

September 19, 2023

Sherri L. Golden Secretary of the Board New Jersey Board of Public Utilities 44 S. Clinton Avenue, 1st Floor Trenton, NJ 08625

Submitted Electronically

Re: Docket No. QO22080540 – NineDot Energy Comments in the matter of the New Jersey Energy Storage Incentive Program

Dear Secretary Golden,

NineDot Energy is pleased to submit the attached responses to the New Jersey Board of Public Utilities (the "BPU's") August 8, 2023, Notice of Request for Information (the "RFI") in the above referenced docket.

NineDot appreciates the BPU's commitment to developing a robust energy storage sector in New Jersey and looks forward to collaborating with the BPU and stakeholders to help the Storage Incentive Program reach its potential.

Sincerely,

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Introduction and Executive Summary

NineDot Energy builds community-scale energy systems that support a more resilient electric grid, deliver economic savings, and reduce carbon emissions. To date, NineDot's development efforts have focused on the New York City area (including Westchester and Long Island), which is moving fast in deploying urban clean energy solutions. With a growing portfolio of projects across a range of technologies, and an emphasis on battery storage, NineDot is leading the way to urban clean energy.

NineDot is enthusiastic about the potential for building community-scale energy systems in New Jersey. These community scale projects, which are often sized at 5 MW¹ and connect to the distribution system, represent a unique value proposition for the energy storage industry and are well-suited for a geography such as New Jersey. These projects are large enough to reap a portion of the economies of scale enjoyed by utility scale projects, yet their location on the distribution grid allows for enhanced benefits to the grid relative to their larger transmission-connected counterparts. Since they are larger than customer-sited projects and smaller than transmission-connected projects which tend to have lengthier permitting and interconnection processes, they offer a combination of standardization and innovation that will allow the market to rapidly scale, mirroring success in the community scale solar markets.

Relevant to the objectives of the NJ Storage Incentive Program ("SIP"), community-scale storage is located close to load pockets, providing relief to the most stressed areas of the grid, helping prevent localized blackouts and brownouts and defraying infrastructure expenses. These community scale projects are often located on underutilized land (e.g., brownfield sites). They are on the distribution system and so behind the utility meter, but they are not located at a customer facility or behind a customer's meter.

To unleash the market potential for community-scale storage, the BPU should take the following three actions:

- 1. Confirm in the next version of the straw proposal and any final program documents that projects that are distribution-connected and behind a utility meter but not a customer meter are automatically eligible to participate in the "distributed" program. We will expand on this recommendation later in this section.
- 2. Increase the procurement quantity of the "distributed" program and procure more MW in the beginning years of the SIP. This assumes these distribution-connected projects will participate in the "distributed" program.
- 3. Adopt best practices from nearby states and have transparent processes for determining performance payments and allow storage owners to "lock-in" the performance payment rate for 10 years to reduce financing costs.

¹ Projects are often sized at 5 MW due to interconnection processes, as projects greater than 5 MW typically endure a more time-intensive process. Community-scale storage projects can range upwards of 20 MW.



NineDot expands on these recommendations and offers additional recommendations in its RFI responses. But since the RFI does not ask about what projects should be eligible to participate in the "distributed" program, NineDot will address that here. To avoid confusion and jumpstart the distribution-connected market segment in New Jersey, the BPU should confirm in the next version of the straw proposal and any final program documents that projects that are distribution-connected and located behind a utility meter but <u>not</u> located behind a customer's meter are automatically eligible to participate in the "distributed" program. The straw proposal uses the term "behind-the-meter" in a manner that seems to be referring to behind the utility meter, or anything that is distribution-connected, and not behind the meter at a customer facility, but this confirmation is still necessary.

