describes the proposed retail storage program for energy storage projects up to 5 MW/20 MWh AC, including the retail MWh block program, customer and project eligibility, application submission process, incentive levels by location, disadvantaged community program design, prevailing wage

requirements, quality assurance, fire safety, measurement and verification, payment, VDER calculator, statewide solar for all program participation, and technical assistance.

Eligible projects include behind-the-meter energy storage, front-of-the-meter energy storage directly connected into the utility distribution system, and utility, non-demand metered customers that install energy storage paired with solar behind-the-meter. Other requirements may include, but would not be limited to, that the energy storage must be a new and permanent project, have a minimum 10-year manufacturer's warranty, have appropriate interconnection agreements, meet minimum safety requirements by a Nationally Recognized Testing Laboratory, and that the project enter service by December 31, 2030 unless otherwise extended by NYSERDA. Ineligible projects would include those that have a bulk storage or bulk dispatch rights contract, utility-owned storage, projects that received permission to operate prior to application submission, and projects compensated through a NYSERDA-awarded Renewable Energy Certificate.

Participating Contractors would submit project applications that include information such as the location of the proposed project, intended use, technology type, site plan, estimated project cost, planning and zoning board approval if applicable, and a negative declaration under the State Environmental Quality Review Act, among other requirements.

NYSERDA proposes a number of funding blocks and incentive levels, depending on geographic location. In New York City, NYSERDA proposes a 300 MW/1,125 MWh Block with a \$125/kWh incentive rate, with a total of \$140.6 million in funding. For Westchester, NYSERDA proposes a 100 MW/375 MWh Block with a \$125/kWh incentive rate with \$46.8 million in funding and for Rest of State NYSERDA proposes a 150 MW/563 MWh Block with a

\$175/kWh incentive rate with total funding of \$98.4 million. NYSERDA would propose subsequent blocks, incentive levels, and funding at a future date to meet the 1,500 MW target.

In response to the 2024 Energy Storage Order's requirement that a minimum of 35 percent of total retail energy storage procurements be located in New York Independent System Operator (NYISO) Zones G-K,² with at least 30 percent in Zone J and 5 percent in Zones G, H, I, and/or K, NYSERDA proposes to allocate a minimum of 50 percent of the total Retail energy storage program, or 750 MWs, to projects located in New York City, and a minimum of 10 percent, or 150 MWs, in Zone I. NYSERDA also proposes that a minimum of 35 percent of behind-the-meter retail energy storage be located within disadvantaged community census tracts. To effectuate this, NYSERDA would offer a targeted statewide incentive for a minimum of 60 MW of retail energy storage known as the Retail Inclusive Storage Incentive (Retail ISI) for eligible projects that are sited at critical facilities in disadvantaged community census tracts throughout the state. Eligible projects would be required to meet all requirements of the retail program, be located within a disadvantaged community, and meet other requirements which will be outlined in the forthcoming Program Manual. Potential eligible sites include affordable housing properties, food banks, homeless shelters, cooling centers, and medical facilities such as hospitals, blood banks, and hospice facilities. NYSERDA proposes the first Block for the Retail ISI be set at 15 MW/45 MWh, with an incentive rate of \$350/kWh and total funding of \$15.7 million.

² For a map of NYISO Zones see: https://www.nyiso.com/documents/20142/1397960/nyca_zonemaps.pdf.

NYSERDA describes that retail energy storage projects with an installed capacity of 1MW-AC or greater that receive an incentive would be required to pay Prevailing Wage or enter into a labor agreement for project construction. New York State Labor Law Article 8 outlines the applicable Prevailing Wage based on the location of the energy storage project. Construction activities that would be subject to the Prevailing Wage requirement include, but are not limited to, grading, installation, erection, and placement of the facility.

Quality Assurance would be achieved through onsite field inspections and photographs once the energy storage facility is mechanically complete but unenergized. A NYSERDA approved quality assurance checklist would be used by a qualified third-party to complete the field inspection. After the field inspection is completed, NYSERDA would release an inspection report which would determine whether or not the project is in compliance with the program requirements. Major nonconformance issues regarding safety and health would result in an automatic failure, while minor issues may result in a failure, depending on the number and type of issue. The Participating Contractor would be responsible for rectifying any deficiencies identified by NYSERDA; failure to do so may result in the Participating Contractor being put on probation status, suspended status, or terminated.

Fire safety is a key consideration for the implementation of the retail energy storage program. Following battery energy storage fires in 2023, an interagency Fire Safety Working Group was convened to address fire safety concerns, review current codes and regulations pertaining to battery energy storage, identify any shortcomings in the current code, and make recommendations for code improvement. The efforts of the Working Group remain ongoing, although it did submit a final

version of its Fire Code Recommendations report which was published and submitted to the Code Council and the New York State Department of State in July 2024.³ NYSERDA would incorporate any additional applicable future recommendations and describe them in the Program Manual and file an updated Implementation Plan as necessary.

Presently, NYSERDA proposes that the Retail energy storage program adopt some of the recommendations of the Fire Safety Working Group, including peer review milestones, emergency response plans, and first responder training. The peer review milestone requirement would apply to projects with a nameplate capacity of over 600 kWh sited outside New York City. The peer review requirement would entail a pre-construction review of the project's site plans, electrical drawings, and large-scale fire test reports that are conducted by a contracted, qualified third-party by NYSERDA to ensure that they meet the New York State Fire Code requirements.

