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December 18, 2024

VIA ELECTRONIC MAIL
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Secretary of the Board
New Jersey Board of Public Utilities
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Re: In the Matter of the New Jersey Energy Storage Incentive Program
New Jersey Energy Storage Incentive Program 2024 Straw Proposal
Docket No. QO22080540

Dear Secretary Golden:

On November 7, 2024, the New Jersey Board of Public Utilities ("BPU" or "Board"), through its Staff ("Staff"), issued the New Jersey Energy Storage Incentive Program ("NJ SIP") 2024 Straw Proposal ("Straw") and associated draft rules, which included a request for comments. Jersey Central Power & Light Company ("JCP&L" or "Company") appreciates the opportunity to comment on the Straw. As encouraged by Staff, JCP&L hereby provides its comments on the Straw, including those in response to Staff's ten specific questions.

I. BACKGROUND

New Jersey has one of the most ambitious storage targets in the nation, with a statutory mandate to achieve 2,000 megawatts ("MW") of installed energy storage by 2030.[1] To achieve this goal, the Straw proposes to create two energy storage segments as part of the NJ SIP: (1) the Grid Supply Segment for front-of-meter ("Grid Supply") energy storage systems; and (2) the Distributed Storage Segment for behind-the-meter energy storage systems ("Distributed Resources").[2] Each segment would be eligible for NJ SIP incentives, with a different protocol and incentive structure applying to each segment.

Grid Supply energy storage systems would initially be eligible for only fixed upfront incentive payments through an annual competitive bidding structure.[3] Distributed Resources, in

[1] Straw at 3.
[2] Ibid.
[3] Ibid.

contrast, would be eligible not only for fixed incentive payments through blocks released annually, but also performance payments for successfully reducing onsite load or injecting power into the distribution system when called upon by an electric distribution company ("EDC") during certain performance hours, as established by each EDC.[4] Part of the Distributed Storage Segment would be reserved for projects located in, or directly serving, overburdened communities ("OBCs").[5]

While the Straw makes clear that EDCs are not precluded from owning and operating energy storage systems, which clarification is appreciated by JCP&L, it does not make incentives under the NJ SIP available to EDC owned and operated energy storage systems.[6] To entice private owners and operators, the Straw recommends that, in addition to the NJ SIP incentives, private investors be allowed to own and operate energy storage systems, allowing them to "stack" revenues from the wholesale electricity market, to use the distributed energy storage system to actively manage their energy usage at the distribution level and reduce electricity costs, or to participate in a Distributed Energy Resource ("DER") Aggregation service, when available.[7]

The Straw argues that the NJ SIP would provide ratepayers with a variety of benefits, including carbon savings and improvements to hosting capacity and system resilience.[8] The Straw further asserts that the NJ SIP is expected to drive down costs for storage deployment.[9]

II. GENERAL COMMENTS

JCP&L generally supports the Board's efforts to promote the development of energy storage resources in New Jersey to achieve the goal of 2,000 MW of installed energy storage by 2030. Energy storage is an important component of maintaining system balance in response to the increasingly intermittent and variable loads associated with the continued integration of renewable resources onto the grid, coupled with the electrification of transportation, building space, and water heating. Properly deployed and administered energy storage can help balance these variable loads (along with the use of energy efficiency and peak demand reduction programs) by offering a method to manage load and store power for use when customers need it most. In addition, properly placed and utilized energy storage resources, which are interconnected in accordance with State and federal rules, have the potential to reduce the cost of electricity for customers by storing it when electricity is inexpensive and selling it when demand is high. Properly deployed energy storage resources may also increase the reliability and resiliency of the electric grid.

Yet further clarification on how the NJ SIP will effectively coexist and harmonize with Federal Energy Regulatory Commission ("FERC") and PJM Interconnection LLC ("PJM") rules is still needed. Accordingly, JCP&L recommends that the Board convene workshops to discuss

[4] Ibid.
[5] Id. at 12.
[6] Id. at 8.
[7] Id. at 4.
[8] Ibid.
[9] Ibid.

this complex topic to avoid potential project delays, conflicts during implementation, and confusion. There also exists the issue of how the NJ SIP will work with the current net metering program. It is unclear whether a net metering customer can add an energy storage system and be eligible for both net metering and the NJ SIP, or vice versa, as discussed in more detail below.

A. Incentive Structure

The Straw recommends that NJ SIP incentives be comprised of two main payments: (1) a fixed incentive, measured in $/kilowatt-hour ("kWh") of storage capacity and paid one time upon commercial operation; and (2) a performance-based incentive tied to benefits created through the storage system's operations.[10]

1. Prohibition on Grid Supply Storage Developers Participating in the NJ SIP and Competitive Solar Incentive Program Simultaneously

The Straw would require Grid Supply storage developers to choose between either the NJ SIP or the Competitive Solar Incentive ("CSI") Program, prohibiting them from participating in both programs simultaneously.[11] The Straw seeks comment on how best to allow developers the flexibility to choose which program to participate in.[12]

JCP&L agrees with prohibiting Grid Supply storage developers from participating in both the NJ SIP and the CSI Program simultaneously. Grid Supply storage developers should, however, have the flexibility to choose which program to participate in. The Company does not oppose allowing a project that is not selected for one program from being permitted to apply for the other program. This will ensure that projects can seek appropriate incentives but that ratepayers are not overburdened by any individual project by having to pay for two different forms of incentive.

