PUBLIC UTILITIES

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BOARD OF PUBLIC UTILITIES

Garden State Energy Storage Program

Proposed New Rules: N.J.A.C. 14:8-14

Authorized By: New Jersey Board of Public Utilities, Christine Guhl-Sadovy, President, Dr. Zenon Christodoulou, Ph.D., and Michael Bange, Commissioners.

Authority: N.J.S.A. 26:2C-51, 48:3-60, and 48:3-87.8.

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

BPU Docket Number: QX25050283.

Proposal Number: PRN 2025-089.

The deadline for comments on this matter is 5:00 P.M. Eastern Time on October 3, 2025. Please submit comments directly by using the Board's Public Document Search tool, search for the specific docket number listed above, and post utilizing the "Post Comments" button. Written comments may also be submitted. Please include subject matter and docket number and submit to:

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All comments are considered "public records" for purposes of the State's Open Public Records Act. Commenters may identify information that they seek to keep confidential by submitting it in accordance with the confidentiality procedures set forth at N.J.A.C. 14:1-12.3.

The agency proposal is as follows:

Summary

The New Jersey Board of Public Utilities ("Board" or "NJBPU") is proposing new rules associated with the launch of the Garden State Energy Storage Program ("GSESP" or "Program"), previously referred to as the New Jersey Storage Incentive Program ("NJ SIP"). The goal of the GSESP is to enhance the electric grid's resilience to weather-related disruption, increase New Jersey's portfolio of capacity resources to accommodate the State's growing energy needs, and lower electricity rates for New Jersey residents. The Program is designed to provide incentives to eligible energy storage systems in order to implement the Clean Energy Act of 2018 (CEA) (P.L. 2018, c. 17) mandate to deploy 2,000 megawatts ("MW") of energy storage by 2030. See N.J.S.A. 48:3-87.8(d). The proposed rules will apply to all energy storage systems that are eligible for the GSESP. The GSESP and proposed rules will be posted on the Board's website under Docket No. QX25050283, upon the proposed rules publication in the New Jersey Register.

The CEA directed the Board to "initiate a proceeding to establish a process and mechanism for achieving the goal of 600 megawatts of energy storage by 2021 and 2,000 megawatts of energy storage by 2030." N.J.S.A. 48:3-87.8(d). Energy storage systems are critical for bolstering the resilience of New Jersey's electric grid, supporting and enhancing the growing solar industry, reducing carbon emissions, and enabling New Jersey's transition to 100 percent clean energy. The State's Energy Master Plan aims to achieve a 100 percent clean energy transition by 2035. The GSESP and its associated rules build a critical foundation for a long-term energy storage effort in the State.

Market Segments

The Program establishes two incentivized market segments: a transmission segment for large energy storage systems that interconnect directly to the bulk electric grid, and a distribution segment for smaller systems that interconnect either behind-the-meter (BTM) or in front-of-the-meter (FOM) to a distribution grid, as further described below. The GSESP's structure is similar to the NJBPU's Successor Solar Incentive (SuSI) Program. While the SuSI Program incentivizes stand-alone solar and solar-plus-storage projects, the GSESP will focus on incentivizing stand-alone transmission energy storage projects, as well as solar-plus-storage projects that are ineligible to receive storage incentives from the SuSI Program, thereby filling a critical gap in the market.

Program Structure and Timeframes

The GSESP will consist of two distinct phases, and a potential third phase, each with its own deployment timeline.

Phase 1 (Transmission Fixed Incentive) will launch with an initial State fiscal year (SFY) target of 350-750 MW and will seek to procure at least 1,000 MW of transmission-scale energy storage over multiple SFYs. The NJBPU will offer fixed incentive payments through an annual competitive bidding structure, paid out over a period of 10 to 20 years.

Phase 2 will consist of two distributed segments:

1. A distributed fixed incentive segment, whereby NJBPU will offer a fixed incentive through capacity blocks released on an annual basis.

2. A distributed performance incentive segment, with incentives being paid by the electric distribution companies (EDCs). The EDCs will offer performance incentives for successfully reducing on-site load and/or injecting power into the distribution system when called upon during certain performance hours, as established by each EDC.

A potential Phase 3 would consist of a Transmission Performance Incentive, with incentives paid by the NJBPU. This aspect of the Program would offer performance incentives to transmission-scale energy storage systems, to help advance the State's policy goals.

The Phase 1 transmission fixed incentive segment of the GSESP will launch in 2025. The Phase 2 distributed fixed and performance segment of the GSESP are anticipated to launch in 2026. The potential Phase 3 transmission performance incentive segment of the GSESP is being deferred, as shown at Table 1 below. Table 1 summarizes the Program's segments, deployment timeframes, and other Program elements.

Table 1. Summary of Key Program Elements

Phase	Phase 1	Phase 2	Phase 2	Phase 3
Incentive Type	Transmission Fixed	Distributed Fixed	Distributed Performance	Transmission Performance
Projected Launch Date	2025	2026	2026	Deferred
Incentive Timing	15-year payout	Upfront	Ongoing	Deferred
Form	Annual competitive bid	Annual block	Pay-for-performance	Deferred
OBC Adder	No	Yes	No	No

*"OBC"—Overburdened Community

Major Changes from November 2024 New Jersey Storage Incentive Program (NJ SIP) Straw Proposal

Major changes from the November 2024 NJ SIP straw proposal consist of the following:

Phase 1 now consists of only transmission-scale energy storage systems in order to increase New Jersey's portfolio of capacity resources. The NJ SIP straw proposal allowed FOM "grid supply" connections to the electric distribution system. A transmission-scale energy storage system is one that has an installed capacity of at least five MW alternating current (AC), is interconnected with the PJM transmission network, and is sited inside a transmission zone in New Jersey, or is otherwise located in New Jersey and qualified to provide energy, capacity, or ancillary services in the wholesale markets established by PJM Interconnection, LLC.

Fixed incentives for transmission-scale energy storage systems will now be paid over a 10- to 20-year period instead of being paid upfront. A result of spreading out payments is that a greater number of megawatts can be procured at the inception of the Program.

In order to qualify for an incentive award, transmission-scale energy storage systems must have a planned commercial operation date (COD) that is no later than 30 months after the date the application period for the relevant competitive solicitation closes, instead of 550 days after they execute a generation interconnection agreement.

The transmission segment solicitation application will now request information and qualitatively consider information on how the application

will support redevelopment, community benefits, brownfield redevelopment, and/or demonstrated benefits to overburdened communities where a transmission-scale energy storage system is proposed to be located.

The proposed new rules provide further detail on the role of EDCs and how they can recover costs.

The proposed new rules provide further detail on project and Program reporting requirements.

The proposed new rules add several new definitions and modify others, including the definition of energy storage.

Siting restrictions and waiver provisions were removed from the proposed straw proposal to mitigate obstacles to incentive access, which may otherwise hinder the timely processing of incentive awards. GSESP projects remain subject to all applicable State regulations.

Stakeholder Engagement

Board staff engaged stakeholders in the following manner:

- On September 29, 2022, NJBPU staff released an initial straw proposal as Docket No. QX25050283 to solicit stakeholder input. Staff also conducted a public webinar regarding the straw proposal. Staff reviewed and considered stakeholder comments.
- On August 8, 2023, NJBPU staff released a Request for Information (RFI), pursuant to the above-referenced docket, and requested written stakeholder comments. The RFI posed a series of questions that arose as a result of staff's review of stakeholder comments. Staff reviewed and considered stakeholder comments.
- On November 7, 2024, NJBPU staff released a second straw proposal and draft rules pursuant to the docket identified above. The document solicited oral comments at a November 20, 2024 webinar, as well as written comments.
- On November 20, 2024, NJBPU staff conducted a public webinar regarding the second straw proposal and draft rules. Over 300 parties participated in the webinar.

NJBPU staff considered written comments from over 60 parties on the second straw proposal and draft rules submitted by the December 18, 2024 deadline.

Project Evaluation and Selection

The Board will award incentives for transmission-scale energy storage systems on a competitive basis. In each solicitation, the Board may consider bid price and other factors to be determined by the Board, such as community benefits, brownfield redevelopment, and/or demonstrated benefits to overburdened communities where a transmission-scale energy storage system is proposed to be located. Upfront incentives, paid over 10 to 20 years, will be awarded to distributed energy storage systems on a first-come, first-serve basis, based on the date and time of when a completed application is received.

Project Maturity Requirements

Both the transmission and distribution segments of the GSESP include qualification, project maturity, and bid participation fee requirements. The purpose of these requirements is to ensure that energy storage systems that are awarded incentives have a reasonable likelihood of successful and timely completion.

If transmission-scale projects are unable to achieve commercial operation within 30 months of the date when the application period for the relevant competitive solicitation closes, the capacity they reserved may be returned to the market, either by increasing the size of any open solicitation, or by opening a new solicitation. Projects will be considered to have achieved commercial operation if they are fully constructed and have completed the full interconnection process, either at PJM or with a New Jersey jurisdictional EDC, including construction of any required interconnection upgrades. Transmission-scale projects that failed to meet the maturity requirements of one solicitation could bid into a future competitive solicitation. The GSESP requires that transmission-scale projects meet all the following criteria at the time they respond to a competitive solicitation:

- At a minimum, have been analyzed in a Phase I System Impact Study, or analyzed in a Surplus Interconnection Study, demonstrated that they will be able to use the capacity interconnection rights of a deactivating generation facility, or have a fully executed interconnection agreement;
- Demonstrate site control, either through lease or ownership;
- Obtained all required permits or have an execution plan for all required permits;
- A guaranteed COD prior to December 31, 2030, and after the effective date of the GSESP; and
- A planned interconnection with the PJM transmission network and situated within a transmission zone in New Jersey.

The GSESP requires that a distributed project meet the following criteria at the time of application:

- The system owner shall have submitted a level 1, 2, or 3 interconnection agreement application to the EDC and received notice confirming that said application was complete;
- Any generation resource it is paired with produces Class I renewable energy;
- A guaranteed COD prior to December 31, 2030, and after the effective date of the GSESP;
- Is owned, leased, or operated by a residential or non-residential customer of an EDC;
- Meets all other economic and non-economic criteria the Board may set by order; and
- Meets all criteria for participating in the EDC performance incentive program approved by the Board.

Bid Participation Fees

Fees or deposits for projects applying for GSESP incentives are frequently used as a means of ensuring the seriousness of bidders, incentivizing bidders to follow through on project commitments, and (in some cases) helping to defray the cost of administering the GSESP. The GSESP establishes a non-refundable $200.00 per MW fee due to the requirement of additional predevelopment securities.

Pre-Development Security

Should the Board award a transmission-scale energy storage system a fixed incentive, the Board may require the system owner to provide a pre-development security of up to $100,000 per MW for transmission projects upon application approval. Deductions may be made from the pre-development security for delays on project development milestones for non-excused events. Additionally, upon approval, the incentive recipient will provide a planned COD and a guaranteed COD to the Board. If the applicant misses the planned commercial operation date, the Board may impose deductions from the pre-development security. The Board will revoke the incentive award if the applicant misses their guaranteed COD by 36 months, adjusted for any grace period, the Board may establish by order, though the Board may waive this deduction if the applicant demonstrates good cause for relief in writing. Pre-development security, project development milestones, fees, and deductions will be established prior to each solicitation. The methodology used to calculate these values will remain consistent across all projects within the solicitation.