NYSERDA would also require that projects sited outside New York City that participate in the Retail energy storage program provide evidence that demonstrates that the facility has an Emergency Response Plan for first responders on-site, outside of the fence line of the project, and share this with the local fire department, preferably with the fire department's input so as to have an accurate assessment of the operating procedures and capabilities of the department. First responder training would also be required for lithium-ion projects not located in New York City, which would include annual site-specific training for the local fire department.

³ NYSERDA, New York's Inter-Agency Fire Safety Working Group, Final Fire Code Recommendations Report, available at: <https://www.nyserda.ny.gov/All-Programs/Energy-Storage-Program/New-York-Inter-Agency-Fire-Safety-Working-Group>.

Retail sized energy storage projects that are located in New York City are already subject to peer review milestone, emergency response plan, and first responder training requirements. NYSERDA's proposed requirements would expand those statewide, as described in the Implementation Plan.

NYSERDA describes the proposed Measurement and Verification (M&V) requirements that are designed to review the performance of the project prior to project completion. All projects that are awarded a Retail energy storage incentive would be subject to the M&V requirement and be required to install a revenue-grade meter that records the energy storage system's charge and discharge activities. The M&V process would test whether the project is operating as described in the design review of the project's application. The Participating Contractor would be required to provide NYSERDA's M&V contractor with charge/discharge interval data for a period of up to five years.

Incentive payments would be made once the following requirements are met: all required siting and permitting approvals are obtained, permission to operate from the utility is granted, final professional engineer-stamped system designs are submitted, installed project cost data is submitted, a decommissioning plan is submitted, a completed quality assurance inspection and resolution of any identified problems is submitted, and the M&V discharge test is completed.⁴

NYSERDA has developed and published publicly a Value Stack calculator that is intended to help developers estimate how much a retail energy storage project may receive under the

⁴ To the extent that commenters raised concerns about interconnection status, the Commission notes that permission from a utility to operate is predicated on the project having a signed interconnection agreement.

Value of Distributed Energy Resource (VDER) tariff. This calculator is updated periodically to reflect changes to the VDER value stack pricing, policy changes, and based on stakeholder feedback.

NYSERDA describes how retail energy storage may be eligible in the Commission's Statewide Solar for All (SSFA) program, which also includes distributed energy storage projects.⁵ The SSFA program is designed to provide a straightforward method for developers to minimize their customer acquisition and management costs. Pursuant to the proposed Implementation Plan, distributed front-of-the-meter standalone storage up to 5 MW-AC, or energy storage paired with solar that have an interconnected utility account and receive VDER compensation would be eligible to enroll in SSFA when the project makes its initial 25 percent interconnection deposit or executes a Standard Interconnection Contract.

NYSERDA outlines how it would support predevelopment activities and technical assistance to facilitate energy storage deployment serving lower- and middle-income (LMI) housing, disadvantaged communities, and regulated affordable housing. Program Opportunity Notice 3414: Affordable Solar and Storage Predevelopment & Technical Assistance Program, provides grants for solar and storage projects that will benefit LMI households, environmental justice communities, and disadvantaged communities.⁶ Funds are available to assist with securing project financing, creating a business model, site

⁵ Case 21-E-0629, In the Matter of the Advancement of Distributed Solar, Order Approving Statewide Solar for All Program with Modifications (issued May 16, 2024).

⁶ NYSERDA Affordable Solar and Storage Predevelopment and Technical Assistance (PON 3414), available at: https://portal.nyserda.ny.gov/CORE_Solicitation_Detail_Page?SolicitationId=a0rt0000000QnFIAA0.

identification, and customer marketing among other uses. NYSERDA may elect to issue separate solicitations for additional technical assistance that target specific energy storage market segments using funding authorized in the 2024 Energy Storage Order.

Program Administration, Implementation Costs, Performance Metrics and Evaluation, and Budget

NYSERDA describes program administration and implementation costs, which would include salary and fringe costs for NYSERDA staff and administrative support staff, travel costs, consultant support, technical assistance grants, quality assurance, peer Review processes, M&V, and overhead, facility, administrative, and equipment expenses. NYSERDA proposes to use the \$27.6 million in funding made available for these purposes in the 2024 Energy Storage Order, in addition to \$22.7 million previously authorized in the 2018 Energy Storage Order.

NYSERDA would continue to track and report, as required in the 2024 Energy Storage Order: the average total installed cost of energy storage systems, total MWs/MWhs deployed, progress in reducing soft costs, deployment timeline, new impediments and proposed solutions, and adjustments to incentive funds. These metrics would be analyzed and included in the annual State of Storage Report.⁷

Impact evaluations would involve verifying actual operations of installed energy storage projects and investigation of any differences between actual and projected economics and first-year system performance, using a sampling approach. Specific impact evaluation objectives, approaches,

⁷ "Annual reports on the achievements and effectiveness of the [energy storage] policy shall be submitted to the governor, the temporary president of the senate, and the speaker of the assembly." PSL §74(4).

and timelines would be developed by NYSERDA and DPS Staff, with stakeholder input.