As highlighted previously, this segment of distribution-level projects is well-suited for the geographic density of New Jersey. As recognized by the BPU staff, promoting the development of these projects is consistent with the NJ SIP's objectives as well as the Energy Master Plan:

"Likewise, storage resources 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. As noted in the EMP, while 'New Jersey does not currently have a means of pricing the benefits that batteries can provide at the distribution level . . . New Jersey is committed to adopting changes in regulatory policy that recognize the full wholesale and distribution value of batteries.' EMP at p. 128."²

Given these distribution-level benefits, it would be inappropriate to require distribution-level projects to participate in the grid-supply program, as this would prevent such projects them from monetizing their distribution-level value and prevent their development.

If the BPU seeks to prevent overly large projects from participating in the "distributed" bucket, the BPU could stipulate that projects that are <20 MW and that are distribution-connected are automatically eligible to participate in the "distributed" program, and projects >20 MW or connected to the bulk system are automatically eligible to participate in the "grid-supply" program.

NineDot's answers to the RFI questions reflect the assumption that all distribution-connected projects will participate in the "distributed" program.

1.0 Utility Ownership/Dispatch Control

The Straw "does not propose to allow for utility ownership or operation of devices," but notes that "EDCs will play a key role in building the grid infrastructure necessary to enable the effective dispatch of energy storage devices." This proposal was intended to encourage private ownership and operation of energy storage devices and the development of a robust energy storage sector in New Jersey's restructured competitive market.

² New Jersey Storage Incentive Program Straw Proposal. DOCKET NO. QO22080540. September 29, 2022. P.22-23.



1.1. What are the advantages and disadvantages of utility control versus non-utility control of energy storage systems?

NineDot interprets the BPU's reference to "control" to refer to who will be dispatching the energy storage and not to refer to storage ownership.

Assuming that non-utility entities will be the storage owners, the storage owner must have the option to have full dispatch control over the system. If the utility has control, then it would preclude the storage owner from optimizing the storage for other value streams, such as PJM revenues or bill savings that may be necessary for the projects to become economic.

NineDot notes that Atlantic City Energy ("ACE") proposes a "passive" Distributed program similar to the SIP Straw Proposal and an "active" Distributed program, describing the active program "that would provide an additional option to customers in which the customers agree to allow the EDCs to control and operate the battery storage resources during times of distribution system need." ACE also proposes the utilities managing the storage's PJM participation. NineDot believes there could be merit to exploring the "active" program, but this should not delay the rollout of the proposed "passive" program. The payment rate of the "active" program would need to be sufficiently high and predictable for the storage owner/operator to cede complete dispatch control to the utility and finance the project. The utility would also need to demonstrate that it has the technical capability to dispatch and optimize distribution-connected storage.

NineDot disagrees with ACE's assertion regarding the passive program that "the distribution system benefits of this approach will tend to be minimal and the distribution-system performance payment for the passive Distributed program would reflect that value." If ACE is concerned about performance, they could propose a minimum performance threshold, and if a resource performed under that threshold, the storage would be ineligible for performance payments in that season. This would allow ACE to use the minimum performance threshold as a floor in its system planning exercises and revise the figures after gaining experience. After Year 1 of program participation, each storage resource could have an "EFORd" (equivalent forced outage rate on demand) as is the case in the wholesale market as an input for system planning.

It's imperative that the BPU implements a solution different than allowing utilities to assume low performance and therefore lowering the performance rate. That would send the SIP in a death spiral, as the low rate would lead to low performance. Several programs, including but not limited to NY's Value of Distributed Energy Resources ("VDER") allow for the storage owner/operator to have control over battery dispatch and have "voluntary" performance. VDER is mutually beneficial to storage owner/operators and ratepayers, in that they provide enough remuneration for projects to get built and provide enough distribution-level benefits to be cost-effective.

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³ Comments of Atlantic City Energy on NJ SIP. December 12, 2022



The New York Public Service Commission scrutinized how to determine performance payments for distributed resources at length, including staff whitepapers. A New Jersey can utilize this information to achieve a timelier determination. NineDot urges the BPU to lead a transparent process that allows for public participation to determine performance payment rates.

1.2 For Distributed resource Performance-based Incentives, should responding to a utility signal be compulsory or voluntary?

