



Enel North America, Inc.
Regulatory Affairs

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Carmen D. Diaz, Acting Secretary of the Board
New Jersey Board of Public Utilities
44 South Clinton Avenue, 1st Floor
Trenton, NJ 08625-0350 - USA

Submitted electronically

December 12, 2022

Re: Docket No. QO22080540, In the Matter of the New Jersey Energy Storage Incentive Program

Dear Secretary Diaz,

Enel North America, Inc. (“Enel”) is pleased to submit comments on the New Jersey Energy Storage Incentive Program (“NJ SIP”) Straw Proposal released by the New Jersey Board of Public Utilities in Docket No. QO22080540.

Enel continues to strongly support New Jersey’s path towards decarbonization, including the goal to install 2,000 MW of energy storage capacity by 2030. New Jersey’s step here to procure 1,000 MW of energy storage represents a very important step towards that goal. Enel agrees with the general framework of splitting the program into two portions, one for Grid Supply storage resources and another for Distributed storage resources.

Through these comments, Enel offers constructive recommendations to strengthen the NJ SIP Straw Proposal and to answer specific questions raised by NJ BPU Staff to stakeholders.

Enel thanks the New Jersey Board of Public Utilities for the opportunity to provide these comments and looks forward to participating actively with NJ BPU Staff in the next steps of the NJ SIP’s development to support the State on its path toward a reliable, least-cost, and carbon-free electric grid.

Sincerely,

Brian Kauffman

Director, Regulatory Affairs

Comments of Enel North America, Inc.

In the Matter of the New Jersey Energy Storage Incentive Program

Docket No. QO22080540

December 12, 2022



I. Executive Summary

Enel North America, Inc. (“Enel”) thanks the New Jersey Board of Public Utilities (“NJ BPU”) for the opportunity to comment on the New Jersey Energy Storage Incentive Program (“NJ SIP”) Straw Proposal (“NJ SIP Straw Proposal” or “Straw Proposal”)¹, Docket No. QO22080540.

Enel continues to strongly support New Jersey’s path towards decarbonization, including the goal to install 2,000 MW of energy storage capacity by 2030. New Jersey’s step here to procure 1,000 MW of energy storage represents a very important step towards that goal. Enel agrees with the general framework of splitting the program into two portions, one for Grid Supply storage resources and another for Distributed storage resources.

Enel generally supports the comments presented by the American Clean Power Association (“ACP”) and the Solar Energy Industries Association (“SEIA”) (together, “the Clean Trades”) on this matter. Enel submits these comments with the purpose to provide more specific recommendations, and at times, alternative views from the Clean Trades. In our comments, Enel provides seven succinct recommendations for the Grid Supply program and four succinct recommendations for the Distributed program for the NJ BPU to consider (see Section IV), but places special attention to three particular aspects of the program (see Sections V, VI, and VII). In summary, our specific comments focus on:

- Section V. The performance-based incentive tied to carbon emission performance for Grid Supply resources: Enel understands the importance of tying the performance-based incentive for the Grid Supply portion of the NJ SIP to carbon emissions abatement. Enel looks forward to participating actively with NJ BPU Staff, a future Program Administrator selected by NJ BPU, and other stakeholders to develop an effective mechanism that helps New Jersey achieve its decarbonization and storage installation goals. Enel agrees that “loosely patterning” the performance-based incentive on California’s Self-Generation Incentive Program (“CA SGIP”) could be a good direction, but New Jersey would benefit from carrying out its own analysis to ensure a CO₂ equivalence abatement target and penalty factor. In addition, Enel recommends that the BPU work to generate a forecast of marginal emissions for asset developers and owners to use as an emission signal and plan asset charge and discharge patterns (i.e., provided by PJM or through a third-party). Enel also recommends not to establish specific performance hours, and comments on the emissions accounting methodology used for storage assets co-located with renewables. Last, Enel recommends considering the trend in the difference between high and low intra-day emitting periods as renewables continue to penetrate the system.
- Section VI. The proposed Distributed resources procurement quantities: By allocating nearly 90% of total MW to the Grid Supply program, the proposal fails to capitalize on the well-documented resilience benefits that the Distributed storage program can provide. Limiting the program to only 120 MW pales in comparison to recent programs from states such as Connecticut and leaves more customers vulnerable to power outages. We outline three options in which the NJ SIP could at least double the proposed procurement quantities for the Distributed resources program.
- Section VIII. The performance and performance assessment of Distributed resources: Enel recommends that the BPU design the program to measure the storage resource performance directly from the storage asset (irrespective of load). This would include developing regulations to allow for

¹ NJ BPU Storage Incentive Program Straw Proposal:
https://nj.gov/bpu/pdf/publicnotice/Notice_StakeholderMeetings_NewJerseyEnergyStorageProgram.pdf



sub-metering and injection into the system. Enel also recommends for resource performance and performance assessment to allow for and not hinder value-stacking.