Market and Process evaluations would examine the important market indicators over time to understand program impact and achieve maximum effectiveness. As part of this evaluation, NYSERDA and DPS Staff would analyze hard and soft costs, deployment timeline, barriers to adoption, evolution of business models, and customer satisfaction among other factors.

NYSERDA describes the \$1.2 billion program budget authorized by the 2024 Energy Storage Order for the Residential and Retail Commercial MWh block program structure. This budget includes \$100 million for residential energy storage incentives, \$891.5 million for retail energy storage incentives, \$133 million for bulk energy storage incentives, and \$37.2 million for program administration, \$23 million for implementation, quality assurance, and measurement and verification, \$2 million for customer education, \$8 million for evaluation activities, and \$13.4 million for the State Cost Recovery Fee.

NOTICE OF PROPOSED RULE MAKING

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rulemaking (Notice) was published in the State Register on September 18, 2024 [SAPA No. 18-E-0130SP16]. The time for submission of comments pursuant to the Notice expired on November 18, 2024. Moreover, in the Secretary's Notice Soliciting Comments, issued on September 23, 2024, stakeholders were invited to submit written comments by November 18, 2024. In response to the Notice and the Secretary's Notice, comments were received from BlueWave Energy, Center for Sustainable Energy, City of New York, Clean Energy Industries, Convergent Energy and Power, Enphase Energy, NineDot, New York Battery Energy Storage Technology Consortium

(NY-BEST), New York Solar Energy Industries Association (NYSEIA), PEAK Coalition, Power Edison LLC, RIC Energy, and Sustainable Westchester. A complete summary of these comments is included in the Appendix, and responses to specific comments are addressed in the relevant sections of the discussion below.

LEGAL AUTHORITY

The Commission has broad jurisdiction, power, and duties over the “[m]anufacture, conveying, transportation, sale, or distribution of ... electricity” Furthermore, PSL §5(2) instructs the Commission “[t]o encourage all persons and corporations subject to its jurisdiction to formulate and carry out long-range programs ... with economy, efficiency, and care for the public safety, the preservation of environmental values and the conservation of natural resources.” The Commission’s supervision of electric corporations includes the responsibility to ensure that all charges made by such corporation for any service rendered shall be just and reasonable. Public Service Law §66 empowers the Commission to “[p]rescribe from time to time the efficiency of the electric supply system.” The Commission may exercise this broad authority to direct regulatory standards to execute the provisions contained in the PSL. Additionally, the Commission has the authority to direct the treatment of DERs by electric corporations.

Pursuant to PSL §74, the Commission is required, by December 31, 2018, to establish, in consultation with NYSERDA and LIPA, a statewide energy storage goal for 2030, and a deployment policy to support that goal. The Retail and Residential Energy Storage Implementation Plan approved by this Order is within the Commission’s regulatory authority indicated above, and helps fulfill the requirement that the Commission establish a statewide energy storage goal and deployment policy.

DISCUSSION

As further discussed below, the Commission approves, with modifications, the Residential and Retail Energy Storage Market Acceleration Incentives, 2024-2030 Implementation Plan as filed by NYSERDA on August 19, 2024, as being consistent with the directives in the 2024 Energy Storage Order. Further, the Commission directs NYSERDA to file a revised Implementation Plan within 30-days of the effective date of this Order.

Project Eligibility and Maturity Requirements

Several commenters raise the issue of project eligibility and maturity requirement criteria for NYSERDA to include in its Implementation Plan. NY-BEST, NYSEIA, and RIC Energy recommend that NYSERDA require a 100 percent interconnection deposit for New York City projects to help ensure that projects that want to receive retail incentives in New York City are likely to be built. They also state that NYSERDA should have the flexibility to add maturity requirements in each New York City block. NY-BEST further requests that the Commission clarify that NYISO distributed energy resource (DER) aggregation program projects are eligible to participate in the Retail program.

The Commission acknowledges that establishing clear maturity requirements and project eligibility criteria is important in setting up viable Retail and Residential energy storage programs while also recognizing that requirements may change over time based on the state of the storage market, storage uptake, and interconnection status among other factors. Therefore, the Commission will not require specific maturity requirements and project eligibility criteria in this Order. Instead, NYSERDA shall include applicable maturity and eligibility requirements in its Program Manual. This gives NYSERDA the flexibility to modify program requirements, in

consultation with DPS Staff, as necessary while also giving developers pertinent participation criteria to engage in the retail and residential storage programs.

Sustainable Westchester requests that the Commission allow mobile battery energy storage systems, such as those used for airport ground support equipment, to qualify for Retail program incentives. Power Edison states that no more than two incentive grants should be awarded to any individual developer. NYSEIA seeks clarification that participation in utility dynamic load management (DLM) programs is not required to qualify for Residential storage incentives and requests a carveout for medium-sized retail projects. Enphase recommends the Implementation Plan specify a 10-kWh system size cap to qualify for the Residential program incentive or have a 20-kWh cap with decreasing incentives beyond the first 10-kWh. NineDot states that non-wire alternative (NWA) projects should qualify to receive Retail incentives, and if not, then give NYSERDA the ability to determine eligibility on a case-by-case basis.