Please see above. Storage owners/operators should have the option of "voluntary". Making them compulsory could preclude revenue stacking and participation in PJM. If there is a PJM emergency during a performance window, it is in NJ's best interest for PJM to able to dispatch whatever resources it deems necessary to preserve bulk-level reliability.

As noted above, NineDot believes there could be merit to exploring the "active" program, but this should not delay the rollout of the proposed "passive" program.

2.0 Installed Storage Targets, Deployment Timelines and Capacity Blocks

The Straw set annual installed energy storage targets that increase over time (see section V. D. of the NJ SIP Straw Proposal for details).

2.1: How should capacity blocks be structured and proportioned, both within each component of the NJ SIP (Grid Supply and Distributed) and relative to each other?

NineDot will break the answer down into the following categories: procurement timing, procurement sizes between different market segments, and block sizes.

Procurement timing for fixed incentives: The BPU should stimulate near-term investment in energy storage in New Jersey and avoid unnecessarily limiting storage development activity in early years. The urgency of PJM's resource adequacy issues⁵ underscores the need for the BPU to raise procurement quantities in the years immediately following the SIP launch. Moreover, given interconnection and supply chain challenges, it could be at least 2-3 years from when the BPU awards a project a spot in the program to when the project gets built. It also takes years for a storage ecosystem (e.g., well-qualified Engineering, Procurement, and Construction vendors) to take shape, and with meager targets, it will only delay this ecosystem from developing. Under the BPU's Straw Proposal, it would be 2031 or 2032 before most projects from the program are operating. This would jeopardize the ability for NJ to meet its 2,000 MW goal by 2030.

⁴ STATE OF NEW YORK PUBLIC SERVICE COMMISSION. CASE 15-E-0751 – In the Matter of the Value of Distributed Energy Resources. WHITEPAPER REGARDING FUTURE VALUE STACK COMPENSATION, INCLUDING FOR AVOIDED DISTRIBUTION COSTS. December 12, 2018

⁵ Energy Transition in PJM: Resource Retirements, Replacements & Risks. Feb. 24, 2023. Page 16. <u>energy-transition-in-pjm-resource-retirements-replacements-and-risks.ashx</u>



As detailed below, NineDot strongly recommends increasing procurement quantities in the immediate years following the program launch.

Procurement sizes between market segments for fixed incentives: The BPU's straw proposal included 880 MW of grid-supply projects and 120 MW of distributed projects, a ratio of over 7:1. Assuming that the distributed program is open to all distribution-connected projects, we urge the BPU to incorporate a 1:1 ratio, and 500 MW for each program. There are several reasons for this, including:

- As the straw proposal acknowledges, distribution-connected projects can provide greater resilience benefits relative to transmission-connected projects.
- Given that the distributed program will reduce distribution-level costs in a manner that transmission-connected projects cannot, the "distributed" program should result in a higher portion of benefits accruing to New Jersey consumers than the grid-supply program.
- Distributed projects should experience a faster interconnection, permitting, and
 development process than the grid-supply projects. Indeed, distributed projects will be
 able to utilize the state-level interconnection process, or for projects <5 MW, the PJM
 fast-track process. Therefore, these distributed projects should offer a quicker pathway
 for consumers to capture program benefits.

Block sizes for fixed incentives: NineDot recommends the following block structure (similar to CPower):

Energy Year in which awards are made	Proposed grid supply procurement quantity (MW)	Proposed grid supply procurement quantity (MWh)	Proposed distributed procurement quantity (MW)	Proposed distributed procurement quantity (MWh)
Block 1	125	500	125	500
Block 2	125	500	125	500
Block 3	125	500	125	500
Block 4	125	500	125	500
Total	500	2000	500	2000

Having a smaller number of larger capacity blocks will provide developers with increased certainty regarding the fixed incentive they will receive. Given the length of development timelines, having capacity blocks that are each less than 5 MW (as outlined in the Straw Proposal) would make it impossible for developers to properly forecast what incentive they would receive.