II. About Enel

Enel, which celebrates its 60th anniversary this year, is a multinational power company and a leading integrated player in the global power and renewables markets. At a global level, Enel is the largest renewable private player and the biggest retail operator by customer base. The Group is the worldwide demand response leader and the largest European utility by ordinary EBITDA².

Enel is present in 30 countries worldwide, producing energy with over 90 GW of total capacity. The Group brings energy to around 70 million homes and businesses. Enel's renewables arm Enel Green Power has a total capacity of more than 54 GW and a generation mix that includes wind, solar, geothermal, and hydroelectric power, as well as energy storage facilities, installed in Europe, the Americas, Africa, Asia, and Oceania. Enel X Global Retail, Enel's global advanced energy services business line, has a total capacity of around 6.6 GW of demand response managed globally and has installed 59 MW of behind-the-meter storage capacity. In addition, Enel X Way is the Group's new global business line fully dedicated to electric mobility, managing nearly 350,000 public and private EV charging points worldwide, both directly and through interoperability agreements.

III. Introduction

Enel continues to strongly support New Jersey's path towards decarbonization, including the goal to install 2,000 MW of energy storage capacity by 2030. New Jersey's step here to procure 1,000 MW of energy storage represents a very important step towards that goal. Enel agrees with the general framework of splitting the program into two portions, one for Grid Supply storage resources and another for Distributed storage resources.

Enel expresses support for the comments presented by the American Clean Power Association ("ACP") and the Solar Energy Industries Association (SEIA), and presents these comments with the purpose to provide more specific recommendations, and at times, alternative views from the Clean Trades. In Section IV, Enel first provides seven succinct recommendations for the Grid Supply program and four succinct recommendations for the Distributed program for the NJ BPU to consider. In Sections V, VI, and VII, Enel then provides special attention to three particular aspects of the program:

- Section V addresses the performance-based incentive tied to carbon emission performance for Grid Supply resources
- Section VI addresses the proposed Distributed resources procurement quantities
- Section VII addresses the performance and performance assessment of Distributed resources

Enel looks forward to participating actively with NJ BPU Staff, a future Program Administrator selected by NJ BPU, and other stakeholders to develop an effective mechanism that helps New Jersey achieve its decarbonization and storage installation goals.

² Enel's leadership in the different categories is defined by comparison with competitors' FY 2021 data. Publicly owned operators are not included.



IV. Enel's Comments and Recommendations for the Grid Supply Storage and Distributed Storage Portions of the NJ SIP Straw Proposal

Enel appreciates the opportunity to comment on the NJ SIP Straw Proposal. This section provides seven succinct recommendations for the Grid Supply program and four succinct recommendations for the Distributed program of the NJ SIP Straw Proposal, respectively. As explained in the Introduction, this section is followed by three separate sections that elaborate further on three of our comments from the list below.