The Commission disagrees with NYSEIA that participation in utility DLM programs should not be required to qualify for Residential storage incentives. Residential energy storage projects that receive ratepayer funded incentives through the residential energy storage program should be used in a manner that maximizes their benefit to New York's electric system. Utility DLM programs are a proven and effective tool that help to manage load on the electric system, thereby reducing the need for new utility infrastructure investments. Therefore, the Commission will require residential energy storage projects that receive a residential energy storage

program incentive to participate in the relevant DLM program for the project's location if such a program is available.⁸

The Commission disagrees with certain aspects of NineDot's request that NWA projects should be eligible for the Retail storage incentive. The Commission agrees that, going forward, both retail and residential energy storage projects should be able to participate in both the NYSERDA Retail and Residential Storage Incentive and also participate in applicable NWA projects. However, we are concerned about the potential for economic windfalls for NWA projects that have already progressed through contracting which would become eligible for a new incentive stream after the fact. Generally speaking, NWA project contracts provide needed but missing money so that the project is economic and installed when and where it is needed, considering other incentive streams such as the Federal Investment Tax Credit. If a utility has already executed an NWA contract that includes retail and/or residential energy storage, and has paid a premium due to the absence of other incentives to make the retail and/or residential energy storage project economic, then that project also receiving an upfront Retail or Residential storage incentive in addition to the contract terms of the NWA would result in the project receiving more incentives than necessary, at ratepayer expense.

Recognizing this, projects that have already executed a contract to participate in an NWA project on or the before the

⁸ Residential customers in the service territories of utilities that have already completed deployments of Advanced Metering Infrastructure, such as Con Edison and O&R, are already able to participate in those utilities' Dynamic Load Management Programs, typically through an Aggregator. The Commission is also presently considering proposals by each of the investor-owned utilities regarding whether to implement more technology-specific direct load control programs targeted to residential-scale energy storage systems in Case 14-E-0423.

effective date of this Order will not be eligible to receive the Retail or Residential storage incentive. Retail and/or Residential energy storage projects which execute NWA project contracts after the effective date of this Order will be eligible to apply for and receive the Retail or Residential Storage Incentive prior to entering into the NWA, since the utility will be able to take such additional incentives into account during the contracting process. This determination is substantially similar to determinations made by the Commission regarding eligibility for energy storage projects installed at commercial customer sites to simultaneously participate in NWA projects and also benefit from an exemption from Buyback Service Contract Demand Charges.⁹

The Commission does agree with NY-BEST that NYSERDA should clarify that NYISO DER Aggregation program projects are eligible for the Retail program without needing to submit a petition. Even though NYISO DER aggregations are not monetized under a utility tariff these aggregations provide similar services as retail energy storage projects that receive compensation under a utility tariff. Therefore, the Commission directs NYSERDA to reflect that NYISO DER Aggregation program participants are eligible to participate in the Retail storage program in a revised Implementation Plan to be filed with the Commission within 30 days of the effective date of this Order.

⁹ Case 15-E-0751, Value of Distributed Energy Resources, Order Establishing an Allocated Cost of Service Methodology for Standby and Buyback Service Rates and Energy Storage Contract Demand Charge Exemptions (issued March 16, 2022), p. 131; Case 15-E-0751, Order Establishing Updated Standby Service Rates and Implementing Optional Mass Market Demand Rates (issued October 13, 2023), pp. 73-75.

Block Design

The Implementation Plan proposes an initial 300 MW Retail Block in New York City. Several commenters, including NY-BEST, NineDot, NYSEIA, and Convergent recommend increasing this initial Block to 450 MW; Convergent recommends increasing this initial Block to 700 MW. Parties reason that this increase is reflective of the demand and readiness of retail energy storage projects that have been waiting for the newest round of incentive funding. NYSEIA and RIC Energy request that a carveout for Rest of State be added into the Implementation Plan to ensure that there is sufficient Retail energy storage development that occurs in upstate New York. NY-BEST and Convergent state that if the number of applications for the opening blocks exceed the available amount of capacity, then NYSERDA should employ the same ordering strategy used for Block 5 New York City, where applications are ordered based on the date of 100 percent interconnection payment.

The Commission notes the previous success of the block design, evidenced by the complete subscription of available funds presently and understands the rationale of the requests to increase the NYC Retail block from the proposed 300 MW. However, the Commission declines to alter the proposed 300 MW and set a revised New York City Retail Block in this Order. NYSERDA proposed the 300 MW Block based on its understanding of the current queue volume and expected demand for Retail incentives at the time of filing its Implementation Plan. The Commission understands the need for setting the block size closer to the program launch to consider the most recent queue information and therefore gives NYSERDA the flexibility to set the block size closer to the program launch, in consultation with DPS Staff. The Commission believes this will allow the setting of block sizes that matches expected demand with a

built-in buffer that provides rate visibility to earlier stage projects.

The Commission declines to establish a Rest of State carveout as requested by RIC Energy and NYSEIA as that flexibility shall be left to NYSERDA in consultation with DPS Staff. NYSERDA will finalize Rest of State block sizes and incentive levels closer to the launch of the block, similar to how it will with New York City blocks to consider the most recent queue and interconnection data. It is also premature to require NYSERDA to establish a capacity allotment and incentive level for Rest of State Block 6, as queue and interconnection statuses may change between Block 5, which has not yet been launched, and Block 6.