Incentive Types

A) Fixed Incentives:

Fixed incentives for energy storage systems are designed to help reduce the revenue gap between energy storage costs and revenues needed to attract interested parties to develop energy storage systems.

1) Fixed Incentives for Transmission Resources:

Based on stakeholder comments, the number of storage projects that have remained in the PJM interconnection queue following the imposition of stricter readiness requirements, and the Board's experience with the Competitive Solar Incentive (CSI) Program, Board staff concluded that one or more annual competitive solicitations is the most appropriate path forward to meet the objectives of the transmission segment of the GSESP. Through this approach, the Board will release, by order, a solicitation with the specific objective amounts in MWs, or ranges of amounts, being sought for a given SFY year. The solicitation would ask participants to quantify the level of fixed incentive needed to support their project revenue requirements. Front-of-the-meter storage developers must select between the GSESP or the CSI Program. Figure 1 provides a decision tree on the topic.

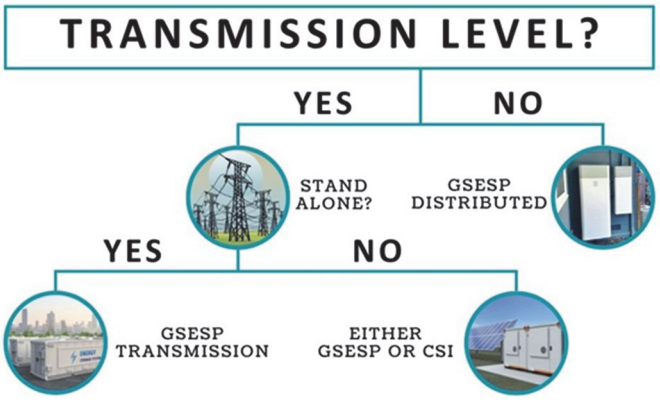

Figure 1. Garden State Energy Storage Program Selection

For example, a solar plus storage project that does not clear in the CSI Program may elect to later participate in the GSESP, or vice versa.

Recipients of fixed incentives during the period when only fixed incentives are offered will be ineligible to receive future performance incentives.

2) Fixed Incentives for Distributed Resources:

The GSESP will open a block of incentives every fiscal year by no later than August 1st of that SFY. Through the block design, the incentive level can be adjusted by Board order, as required, due to changes in costs or market structure.

The Board will establish administratively set fixed distributed incentives. The Board may change the amount of such administratively set incentives each time it opens a new block in response to market participation and economic conditions. A block structure is designed to ensure that the total cost to ratepayers decreases to the minimum necessary to address the identified revenue gap. Pursuant to a block structure, the Board will, by order, establish an initial "Capacity Block" or "Block" of storage capacity, denominated in megawatt-hours (MWhs). The Board, likewise, will establish an initial annual incentive amount for projects registering in the initial block, denominated in $/kWh of storage capacity. Once the block is fully subscribed, the incentive level will be stepped up or down in the next block depending on market conditions, Federal policies, and available budget. If a block remains unsubscribed or under-subscribed, the Board shall have the option to increase the incentive, though Board staff anticipates that the incentive level in any given Block will not exceed the incentive level in any prior block that was fully subscribed.

To determine appropriate incentive levels for distributed storage projects, staff's consultant performed a "gap analysis" that estimated the revenue and savings potential of behind-the-meter storage projects for a variety of different building types, rate classes, and tariffs associated with the New Jersey EDCs. The results showed a consistent shortfall of $220.00 to $330.00 per kWh and ranged between 37 percent and 47 percent of the total installed cost of the systems (higher for residential systems). The incentive levels shown in Table 2 below are designed to meet the identified need up to a cap of approximately 40 percent of the fully installed cost. The values shown are intended to be met by a combination of a fixed payment paid by NJBPU, as well as an annual performance payment from the EDCs.

Table 2. Target Combined Incentive Level

Project Type	Nameplate MW Capacity	Target Initial Incentive (Net Present Value of Upfront Incentive Plus Performance Incentives)	Overburdened Community (OBC) Upfront Incentive Adder
Small	<100 kW	$300/kWh	$100/kWh
Medium	100-500 kW	$200/kWh	$67/kWh
Large	>500 kW	$150/kWh	$50/kWh

Board staff believes these starting incentive levels appropriately balance both budget targets and the need to establish the Program and allow the block mechanism to reveal the competitive incentive level for storage. As discussed above, the GSESP will undertake an annual process to evaluate the capacity block sizes and, if necessary, adjust the incentive levels.

3) Enhanced Incentives for Energy Storage Projects in Overburdened Communities:

This GSESP incentive will encourage a share of distributed energy storage systems to locate in or serve overburdened communities. Distributed storage plays an important role in reducing emissions and enhances the resilience of the electric grid—both important factors in meeting Governor Murphy's environmental justice and equity directives. As distributed energy storage systems are customer-sited, energy storage systems serving overburdened communities will provide improved energy resilience to the local communities and may help reduce the need for less clean backup generation options during emergency conditions. Therefore, the GSESP establishes an adder of energy storage capacity in the fixed portion of the incentive for projects located in overburdened communities and reserves a portion of the incentive budget, to be established by the Board, for customers in overburdened communities. The GSESP does not include any additional incentives to locate transmission-scale storage in overburdened communities, as those projects typically have fewer localized benefits, compared with distributed storage systems, which directly add to the energy resilience of the local community. However, Board staff believes that it is possible that such projects may reduce the run-time and, thus, emissions from peaker plants in overburdened communities, which could constitute a significant local benefit. If an applicant is able to provide satisfactory evidence and analysis demonstrating that its proposed energy storage system would provide such a benefit, the Board may consider this factor when determining which projects to select in a given transmission segment solicitation.

The NJBPU may supplement the incentive for overburdened communities by passing through Federal or other external funds, should such funds become available. The terms and conditions of the grant will apply to energy storage projects receiving such grants.

B) Performance Incentives:

The performance-based incentives for energy storage systems will be designed to encourage the operation of storage assets in a manner that produces environmental benefits and/or helps the electric grid during times of operational stress. The flexibility of energy storage can result in a range of benefits for the efficient and effective operation of the bulk electricity system while also potentially providing environmental benefits by reducing carbon emissions and criteria pollutants. Likewise, energy storage systems at the distribution level can provide all of these benefits while also contributing to local system resilience, helping integrate higher levels of distributed generation, and potentially reducing the cost of operating and maintaining the distribution grid. Distributed performance incentives will be deferred until at least 2026, to allow the EDCs adequate time to develop and seek Board approval to administer that portion of the Program.

1) Performance Incentives for Transmission Resources:

One of the stated goals of the GSESP is to encourage energy storage systems to dispatch in a manner that decreases greenhouse gas (GHG) emissions by tying operations to pay-for-performance metrics. The September 2022 NJ SIP straw proposal proposed to use PJM's hourly GHG marginal emissions rates (MER) data as the basis for a GHG reduction performance incentive. Unfortunately, the MER data are not forward-looking, as PJM does not provide day-ahead emissions signals. In comments to the September 2022 NJ SIP straw proposal, a significant number of stakeholders argued that the historical, hourly MER data PJM provides cannot be used to project hourly emissions and, therefore, cannot guide decisions about when to charge or discharge an energy storage system. Board staff agreed and sought to determine whether PJM could, or would, publish a day-ahead emissions signal on which to base a performance incentive. However, because the day-ahead energy market is in part financial (that is, not unit-specific), PJM is currently unable to develop a day-ahead MER signal based on the day-ahead model. Staff also explored the use of MER data from real-time operations, which is updated approximately every two hours, but mathematical relationships were, at best, weak and, at worst, unreliable.

Both stakeholders and Board staff identified other specific concerns with using the currently available PJM MER data. First, it is not clear whether emission rates can be used in conjunction with preliminary load and/or settled hourly prices (for example, linear regression) to develop reliable mathematical relationships. Second, a review of hourly emissions data for January 1, 2024, through May 22, 2024, found multiple hours during which emissions rates were the reverse of what would have been expected. Third, PJM itself has cautioned that its marginal emissions data is not fully developed. Finally, many stakeholders believe that the MER-based incentive would be too complex.

For these reasons, Board staff concludes that it would be inadvisable to launch the GSESP with a net avoided emissions performance incentive. However, Board staff believes that the Board should have the ability to implement such an incentive if, and when, the necessary data and analytics become available. The Board, therefore, proposes that if it determines that a sufficiently accurate day-ahead MER signal capable of guiding dispatch decisions has been developed, either by PJM or by a third party that is capable of modeling security-constrained unit commitment and dispatch in the PJM transmission network, the Board may, by order, establish a net avoided emissions performance incentive for transmission-scale energy storage systems.

The performance incentive would be provided in addition to a fixed incentive and will only be available to energy storage systems that neither received a fixed incentive, nor commenced commercial operation, prior to the launch of a net avoided emissions performance incentive. Qualifying projects would receive a payment equal to their net avoided emissions in short tons multiplied by a dollar-per-ton rate determined by the Board. The energy storage system's net avoided emissions would be calculated by subtracting the gross induced emissions from the gross avoided emissions, where:

- Gross induced emissions would be calculated by multiplying, for each time interval during the relevant fiscal year in which the transmission-scale energy storage system consumed electricity to charge, the MER in its wholesale energy market zone or node by the amount of electricity it consumed, and then adding the resulting products together.
- Gross avoided emissions would be calculated by multiplying, for each time interval during the relevant fiscal year in which the transmission-scale energy storage system discharged electricity, the MER in its wholesale energy market zone or node by the amount of electricity it discharged, and then adding the resulting products together.

2) Performance Incentives for Distributed Energy Storage Systems:

For distributed energy storage systems, the GSESP directs each EDC to establish a performance-based incentive, in $/kW per year, that will be provided to energy storage systems operating during specific call hours, patterned in part on the ConnectedSolutions program utilized in Connecticut and Massachusetts. These programs provide an easy-to-understand incentive to distributed energy storage systems by providing a $/kW payment for customers discharging power when called by the EDC during specific performance hours, usually summer afternoons. Each EDC has the flexibility to establish the call hours and payments based on its specific needs. The development of a mechanism for calling resources is anticipated to take approximately six months to a year after the launch of the transmission-scale segment. Each EDC energy storage filing will be required to address the following items:

1. Program Call Hours: Each EDC shall identify the seasons and times of day when the deployment of storage systems is most likely to benefit the grid.

2. A $/kW per year Incentive Payment for Calls: Each EDC shall adopt a simple $/kW per year payment to incentivize storage systems on its system.

The EDC may adopt a single-system payment or may establish geographically variable payments if such payment differentiation is warranted. Rate and tariff design should align with expected PJM requirements related to Federal Energy Regulatory Commission (FERC) Order No. 2222 (*Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators*, 85 Fed. Reg. 67,094 (Oct. 21, 2020) (codified at 18 CFR Part 35)) and include co-optimizing economic and GHG reduction considerations while disallowing duplicate compensation. Enhancing the value stack will provide a strong financial incentive for energy storage systems to provide energy to the grid (and/or serve on-site load) during the times when the grid is the most stressed. The release of stored energy during these times could provide significant environmental, reliability, and cost savings to New Jersey consumers, as the energy storage systems will potentially avoid, or at least reduce, the use of peaking generation, which is typically the most expensive, dirtiest, and least efficient generation.

Each EDC shall explain how its proposed payment structure meets the following criteria: (i) increases environmental benefits of storage deployment; (ii) cost-effectively reduces the need for traditional distribution investments; and (iii) otherwise minimizes the stress on the local distribution system and reduces operating costs.