A. Grid Supply Storage

1. Enel suggests removing intra-year blocks. Each block is small relative to the expected project size which could lead to a particular project that files only days later than an initial project—but that otherwise faces the same storage market context and conditions—to unreasonably get a lower incentive rate.
2. Regarding hybrid storage resources (storage resources co-located with power generating sources), Enel advocates that the NJ SIP specifically allow storage resources coupled with renewable generation to be eligible. Once eligible, Enel recommends clarifications on how this type of asset would be able to participate and quantify emission reductions. Enel takes up the question of quantifying emission reduction below in Section V. Given the uncertainty on uptake of storage in the Competitive Solar Incentive (“CSI”) program³, it is especially important to allow storage to qualify across both programs.
3. Enel recommends that the BPU provide further clarity on the expected incentive rate decrease year-over-year. While we understand and respect NJ BPU Staff’s interest in creating flexibility to adjust the rate throughout the program, clear market signals are essential for market participants to properly forecast and design their projects, thus lowering uncertainty.
4. Enel recommends that the BPU provide further clarity on the selection criteria for projects beyond a “first-come, first-served” policy. Market participants need further information on what would ensure their projects are selected to receive the incentive.
5. Regarding the performance-based incentive being tied to carbon emission performance, Enel provides our comments and recommendations in Section IV. below, and looks forward to participating actively with NJ BPU Staff, a future Program Administrator selected by NJ BPU, and other stakeholders to develop an effective mechanism that helps New Jersey achieve its decarbonization and storage installation goals.
6. Enel seeks verification that the NJ SIP will be eligible to projects connected both at the distribution and transmission systems. While the Program Goals section of the Straw Proposal states this conclusion under goal number four, in several other places the Straw Proposal only states “this Straw will focus on incentivizing stand-alone energy storage devices physically connected to a New Jersey *electric distribution company (“EDC”)*” (emphasis added).
7. Enel recommends that the BPU increase the deployment timeline, or at a minimum allow for two rounds of six-month extensions if delays occur and the developer can demonstrate progress toward project completion. Such flexibility is necessary given challenges to supply chains, siting, and interconnection. Enel welcomes the opportunity to collaborate with the NJ BPU and other storage developers to establish appropriate timelines and extensions.

B. Distributed Storage

1. Enel suggests removing intra-year blocks for the same reason explained under the Grid Supply Storage section above.

³ CSI program website: <https://njcleanenergy.com/renewable-energy/programs/susi-program/csi-program>



2. Enel recommends that the BPU increase the proposed distributed resources procurement quantities, as explained in Section V. below.
3. Regarding performance assessment of the storage assets, as explained further in Section VI. below, Enel recommends that the BPU design the program to ensure that
 - a. storage resource performance is measured based on the behavior of the storage asset (irrespective of load); and
 - b. resource performance and performance assessment allow for value-stacking with other PJM Interconnection LLC ("PJM") Capacity Performance ("CP") cost structures.
4. For the same reasons cited in the "Grid Supply Storage" section, Enel recommends that the BPU increase the deployment timeline from 18 months to 30 months after project registration, or at a minimum allowing for two rounds of six-month extensions if delays occur and the developer can demonstrate progress toward project completion. Such flexibility is necessary given challenges to supply chains, siting, and interconnection. Enel welcomes the opportunity to collaborate with the NJ BPU and other storage developers to establish appropriate timelines and extensions.

V. Comments and Recommendations on Performance-Based Incentive Tied to Carbon Emission Performance for Grid Supply Resources

Enel continues to strongly support New Jersey's path towards decarbonization, including the goal to install 2,000 MW of energy storage capacity by 2030. As such, Enel understands the importance of tying the performance-based incentive for the Grid Supply portion of the NJ SIP to carbon emissions abatement. Enel looks forward to participating actively with NJ BPU Staff, a future Program Administrator selected by NJ BPU, and other stakeholders to develop an effective mechanism that helps New Jersey achieve its decarbonization and storage installation goals.

Enel agrees that "loosely patterning" the performance-based incentive on the California Self-Generation Incentive Program ("CA SGIP") could be a good direction for New Jersey. However, given regional differences, Enel recommends setting an emission reduction target based on region-specific modeling, rather than directly adopting the CA SGIP's target of 5 kilograms (or approximately 10 pounds as stated in the NJ SIP Straw Proposal) of CO₂ equivalence abated per kWh of storage capacity and penalty factor of \$1 per kilogram of CO₂ equivalence abatement by which a project falls short of the target.

By way of background, the California Independent System Operator's ("CAISO") daily marginal emissions profile follows roughly the same duck-curve profile seen in their net-load and price data; thus, the difference between the marginal emissions during charging and discharging of the storage asset allows asset managers to reasonably achieve the targeted 5 kg of CO₂ equivalence abatement per kWh of storage capacity. On the other hand, PJM's marginal emissions profile is very flat, with occasional substantial positive and negative spikes. The target set for the CA SGIP was the result of state-specific analyses and New Jersey would benefit from carrying out its own analysis to ensure a CO₂ equivalence abatement target and penalty factor that allows New Jersey to reach its decarbonization goals while developing an effective and sustainable storage market.