The Commission agrees with NY-BEST and Convergent that NYSERDA should continue to order applications for incentives based on the date of 100 percent interconnection payment, as has been used for New York City Block 5 and directs NYSERDA to explain this process in its Program Manual.

The Commission further directs NYSERDA, consistent with the requirements of the 2024 Energy Storage Order, to work with DPS Staff and revise its Implementation Plan within 30 days of the effective date of this Order to include a description of how incentive levels and future incentive blocks are calculated to give developers important information to make informed investment decisions and propose projects that provide maximum value to New York's electric system.

Disadvantaged Community Program Design

NYSERDA proposes both a Residential and Retail Inclusive Storage Incentive in compliance with the requirements in the Order that a certain portion of energy storage development shall be targeted in areas that serve disadvantaged communities. Regarding the proposed Retail Inclusive Storage

Incentive, New York City, and PEAK Coalition recommend that it include region specific carveouts while NY-BEST and Center for Sustainable Energy (CSE) recommend NYSERDA consult with community-based organizations in disadvantaged communities to refine the list of proposed critical facilities and definitions.

CSE recommends that the proposed Residential ISI should have 100 percent of the system cost covered under the incentive and that it should allow for eligibility pathways for low-income households that are already enrolled in low-income programs such as SNAP or EAP. NY-BEST states that affordable multifamily buildings that are more than four units should be eligible for the Residential ISI while New York City requests that affordable housing units that are less than 25,000 square feet be eligible for the Residential ISI. New York City also requests that residential buildings that are in locations that suffer frequent and/or prolonged power outages should be eligible for the Residential ISI, and that a higher incentive be made available for Residential ISI projects installed at an owner-occupied residence with household income below 80 percent of the average median income or statewide median income, whichever is higher, and for residential affordable housing properties below 25,000 sq. ft.

The Commission declines to establish specific disadvantaged community program criteria in this Order, but directs NYSERDA to continue engagement with stakeholders and community-based organizations to come up with the specific eligibility requirements, which will be described in the Program Manual for participation in either the Retail or Residential ISI programs. Once such criteria is established, NYSERDA shall consult with DPS Staff and file an updated Implementation Plan. In the event that NYSERDA and stakeholders are unable to come to

mutually agreeable terms, NYSERDA shall consult with DPS Staff about next steps.

Statewide Solar for All

The proposed Implementation Plan discusses the compensation and enrollment/eligibility requirements for energy storage projects looking to participate in the SSFA program. NineDot, NY-BEST, NYSEIA, and ACE/Advanced Energy United request that already-operating Remote Crediting Projects be allowed to opt into the SSFA program and to allow Energy Affordability Program customers, regardless of whether they live in a disadvantaged community census tract, to receive SSFA bill discounts. NineDot requests that SSFA savings be allocated from storage projects only during the summer months rather than equally throughout the year. NY-BEST asks the Commission to allow projects to enroll a portion of their capacity in SSFA, rather than the entire output as is currently required.

The Commission makes no determinations on the requests to modify the requirements of the SSFA program as they are outside the scope of this proceeding. Any requested changes to the SSFA program should be made in the SSFA docket.

Fire Safety Requirements

Stakeholders generally support the proposed fire safety requirements for Retail energy storage in the Implementation Plans, including the peer review milestone, preparation of an on-site emergency response plan, and annual first responder training. NY-BEST recommends that first responder trainings be combined where practical to maximize local fire department resources. NYSERDA also states that any additional applicable recommendations that get issued by the Fire Safety Working Group would get included in an updated Implementation Plan.

As highlighted in NYSEERDA's draft Implementation Plan, fire safety is a key consideration for the Commission in the build out of energy storage infrastructure. The Commission agrees with the proposed fire safety measures proposed in the Implementation Plan and directs NYSEERDA to include additional details in its forthcoming Program Manual. Fire safety regarding energy storage systems remains an important focus for the Commission as New York looks to build 6 GW of energy storage resources.

The Commission recognizes that the proposed fire safety requirements in the Implementation Plan reflect some of the recommendations from the Fire Safety Working Group and are a reasonable effort at limiting the likelihood of battery fires. After comparing the draft Implementation Plan and the Fire Safety Working Group's recommendations, the key differences are related to technical recommendations for consideration by the New York State Fire Prevention and Building Council towards inclusion in the 2025 update of the New York State Uniform Fire Prevention and Building Code (Building Code). The Commission directs NYSEERDA to implement new fire safety requirements as necessary based on updates to the Building Code for fire safety, regarding energy storage systems. When NYSEERDA updates the fire safety requirements, it shall file a revised Implementation Plan and Program Manual with the Commission to reflect the changes.

Technical Assistance

Several stakeholders, including NYSEIA, Convergent, NY-BEST, and PEAK Coalition request that NYSEERDA continue to provide New York City-specific technical assistance to help developers and customers navigate the permitting process for indoor lithium-ion energy storage.

The Commission recognizes the complexity of permitting energy storage systems in New York City and directs NYSEERDA to

continue to provide this assistance and deploy implementation funding to support this effort as New York City is expected to be one of most popular areas in New York State to locate energy storage due to its potential high value in resolving reliability needs. NYSERDA shall describe that it will provide this continued technical assistance in its updated Implementation Plan.