Payments to Resource Owners

During dispatch events, an energy storage owner will meet its obligations of the performance-based payment portion of the GSESP if it responds to a call. Successfully "responding" to a call can take two forms or some combination thereof: either injecting power into the distribution system or by using the energy storage system to reduce the customer's consumption of power from the grid during the call period. Collectively, these are the distributed customer's "Response kWs," and are measured in kWs of relief provided. When a dispatch signal is sent by the relevant EDC, the customer will receive credit for each kW of Response kWs it provides during the call period, averaged over all call periods in a particular year. For example, an EDC that issued 10 calls over the course of a summer will add up the total Response kWs provided by an energy storage system and report the average response over those 10 calls. A resource owner will be required to provide Response kWs for the entire duration of a call (likely up to four hours). A missed call will be registered as 0 kW. The resource owner will then receive the $/kW per year incentive established by the EDC, multiplied by their average Response kWs. At no point will the distributed storage resource incur penalties for missing a call, aside from the reduction in their performance incentive payment that accompanies the resulting reduction in their average Response kWs.

Mechanism for Calling Resources

Each EDC will be required, by Board order, to develop a system for calling resources and communicating with distributed energy storage systems, which are expected to be able to respond automatically. However, customers may opt out of a particular call without penalty, except for foregoing performance incentives they could earn during that call. Each EDC program shall offer incentives for customer performance, but responding to calls will be voluntary for the consumer, as is the case in the ConnectedSolutions programs. Further, Board staff recognize that many customers invest in distributed storage systems to provide backup power during blackouts or other reliability events. In order for customers to rely on energy storage systems during these times of grid stress, the customer may want to ensure that the energy storage system is fully charged before a storm or other event. To prevent energy storage systems from being drained immediately in advance of a potential grid event (for example, a significant weather event), it is imperative that advance notice of a call is given to system owners by the EDCs. Staff notes that the ConnectedSolutions programs typically prohibit the EDCs from dispatching energy storage systems less than 48 hours ahead of anticipated extreme weather or likelihood of grid outages.

Participation Terms, Conditions, and Enforcement

- This GSESP requires that transmission-scale energy storage systems meet the following criteria at the time they respond to a competitive solicitation:
  - The energy storage systems are not enrolled in the SuSI Program.
  - The energy storage systems meet all other economic and non-economic criteria that the Board may set by order.
- Distributed energy storage systems shall meet the following criteria at the time of application:
  - The system owner shall have submitted a level 1, 2, or 3 interconnection agreement application to the EDC and received notice confirming that said application was complete.

- ○ Any generation resource paired with the energy storage system shall produce Class I renewable energy.
- ○ The system shall have a guaranteed COD prior to December 31, 2030, and after the effective date of the GSESP.
- ○ The system shall be owned, leased, or operated by a residential or non-residential customer of an EDC.
- ○ The system shall meet all other economic and non-economic criteria that the Board may set by order.
- ○ The system shall meet all criteria for participating in the performance incentive segment set by the EDC and approved by the Board.

Siting and Permitting

There shall be no siting restrictions and waiver provisions through the GSESP that may otherwise hinder the timely processing of incentive awards. However, GSESP projects remain subject to all applicable State laws and rules.

Technical Requirements

To be eligible to apply for incentives, transmission-scale energy storage system and distributed energy storage system applicants must meet the following requirements:

- The applicant must not be an EDC. The applicant may be a government entity or a private entity;
- The energy storage system must be comprised of new equipment, be a planned resource if it is a transmission resource interconnecting to the PJM transmission network, and be electrically interconnected to the distribution system of a New Jersey EDC or to a part of the PJM transmission network situated within a transmission zone in New Jersey;
- Meet appropriate financial security and project maturity requirements;
- Meet minimum safety requirements by a nationally recognized testing laboratory as evidenced by specific UL listings defined in the Program manual at the time the system enters commercial operation (these references are intended to evolve to meet current best practices in the storage industry); and
- Comply with all manufacturers' installation requirements, applicable state and Federal laws, regulations, codes, licensing, and permit requirements.

Monitoring and Reporting

This section discusses both project-level reporting by the project operator applicable to all Program segments, unless otherwise specified in Program-level reporting by the NJBPU.

a) Project Reporting

- Prior to system operation, the system owner shall submit construction reports to the Board, or the Program administrator, from the start of construction until the COD, to enable the Board to track progress on project milestones.
- During system operation, the system owner shall provide a report with key operational metrics, to the Board, or the Program administrator, within five business days after the last day of each month.
- Written notification to the Board is required for any changes involving project developers, owners, or operators. These changes may include sale, transfer, contract modification, or other material alterations to the parties originally listed in the application. Specifically:
  - ○ New owners and operators shall notify the Board of their name, tax identification number, contact telephone number, and percent ownership of the project within 30 days of any ownership change.
  - ○ Major project developments or changes shall be communicated to the Board through written notification (through email or letter).
- For new or existing power generation equipment at the site of a transmission-scale energy storage system, the system owner must install a revenue-quality meter that can separately measure the power and energy exchanged with the energy storage system and that produced by the power generation equipment. Additionally, telemetering equipment and data acquisition services are required to generate and submit monthly operating reports on the energy storage system to the program administrator.

b) NJBPU Program-Level Reporting

The Board will conduct an annual review of the GSESP after the Program begins to ensure that it is meeting its objectives. Board staff will provide recommendations to make any necessary adjustments. The Program administrator will establish, and regularly update, a public website that will show Program status.

As the Board has provided for a 60-day comment period on this notice of proposal, the proposed notice is excepted from the rulemaking calendar requirement set forth at N.J.A.C. 1:30-3.3(a)5.

The following is a section-by-section summary of the proposed new rules:

At proposed N.J.A.C. 14:8-14.1, the Board sets forth the purpose and scope of the new subchapter.

At proposed N.J.A.C. 14:8-14.2, the Board sets forth new definitions to be used within this subchapter for the following terms: "accredited capacity," "authority having jurisdiction," "base residual auction," "block," "block incentives," "block priority date," "'Board' or 'NJBPU,'" "business day," "calendar day," "capacity interconnection rights," "Class I renewable energy," "commercial operation," "delay damages rate," "distributed energy storage system," "distributed segment," "'distributed energy resource' or 'DER,'" "distribution system," "Division Director," "'electric distribution company' or 'EDC,'" "eligible project," "energy storage," "energy storage program," "energy storage system," "facility," "FERC," "fiscal year," "fixed incentive," "force majeure," "gap analysis," "'Garden State Energy Storage Program' or 'GSESP,'" "'generation interconnection agreement' or 'GIA,'" "'guaranteed commercial operation date' or 'guaranteed COD,'" "IEEE 1547," "incentive award," "installed capacity," "installed cost," "interconnection agreement," "interconnection service agreement," "large," "'marginal emission rate' or 'MER,'" "'marginal emissions rate signal' or 'MER signal,'" "marginal resource," "medium," "net avoided emissions," "OBC adder," "'overburdened community' or ''OBC,'" "performance incentive," "'permission to operate' or 'PTO,'" "permits," "Phase I system impact study," "PJM," "PJM transmission network," "'planned' or 'planned resource,'" "'planned commercial operation date' or 'planned COD,'" "pre-development security," "program administrator," "project milestones," "project operator," "response kWs," "small," "standalone," "surplus interconnection study," "system owner," "transmission-scale energy storage system," "transmission segment," "transmission zone," "UL 1741," "UL 1741 SB," "UL 9540," "UL 9540A," and "unforced capacity."

At N.J.A.C. 14:8-14.3, the Board proposes a structure for the transmission segment fixed incentive. The Board proposes an initial SFY target of 350 to 750 MW and the procurement of at least 1,000 MW of transmission-scale energy storage over the course of multiple SFYs. Additionally, the Board proposes offering fixed incentive payments through an annual competitive bidding structure, to be paid over a period of 10 to 20 years.

At N.J.A.C. 14:8-14.4, the Board proposes funding for the transmission segment fixed incentive. The Board proposes to allocate funds collected through the societal benefits charge established pursuant to subsection a. of section 12 at P.L. 1999, c. 23 (N.J.S.A. 48:3-60), and moneys available from other funding sources, as determined by the Board.

At N.J.A.C. 14:8-14.5, the Board proposes a structure for the transmission segment performance incentive. The Board proposes deferring the transmission segment performance incentive until a reliable day-ahead MER signal is developed by PJM or a qualified third party.

At N.J.A.C. 14:8-14.6, the Board proposes a structure for the distributed segment fixed incentive. The Board proposes offering fixed incentive payments through capacity blocks, which will be released on an annual basis.

At N.J.A.C. 14:8-14.7, the Board proposes a structure for the distributed segment performance incentive. The Board proposes that EDCs offer performance incentives for successfully reducing on-site load and/or injecting power into the distribution system when called upon during specific performance hours, as established by each EDC.

At N.J.A.C. 14:8-14.8, the Board proposes the technical requirements that energy storage systems must meet to receive incentives.

At N.J.A.C. 14:8-14.9, the Board proposes EDC responsibilities and cost recovery requirements. The Board proposes that the EDCs shall be responsible for facilitating the interconnection of energy storage systems into the distribution grid and ensuring compliance with regulatory and technical requirements. Additionally, the Board proposes that the EDCs shall be responsible for calling for services from energy storage systems and for providing and administering future distributed performance financial incentives for their response.

At N.J.A.C. 14:8-14.10, the Board proposes Program-level reporting requirements.

Social Impact

Implementation of the proposed new rules and GSESP are expected to have an overall positive social impact on New Jersey due to positive contributions to electric energy resilience, air quality, electric bills, and energy usage. The Program is anticipated to procure between 1,500 and 1,800 megawatts (MW) of installed energy storage systems (ESS) for New Jersey consumers over a period of approximately five years and will assist in complying with the legislative goals of the Clean Energy Act of 2018, N.J.S.A. 48:3-87.8. The energy storage systems integrated into New Jersey's electric grid resulting from the proposed rules will enhance energy resilience by providing backup power generation during and after extreme weather events and emergencies, particularly for critical facilities such as hospitals, emergency response centers, and water treatment facilities. These grid enhancements have significant potential to foster community well-being and reduce the socioeconomic disruptions caused by prolonged power outages, resulting in an overall positive social impact for New Jersey residents.

Further, the utilization of energy storage systems to export electricity to the grid at peak times has significant potential to reduce the number of times peaker plants need to operate over the course of a year. Peaker plants are well understood to be one of the "dirtiest" sources of energy generation, due to their relatively high emission rates of GHG, particulate matter, and sulfur and nitrous oxide compounds, all of which have demonstrated negative impacts on human health and biodiversity, and are solely utilized when the electric grid is stressed due to high load (for example, on a hot summer afternoon). Overburdened and low-income communities are disproportionately impacted by the utilization of peaker plants because such generation sources are often located in lower-income areas. Thus, reducing the amount of power peaker plants needed to generate will tend to improve air quality in overburdened and low-income communities. These reductions in peaker plant run times are anticipated to improve health outcomes for New Jersey residents, mitigate the adverse impacts of climate change that the State is experiencing, and advance environmental justice by supporting overburdened communities. Hill, et al., New Jersey Scientific Report on Climate Change, 1.0 New Jersey Department of Environmental Protection. 60, 69 (2020).