A. Rolling emission forecasts:

An aspect that is not mentioned in the Straw Proposal, but that Enel recommends also patterning after the CA SGIP, is generating and providing a rolling emission forecast of marginal emissions for asset developers and owners to use as an emission signal and plan asset charge and discharge patterns. Such a forecast could be generated and provided either directly by PJM, the Program Administrator, or a secondary third-party selected by NJ BPU through a competitive bid process like the California Public Utility Commission did for the CA SGIP. Enel highlights that while PJM currently



provides marginal emissions data via Data Miner, their current methodology for calculating these values might not be the most adequate or accurate for use in the NJ SIP. Enel recommends the NJ BPU address this in a future working group with the Program Administrator and other stakeholders.

B. Performance hours:

Regarding BPU Staff's request to stakeholders to comment on whether the performance-based incentive should establish specific performance hours, Enel recommends not setting fixed performance hours and instead allowing measurement of emissions performance across all hours. This recommendation is supported by work performed for the CA SGIP. The SGIP GHG Signal Working Group, which was tasked with developing the GHG signal framework, including analyzing the use of performance hours, found in its final report⁴ that constraining the storage assets to charging and discharging during specific performance hours would have a negative impact on emission reduction.

C. Co-located sources:

Regarding BPU Staff's request to comment on the treatment of storage resources that charge from a co-located power source, Enel has two recommendations—one for AC-coupled systems and one for DC-coupled systems where the generating asset (typically a solar array) is much larger than the shared inverter. For AC-coupled systems, Enel recommends setting the marginal emission rate as the grid-emission, rather than zero pounds of CO₂ equivalent per kWh. The onsite renewable resource is typically not the marginal generator; if a storage asset were not charging at a given moment in time (or before co-locating a storage asset with a renewable generation source), that renewable power would flow into the grid, displacing the marginal generator (typically a coal or gas unit in PJM). Thus, charging the storage asset at that moment in time would mean that the marginal unit would have to output more power than it otherwise would, leading to higher emissions.

For DC-coupled systems where the solar system is greater than the inverter shared by the solar and storage resource, on the other hand, it would make sense to set the marginal emission rate at zero pounds of CO₂ equivalent per kWh during some time intervals. In this case, due to the size of the inverter, much of the power output from the generating asset would have to be curtailed if a storage asset were not available to recover that additional power. While the CA SGIP does not consider this case because DC-coupled batteries aren't very common in the CA behind-the-meter context, this type of system might be more relevant for utility-scale projects in PJM. In this approach, the output of the renewable resource (not just the storage asset) would need to be measured, and the nameplate capacity and efficiency of the inverter would need to be known. In effect, the emissions impact of the DC-coupled energy storage system would be determined by comparing observed grid emissions displaced against a counterfactual where the battery did not operate, and where a significant portion of the solar array's emissions were clipped by the inverter.

D. Time-varying incentives:

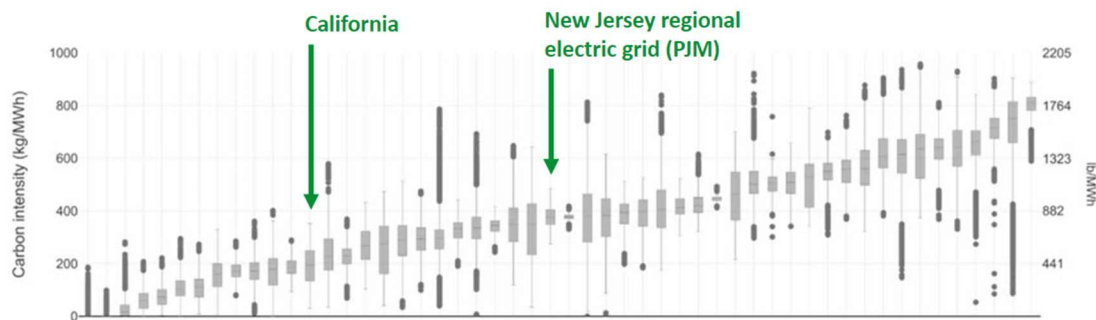
Another aspect related to emissions abatement that Enel recommends is setting the performance incentive higher in the near-term relative to the long-term. This recommendation recognizes the trend in the difference between high and low intra-day emitting periods as renewables continue to penetrate