2. Overburdened Communities

The Straw seeks to ensure that an equitable share of Distributed Resources is placed in or serves OBCs by: (1) establishing an incentive adder for projects located in OBCs; and (2) reserving a portion of the incentive budget for customers in OBCs.[13] The Straw does not propose to include any additional incentives to locate Grid Supply storage in OBCs, as those projects typically have fewer localized benefits.[14]

JCP&L supports the Straw's goals of incenting Distributed Resources to locate in OBCs. The Board should, however, be mindful of the impact that any additional or separate incentives

[10] Id. at 9-10.
[11] Id. at 11.
[12] Ibid.
[13] Id. at 12.
[14] Ibid.

may have on customer bills. JCP&L also agrees with the Straw's recommendation of not providing additional incentives for Grid Supply to locate in OBCs.

3. Performance-Based Incentive for Distributed Storage Segment

The Straw recommends directing each EDC to establish a performance-based incentive, in $/kilowatt ("kW") year, that would be provided to storage resources operating during specific call hours.[15] In its filing, each EDC would be required to address: (1) program call hours, (2) a $/kW per year incentive payment for calls; (3) payments to resource owners; and (4) a mechanism for calling on resources.[16]

a. Deferral of Performance-Based Incentive

The Straw appears to recommend deferring performance-based incentives for Distributed Resources projects to allow EDCs adequate time to develop and administer the Distributed Storage Segment of the NJ SIP.[17]

JCP&L agrees with the deferral and encourages Staff to create a workgroup on this topic. The workgroup should address, among other issues, how incentives will be paid if a Distributed Resource project is not a registered PJM resource, bearing in mind that current FERC rules may not otherwise authorize payment of kWs that are exported onto the distribution or transmission system. The Company further requests clarification on the Board's intent and timeframe for adoption of the performance-based incentive for the Distributed Storage Segment.

b. Program Call Hours

Under the Straw, each EDC will identify the seasons and times of day when deployment of storage resources is most likely to benefit the grid.[18] The Straw Proposal suggests that the call hours would focus on summer peak hours, between 3:00 p.m. and 7:00 p.m. on weekdays; however, each EDC will have the flexibility to determine the season and preferred hours.[19]

There should be significant flexibility for each EDC to establish program call hours. Due to increasing electrification and shifts in load, there needs to be a simple and straightforward protocol for the EDCs to adjust program call hours for NJ SIP participants. The Company agrees that, traditionally, electricity usage peaks in the summer; however, with increasing electrification,

[15] Id. at 14.
[16] Id. at 14-15.
[17] Id. at 12.
[18] Id. at 14.
[19] Ibid.

PJM anticipates a shift to winter peaking.[20] JCP&L is concerned that focusing on summer peak hours may help reduce peak demand at the cost of dissuading energy storage resources from providing other services, such as hosting capacity and resiliency. It also fails to account for the unique customer load make-up in different areas, which may peak at different times. For example, a predominately residential load or some commercial or industrial load areas may peak on weekends.

c. $/kW Per Year Incentive Payment for Calls

The Straw proposes that each EDC adopt a $/kW per year payment for storage resources.[21] The Straw allows for EDCs to either adopt a single-system payment or establish geographically variable payments, if warranted.[22] The Straw provides that rate and tariff design should align with expected PJM rules related to FERC Order No. 2222 and include co-optimizing economic and greenhouse gas ("GHG") reduction considerations.[23] The Straw states that each EDC should explain how its proposed payment structure meets the following criteria: (i) increases environmental benefits of storage deployment; (ii) minimizes distribution investment; and (iii) otherwise minimizes the stress on the local distribution system and reduces operating costs.[24]

JCP&L agrees with a $/kW per year incentive and that the rate and tariff design should align with FERC Order No. 2222 and expected related PJM rules.

FERC Order No. 2222 is still an active proceeding and the implementation efforts with PJM are ongoing with PJM's targeted implementation date of February 2028 (which has not yet been approved by FERC). Close coordination via targeted workshops and meetings is essential among the EDCs, Staff, and PJM to ensure that implementation of this portion of the NJ SIP does not conflict with or violate the objectives of FERC Order No. 2222.

Additionally, Staff should be mindful when considering payment eligibility from other EDC energy efficiency and peak demand reduction programs made to these Distributed Resources. While revenue stacking may be appealing, ultimately, customers paying for the programs may see bill increases that need to be considered if multiple ratepayer-funded revenue streams are permitted.