Furthermore, energy storage is likely the only source of new dispatchable capacity (albeit dispatchable for only a limited duration) that can be added to the grid in the next few years. Equipment needed to build new gas-fired power plants is now facing significant order backlogs, such that development timelines for new gas-fired power plants are now seven to eight years long. Kevin Clark, Long Lead Times Are Dooming Some Proposed Gas Plant Projects, Power Engineering (Feb. 20, 2025), https://www.power-eng.com/gas/turbines/long-lead-times-are-dooming-some-proposed-gas-plant-projects/. New nuclear capacity would likewise take at least seven years, and likely substantially longer, to build. Nick Shykinov, Importance of Advanced Planning of Manufacturing for Nuclear Industry, 7 Mgmt. & Production Engineering Rev. 42, 43 (2016). Energy storage systems can come online much faster and contribute to near-term capacity needs when traditional resources cannot.

Lastly, the GSESP has the potential to allow customers more control over their electric bills. The installation of an energy storage system will allow a customer two potential avenues to save or generate funds through energy arbitrage and demand response. Energy arbitrage is a strategic energy purchasing tactic where an entity can purchase (and/or store) energy during off-peak hours when prices are low, then use or sell that energy during peak hours when energy prices are high. This strategy has long been used by utilities and can also be utilized by distributed energy customers with the use of an energy storage system. For example, a customer may charge their energy storage system during off-peak hours and then discharge their energy storage system to power their home during times of peak energy use when prices are high. Doing so can empower customers by giving them control over their energy usage and the price they pay for it. Energy storage systems can be used for demand response in a similar fashion. Customers with an energy storage system will have the opportunity to participate in virtual power plants (VPPs) or the wholesale energy market through the strategic charging and discharging of their energy storage systems. Customers may participate in distribution-level VPPs and be compensated either for discharging the energy from their energy storage system onto the grid or for reducing their load by using energy from the energy storage system instead of importing electricity from the distribution grid. Customers may also choose to participate in an aggregation pursuant to FERC Order No. 2222, which allows DERs, such as energy storage systems, to sell their energy to the wholesale market. Please see NJBPU Docket No. EO24020116, *I/M/O New Jersey's Distributed Energy Resource Participation in Regional Wholesale Electricity Markets,* for more information on the Board's activities with respect to FERC Order No. 2222.

Despite these benefits, large-scale battery energy storage systems may also present health and safety challenges if not properly managed and maintained. Energy storage systems can pose risks, such as thermal runaway, chemical exposure, fire, and electrical hazards, which require meticulous oversight during installation, operation, and maintenance. To address these impacts, best practices include following manufacturers' detailed recommendations during installation. Regular monitoring and routine inspections help identify potential issues early during operation, while scheduled maintenance and robust staff training minimize risks over the system's lifecycle. Additionally, integrating emergency response protocols and safety measures, such as fire suppression systems, further ensures that these energy storage solutions operate safely and reliably.

Overall, beyond reducing the strain on the grid during peak hours, minimizing the risk of blackouts, and lowering energy costs for consumers over time, the GSESP is anticipated to have an overall positive impact on New Jersey residents by increasing energy resilience, improving air quality, reducing GHG emissions, and allowing customers to have more control over their energy usage and electric bills. There are potential negative social impacts that could arise from the mismanagement of large-scale battery energy storage systems that should be carefully considered by Program applicants and Board staff/Program administrator application reviewers. The benefits, however, of engaging customers in the energy market and empowering them to participate in energy arbitrage, demand response, and VPPs, are substantial. Without energy storage, a fully reliable grid will also be extremely expensive or even impossible to realize in the short term due to the length of time required to build other forms of dispatchable capacity. Therefore, installing more storage is imperative to achieve grid reliability and resilience. The enhancements to the electric grid will have a positive impact on New Jersey residents overall, improving reliability and eventually reducing costs for ratepayers. Customers on the specific circuit where the battery is located will experience even greater benefits, as the increased stability of the circuit will enhance their service. Additionally, OBCs will receive preferential advantages due to the additional incentives allocated to them.

Economic Impact

The Board expects the GSESP will most likely lead to a net decrease in electricity costs for New Jersey ratepayers. At the same time, the economic activities associated with the GSESP are expected to contribute modestly to New Jersey's economy by increasing investment in new infrastructure, modernizing New Jersey's grid, improving reliability, reducing environmental damages, improving public health, and creating new jobs. The GSESP should, therefore, have a net positive impact on New Jersey's economy.

The Board concludes that the GSESP will probably decrease electricity costs for two reasons. First, a quantitative analysis performed by Board staff with modeling support provided by outside consultants indicates that in most scenarios the capacity cost savings to ratepayers produced by alleviating the PJM region's tight capacity supply conditions exceed the cost of the GSESP incentives required to ensure deployment of the statutorily mandated 2,000 MW of storage by 2030. Board staff has

prepared a separate report that describes the results and key assumptions underlying this analysis, which is available at the Board's website at https://www.njcleanenergy.com/storage. Additionally, the net cost of distributed performance incentives should be close to zero. This is because the Board intends for these incentives to be set at levels that roughly reflect the actual value that distributed energy storage systems provide to the electric grid. Consequently, the cost of these incentives should be offset by avoided "poles and wires" investment in utility infrastructure and/or other operational costs that would otherwise have been charged to ratepayers. For these reasons, the Board concludes that, holding all else equal, the GSESP will likely lower electricity costs for New Jersey ratepayers.

For the transmission-scale energy storage segment, the GSESP's emphasis on competitive solicitation helps ensure that the State procures the most cost-effective energy storage solutions. This competitive approach can lead to technological innovations and cost reductions over time, enhancing the State's competitiveness in the energy sector.

The distributed energy storage segment also includes provisions for annual program reviews and adjustments. The Board has the authority to annually adjust the distributed segment fixed incentive. The annual adjustment allows the State to respond to the rate of progress towards the 2030 goal, market developments, and technological advancements. This adaptability ensures that the segment remains effective and continues to deliver economic benefits as the energy landscape evolves.

The Board also expects that the GSESP will provide the following long-term benefits to New Jersey:

1. Energy Savings: Energy storage reduces reliance on peak power plants, stabilizes the grid, and integrates renewable energy, leading to long-term savings for consumers and businesses. Energy storage can also improve power quality, which allows electrical equipment such as motors and sensitive electronic equipment to run more efficiently and for a longer duration.

2. Grid Modernization: Improved reliability and reduced power outages could boost economic productivity. Energy storage systems enhance grid stability by storing excess energy for use during peak demand periods, thereby reducing the likelihood of blackouts and associated economic losses. Improved grid reliability can attract new businesses to the State, by assuring them that their operations will be supported by reliable energy infrastructure. Energy storage can also enhance the value of intermittent renewable energy resources by reducing the curtailment such resources sometimes face.

3. Reliability: Reliability benefits for grid operators have been estimated to be from $10.00/kW-year to $719.00/kW-year. See Balducci et al., Assigning value to energy storage systems at multiple points in an electrical grid, 11 Energy Environ. Sci. 1926-1944 (2018); Balducci et al., Understanding the Value of Energy Storage for Power System Reliability and Resilience Applications, 8 Energy Storage. 131-137 (2021). During extreme weather events, such as hurricanes and wildfires, energy storage could increase resilience and reduce the duration of overall outages while also bringing local grids back online faster. See Wu et al., An open-source extendable model and corrective measure assessment of the 2021 Texas power outage, 4 Advances in Applied Energy. 100056 (2021).

4. Environmental Benefits: Transitioning to cleaner energy storage reduces healthcare costs by improving air quality. The GSESP will result in cleaner air for the citizens of New Jersey, reduce the negative human health impacts of pollution from fossil fuel power plants, as well as reduce GHG emissions and attendant climate harms. The positive health effects and mitigation of climate change are expected to benefit New Jersey's economy. The GSESP's modeling of changes in GHG emissions attributable to the program has shown:

- From 2025-2050, energy storage will facilitate the much larger expansion of solar, wind, and Electric Vehicle (EV) chargers, and the contraction of dispatchable fossil power plants.
- The GSESP will cause a net reduction of approximately two million metric tons of CO_2 between 2025 and 2044 (20 years), or about 100,000 metric tons per year.
- The GSESP may increase emissions in its initial years due to current small differences between peak and off-peak marginal emission rates.
- 2031 is the last year with increased emissions. In 2032, system-avoided emissions are projected to be 128,000 metric tons and emissions from battery operations are projected to be 119,000 metric tons, leading to net abated emissions of 9,000 metric tons.

5. Attraction of Investment: Companies looking to build or relocate might be attracted to New Jersey by New Jersey's greener grid and modernized energy infrastructure. By establishing a robust energy storage infrastructure, the State can stabilize energy prices, reduce dependence on out-of-State energy sources, and keep energy expenditures within the local economy.

The Garden State Energy Storage Program is poised to deliver economic benefits to the State. Through job creation, enhanced grid resilience, environmental improvements, and long-term economic growth, the GSESP represents a strategic investment in New Jersey's energy future. Finally, the GSESP requires that the projects are located in New Jersey, keeping the investments here in the Garden State. The GSESP would draw funds from the Clean Energy Program.

Federal Standards Statement

N.J.S.A. 52:14B-1 et seq., requires State agencies that adopt, readopt, or amend State rules exceeding any Federal standards or requirements to include in the rulemaking document a Federal standards analysis. This rulemaking has no Federal analogue and is not promulgated pursuant to the authority of, or in order to implement, comply with, or participate in any program established pursuant to Federal law or a State statute that incorporates or refers to Federal law, Federal standards, or Federal requirements. Accordingly, N.J.S.A. 52:14B-1 et seq., does not require a Federal standards analysis for the proposed new rules.

Jobs Impact

The GSESP will create jobs in construction, professional services, manufacturing, and wholesale trade and distribution, all of which are fields that play a role in the deployment and/or operation of energy storage systems. The United States Department of Energy's National Renewable Energy Laboratory (NREL) State Clean Energy Employment Projection Support Report provides quantitative job projections expressed in jobs per megawatt of installed battery storage capacity. See Truitt et al., State-Level Employment Projections for Four Clean Energy Technologies in 2025 and 2030, NREL/TP-5500-81486 National Renewable Energy Laboratory. 22 (2022). As the GSESP will likely lower, instead of increase, electricity costs, the Board believes the Program will have no material negative impacts on employment levels. Any reduction in electricity costs could induce increased consumer spending in other areas of the economy, as well as reduce operating costs for businesses, both of which could contribute modestly to economic expansion and, thus, job creation. For these reasons, the Board concludes the GSESP would likely lead to a net increase in the number of jobs in the New Jersey economy.

Agriculture Industry Impact

The proposed new rules are not expected to cause any material impacts to farmlands that would harm the agriculture industry, or materially impact agricultural lands. This is because GSESP projects must comply with all applicable State regulations.

Additionally, the GSESP creates new opportunities for dual-benefit renewable energy development in the agricultural sector by allowing dual solar-plus-storage configurations that are not eligible through the SuSI Program to participate in GSESP incentives. This structure encourages greater clean energy participation by New Jersey's farming community, particularly where the pairing of solar and storage can reduce operating costs and improve resilience for farm operations. The Board expects that supporting such installations on built environments and through distributed storage configurations will complement the goals of the New Jersey Department of Agriculture (NJDA), which promotes energy efficiency and cost savings through renewable technologies for the agricultural sector.

Also, because like everyone else, the agricultural industry is a consumer of electricity, given the projected net electricity cost savings resulting from the GSESP, there may be a modest positive impact on the agricultural industry due to reduced electricity costs.