⁴ SGIP GHG Signal Working Group Final Report: https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_programs/demand_side_management/customer_gen_and_storage/ghg-working-group-report-09-06-18-corrected.pdf (accessed December 7, 2022)



the system. Figure 1, adapted from Miller et al. (2022)⁵ shows hourly accounting of carbon emissions from electricity consumption across states. As identified in the figure, a storage resource in New Jersey, in contrast with CA, would likely calculate a smaller difference between the low emissions when the storage asset would presumably be charging and the high emissions when the asset would presumably be discharging (“the delta”). As renewables continue to penetrate the system, this delta in intra-day emissions will increase, making it easier to derive value through a performance-based incentive. As this delta increases, New Jersey could consider lowering the value of the performance-based incentive over time and using the saved funds to incentivize a larger number of projects or to decrease the burden on New Jersey rate payers.

Figure 1. Hourly accounting of carbon emissions from electricity consumption across states – adapted from Miller et al. (2022) to highlight New Jersey and California data



VI. Comments and Recommendations on the Proposed Distributed Resources Procurement Quantities

Enel urges the BPU to increase the allocation of MW for Distributed projects. Enel highlights important context on the value of Distributed projects that help explain why the proposal to allocate nearly 90% of MW toward Grid Supply projects is misguided. Enel then concludes with three avenues the BPU staff could pursue to increase the procurement quantities for the Distributed resources portion of the NJ SIP.

A. Distributed storage resources can increase the reliability and resilience of the grid:

Recent extreme weather events in PJM underscore the vulnerability to transmission-level infrastructure. From June 14 to June 16, 2022 PJM faced an emergency due to issues with the transmission system near Columbus, Ohio. While there were no front-of-the-meter assets within the constrained area to help address the emergency, PJM was able to respond by dispatching Demand Response resources within the constrained area⁶. In such events where transmission (or distribution) infrastructure is temporarily disabled, Distributed Energy Resources can provide a continued source

⁵ Study of hourly carbon emissions from electricity consumption across states: Miller, Gregory J. and Novan, Kevin and Jenn, Alan, Hourly Accounting of Carbon Emissions from Electricity Consumption (April 8, 2022). Available at <https://iopscience.iop.org/article/10.1088/1748-9326/ac6147> (accessed December 7, 2022)

⁶ Load Management performance report presented by PJM on Dec 8, 2022 in the Operating Committee: <https://www.pjm.com/-/media/committees-groups/committees/oc/2022/20221208/item-09a---aep-columbus-marion-area-load-shed-eventppt.ashx> (accessed December 12, 2022)



of power to customers that Grid Supply projects may be incapable of providing. Limiting the total allocation to 120 MW will provide minimal value to New Jersey residents and businesses during future extreme weather events.

For instance, power outages to fueling stations could leave New Jersey drivers without gas in their cars. Rocky Mountain Institute highlighted this risk in a recent whitepaper, stating “[p]ay particular attention to loads that may be critical during a broader emergency that can accompany a grid outage. For example, prioritizing resilient access to electricity for pumps at fueling stations (e.g., through solar-plus-storage systems with direct connection to fuel pump circuits) can prevent a situation where first responders are unable to access fuel for emergency vehicles during a broader grid outage that would otherwise disable fuel pumps.”⁷ Enel has built projects that include storage that address this risk, but limiting the program size to 120 MW will threaten the development of a market for these resources.⁸

Furthermore, Distributed storage resources would unleash the resilience benefits of distributed generation resources, an important component of the New Jersey Energy Master Plan (“EMP”).⁹ The EMP highlights grid failures during the Northeast Blackout of 2003, Hurricane Irene in 2011, and Superstorm Sandy in 2012 and states that “[a]dding decentralized carbon-neutral electricity generation to the system mix adds energy diversity, particularly where those decentralized resources are co-located with critical facilities, such as hospitals and first responders, and are configured to operate even when the larger grid fails.”