Moreover, if the purpose of capacity blocks is to track deployment costs, it takes a lot longer than a few months for deployment costs to meaningfully change. And when one cost component does change, another one often increases. As such, overall deployment costs have not decreased in



recent years. ⁶ Having three separate blocks in one year is unnecessary and will be harmful to market deployment.

The BPU could still plan to reduce the fixed incentive by \$2/kWh in each block and then revisit the planned reduction before the next block opens depending on prevailing market conditions.

If the BPU is adamantly opposed to the idea of four large blocks, then at the very least, we recommend having one fixed incentive for each year, and not having anything more granular (e.g., \$40/kWh for 10 years for 2024 projects, \$38/kWh for 10 years for 2025 projects, etc).

Finally, the BPU should build flexibility into both the standalone storage program and the solar + storage program, such that if one class of projects is consistently over-subscribed and one is under subscribed, they can shift MW from one program and one class to another.

2.2. Should the proposed "first-come, first-served" application process be changed to a "First-Ready, First-Served" process?

The BPU should seek to strike an appropriate balance between discouraging speculative projects from consuming MWs in the program and having reasonable requirements that avoid precluding developers from participating in the program.

In the case of the distributed program, NineDot believes that "first-ready, first-served" may be appropriate depending on how the BPU defines "ready." NineDot recommends the BPU require the developer to have a signed interconnection agreement and to place a refundable deposit on a percentage (e.g., 20%) of any interconnection upgrades in order for the BPU to consider it ready and receive a fixed incentive award.

This milestone would ensure that only sufficiently mature projects receive awards but also not require developers to spend unreasonable amounts that they may never recover. If deposits are non-refundable, then NineDot recommends the developer to have submitted a complete interconnection application.

This first-come, first-ready approach also aligns with NineDot's suggestions for larger capacity blocks, as developers would be more willing to have a more challenging milestone if they are more confident in the fixed incentive they will receive.

2.3 How should the program be designed to avoid or minimize interconnection delays? Should the interconnection process be modified for accommodating energy storage and if so, how?

⁶ See U.S. Energy Storage Monitor Q2 2023 Executive Summary. Wood Mackenzie Power & Renewables/American Clean Power Association | June 2023. Slide 5. "Battery prices peaked in late 2022 following a peak in lithium and other battery commodity prices in Q4 2022. Through Q1, lithium spot prices dropped precipitously, though the corresponding drop in module costs has lagged in timing and been much smaller in magnitude. Labor and Balance of Plant costs are still increasing due to a variety of factors, such as the influence of the Inflation Reduction Act on projects wanting to achieve at least a 30% tax credit by using prevailing wages and apprenticeship programs. EPC demand continues to tighten as a result.



Given supply chain and interconnection delays, the BPU should extend the COD deadline after receiving an award from 18 months to 24 months. Moreover, the BPU should provide a limited set of exemptions for extending the 24-month deadline, including situations outside of the developer's control such as PJM queue delays, transformer shortages, supply chain issues, etc.

To avoid or minimize interconnection delays, the BPU should:

- Prescribe time limits that EDCs have to follow for each stage of interconnection.
- To avoid prolonged back and forth between the developer and EDC, make sure EDCs request necessary information upfront.
- Require EDCs to study storage consistent with its operating parameters do not study it as a load during peak periods if it is going to be discharging during peak periods.
- The BPU should require the EDCs to report quarterly on the average interconnection times.
- For projects subject to PJM interconnection, actively engage with PJM and New Jersey utilities to ensure that projects are proceeding in a timely manner.
- 3.0 Incentive Structure. The NJ SIP incentives are proposed to be comprised of two incentive payments, a Fixed Incentive and a Performance-based Incentive (see section V. E. of the NJ SIP Straw Proposal for details).
- 3.1 Incentives are meant to cover a portion of the fully installed cost of an energy storage system. What is the fully installed unit cost (in \$/kWh) for energy storage systems at present, and estimated to be each year through 2030? How do New Jersey-specific costs vary from these estimates? Please provide links to your references

In NineDot's experience, there are significant "soft costs" to developing storage in new states, as it takes time for there to be an adequate volume of qualified Engineering, Procurement, and Construction ("EPC") firms to meet demand. As such, costs will be higher in states like NJ with low storage penetration in the early years.