The proposed new rules are, therefore, expected to have both neutral and positive impacts on agriculture in New Jersey. First, the rules protect

covered agricultural lands from development-related disruption by design. Second, the rules support the agricultural community's ability to access modern, cost-saving renewable energy solutions. Lastly, these dual outcomes are expected to strengthen the sustainability of the agricultural industry without displacing critical farmland resources.

Regulatory Flexibility Statement

The proposed new rules include reporting requirements applicable to GSESP projects. Accordingly, this rulemaking does impose recordkeeping, reporting, and other compliance requirements on small businesses that may apply to the Program. A small business, as defined in the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., is a business that has fewer than 100 full-time employees. Regarding businesses that qualify as small businesses pursuant to the Regulatory Flexibility Act, the GSESP is a voluntary program and, as such, will not impose any requirements on any small business that declines to voluntarily participate in the Program.

Housing Affordability Impact Analysis

The Board does not anticipate that this rulemaking will have an impact on housing affordability or the average cost of housing in New Jersey. Insofar as the GSESP will probably decrease the net cost of electricity, and utility costs are part of the total cost of housing, the GSESP will most likely slightly improve housing affordability for New Jersey residents. Residential customers that take direct advantage of GSESP incentives and participate in the distributed performance incentives program, virtual power plants, and/or aggregations could experience an even greater savings. Still, the Board expects any overall effect on housing affordability attributable to the GSESP to be fairly minor.

Smart Growth Development Impact Analysis

This rulemaking will not impact smart growth development in New Jersey. This rulemaking will not evoke a change in housing production in Planning Areas 1 or 2, or within designated centers, pursuant to the State Development and Redevelopment Plan in New Jersey. The scope of the rulemaking is limited to establishing a new competitive procurement program for energy storage in New Jersey. Both the New Jersey Highlands Council and the Pinelands Commission have been consulted regarding the preparation of the land use element of the proposed rules.

Racial and Ethnic Community Criminal Justice and Public Safety Impact

This rulemaking will not have an impact on pretrial, detention, sentencing, probation, or parole policies concerning adults and juveniles in the State. Accordingly, no further analysis is required.

Full text of the proposed new rules follows:

SUBCHAPTER 14. GARDEN STATE ENERGY STORAGE PROGRAM

14:8-14.1 Purpose and scope

This subchapter sets forth the rules for the Garden State Energy Storage Program. The program is comprised of two segments: one for transmission-scale energy storage systems directly interconnected to the bulk transmission system and the other for distributed energy storage systems interconnected to electric distribution companies' distribution systems, either in front of or behind a retail meter. The two segments are designed to provide incentives for eligible energy storage systems to achieve the State of New Jersey target of deploying 2,000 megawatts (MW) of energy storage by 2030.

14:8-14.2 Definitions

For the purposes of this subchapter, the following words and terms shall have the following meanings, unless the context clearly indicates otherwise:

"Accredited capacity" means the capacity value, measured in megawatts of unforced capacity, that an eligible project can contribute toward New Jersey's capacity needs and/or bid into PJM's base residual auction, including through participation in a distributed energy resource aggregation.

"Authority having jurisdiction" means an organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

"Base residual auction" shall have the same meaning as defined in section 3 at P.L. 1999, c. 23 (N.J.S.A. 48:3-51).

"Block" means the target deployment level of a distributed energy storage system's installed capacity for a given fiscal year.

"Block incentives" means the fixed incentive levels for distributed energy storage systems the Board sets for a specific block in a particular fiscal year.

"Block priority date" means the date on which the program administrator receives a completed distributed segment application.

"Board" or "NJBPU" means the New Jersey Board of Public Utilities.

"Business day" means any day except a Saturday, Sunday, or a day designated as a legal holiday pursuant to New Jersey law.

"Calendar day" means all weekdays and weekend days, including days designated as legal holidays pursuant to New Jersey law.

"Capacity interconnection rights" shall have the same meaning as defined in PJM's Open Access Transmission Tariff, or in any successor document.

"Class I renewable energy" shall have the same meaning as provided at N.J.A.C. 14:8-1.2.

"Commercial operation" means obtaining the applicable permission to operate (PTO) an energy storage system from an electric distribution company (EDC), PJM Interconnection, L.L.C. (PJM), or both an EDC and PJM, depending on the point of interconnection.

"Delay damages rate" means the damages rate that the Board will set by Board order.

"Distributed energy resource" or "DER" means a category of devices and technologies that are integrated with the electricity system at the distribution level, either providing or consuming power.

"Distributed Energy Resource Aggregation" or "DER Aggregation" means the same as defined at N.J.A.C. 14:8-5.1.

"Distributed energy storage system" means an energy storage system that operates in parallel with an electric distribution system, is either connected on the customer side of the meter or directly interconnected to the distribution system in front of the meter, and is owned by the customer or another party that is not an EDC.

"Distributed segment" means the component of the GSESP designed to accelerate the deployment of distributed energy storage systems.

"Distribution system" means, with respect to an EDC, any property that is used for the distribution or delivery of electricity to the customers of the EDC including, but not limited to, the land, structures, meters, lines, switches, and all other appurtenances thereof and thereto, owned or controlled by the EDC within this State.

"Division Director" means the Board employee that is the head of the Board division or unit tasked with overseeing implementation of the GSESP.

"Electric distribution company" or "EDC" means a public utility, as that term is defined at N.J.S.A. 48:2-13, that transmits and distributes electricity to end users within the State.

"Eligible project" means an energy storage system that meets the criteria for an incentive award pursuant to the GSESP.

"Energy storage" means a device that is capable of absorbing energy from the grid or from a generation resource located behind the same point of interconnection, storing it for a period of time using mechanical, chemical, or thermal processes, and thereafter discharging the energy back to the grid or directly to an energy-using system to reduce the use of power from the grid.

"Energy storage program" means a program designed to encourage the growth of energy storage capacity, either standalone or paired with a generation resource, in the State in order to strengthen storage capacity for the electric grid. "Energy storage program" includes, but is not limited to, the Board's Successor Solar Incentive (SuSI) Program, including the Competitive Solar Incentive (CSI) Program, and the GSESP.

"Energy storage system," absent further qualification, means either a distributed energy storage system or a transmission-scale energy storage system.

"Facility" means the land or building on which an energy storage system is to be built, or is in the process of being built, along with all electrical and mechanical equipment required to interconnect such facility

or facilities with either the PJM transmission network or the distribution system of an EDC.

"FERC" means the Federal Energy Regulatory Commission or any successor agency.

"Fiscal year" means July 1 through June 30 of the following calendar year.

"Fixed incentive" means a one-time or annual monetary payment to partially offset the installed cost of an energy storage system that the Board makes to a system owner once their energy storage system achieves commercial operation.

"Force majeure" means an event that is not attributable to the fault or negligence of the system owner and is caused by factors beyond the system owner's reasonable control.

"Gap analysis" means an analysis that determines the difference between the average installed cost of an energy storage system, including all fixed and operating costs, and the projected revenue needed to fund debt and equity costs.

"Garden State Energy Storage Program" or "GSESP" means the program designed to accelerate the deployment of energy storage systems interconnected to a New Jersey EDC's distribution system or the part of the PJM transmission network located in New Jersey, as set forth in this subchapter.

"Generation interconnection agreement" or "GIA" shall have the same meaning as defined in PJM's Open Access Transmission Tariff, or in any successor document.

"Guaranteed commercial operation date" or "guaranteed COD" means the date by which a recipient of a fixed incentive award commits to achieve commercial operation.

"IEEE 1547" means the IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces.

"Incentive award" means a payment or series of payments awarded by the Board for an eligible project, which payments are conditioned upon the completion and commercial operation of the eligible project. An incentive award is subject to any conditions required by the Board, such as satisfactory up-time performance metrics.

"Installed capacity" means the nameplate output of an eligible project, measured in megawatts of alternating current (MW AC), that is available to the electric grid.

"Installed cost" means the total construction cost of a new energy storage system, including the costs of hardware, siting, installation, permitting, and interconnection.

"Interconnection agreement" means an agreement between a system owner and an EDC or PJM that governs the connection of the facility to the electric distribution system or the PJM transmission network, as well as the operation of the facility after it is interconnected with the distribution system or the PJM transmission network. An interconnection agreement shall follow the standard form agreement developed by the Board and available from each EDC, or, in the case of transmission interconnection, the standard form developed by PJM. Interconnection agreements include, but are not necessarily limited to, generation interconnection agreements, interconnection service agreements, as well as level 1, level 2, and level 3 interconnection agreements entered into with an EDC pursuant to N.J.A.C. 14:8-5.

"Interconnection service agreement" shall have the same meaning as defined in PJM's Open Access Transmission Tariff, or in any successor document.

"Large" when describing distributed energy storage systems, means possessing an installed capacity of greater than 500 kW.

"Marginal emission rate or "MER" means the amount of carbon dioxide the marginal resource in a particular PJM wholesale market zone or node emits for every megawatt-hour it supplies during a particular time interval.

"Marginal emissions rate signal" or "MER signal" means a system or means of determining and relaying data on the marginal emission rates for New Jersey wholesale market zones during a particular time interval.

"Marginal resource" means the source of electricity or load reduction that sets the zonal or nodal wholesale energy market clearing price in the relevant zone or node during a given time interval.

"Medium" when describing distributed energy storage systems, means possessing an installed capacity of 100 to 500 kW.

"Net avoided emissions" means avoided carbon dioxide emissions resulting from an energy storage system discharging, net of carbon dioxide emissions caused by the energy storage system charging.

"OBC adder" means an increase to the fixed incentive for distributed energy storage systems that benefit OBCs or OBC residents.

"Overburdened community" or "OBC" means any census block group, as determined in accordance with the most recent United States Census, in which: (1) at least 35 percent of the households qualify as low-income households; (2) at least 40 percent of the residents identify as minority or as members of a State-recognized tribal community; or (3) at least 40 percent of the households have limited English proficiency.

"Performance incentive" means a series of recurring monetary payments that are paid to the owner of an eligible energy storage system that participates in the GSESP to compensate such owner for the power system and/or environmental benefits provided by the energy storage system.

"Permission to operate" or "PTO" means final approval from PJM and/or the applicable EDC to start utilizing a grid-connected energy storage system following the complete installation or construction of the energy storage system and any equipment needed to facilitate its interconnection.

"Permits" includes both ministerial permits that are granted by an authority having jurisdiction when applicable standards are met on a non-discretionary basis, such as electrical and building permits; and non-ministerial permits that the authority having jurisdiction is not necessarily required to grant and can deny on a discretionary basis, such as zoning exemptions and Pinelands Commission approvals.

"Phase I system impact study" shall have the same meaning as defined in PJM's Open Access Transmission Tariff, or in any successor document.

"PJM" means PJM Interconnection, L.L.C., as that term is defined in section 3 at P.L. 1999, c. 23 (N.J.S.A. 48:3-51).

"PJM transmission network" means the high-voltage network of transmission equipment managed by PJM.

"Planned" or "planned resource" means energy storage systems that are either undergoing some form of PJM or EDC interconnection review, have an interconnection agreement with PJM or an EDC, or will be allowed to interconnect under another resource's interconnection agreement, and which have neither achieved commercial operation nor cleared capacity in reliability pricing model capacity auctions or energy in PJM energy or ancillary services markets.

"Planned commercial operation date" or "Planned COD" means an estimated date on which a system owner will commence commercial operation.