The currently low proposed allocation of resources for the Distributed program contradicts the objective stated in the introduction that “[t]he NJ SIP is designed to provide New Jersey ratepayers with a variety of benefits such as (...) hosting capacity improvements (for enabling grid management flexibility at higher DER penetration levels), and improving system resilience.”¹⁰

- B. Distributed storage resources should represent a sizeable share of the storage market in New Jersey: The 120 MW proposed for Distributed resources in the Straw Proposal would barely tap into the potential for the “Distributed” market, and pales in comparison to recent program sizes for even smaller state such as Connecticut. Over a similar timeframe, Connecticut instituted a 580 MW program for “behind-the-meter” projects that had to pass rigorous cost-effective testing.¹¹ Just months after launching the nine-year program, there are over 67 MW of projects in the queue.¹² Limiting the size to 120 MW could prevent the distributed storage ecosystem from developing in New Jersey.

As stated in the Straw Proposal, Wood Mackenzie estimated that 48.2 GW of energy storage capacity will be installed in the US between 2021 and 2026, with residential storage and C&I storage amounting to almost 33% of the total. However, despite this identification of the important role that

⁷ RMI whitepaper “Reimagining Grid Resilience” https://rmi.org/wp-content/uploads/2020/07/reimagining_grid_resilience.pdf (accessed December 11, 2022)

⁸ Enel X press release, microgrid in Massachusetts: <https://www.enelx.com/n-a/en/press-releases/enel-x-launches-microgrid-at-massachusetts-fresh-food-service-station>

⁹ New Jersey EMP: https://nj.gov/emp/docs/pdf/2020_NJBPU_EMP.pdf (accessed December 12, 2022)

¹⁰ New Jersey EMP, page 101

¹¹ Connecticut’s storage program: <https://portal.ct.gov/-/media/PURA/electric/Final-Decision-Docket-No-17-12-03RE03.pdf> (accessed December 11, 2022)

¹² Connecticut’s Energy Storage Solutions Program: <https://energystoragect.com/energy-storage-solutions-for-buildings-communities/> (accessed December 11, 2022)



residential and C&I storage assets will play in the future electric grid, the proposed procurement quantity for the Distributed portion of the NJ SIP does not reflect this.

Based on Table 2 of the Straw Proposal, 880 MW of 4-hour storage have been proposed to be allocated to the Grid Supply portion of the program and 120 MW of 4-hr storage to the Distributed portion. These proposed storage capacities respectively represent 88% and 12% of the total goal of 1,000 MW to be achieved through the NJ SIP. This 12% of storage capacity allocated to residential and C&I projects in the Straw Proposal amounts to just a little over a third of Wood Mackenzie's 33% estimate stated above. Further, considering that the CSI program—through which New Jersey expects to procure another 1,000 MW of storage—only contemplates C&I projects greater than 5 MW, residential and C&I storage projects stand to amount to an even smaller percentage of the storage capacity.

The small proposed allocation of resources for the Distributed program contradicts the stated Program Goals of the Straw Proposal to “promote deployment of private capital by establishing a stable market” and “grow a sustainable energy storage industry (...) to ensure that the benefits (...) last beyond the term of this initial program.” Further, this conflicts with the Straw Proposal's vision to “build businesses here in New Jersey and to invest in the workforce of the future, paving the way for high paying green careers to locate in our State.”

C. Enel urges the BPU to increase the allocation of MW for Distributed projects and provides three potential avenues:

Enel highlights these points for New Jersey to consider what balance between Grid Supply and Distributed storage resources the State is interested in achieving as part of its decarbonization and storage procurement goals. As we outline below, there are at least three avenues the BPU staff could pursue to increase the procurement quantities for the Distributed resources portion of the NJ SIP:

i. Revise proposed procurement quantities between the Grid Supply and Distributed programs:

A potential avenue to increase the Distributed resources procurement quantities would be to transfer a portion of the proposed procurement quantities from Grid Supply to the Distributed program.

As one example, Table 1 shows the annual procurement quantities for every year of the program after doubling the proposed Distributed procurement quantity suggested in the Straw Proposal, as well as the share of each category for any given year. While a total share of 24% for Distributed storage is still not close to the expected national share of 33% for residential and C&I projects analyzed by Wood Mackenzie, this approach would at least achieve that level or higher in the earlier years of the program (i.e., 50% in the 2023/2024 period and 33% in the 2024/2025 and 2025/2026 periods). This increase in the early years would provide more potential for Distributed Storage to develop into a healthier and sustainable market that would last beyond the NJ SIP program. This increase would also correspond with a decrease in the share of the Grid Supply portion, particularly in the early years, which would be aligned with the expectation that many Grid Supply projects will only be eligible to take advantage of the incentive in later years due to expected PJM interconnection timelines.