Round-Trip Efficiency

NY-BEST requests that NYSERDA clarify that round-trip efficiency (RTE) will be technology specific, as energy storage technology varies in its RTE depending on if it is lithium-ion or not.

The Commission agrees with NY-BEST and directs NYSERDA to include technology-specific RTEs in its Program Manual. Assigning different RTEs based on technology provides a more accurate representation of the expected performance of energy storage systems.

Modification of Implementation Plan

The proposed Implementation Plan filed by NYSERDA and approved today, with modifications, represents a good-faith effort at capturing and defining the necessary elements needed to have successful retail and residential energy storage programs. We recognize, however, that the Implementation Plan that is approved today may need to be modified in the future to account for changing market conditions, technology advancements, and other factors that impact the retail and residential energy storage programs. This Order gives NYSERDA flexibility for a number of program parameters. If NYSERDA exercises such flexibility and determines that program modifications are necessary, it shall first consult with DPS Staff. After consulting with DPS Staff and determining whether the modifications would impact the Implementation Plan, then NYSERDA

shall file a redlined and clean version of the Implementation Plan, along with a letter confirming it met with DPS Staff and explaining the changes. If NYSERDA proposes to modify the Implementation Plan beyond the flexibility afforded in this Order, then NYSERDA must file a Petition with the Commission seeking approval for such changes.

Program Manual

NYSERDA shall file a Residential and Retail Program Manual at least two weeks prior to the launch of the retail and residential energy storage programs discussed in the 2024 Energy Storage Order to give stakeholders an opportunity to review the specific program requirements. The Program Manual shall set forth the specific program provisions and requirements for participation in the residential and retail energy storage programs including the pertinent maturity and project eligibility requirements. NYSERDA may modify the Program Manual as necessary, in consultation with DPS Staff, to reflect needed changes in programmatic elements. If NYSERDA does modify its Program Manual, it shall file both a clean and redlined version with the Commission, along with a letter explaining the changes.

CONCLUSION

With this Order the Commission approves, with modifications, NYSERDA's Residential and Retail Energy Storage Market Acceleration Incentives Implementation Plan. This Implementation Plan will assist in the development of 1,500 MWs and 200 MWs of Retail and Residential energy storage throughout New York State, respectively. As discussed in the body of this Order, continued refinement of the Implementation Plan may be necessary over time to account for changes in market conditions, technology, and additional elements that impact the development of retail and residential energy storage.

The Commission orders:

1. The New York State Energy Research and Development Authority shall file an updated Implementation Plan within 30 days of the effective date of this Order, consistent with the directives in the body of this Order.

2. The New York State Energy Research and Development Authority shall consult with DPS Staff prior to making any modifications to the Implementation Plan.

3. The New York State Energy Research and Development Authority shall file a program manual two weeks prior to the launch of the retail and residential energy storage program, consistent with the directives in the body of this Order.

4. The New York State Energy Research and Development Authority shall file an updated Implementation Plan when the disadvantaged community program criteria is established, consistent with the directives in the body of this Order.

5. In the Secretary's sole discretion, the deadlines set forth in this Order may be extended. Any request for an extension must be in writing, must include a justification for the extension, and must be filed at least three days prior to the affected deadline.

6. This proceeding is continued.

By the Commission,

(SIGNED)

MICHELLE L. PHILLIPS
Secretary

SUMMARY OF STAKEHOLDER COMMENTSAlliance for Clean Energy New York & Advanced Energy United
(Clean Energy Industries)

The Clean Energy Industries urge the Commission to quickly approve the filed Residential and Retail Energy Storage Market Acceleration Incentives Implementation Plan. The Clean Energy Industries agree with the MWh block program as proposed. For the residential program, the Clean Energy Industries support the "fixed-rate incentives per kWh of a system energy capacity for grid-connected residential energy storage project...on a first-come first-serve basis." The Clean Energy Industries support the retail energy storage program structure, specifically that it is designed to shift a customer's electric demand to off-peak periods, shift renewable energy injections to more profitable times, and help relieve grid constraints. The Clean Energy Industries also recommend that projects in in the Statewide-Solar for All program be able to opt into Remote Crediting after they receive permission to operate. They also state their support for the Commission to allow energy affordability program customers to be eligible to receive bill discounts in the Statewide-Solar for All program, regardless of whether they live in a disadvantaged community or not.

The Clean Energy Industries recommend that NYSERDA include non-prescriptive examples in the Program Manual of what constitutes the "beginning of construction" and what sort of in-service delays would not be the fault of the developer. The Clean Energy Industries further recommend that NYSERDA give sufficient notice to the market when they plan to announce new funding blocks and capacity allocations so that developers have time to plan.

BlueWave Energy

BlueWave supports the Implementation Plan filed by NYSERDA, including the MWh block structure and the flexibility for NYSERDA to set different sized funding blocks and capacity allocations in future blocks. BlueWave recognizes the importance of downstate energy storage projects but urges NYSERDA to ensure that sufficient allocation for energy storage projects is located upstate, as upstate is expected to host a significant amount of energy storage to help meet the 2030 goal. BlueWave also supports the inclusion of the fire safety provisions detailed in the Implementation Plan, comprising the

peer review milestone, emergency response plan, and first responder training.