"Pre-development security" means, with respect to system owner, one or more of the following: cash or a letter of credit in a form reasonably acceptable to the Board.

"Program administrator" means the entity responsible for managing, in consultation with the Board, the processes associated with the procurement of new energy storage installed capacity and the development of any reports or evaluations required by the Board to assess the progress of such procurement.

"Project milestones" means significant events in the design, planning, construction, and commissioning phases of a project. Project milestones include, but are not limited to, developer financial closing; executed interconnection agreement; major equipment delivery; commencement of energy storage system construction; and commercial operation.

"Project operator" means the entity responsible for an energy storage system's operations and maintenance, and for its participation in the applicable wholesale markets and/or performance incentive structures.

"Response kWs" means the power discharged from a distributed energy storage system during a dispatch call initiated by a New Jersey EDC.

"Small," when describing distributed energy storage systems, means possessing an installed capacity of less than 100 kW.

"Standalone" means, when describing energy storage systems, those energy storage systems that are not a component of a "hybrid" configuration, which would include a generating resource of a different asset class.

"Surplus interconnection study" shall mean any interconnection study that PJM requires a resource seeking surplus interconnection service to complete.

"System owner" means the owner of an energy storage system that is eligible to participate in the GSESP.

"Transmission-scale energy storage system" means an energy storage system, with an installed capacity of at least five MW AC, that is interconnected with the PJM transmission network and situated inside a transmission zone in New Jersey, or is otherwise located in New Jersey, and qualified to provide energy, capacity, or ancillary services in the wholesale markets established by PJM.

"Transmission segment" means the component of the GSESP designed to accelerate the deployment of transmission-scale energy storage systems.

"Transmission zone" means the jurisdictional territory of an EDC in PJM that owns and maintains transmission facilities within the territory.

"UL 1741" means UL Standards and Engagement, Standard 1741 Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources.

"UL 1741 SB" means UL Standards and Engagement, Standard 1741 Supplement B, for Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources.

"UL 9540" means UL Standards and Engagement, Standard 9540 Energy Storage Systems and Equipment.

"UL 9540A" means UL Standards and Engagement, Standard 9540A Standard for Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems.

"Unforced capacity" shall have the same meaning as defined in PJM's Reliability Assurance Agreement, or in any successor document.

14:8-14.3 Transmission segment fixed incentive structure

(a) For the transmission segment, the GSESP shall provide fixed incentives to transmission-scale energy storage systems that are standalone planned resources, as well as planned transmission-scale energy storage systems that will be paired with a generating resource that produces Class I renewable energy, subject to the conditions and limitations specified in this section.

(b) The size of the fixed incentive that a transmission-scale energy storage system may receive will be determined by a competitive solicitation process.

1. The Board shall conduct at least one solicitation for transmission segment fixed incentives in fiscal year 2026. The Board may conduct additional solicitations after fiscal year 2026, if the Board determines that such additional solicitations are a cost-effective means of achieving, or helping to achieve, any State statutory energy storage targets or goals.

2. The timing of the solicitations shall be set by Board order.

3. The length of a solicitation's application period, as well as the target amount or range of energy storage installed capacity to be sought in each solicitation, shall be set by Board order opening the relevant solicitation.

(c) The Board shall decline to award fixed incentives to a transmission-scale energy storage system if it determines that paying the requested incentive would be an unduly expensive means of advancing the State's energy storage goals. The Board shall determine whether a requested incentive is unduly expensive by considering:

1. Whether the requested incentive appears reasonable on the basis of confidential analyses of the amount of incentive funds a transmission-scale energy storage system likely needs to be financially viable, adjusted as necessary, for changes in market conditions, such as those caused by shifts in Federal tariff or tax policy; and

2. The magnitude of likely offsetting savings awarding the incentive would produce for ratepayers, including, but not limited to, reduced energy or electric capacity costs.

(d) To qualify for an incentive award pursuant to this section, a transmission-scale energy storage system shall:

1. Be a planned resource, part of a planned resource, or a planned addition to an existing resource that will interconnect to the PJM transmission network and be located within a transmission zone in New Jersey;

2. Not participate in any other energy storage program, except when seeking to pair with or interconnect behind the same meter as an existing solar project participating in the CSI Program. Such systems shall only qualify for an incentive award pursuant to this section if neither the existing solar project nor the transmission-scale energy storage system has received, is receiving, or will receive incentives from the CSI Program for any energy storage capacity;

3. Have an anticipated commercial operations date of no later than December 31, 2030, unless the Board permits an exception;

4. Have a planned COD that is no later than 30 months after the date the solicitation's application period closes, and a guaranteed COD that is no later than 150 calendar days after the planned COD;

5. At the time of application:

i. Have completed the PJM interconnection process up to, at a minimum, the completion of a Phase I system impact study, surplus interconnection study, or equivalent study;

ii. Provide the Board with documentation demonstrating that they will be able to use the capacity interconnection rights of a deactivating generation facility; or

iii. Have a fully executed generation interconnection agreement or interconnection service agreement; and

6. Meet any other eligibility criteria the Board may establish by Board order.

(e) The Board shall determine which transmission-scale energy storage systems requesting fixed incentive awards have the lowest bid prices on a per-unit basis by dividing an applicant's requested annual incentives by either:

1. The lesser of the transmission-scale energy storage systems' installed capacity or energy storage capacity divided by four hours; or

2. The expected average accredited capacity of the transmission-scale energy storage systems over the first five years of the system's life, or another period of time established by Board order.

(f) In each competitive solicitation conducted pursuant to this section, the Board shall award fixed incentives to the transmission-scale energy storage systems with the lowest per-unit bids, as determined pursuant to (e) above, until the Board awards enough transmission-scale energy storage systems to meet the solicitation's target installed capacity amount or range. If the Board determines that one or more transmission-scale energy storage systems needed to meet the solicitation's target installed capacity amount or range submitted an unduly expensive bid price pursuant to (c) above, the Board may instead award fixed incentives to only those proposed transmission-scale energy storage systems that did not submit bids the Board determined were unduly expensive.

(g) Notwithstanding anything at (f) above to the contrary, the Board may award incentives to transmission-scale energy storage systems that do not have the lowest per-unit bids if:

1. Their per-unit bid price is no more than 10 percent higher than the lowest per-unit bid price the Board rejects in the same solicitation; and

2. The Board determines that awarding incentives to these more expensive transmission-scale energy storage systems instead of lower bidders is in the public interest after considering the following qualitative factors: community benefits, brownfield redevelopment, and/or demonstrated benefits to overburdened communities where a transmission-scale energy storage system is proposed to be located.

(h) Any application for an award of fixed incentives pursuant to this section shall include documentation or other evidence demonstrating the following, as well as any other information that the Board may require by Board order:

1. The applicant has site control over the proposed location for its transmission-scale energy storage system;

2. The applicant has all required permits or an execution plan to obtain all required permits;

3. The applicant's proposed transmission-scale energy storage system meets the eligibility requirements listed at (d) above;

4. The applicant has the financial means to construct the transmission-scale energy storage system and the ability to obtain revenues through electricity markets or non-ratepayer funding, including, but not limited to, energy arbitrage, ancillary services, and capacity revenues in PJM;

5. The applicant's transmission-scale energy storage system will adhere to nationally recognized minimum safety requirements, as well as any additional safety requirements, standards, or measures that the Board deems appropriate, including, but not limited to, appropriate laboratory

testing, and comply with all manufacturers' installation requirements, applicable Federal and State laws, regulations, codes, licensing, and permit requirements; and

6. The applicants' transmission-scale energy storage systems will in fact provide any claimed brownfield development benefits or community benefits, including claimed benefits to any overburdened communities.

(j) An application package must be accompanied by a non-refundable application deposit. The amount of the deposit shall be $200.00 per MW of installed capacity or another amount set by Board order.

(k) Only applications that are complete by the close of the application period will be considered for participation in the GSESP for that program year. At the Division Director's discretion, Board staff or the program administrator may instruct an applicant, in writing, on curing minor defects in an application.

(l) An eligible project that did not receive an incentive award in a given solicitation may submit a bid in a future solicitation.

(m) Recipients of fixed incentives during the period when only fixed incentives are offered will be ineligible to receive future performance incentives.

(n) If the Board approves an application, Board staff or the program administrator will send notice to the applicant within five business days of completing the application review. As soon as practicable after an applicant receives notice of a fixed incentive award, such applicant shall provide a report to the Board with the estimated dates for the following project milestones, as applicable:

1. Fully executed GIA interconnection agreement;

2. Fully executed engineering, procurement, and construction agreement;

3. Developer financial closing;

4. Commencement of energy storage system construction;

5. Planned COD; and

6. Guaranteed COD.

(o) For each GSESP solicitation order issued, the Board may require the system owner to provide pre-development security of up to $100,000 per MW of installed capacity. At each of the project milestones, the program administrator will evaluate progress, requiring documented achievement within 30 days of the project milestone date, unless the Board order opening the solicitation specifies another period of time. Should the Board require pre-development security, then the following provisions shall apply:

1. If the system owner achieves a given project milestone, a portion of the pre-development security will be returned to the system owner, up to the full amount, for the timely completion of all project milestones. Should a system owner fail to achieve a project milestone within 30 calendar days of its scheduled completion date, or within another period of time established by Board order, Board staff or the program administrator shall deduct part of the system owner's pre-development security. The amount of these deductions shall equal the planned installed capacity multiplied by the delay deduction rate for each day, starting with the calendar day that is 30 calendar days after the applicable scheduled completion date, unless the Board, by Board order, designates another day from which to start calculating deductions. Such delay deductions will not be deducted from the system owner's pre-development security if the delay was caused by an event of force majeure, in which case, the Division Director may extend the guaranteed COD and remaining project milestone completion dates up to a maximum period of time established in the Board order opening the relevant solicitation.

2. If commercial operation has not occurred by the planned COD, Board staff or the program administrator shall deduct from the system owner's pre-development security an amount equal to the planned installed capacity multiplied by the delay deduction rate for each day, starting with the calendar day after the planned COD until commercial operation, unless the Division Director grants an extension of the planned COD deadline. A system owner experiencing a delay of up to 180 days must submit evidence that the system owner sought to avoid said delays and advance the project in good faith to qualify for an extension of up to 180 calendar days. The Division Director may only extend the COD deadline by more than 180 calendar days if the system owner submits evidence and demonstrates to the Division Director's satisfaction that the system owner experienced a force majeure event that the system owner took all possible steps to avoid. If the Division Director grants a planned COD deadline extension that the system owner still fails to achieve, Board staff or the program administrator shall deduct from the system owner's pre-development security an amount equal to the planned installed capacity multiplied by the delay deduction rate for each day, starting with the calendar day after the day to which the Division Director extended the planned COD deadline.

(p) A system owner will forfeit any fixed incentive award for a project that fails to achieve commercial operation within 36 months of the guaranteed COD or within any other grace period the Board may establish by order. However, the Board, or the program administrator, if the Board decides to delegate this authority, may allow a system owner that achieved commercial operation at a later time to retain a fixed incentive award if they show good cause for such relief.

(q) The system owner shall provide to the Board, or the program administrator, construction reports from the time construction commences on its energy storage system until the system achieves commercial operation, as specified in the application approval letter, to enable the Board to assess progress toward the achievement of commercial operation.