Table 1. Annual procurement quantities for every year of the program after doubling the proposed Distributed procurement quantity suggested in the Straw Proposal, and share of each category for any given year

	Grid Supply Procurement Quantity After Doubling Distributed Portion (MW of 4 Hour Storage)	Doubling the Proposed Distributed Procurement Quantity (MW of 4 Hour Storage)	Share of Grid Supply Procurement Quantity for a Given Year	Share of Distributed Procurement Quantity for a Given Year
2023/2024	20	20	50%	50%
2024/2025	40	20	67%	33%
2025/2026	60	30	67%	33%
2026/2027	90	30	75%	25%
2027/2028	120	40	75%	25%
2028/2029	160	40	80%	20%
2029/2030	270	60	82%	18%
Total	760	240	76%	24%

ii. Allow large C&I storage resources to tap into the Grid Supply procurement quantities:

Another potential avenue to ensure a greater procurement quantity for distributed storage resources, recognizing their importance for the reliability and resilience of the future overall grid, would be to allow large C&I assets to tap into the Grid Supply procurement quantities. This could be done through a carve-out of the Grid Supply program that distributed assets could have access to, even if competing with other Grid Supply projects. Enel notes that this framework is already used in the CSI program, which provides incentives for grid supply projects and net metered non-residential projects greater than 5 MW.

iii. Transfer a share of the expected storage procurement through the CSI program to the NJ SIP Distributed program:

Enel is excited about the storage adder that would be part of the CSI program. However, given the program’s design allows a developer to receive the storage adder only after the corresponding solar project has been successfully reviewed, significant uncertainty remains for storage projects. We believe that the NJ BPU’s assumption that 1,000 MW of storage can successfully be procured through the CSI program (as estimated in the NJ SIP Straw Proposal) is worth revisiting. Through this analysis, the NJ BPU could find that a portion of this procurement quantity could be transferred to the NJ SIP program to specifically enlarge the distributed portion of the program.

iv. Residential and C&I storage may deserve separate procurement targets:

While the residential storage market is valuable, it serves a different purpose than C&I. Residential projects tend to be smaller and do not capture public facilities, including critical infrastructure. Increasing the overall pool of Distributed projects is essential. The BPU should also consider splitting the Distributed portion of the NJ SIP into residential and C&I if the total procurement quantity for the overall program is increased by a factor of two or more. Under this scenario, Enel recommends at least 50% of the total Distributed MW target to be set aside for C&I.



VII. Comments and Recommendations on Performance Assessment of Distributed Resources

Regarding the performance assessment of the Distributed storage assets, Enel recommends for the program to be designed to ensure the following:

A. Storage resource performance should be measured based on the behavior of the storage asset itself (irrespective of load):

Enel recommends that the program design measure the performance of storage assets directly. This would require implementing changes to regulations such as allowing sub-metering directly at the storage asset and explicitly allowing injections from storage into the grid. Allowing storage injections (not just customer curtailments) specifically for the NJ SIP performance events is essential to achieve New Jersey's decarbonization goals. In addition, this step is an important positive precedent for similar regulations in other retail and wholesale markets. These recommendations align with the Straw Proposal's acknowledgement of the role that New Jersey's EDCs would play.

B. Resource performance and performance assessment should allow for value-stacking:

Enel recommends that the NJ SIP performance events for distributed resources ensure value-stacking with other Capacity Performance cost structures (i.e., PLC and NSPL). This would be aligned with what the Straw Proposal identifies as a major goal of the program:

"A major goal of the NJ SIP structure is therefore to encourage long-term investment in, and main maintenance of, energy storage devices at the transmission and distribution level. To encourage this long-term outlook, Staff anticipates that energy storage owners will engage in "value stacking."

This would also help reduce the need for incentives. As the Straw Proposal points out, "revenue from the value stack reduces the need for incentives to move the market at a desired pace."

VIII. Conclusion

Enel thanks the NJ BPU for the opportunity to provide these comments and looks forward to participating actively with NJ BPU Staff, a future Program Administrator selected by NJ BPU, and other stakeholders to develop an effective mechanism that helps New Jersey achieve its decarbonization and storage installation goals.