3.3 Should Fixed Incentives be assignable to an aggregator? Why or why not?

Yes. Aggregators often have a benefit share with their customers with the benefits flowing to the aggregator in return for a customer avoiding deploying capital for the battery and receiving a share of benefits. It would unnecessarily complicate transactions to prohibit the aggregator from receiving fixed incentives.

3.4 Should a Distributed energy storage resource that can provide grid services have the ability to opt in to either the Grid Supply or the Distributed storage program, for both the Fixed and Performance-based incentives?

Yes. Presumably the BPU will place a higher value on whatever program delivers greater benefits to ratepayers, and so as long as a Distributed resource is capable of providing those benefits, it would be in everyone's best interest to allow that optionality.



3.5 The Straw proposes the use of the PJM Marginal Emission Rate ("MER") signal as a basis for Performance-based Incentives for Grid Supply energy storage systems. Is or will the PJM MER be sufficiently developed to use to calculate NJ SIP Performance-based Incentives?

NineDot supports the objective of utilizing storage to reduce emissions. Given that there are limited intra-day emissions changes in PJM right now, it might be easier to start the grid-supply program with the four continuous hours of highest emissions. Project owners could be given the option to use the MER option as there might be parts of the grid with higher intra-day emissions than on average.

3.6 Is there a different methodology that can be used to determine Performance-based Incentives, such as a Peak Demand Reduction program?

For the "distributed" program, NineDot supports dispatching the program during pre-determined peak hours and compensating based on average performance over these dispatch hours. This is similar to program designs in CT, MA, RI, and NY.⁷ The BPU referenced the CT program in the SIP Straw Proposal.

3.7 If a Peak Demand Reduction program were to be developed, how should it be structured? What other states have similar programs that New Jersey should use as a benchmark?

In the case of the distribution-level programs, NineDot supports dispatching the program for 2-4 continuous pre-determined peak hours that yields the greatest benefits to consumers. This is similar to program designs in CT, MA, and CT (See footnote 7).

NineDot would recommend both summer and winter performance windows. Even if NJ is summer peaking now, with increases in electrification and PJM winter reliability issues, winter programs could reduce costs and emissions and improve reliability. Connecticut's program includes winter dispatch hours and compensation. Similar to NJ, Connecticut implemented a winter program to reduce emissions. On the connecticut implemented a winter program to reduce emissions.

⁷ For example, please see Page 2 of the Connected Solutions program: <u>CI-ConnectedSolutions-Offering-Materials June-2023.pdf (masssave.com)</u>. And Page 44 of the CT ESS Manual: <u>ESS Program Manual Updated 1.20.2023 CLEAN.pdf (state.ct.us)</u>. Con Ed VDER Value Stack: <u>Components and Eligibility for the VDER Value Stack Phase Two (coned.com)</u>.

⁸ PJM Interconnection. "Winter Storm Elliott Event Analysis and Recommendation Report." July 17, 2023 "PJM had approximately 47,000 MW of units on forced outages during the hours when they were most needed." Page 49. 20230717-winter-storm-elliott-event-analysis-and-recommendation-report.ashx (pjm.com)

⁹ Page 6 and 8 of the CT ESS Manual: ESS Program Manual Updated 1.20.2023 CLEAN.pdf (state.ct.us).

¹⁰ State Of Connecticut Public Utilities Regulatory Authority Docket No. 17-12-03re03. PURA Investigation Into Distribution System Planning Of The Electric Distribution Companies – Electric Storage.

July 28, 2021. "Page 17. "Given the stakeholder support for targeting the reduction of oil-fueled generation in winter months, the Authority finds that a winter peak period performance-based incentive is appropriate. Specifically, the Authority determines that an active winter dispatch incentive presents significant potential



3.8 What degree/percentage of Peak Demand should be targeted for reduction? What effect would such a program have on GHG emissions?