Center for Sustainable Energy (CSE)

CSE strongly recommends a higher incentive rate for the Residential Inclusive Storage Incentive (Residential ISI) for lower- and middle-income households, particularly those located in disadvantaged community census tracts. CSE recommends that the incentive level for qualified low-income customers should cover the full cost of the energy storage system and that the Residential ISI offer eligibility pathways for low-income customers that are active participants or had previously enrolled in low-income programs available to customers with an area median income of 80 percent or less. CSE states that involving community-based organizations in the development of eligible pathways is prudent, as these organizations can utilize pre-existing networks to raise awareness and support efforts in marketing, outreach, and education.

CSE recommends that NYSERDA look at what a facility's role is in its specific geographic location when establishing the eligibility requirements for participating in the Retail Inclusive Storage Incentive (Retail ISI). CSE also recommends that NYSERDA implement minimum cycling requirements for the energy storage system to ensure that it is used regularly and helping to decrease the demand for grid power and not utilized just for backup power. CSE states support for partnering with a third-party to complete performance monitoring on the completed storage systems and for establishing an established network of solar and storage installers so that customers can more easily navigate the program. CSE recommends that NYSERDA include a verification of project site designations for residential and retail energy storage projects so that projects sited in historic districts are appropriately flagged to avoid fines and delays in construction.

City of New York (The City)

The City supports overall NYSERDA's Residential and Retail Implementation Plan but recommends changes to the proposed Residential and Retail Inclusive Storage Incentive programs. The City recommends that both the Residential and Retail ISI programs include a geographic carveout design for disadvantaged communities located in Zone J to acknowledge the reliability and

resilience needs in New York City and to help replace the retirement of NYPA-owned peaking plants by 2030. The City recommends that the Commission direct NYSERDA to submit regular reports to monitor the program for participation issues in both the base incentive programs and the ISI programs, including region-specific data.

The City suggests two modifications to the proposed Residential ISI program. The first is an alternative method of identifying affordable housing properties based on square footage, defining eligible sites as less than 25,000 gross square feet rather than the proposed eligibility requirement of between 1-4 units. The second is to add an eligibility pathway for Residential ISI projects in Zone J, specifically for residential buildings that have frequent or long-duration power outages, which include the communities of Flushing, Jamaica, Richmond Hills, Woodrow, and Wainwright. The City also suggests a higher incentive for Residential ISI projects installed at owner-occupied residences with a household income below 80 percent of the higher of the area median income or state median income.

For the Retail ISI program, the City recommends that NYSERDA adopt a definition of "critical facility" that is consistent with the City's rules implementing Local Law 97, specifically that it be revised and defined as "facilities the operation of which is critical to human life or safety including hospitals, skilled nursing facilities, nursing homes, blood banks, health care facilities, dialysis centers, a facility that manufactures vaccines, and hospice facilities." The City also recommends that Retail ISI eligibility expand to include projects in Zone J that are critical facilities in areas that are subject to frequent and/or prolonged power outages, regardless of if they are located within a disadvantaged community.

Convergent Energy and Power (Convergent)

Convergent recommends that Block 6 in NYC should be for 700MWs to align with developer interest for energy storage projects. Convergent strongly supports the 100 percent payment of the Coordinated Electric System Interconnection Review submission requirement to receive the storage incentive as this will allow more mature projects to progress to completion. Convergent also supports the re-ordering strategy that was utilized in Block 5 for New York City be used in Block 6 and all

future funding blocks in New York City. Convergent is very supportive of NYSERDA expanding its technical assistance, especially in New York City. Convergent recommends that NYSERDA work with AHJs, including FDNY, to help the development process and result in completed projects. Convergent states that NYSERDA should announce future incentive blocks and capacity allocations in advance of the current block expiring to give the market transparency.

Enphase Energy, Inc. (Enphase)

Enphase supports the residential energy storage program and block incentive structure. Enphase recommends setting a maximum size cap of 10kWh for the residential energy storage program; Enphase reasons that this proposed cap is competitive for all storage vendors regardless of technology type, maximizes the number of customers utilizing the available funding, and is right-sized for what customers are seeking from residential energy storage. Enphase states that if the Commission and NYSERDA believe the 10kWh cap is too small, it should be no higher than 20kWh and that any incentives beyond the first 10kWh be paid at a reduced 50 percent rate.

NineDot

NineDot supports the Implementation Plan overall, including the program structure, New York City incentive rate, NYSERDA flexibility to adapt the program based on market factors, and recycling of cancelled project funds. NineDot recommends that NYSERDA increase the New York City retail Block from 300MW to 450MW to address preexisting demand and readiness from developers. Regarding the Statewide Solar for All(SSFA) program

NineDot urges the Commission to allow Remote Crediting projects to opt into the SSFA to help increase savings for low-income consumers, allow SSFA savings for all energy affordability customers, and allocate SSFA savings from energy storage projects during summer months (June-August) when energy storage is most utilized to meet air conditioning loads to provide impactful savings when energy prices are high. NineDot also recommends that Non-Wires Alternative (NWA) projects be eligible to receive Retail Storage incentive funds, or alternatively allow NYSERDA flexibility to determine incentive fund eligibility for NWA structures.

