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NJBPU Energy Storage Team

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Re: The New Jersey Storage Incentive Program (NJ SIP)
2024 Straw Proposal and Draft Rules
Docket No. QO22080540

December 18, 2024

Dear Secretary Golden and the NJBPU Energy Storage Team,

I want to thank the NJ Energy Storage Team in pushing through the NJ SIP straw proposal and draft rules. In reviewing comments from the utilities and making phones call to Energy Distribution Companies identified by NJBPU, it seems as though there is significant reluctance and challenges from the grid utilities and EDC companies in moving forward New Jersey's critical priority for grid supply and distributed energy storage.

The NJ Energy Storage program is critical for New Jersey to transition off of fossil fuels. All of the NJBPU staff that work on this play a crucial role in moving NJ towards a renewable energy infrastructure. Thank you for your work, but I believe this rule and moving forward with this SIP proposal is how New Jersey can move towards a renewable energy infrastructure. And from what I have seen, this is the toughest, yet most critical, component of a renewable energy infrastructure. It bridges the gap between always-on natural gas combustion turbines with intermittent renewable energy sources. The NJ Energy Storage Program creates a grid that can be more redundant, more resilient and ***more locally enabled***. It can also reduce dependencies on energy transmission supplies (natural gas, electric and even gasoline) from other regions. The NJ Energy Storage Program is a very critical component in New Jersey's Energy Master Plan.

There are several topics that I would like to comment on, which I believe will help NJBPU Energy Storage Team and New Jersey's initiation and implementation of grid supply and distributed energy storage.

Suggestion One: **Using a standard naming convention for labeling systems**

The Clean Energy Act ("CEA") set forth the energy storage goal of 2,000 MW by 2030. In the straw proposal and draft rules, NJBPU attempts to contextualize this goal into a 'normalized' unit of measure that takes into account storage power output and duration set over four hours. In the straw proposal on page 9, NJBPU provides three examples that demonstrate how the proposed name labeling can be misleading.

Examples	Ex1	Ex2	Ex3
Nameplate	10 MW	10 MW	10 MW
Storage Capacity	20 MWh	40 MWh	60 MWh
Power Output	10MW	10 MW	10 MW
Power Duration	2 hours	4 hours	6 hours
2024 Straw Proposal and Draft Rules proposed Nameplate	5 MW	10 MW	10 MW

From reading the 2024 Straw Proposal and Draft Rules, and referencing the CEA, I would suggest a simpler presentation and naming convention that includes both power output capacity and duration in the naming convention. I would also suggest that NJBPU establish the rule and requirement that all storage must have at least 4 hours of power output. This standardizes all storage to an interval that is better integrated into the electric grid from Energy Storage Solutions.

Suggested naming Convention: PowerOutput@NumberOfHours

How each example mentioned above would be labeled: **Ex1**: 5MW@4hours; **Ex2**: 10MW@4hours; and **Ex3**: 10MW@6hours.

Suggested rule modification: Nameplate power must be available for a minimum duration of 4 hours.

Value of suggested naming and rule:

- Standardized based nameplate power to a standard interval of 4 hours.
- Naming label enables clear size and capacity of Energy storage solution.
- Enables NJBPU to track and easily aggregate Power Output nameplate against the CEA target goal of 2,000 MW by 2030.
- Enables NJBPU to aggregate and track energy storage to NJBPU's interpretation of 2,000 MW being 2,000 MW over four hours for a total of 8,000 MWhs.
- Enables NJBPU to readily aggregate and track New Jersey total power storage capacity from installed Energy storage solutions.

Suggestion Two: **Add a third Distributed Energy Resource ("DER") Incentive Program for Distributed Storage, targeting residential and Business owners directly and their respective property location.**

In reading through the 2024 Straw Proposal and Draft Rules, it identifies two incentive programs Grid and Distributed Energy Storage Systems made available through the dependency of Energy Distribution Companies (EDC). When New Jersey first implemented solar, NJ worked through the Utility companies to control and manage the incentives and integration of solar arrays with the grid. I participated in that program and currently fully own my solar array.

This suggestion is to recommend utilizing that model again to strongly launch New Jersey's path of distributed energy storage. It would still prevent utility companies from owning the storage facility, but it engages the utility companies where the utility companies have more control and planning over each project. I also believe there would be many homeowners and businesses that would seek installing Energy Storage Solutions at their respective locations.

This third category would mimic the current distributed incentives, except that the utility would coordinate the ongoing performance-based incentive payout. Using this suggestion would provide another mechanism for New Jersey to quickly ramp up distributed storage in a more even distribution of locations at existing home and business sites. This can reduce the potential of further open land consumption from installing large Energy Storage Solutions while maximizing distributed storage throughout the electric energy grid.

NJBPU could also place a minimum power output nameplate requirement of 10,000 watts over four hours.

Value drivers

- Utility enabled and controlled.
- In the infancy of Energy Solutions, it is better to have the utility companies taking the lead for architecture design, rollout, definition and control of Energy Storage Solutions.
- Flexible performance incentive and use (power fed to grid from behind the meter) based on the changing needs and demands of the energy grid infrastructure and directly controlled by the utility company.
- Thousands of locations immediately available for deploying Energy Storage Solutions.
- Enables the utility companies to explore metal hydride hydrogen Energy Storage Solutions such as GKN Hydrogen's 2 MW solution (https://www.gknhydrogen.com/product/) at homesites willing to enable this type of storage.
- Reduces the Overburdened Community (OBC) barrier, enabling proliferation of storage through all regions including OBC communities.
- Can be the method of how to build the structure that governs EDCs to adhere to as storage increases throughout New Jersey.
- More diverse installation that increases resilience of each transformer leg of the electric grid infrastructure.
- Since these installations are directly controlled by the utility, it creates a stronger shared electric storage resource of distributed Energy Storage Solutions for each substation.

I read through PSE&G's comment on New Jersey Storage Incentive Program and believe the utility companies do have challenges that they need to help guide to find the solutions for. I agree with the premise that the utility companies should not own the solutions, but they can be the architects and enablers for quickly deploying Energy Storage Solutions. We only have five years until 2030, what better way to fast track this Storage Incentive Program, than to get the utility companies leading the way?

Suggestion Three: **Provide on a quarterly basis: Key Performance Indicators (KPIs) on Energy Storage Incentive Program; key measures on projects, storage power output and capacity; and key measures on number of EDCs participating in the Energy Storage Incentive Program.**

I have sent an email request to energy.storage@bpu.nj.gov asking what is the current amount of storage deployed in New Jersey is. I never received a response from that request. On the NJBPU Storage website, it only identifies the latest stakeholder engagement. I have contacted NJ Clean Energy and was told that the manager would get back to me regarding the current storage status in New Jersey. This is problematic and doesn't enable the public to fully engage and support the Energy Storage Incentive Program.

I am fully supportive of the NJBPU Energy Storage Team. I believe that if NJBPU ES Team provides a quarterly dashboard with key performance and progress measures, that it will help New Jersey Residents and New Jersey Agencies better support the critical function that Energy Storage plays in New Jersey transitioning to a fully renewable based energy infrastructure. Increase awareness enables greater participation and support. I urge to you please consider making a dashboard that is provided at least on a quarterly basis.

I very much appreciate your consideration of my suggestions. My hope is that the NJBPU Energy Storage team will enact on these suggestions.

Sincerely,

Kirk Frost