The degree/percentage will be determined by the program quantity size.

Question 3.9: The Straw proposed that each EDC establish its own level of Performance-based Incentives. Should EDCs establish EDC-specific performance incentives, or should the incentive be standardized and common to all EDCs?

NineDot is grateful to the BPU for raising this question and would flag this as the most important question in this section.

The BPU should standardize certain elements of the performance-based incentive. Similar to NY and CT, in the "distributed" program, the storage developer should have the option of "locking-in" the performance-based rate for a period of 10 years. ¹¹ This is critical for project financing. Below is a table capturing Connecticut's performance-based incentives, with storage owners knowing their performance rate for 10 years. ¹²

Table 5: Performance-Based Incentives (All Customer Classes 2022-2024)

Years 1-5		Years 6-10		
Summer	Winter	Summer	Winter	
(\$/kW)	(\$/kW)	(\$/kW)	(\$/kW)	
\$200	\$25	\$115	\$15	
\$225 annual		\$130 annual		

Even though rates decline in Years 6-10, storage developers still have a floor they can use for project financing. Without knowing the rate, developers would have to assume \$0, increasing already high financing costs and the cost of the program.

The performance payment is still subject to performance; it's just the rate that is locked in.

For the distributed program, the BPU should require the EDCs to use independent third-party analysis to help determine the performance-based payment, as is done in MA, ¹³ which leverage the same studies used for the EE/DR programs. The study inputs (benefits) should be open to

benefits, particularly for municipalities that suffer disproportionate health impacts from oil-burning peaking generation units."

¹¹ New York: STATE OF NEW YORK PUBLIC SERVICE COMMISSION CASE 15-E-0751 – In the Matter of the Value of Distributed Energy Resources. ORDER REGARDING VALUE STACK COMPENSATION. Issued and Effective: April 18, 2019. Page 21. "The DRV \$/kW-year value and hours will be determined at the time a project qualifies, and locked-in for the first ten years of the project's operation."

¹² STATE OF CONNECTICUT PUBLIC UTILITIES REGULATORY AUTHORITY TEN FRANKLIN SQUARE NEW BRITAIN, CT 06051 DOCKET NO. 21-08-05 ANNUAL REVIEW OF THE ELECTRIC STORAGE PROGRAM – YEAR 1 December 8, 2021. Page 12. <u>21-08-05 PFD (state.ct.us)</u>

¹³ Avoided Energy Supply Costs in New England (AESC) | Synapse Energy (synapse-energy.com)



public input. Based off the study results, the EDCs can propose a performance payment and the BPU can modify/approve it. For their distributed VDER program, NY uses the utility Marginal Cost of Service studies which are also subject to PSC approval.¹⁴

The BPU must ensure there is transparency and realistic assumptions in the determination of the payment rate.

As noted above, the BPU should also standardize the requirement for utilities to have summer and winter programs given electrification, high winter emissions and winter reliability issues. This will ensure cost-effective utilization of storage. The BPU can look to the Connecticut ESS program referenced above for a model for a winter program, with their rational for the program in Footnote 10.

3.10 Should energy storage owners be permitted to opt in, or be subject to utility control, in order to be eligible for Distributed performance incentives?

See 1.1 and 1.2.

3.12 Under what circumstances, if any, should Distributed resources be able to opt in to Grid Supply Performance-based Incentives?

There should be no restrictions as long as they are capable of meeting all grid-supply eligibility requirements.

3.13 Large projects and long duration projects have the potential to qualify for significant incentives. Should incentive caps be applied in this program? If so, how (for example, by customer, project, developer, duration or meter), or other method?

Assuming the BPU adopts NineDot's proposal for four capacity blocks that are each 125 MW for both programs, NineDot recommends a cap of 20 MW for the fixed incentive in the distributed program. This would not preclude the project from enrolling greater than 20 MW in the performance-based program, assuming the performance-based program is not capped at 1,000 MW.