New York Battery and Energy Storage Technology Consortium (NY-BEST)

NY-BEST broadly supports the incentive programs described in the Implementation Plan, including the program structure, incentive levels, and proposed higher incentive rates for projects in disadvantaged communities.

NY-BEST requests that Block 6 capacity allocation amount in New York City increase to 450MWs to reflect the most recent interconnection queue data showing a large number of projects planned for Zone J. They also request that NYSERDA retain flexibility to alter project maturity thresholds in New York City as necessary and to also require a 100 percent interconnection payment as a project eligibility requirement. NY-BEST supports the same re-ordering strategy of utilizing the actual date of full utility interconnection payment used in Block 5 in NYC, as there are a large number of anticipated applications for Block 6 in Zone J.

NY-BEST strongly supports NYSERDA's involvement in predevelopment activities and technical support with focus on LMI households, affordable housing, and disadvantaged communities. NY-BEST recommends that NYSERDA work directly with AHJs, including FDNY, to improve the local permitting process.

NY-BEST states that the Commission should urge PSEG-LI/LIPA to finalize contracting and cost recovery mechanisms to enable their full participation in the Residential and Retail programs. NY-BEST is concerned that insufficient Retail energy storage will be built on Long Island which will impact achieving the 6GW by 2030 target. NY-BEST urges the Commission and Staff to work with LIPA to ensure that a pathway to participation in the Retail program exists in PSEG-LI's 2025 Utility filing.

NY-BEST recommends that all energy affordability customers be eligible for SSFA bill discounts, not just those who live in a disadvantaged community. They further recommend that the Commission allow projects to partially enroll in SSFA to increase the number of projects that participate. Lastly regarding SSFA, NY-BEST recommends that Remote Crediting projects be allowed to opt-in to SSFA later in development which NY-BEST states will increase the number of projects and MWs available in SSFA.

NY-BEST recommends several areas of clarification in the Implementation Plan, including a size threshold for residential vs. On-site retail program, allow affordable multifamily buildings larger than four units to be eligible for the Residential ISI program, and allow projects that serve

multifamily residential buildings to participate in the Retail program. NY-BEST further recommends that the round-trip efficiency listed in the Program Manual be technology-specific, that Participating Contractors be allowed to identify the Payee after the application approval but prior to invoice, state that projects in Zones I or H in Con Ed's service territory be eligible for the Con Ed Westchester incentive, and that the annual First Responder trainings can be combined to maximize the local fire department's time and resources.

NY-BEST requests expedient review of comments and approval of the Implementation Order to that energy storage development can continue in earnest in New York State. They also request that NYSERDA pair the release of the Residential and Retail programs with a public education and outreach program so that customers and AHJs are aware of them and the potential benefits for hosting energy storage in the community.

New York Solar Energy Industries Association (NYSEIA)

NYSEIA strongly urges the Commission to approve the Implementation Plan quickly. NYSEIA agrees with the recommendations of NY-BEST, including increasing Block 6 New York City to 450MWs, having full interconnection payment as a project maturity requirement in New York City, and providing for New York City specific technical assistance, especially with FDNY. NYSEIA recommends that NYSERDA clarify that Dynamic Load Management program participation is not required to qualify for the residential energy storage incentive and for the state to work with New York City and FDNY to establish reasonable permitting requirements for residential batteries in New York City. NYSEIA further requests a carve-out for medium-sized energy storage systems under 1MW/4MWh, stating that these sized projects can interconnect more easily than larger projects and for increased collaboration with utilities to maximize the impact of residential energy storage by providing demand response, frequency regulation, and peak load management.

PEAK Coalition

PEAK Coalition supports the incentive amounts described in the Implementation Plan and the 50 percent capacity allocation in Zone J. PEAK Coalition recommends that a locational carveout for Zone J be included in any disadvantaged community incentive for both the residential and retail energy storage programs. PEAK Coalition further states that NYSERDA should work with FDNY and the New York City Department of Buildings to streamline and

improve the local permitting process for residential energy storage in New York City, which is currently unable to permit any commercially available residential energy storage.

Power Edison LLC

Power Edison recommends limiting the number of incentive grants to no more than two for any developer.

RIC Energy

RIC Energy recommends that in the Implementation Plan NYSEDA either announce a reservation of capacity for Rest of State or announce the incentive levels and capacity amount for Block 5 and Block 6 for Rest of State to enable sufficient upstate development of retail energy storage; RIC Energy states that if this does not happen, it is likely that New York City will receive a disproportionate share of total retail energy storage MWs. RIC Energy also strongly recommends that NYSEDA establish project maturity requirements in each New York City Retail MWh block to ensure that only viable projects are awarded incentives. RIC Energy states that a full interconnection payment requirement and the flexibility for NYSEDA in the Implementation Plan to require any additional maturity requirements could serve as appropriate benchmarks to gauge the likelihood that a project will come to fruition.

Sustainable Westchester

Sustainable Westchester requests that the Commission authorize mobile battery energy storage systems to be eligible to participate in the Retail energy storage program. Sustainable Westchester explains that battery systems that are docked to a permanent connection with the grid can provide benefits to the grid, including replacement of diesel generation for off-road power supply and construction sites, as well as on-airport ground support equipment and electric vertical take-off and landing aircraft.