(r) The Board may, by Board order, require system owners to provide the Board, or the program administrator, with regular reports on a reporting schedule set forth in the Board order that shows key operational metrics identified in the order. The Board may also create a standardized project-level reporting format to help facilitate the program-level reporting.

(s) The Board must be notified, in writing, of any change to the project developer, system owner, or project operator in case of sale, transfer, contract modification, or other material change to the parties initially listed in the application. Specifically:

1. Within 30 days of a change in system owner, the new system owner shall notify the Board of their individual and/or corporate names, tax identification number, address, contact telephone number, and the percentage of the energy storage system they own. The new system owner shall update pre-development security as necessary.

2. Within 30 days of a material change in the project operator, either the system owner or the new project operator shall notify the Board of their individual and/or corporate names, tax identification number, address, and contact telephone number.

3. Within 30 days of a material change in the project developer, including a change in a subcontractor, either the system owner or the new project developer shall notify the Board of their individual and/or corporate names, tax identification number, address, and contact telephone number.

(t) The system owner shall notify the Board, or the program administrator, in writing, of all major project developments and/or changes. The Board may specify what constitutes a major project and/or change, as well as the specific means by which systems owners should communicate such developments or changes to the Board, in a Board order.

(u) If a transmission-scale energy storage system receiving a fixed incentive award pursuant to this subsection is co-located with an existing generation resource, or an electric generator is subsequently co-located with the transmission-scale energy storage system, the system owner must install a revenue-quality meter or meters capable of measuring the power and energy discharged by the transmission-scale energy storage system separately from the power and energy produced by the generation resource, along with telemetering equipment and data acquisition services sufficient for producing monthly operating reports, pertaining to the transmission-scale energy storage system.

(v) The project-level reporting requirements will be set forth in the program application, and may include, but are not necessarily limited to, the following elements:

GSESP Goals: Transmission Projects	Metrics: Per year and cumulative to date
(1) Achieve the 2030 energy storage goal of 2,000 MW by 2030	Installed capacity in total and by technology type, number of projects, and identification of applications awarded and not awarded
(2) Promote deployment of low-cost private (non-utility and non-NJBPU) capital into New Jersey storage projects	1. Total Project Cost ($, $/kW, $/kWh) 2. Fixed, performance, and total incentives ($, $/kW, $/kWh) 3. Percent of total project cost funded by New Jersey ratepayers, private capital, and other Federal and State funding sources
(3) Decrease Greenhouse Gas (GHG) emissions by enabling higher levels of renewable resources to interconnect to the grid	GHG emissions related to peak, non-peak, and total MWh charged and discharged, as can be reasonably measured or estimated
(4) Support deployment of energy storage systems interconnected to the transmission or distribution system of a New Jersey EDC	1. Timeliness: Days from application to completion 2. Rates of participation in each PJM market available to storage (that is, energy, capacity, and ancillary services markets) 3. Generation Shifting: Peak, non-peak, and total MWh charged and discharged
(5) Grow a sustainable energy storage industry that gradually requires decreased incentives to deploy additional storage systems resources and ensure that the benefits of energy storage last well beyond the term of GSESP	Incentive levels as a percentage of installed cost over time
(6) Support overburdened communities with energy resilience, environmental improvement, and economic benefits derived from energy storage	Transmission-scale systems that asserted they will provide these community benefits should provide quantitative evidence that those benefits were realized to the extent feasible, using metrics tailored to the specific claimed benefits
(7) Encourage storage deployment that accelerates the clean energy transition, including facilitating deployment of renewable energy, electric vehicle, or other DERs and resiliency	N/A to individual transmission-scale systems
(8) Establish a program administrator at the Board who would oversee the efficient implementation of GSESP	N/A for individual projects
(9) Reduce electricity costs for ratepayers	N/A for individual projects

14:8-14.4 Transmission segment fixed incentive funding

The Board shall allocate funding for the transmission segment fixed incentive from funds collected through the societal benefits charge established pursuant to subsection a. of section 12 at P.L. 1999, c. 23 (N.J.S.A. 48:3-60) and moneys available from other funding sources, as determined by the Board.

14:8-14.5 Transmission segment performance incentive structure

(a) If the Board determines that a sufficiently accurate day-ahead MER signal capable of guiding dispatch decisions has been developed, either by PJM or by a third party that is capable of modeling security-constrained unit commitment and dispatch in the PJM transmission network, the Board may, by Board order, establish a net avoided emissions performance incentive for transmission-scale energy storage systems consistent with the provisions of this section. Subsections (b) through (f) below shall only apply if the Board issues such a Board order.

(b) Only transmission-scale energy storage systems that neither received a fixed incentive award nor commenced commercial operation prior to the launch of a net avoided emissions performance incentive shall be eligible for such performance incentives.

(c) Transmission-scale energy storage systems that are eligible to receive net avoided emissions performance incentives shall receive a combination of a fixed incentive and a net avoided emissions performance incentive.

(d) If the operation of a transmission-scale energy storage system that is eligible for net avoided emissions performance incentives causes a net reduction in carbon dioxide emissions in a given fiscal year, it shall receive a net avoided emissions performance incentive payment on August 1 of the subsequent fiscal year. A transmission-scale energy storage system that either caused no net reduction in carbon dioxide emissions or an increase in carbon dioxide emissions during a given fiscal year shall receive no net avoided emissions performance incentive payments for that fiscal year.

(e) If a transmission-scale energy storage system qualifies for a net avoided emissions performance incentive payment pursuant to (d) above, it shall receive a payment equal to its net avoided emissions in short tons for the relevant fiscal year multiplied by a dollar-per-ton rate to be established by the Board.

(f) A transmission-scale energy storage system's net avoided emissions for a fiscal year shall be calculated as follows:

1. The transmission-scale energy storage system's gross avoided emissions shall be calculated by multiplying, for each time interval during the relevant fiscal year in which the transmission-scale energy storage system discharged electricity, the MER in its wholesale energy market zone or node by the amount of electricity it discharged, and then adding the resulting products together.

2. The transmission-scale energy storage system's gross induced emissions shall be calculated by multiplying, for each time interval during the relevant fiscal year in which the transmission-scale energy storage system consumed electricity to charge, the MER in its wholesale energy market zone or node by the amount of electricity it consumed, and then adding the resulting products together.

3. The transmission energy storage's gross induced emissions shall then be subtracted from its gross avoided emissions to determine its net avoided emissions for the relevant fiscal year.

14:8-14.6 Distributed segment fixed incentive structure

(a) For the distributed segment, the GSESP shall provide fixed incentives to planned, standalone distributed energy storage systems and planned distributed energy storage systems that will be paired with a generating resource that produces Class I renewable energy, subject to the conditions and limitations set forth in this section. Such energy storage systems must be physically interconnected with the distribution system of any of the four EDCs in New Jersey, either behind a retail meter or in a front-of-the-meter configuration, in accordance with N.J.A.C. 14:8-5. A distributed energy storage system's planned participation or non-participation in an aggregation in accordance with FERC Order No. 2222 shall not affect its eligibility for this fixed incentive.

(b) The Board shall set distributed segment block sizes and block incentives for every fiscal year by no later than August 1 of that same fiscal year until any and all statutory energy storage targets are achieved. The Board may, by Board order, establish individual incentive levels and target procurement levels for specific segments based on project size. The Division Director shall have the authority to deviate from target procurement levels and reallocate the available budget between size categories in response to the number of incentive applications for particular size categories, fundamental changes in technology costs, new sources of energy storage, Federal tax policy updates, emerging supply chain issues, or other reasons that show that the incentive amount

associated with a given block will no longer suffice to meet program goals or will impose clearly excessive costs on the GSESP budget.

(c) Block incentives for a given fiscal year will be determined by the Board following a gap analysis to ensure that the incentive to the owner incorporates consideration of the difference between projected revenue, including any performance incentive offered, and the installed cost, as well as ongoing operations and maintenance costs of the energy storage system.

(d) A portion of the incentive budget, to be established by the Board, shall be reserved for distributed energy storage systems located in overburdened communities. The Board may establish OBC adders and adjust their level by order, provided that any decrease in OBC adders will not take effect until the start of the next block.

(e) No more distributed segment fixed incentives shall be awarded in a fiscal year once the level of distributed energy storage system capacity awarded fixed incentives in that fiscal year exceeds the target capacity of the corresponding block. Any fixed incentive applications submitted after that point shall be treated as an application for fixed incentives in the subsequent fiscal year's block.

(f) Any applicant seeking a GSESP distributed segment fixed incentive for an energy storage system shall submit a complete application package to the Board, or the program administrator, in accordance with this subchapter, Board orders, and the instructions posted on the Board's website.

(g) An application package must be accompanied by a non-refundable application deposit to be determined by the Board, in proportion to the installed capacity.

(h) Block allocations shall be established on a first-come, first-served basis, with the assignment of a block priority date based on the date stamp of when the program administrator receives a completed application.

(i) The program administrator shall determine whether applications are substantively complete or substantively incomplete in a timeframe to be established by Board order. The program administrator shall reject an application that is substantively incomplete and notify the applicant, in writing, of the specific deficiencies and that their application will not be processed until they submit a substantively complete version that addresses those deficiencies.

(j) A distributed energy storage system that is larger than the size remaining in any individual block will be carried over into the next block(s) and be offered a rate that blends the two (or more) blocks. Applicants will be offered the opportunity to decide whether to accept the blended offer, reduce their project size, or withdraw their application.

(k) As soon as practicable after an applicant for a large distributed energy storage system receives notice of an award, such applicant shall provide a report, to the Board, with the estimated dates for project milestones, as established by the program administrator.

(l) System owners of large distributed energy storage systems shall provide, to the Board, construction reports from the time construction commences on its energy storage system until the system achieves commercial operation, as specified in the application approval letter, to enable the Board to assess progress toward the achievement of commercial operation, communicating the content to be established by the program administrator.

(m) As soon as practicable after an applicant for a small or medium distributed energy storage system receives notice of a fixed incentive award, such applicant shall provide a report, to the Board, with the estimated dates for the following project milestones, as applicable:

1. Fully executed interconnection agreement;
2. Planned COD; and
3. Guaranteed COD.

(n) The planned COD for a distributed energy storage system must be no later than 18 months after the date the applicant submits their application.

(o) The guaranteed COD for a distributed energy storage system must be no more than 150 calendar days after the planned COD.

(p) A system owner will forfeit any fixed incentive award for a distributed energy storage system that fails to achieve commercial operation by the guaranteed COD or within any grace period the Board may establish by Board order. However, the Board, or the program administrator if the Board decides to delegate this authority, may allow a system owner that achieved commercial operation at a later time to retain a fixed incentive award if they show good cause for such relief.

(q) The fixed incentive shall be disbursed after a system owner's facility achieves commercial operation.

(r) Distributed segment eligibility shall be as follows:

1. The fixed incentive of the distributed segment of the GSESP shall be open to a distributed energy storage system that is either standalone or paired with a generation resource and meets all of the following criteria:

i. Its system owner submitted a level 1, 2, or 3 interconnection agreement application pursuant to N.J.A.C. 14:8-5 to the EDC and received notice that said application was complete;

ii. Any generation resource it is paired with produces Class I renewable energy;

iii. Its system owner has 100 percent site control, either through lease or ownership;

iv. Its system owner has obtained all permits or has an execution plan for all permits;

v. It has a guaranteed COD prior to December 31, 2030, and after the effective date of the GSESP; and

vi. It meets all other economic and non-economic criteria the Board may set by Board order.