3.14 Should a cap be set such that the sum of federal and state incentives does not exceed a certain amount? If so, please provide details.

Given supply chain costs/challenges and interconnection delays, NJ will be unable to meet its storage goals if it caps the sum of federal and state incentives at this time. The BPU can revisit this in the future as these costs and challenges decline.

¹⁴ New York: STATE OF NEW YORK PUBLIC SERVICE COMMISSION CASE 15-E-0751 – In the Matter of the Value of Distributed Energy Resources. ORDER REGARDING VALUE STACK COMPENSATION. Issued and Effective: April 18, 2019. Page 21. "The \$/kW-year values established pursuant to the VDER Implementation Order and currently in the utilities' tariff statements will continue to be used for projects that qualify until new MCOS studies are developed and approved by the Commission as a result of the MCOS proceeding."



3.15 What provisions should be included in the program for monitoring, reporting and evaluation in order for deployed projects to maintain eligibility for incentives that are paid over time?

The BPU can leverage inverter-based metering and annual reporting to ensure projects are meeting their uptime requirements.

3.16 How can BPU structure NJ SIP Performance-based Incentives to both promote value stacking and prevent double compensation?

The BPU can be clear in program rules that PJM participation is allowed and work with PJM to address any dual participation issues.

- 4.0 <u>Overburdened Community Incentives</u>. The Straw proposed three methods to support OBCs with energy storage incentives.
 - An incentive adder in kWh
 - A separate incentive block
 - An additional up-front incentive
- 4.1 Staff is considering establishing both an adder and a capacity block for OBCs. What size

should the capacity blocks be over time as a percentage of the overall Distributed segment? How much should the adder be in 1) \$/kWh or 2) as a percentage of the base incentive?

NineDot supports an incentive adder in kWh in the form of a percentage of the base incentive. As long as there is an incentive adder and the BPU aligns its definition of OBCs with the definition of disadvantaged communities in federal tax provisions, we do not believe a separate capacity block is necessary at the outset of the program. A separate block can be added if there is minimal deployment in OBCs.

4.2 How can BPU assure that the incentive structure chosen will in fact provide benefits to OBCs?

By ensuring that these storage resources are available for dispatch during emergency conditions to preserve power to these OBCs and that they are located in OBCs or immediately adjacent to OBCs such that power could flow to the OBCs during a bulk-level outage.



5.2 How will Federal Energy Regulatory Commission ("FERC") Order 2222 affect New Jersey's energy storage market? What changes should the Board make to the NJ SIP to take advantage of PJM's pending implementation of FERC Order 2222?

The BPU should collaborate with PJM and developers to facilitate dual participation.

5.3 Are modifications to the NJ SIP needed to maximize the ability of energy storage developers to access federal investment tax credits or other federal incentives?

Most importantly, the BPU can ensure that developers/aggregators can directly receive all NJ SIP payments and that OBCs are defined similarly to disadvantaged communities in the federal tax provisions.

5.4 What provisions, if any, should be established for interconnection of zero-export energy storage facilities (that is, energy storage facilities that do not inject power back into the grid and only supply power to on-site load)?

The BPU can make these projects eligible for fast track as is the case in CA.

5.5 What specific best practices regarding rates and tariffs from other states should be incorporated?

Please see responses to 3.9.

5.6 Should energy storage be utilized and compensated in the Triennium 2 Energy Efficiency /Demand Response proceeding as an allowable Demand Response resource? If so, what changes, if any, should be made to the NJ SIP design to avoid potentially providing double compensation for the same service?

Performance hours should be the same in Triennium 2 programs as the distributed program,

5.7 How should energy storage systems be metered and measured? Can an inverter serve this function? What role should advanced metering infrastructure ("AMI") play in the NJ SIP?



Directly meter the storage. The inverter should be able to serve this function and AMI is unnecessary. The BPU should require 15-minute or less granularity.

Conclusion

NineDot thanks the BPU for consideration of these responses and looks forward to collaborating to launch a successful SIP.

Sincerely,

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