2. A distributed energy storage system shall qualify for an OBC adder if it is:

i. Installed at a single-family or multi-family residence in an OBC; or

ii. Installed at and provides resiliency benefits to a Federal Emergency Management Agency (FEMA) Risk Category IV or Risk Category III critical public facility as described in the American Society of Civil Engineers (ASCE) Standard 7-16, Minimum Design Loads and Associated Criteria for Buildings and Other Structures.

(s) Distributed segment fixed incentive reporting shall be as follows:

1. The distributed segment fixed incentive reporting requirements will be set forth in the program application, and may include, but not be limited to, the following elements:

GSESP Goals: Distribution Projects	Metrics: Per year and cumulative to date
(1) Achieve the 2030 energy storage goal of 2,000 MW by 2030	Installed capacity, MW, MWh, use case(s), and technology type
(2) Promote deployment of low-cost private (non-utility and non-NJBPU) capital into New Jersey storage projects	1. Total project cost ($, $/kW, $/kWh) 2. Total Incentives ($, $/kW, $/kWh) 3. Percent of total project cost funded by New Jersey ratepayers, private capital and other Federal and State funding sources
(3) Decrease Greenhouse Gas (GHG) emissions by enabling higher levels of renewable resources to interconnect to the grid	GHG emissions related to peak, non-peak, and total MWh charged and discharged, as applicable
(4) Support deployment of energy storage systems interconnected to the transmission or distribution system of a New Jersey EDC	N/A for individual projects
(5) Grow a sustainable energy storage industry that gradually requires decreased incentives to deploy additional storage systems resources and ensure that the benefits of energy storage last well beyond the term of the GSESP	N/A for individual projects

GSESP Goals: Distribution Projects	Metrics: Per year and cumulative to date
(6) Support overburdened communities with energy resilience, environmental improvement, and economic benefits derived from energy storage	Discuss, if applicable
(7) Encourage storage deployment that accelerates the clean energy transition, including facilitating deployment of renewable energy, electric vehicle, or other DERs and resiliency	Discuss, as applicable
(8) Establish a program administrator at the NJBPU who would oversee the efficient implementation of GSESP	N/A for individual projects
(9) Reduce electricity costs for ratepayers.	Report on electricity prices

2. The program application may set different reporting requirements for distributed energy storage systems based on their size, whether they are front-of-the-meter or behind-the-meter energy storage systems, whether the system owner is a residential, commercial, or industrial customer, and whether the system owner is the same person or entity as the owner or occupant of the premises at which the distributed energy storage system is installed.

14:8-14.7 Distributed segment performance incentive structure

(a) Distributed segment performance incentive programs will be established by each of the EDCs pursuant to a common program framework, set forth in minimum filing requirements (MFRs) that the Board shall establish by order, consistent with the provisions of this section.

(b) The performance incentive shall be designed to incentivize participants to dispatch their energy storage systems when called upon by the EDC.

(c) A distributed energy storage system owner's performance incentive shall be paid annually and equal their average response kWs for the applicable year multiplied by a per kW performance incentive rate.

(d) An EDC's call duration shall not exceed four hours.

(e) The EDC shall require that the response kWs be provided for the entire duration of a call.

(f) An EDC shall measure response kWs based on the total amount of power discharged by a distributed energy storage system, regardless of whether the power is consumed behind the retail meter, is injected into the distribution system, or is split between serving load behind the retail meter and power injections into the distribution system.

(g) An EDC may establish geographically variable performance incentive rates.

(h) The EDCs may not penalize distributed energy storage systems that fail to respond or opt out of a call, apart from withholding the performance incentive payments the distributed energy storage systems could have earned had they responded. The EDC shall register a missed call as zero kW.

(i) The EDC's call protocol shall address avoiding dispatching distributed energy storage systems less than 48 hours ahead of anticipated extreme weather or likelihood of grid outages.

(j) The performance incentive of the distributed segment of the GSESP shall be open to a distributed energy storage system that is either standalone or paired with a generating resource that produces Class I renewable energy and meets all of the following criteria:

1. Its system owner has 100 percent site control, either through lease or ownership;

2. Its system owner has obtained all permits or has an execution plan for all permits;

3. It has a guaranteed COD prior to December 31, 2030, and after the effective date of the GSESP;

4. It is owned, leased, or operated by a residential or non-residential customer of an EDC;

5. If it is participating in a distributed energy resource aggregation that is bid into PJM's wholesale electricity markets, it will not receive compensation for the same service through both wholesale electricity markets and the distributed performance incentive segment of the GSESP;

6. It meets all other economic and non-economic criteria the Board may set by Board order; and

7. It meets all criteria set by the EDC establishing the performance incentive program, provided any EDC-developed criteria that creates additional requirements beyond those set forth in this subchapter or Board order has first been approved by the Board, or the program administrator, if the Board decides to delegate this authority.

(k) The EDCs shall develop the application process, application requirements, and eligibility criteria for the performance incentives by building upon the common program framework established by Board order and then submit them to the Board for approval.

(l) The EDCs shall develop the performance incentive program call hours, $/kW per year performance incentive rates, and payment disbursement procedures. The EDCs shall submit the program call hours, $/kW per year performance incentive rates, and payment disbursement procedures to the Board for approval.

(m) The EDCs are required to submit reports to the Board, or the program administrator, as will be prescribed by order, providing the following data on distributed energy storage systems receiving performance incentives:

1. Number of distributed energy storage systems participating in an EDC performance incentive program and whether those systems are also participating in an aggregation pursuant to FERC Order No. 2222;

2. The cumulative amount, by hour, of energy delivered to, and energy discharged from, participating distributed energy storage systems;

3. The hourly average and hourly peak amount of power delivered to, and discharged from, participating distributed energy storage systems;

4. The total funds disbursed to make performance incentive payments and administer the calculation and payment of distributed performance incentives; and

5. The EDCs shall submit monthly electronic reports to the Board, or the program administrator, on distributed energy storage system interconnections, energy discharge, and finances, within 30 days of the end of the applicable calendar month. The content of the reports shall include, but not be limited to:

i. A list of distributed segment projects that submitted an interconnection application, including name, location, and planned installed capacity;

ii. A list of distributed energy storage systems interconnected over the previous month, including name, location, and installed capacity;

iii. The estimated kilowatt-hours supplied to the distribution system by distributed energy storage systems over the previous month, and a description of the estimation methodology used;

iv. The measured average and peak amount of response kWs discharged by energy storage systems interconnected to the EDC's distribution systems during each call period over the previous month;

v. Cumulative data on the total number of interconnection applications received, total number of distributed energy storage systems interconnected, total installed capacity of distributed energy storage systems interconnected, and estimated total kilowatt-hours supplied to the distribution system by distributed energy storage systems since the beginning of the distributed segment of the GSESP; and

vi. The total funds disbursed to make performance incentive payments and administer the performance incentive program.

14:8-14.8 Technical requirements

(a) An energy storage system must be comprised of new equipment, be a planned resource if it is a transmission resource interconnecting to the PJM transmission network, and be electrically interconnected to the distribution system of a New Jersey EDC or to a part of the PJM transmission network situated within a transmission zone in New Jersey.

(b) System owners, or their successors, must meet the COD requirements, as demonstrated by submitting as-built drawings and confirmation of permission to operate from the relevant utility to the program administrator.

(c) System owners, or their successors, must comply with all manufacturers' installation requirements.

(d) System owners, or their successors, must conform to all Federal and State laws, regulations, codes, standards, licensing, and permitting requirements that were applicable when the project was constructed.

(e) All energy storage systems receiving incentives shall be certified to the most recent version of UL 9540, UL9540A, NFPA 855, and/or other codes and standards, as applicable.

(f) All energy storage systems receiving incentives that do not fall within the scope of UL 9540A shall be certified to a comparable applicable standard, if one exists. In such cases, manufacturers shall demonstrate equivalency in fire risk mitigation, thermal management, and overall safety through third-party testing and compliance documentation.

(g) Inverters used in energy storage systems, receiving incentives shall be certified to UL 1741 SB and IEEE 1547.

(h) The Board may update or change the specific standards to which energy storage systems must be certified and compliant with, by order, provided the Board first finds that the new or updated standard is superior to the specific standard set forth in this section.

14:8-14.9 EDC responsibilities and cost recovery

(a) The role of the EDCs in the GSESP shall be to facilitate the interconnection of energy storage systems into the distribution grid, ensuring compliance with regulatory and technical requirements, and calling for services from these energy storage systems while providing and administering distributed performance financial incentives for their response. EDC key responsibilities, subject to NJBPU oversight, include, but are not necessarily limited to:

1. Operational oversight and performance monitoring—the EDCs shall establish a dispatch mechanism, develop and then implement a distributed energy resource management system, ensure energy storage systems respond effectively to grid needs, and oversee data reporting as a means to track, measure, and monitor energy storage performance for the GSESP.

2. Financial and cost recovery mechanisms—the EDCs shall fund the distributed performance energy storage incentive programs through ratepayer tariffs through their base rate cases. The Board shall approve full and timely cost recovery at the approved weighted-average cost of capital for capital improvements, such as distributed energy resource management systems and information technology system upgrades, unless the Board finds the specific capital improvements were imprudent investments or the relevant EDC incurred imprudent costs in the course of making these capital improvements. Administrative expenses and incentive payments shall be a pass-through expense only.

3. The EDCs shall comply with any GSESP reporting requirements the Board may establish by Board order.

14:8-14.10 Program reporting

(a) The program administrator will post and maintain an online dashboard tracking GSESP progress, award details incentive usage and availability, OBC benefits, and performance metrics.

(b) The GSESP reporting elements may include, but are not limited to, the following elements:

GSESP Goals: Transmission Projects	Metrics: Per year and cumulative to date
(1) Achieve the 2030 energy storage goal of 2,000 MW by 2030	Installed capacity in total and by technology type, number of projects and identification of applications awarded and not awarded
(2) Promote deployment of low-cost private (non-utility and non-NJBPU) capital into New Jersey storage projects	1. Total project cost ($, $/kW, $/kWh) 2. Fixed, performance, and total Incentives ($, $/kW, $/kWh) 3. Percent of total project cost funded by New Jersey ratepayers, private capital, and other Federal and State funding sources
(3) Decrease Greenhouse Gas (GHG) emissions by enabling higher levels of renewable resources to interconnect to the grid	GHG emissions related to peak, non-peak, and total MWh charged and discharged
(4) Support deployment of energy storage systems interconnected to the transmission or distribution system of a New Jersey EDC	1. Timeliness: Days from application to completion 2. Capacity: Rates of participation in each PJM market available to storage (that is, energy, capacity, ancillary services) 3. Generation Shifting: Peak, non-peak, and total MWh charged and discharged
(5) Grow a sustainable energy storage industry that gradually requires decreased incentives to deploy additional storage systems and ensure that the benefits of energy storage last well beyond the term of the GSESP	Incentive levels as a percentage of installed cost over time
(6) Support overburdened communities with energy resilience, environmental improvement, and economic benefits derived from energy storage	Metrics provided by project-level reporting
(7) Encourage storage deployment that accelerates the clean energy transition, including facilitating deployment of renewable energy, electric vehicle, or other DERs, and resiliency	Renewable energy: number and percent of projects paired with solar, electric vehicles, other DERs, and resiliency:
(8) Establish a program administrator at the NJBPU who would oversee the efficient implementation of GSESP	N/A (already accomplished by Board action)
(9) Reduce electricity costs for ratepayers.	Report on electricity prices