JCP&L does not have a strong preference regarding a single payment versus geographically variable payment structure. Great care must be taken, however, to define geographic regions and pricing structures to properly incentivize investment in a particular region.

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[20] https://www.utilitydive.com/news/pjm-power-plants-blackout-risks-transition-report/624031/; and https://www.pjm.com/-/media/library/reports-notices/special-reports/2022/20220517-energy-transition-in-pjm-emerging-characteristics-of-a-decarbonizing-grid-white-paper-final.ashx.
[21] Straw at 14.
[22] Ibid.
[23] Ibid.
[24] Ibid.

Since such a "market" construct can take years to design and even longer to mature, it may be in the best interest of the State's goals to begin with a single payment structure and further explore a variable payment structure through focused workshops.

Finally, the three criteria referenced in the Straw Proposal, *i.e.*, (i) increasing environmental benefits of storage deployment, (ii) minimizing distribution investment, and (iii) minimizing stress on the local distribution system and reducing operating costs, are in their own respects uniquely complicated, especially when looking to engineer expected outcomes. When implementing solutions, it is entirely possible one criterion may have to be sacrificed entirely to meet another. For example, to facilitate action to reduce environmental concerns, investment in the distribution system may be required beyond a "minimized investment"; however, the net overall cost/benefit may still be positive. In other words, to get to a net overall positive outcome, it may be that some costs go up while others go down. JCP&L encourages Staff to address these issues with program values trade-offs in a series of workshops.

d. Payments to Resource Owners

The Straw recommends that during dispatch events, a Distributed Resource owner will meet its performance-based payment obligation if it responds to a call.[25] Responding to a call can mean either injecting energy into the distribution system or reducing the customer's consumption of power from the grid (collectively, these are the distributed customer's "Response kWs," measured in kWs of relief provided).[26] Under the Straw, when an EDC sends a dispatch signal, the customer would receive credit for each kW of Response kWs it provides during the call period, averaged over all call periods in a year.[27] A resource owner would be required to provide response kWs for the entire duration of a call (likely up to four hours).[28] A missed call would be registered as zero kW.[29] A Distributed Resource owner would then receive the $/kW incentive established by the EDC, multiplied by its average response kWs.[30] At no point, the Straw notes, would the Distributed Resource incur penalties or result in a decrease to the fixed payment.[31]

The Straw suggests that Distributed Resources receive no incentive payment for failing to respond for the entire duration of a call. JCP&L asks that Staff clarify its statement that "[a]t no point would the distributed storage resource incur penalties or result in a decrease to the fixed payment" in conjunction with establishing the performance metrics.[32] The loss of potential event-based performance payments alone will not be sufficient to support EDC program efforts, especially if these programs will ultimately be utilized by the EDCs to meet reliability objectives

[25] Id. at 15.
[26] Ibid.
[27] Ibid.
[28] Ibid.
[29] Ibid.
[30] Ibid.
[31] Ibid.
[32] Ibid.

or other program performance standards established by the Board. Consideration should be given to developing performance matrix criteria for these devices that require them to achieve a minimum level of performance when called upon by the EDCs or risk being subject to penalties and/or the loss of the contract with the EDC. JCP&L asks that Staff convene workshops to discuss non-responsiveness and penalties.

As discussed in the below comments regarding "A Mechanism for Calling Resources," it is imperative that the Board consider implementing training or certification requirements for Distributed Resource owners to ensure that they fully understand the programs in which they are participating and the obligations they are accepting. It is also essential for any Distributed Resources that are participating in multiple programs to understand their obligations under each program and how to assess and respond to those competing obligations.

e. A Mechanism for Calling Resources

Under the Straw, each EDC will be required to develop a system for calling resources and communicating with Distributed Resources, which are expected to respond automatically.[33] The Straw allows customers the ability to opt-out of a particular call, without penalty (apart from foregoing performance incentives they could earn during that call).[34] The Straw appears to require EDCs to provide advance notice of a call, suggesting that at least 48-hours' notice would be appropriate.[35]

Under the Straw, Distributed Resources would be compensated to respond to market signals for both exporting energy and creating load that may not be aligned with the EDC's reliability efforts for the distribution grid, a customer's immediate energy needs, or environmental response signals. In fact, their unmanaged or unpredictable charge-discharge characteristic means that if Distributed Resources are not solely dispatched by the EDC for reliability, they could adversely impact the reliability of the distribution grid. To ensure that Distributed Resources do not reduce reliability and significantly increase costs for customers, an EDC operator must have visibility, dispatch control, and real-time distribution operational analysis capability for Distributed Resources on its distribution grid. If the EDC does not have this level of control, it must plan and build its system to meet the gross load connected. For example, before Distributed Resources were increasing in utilization, wires were sized to meet load from centralized generation. The grid was planned, built, and operated to deliver energy efficiently over wires sized to serve gross load plus modest growth. Due to Distributed Resource proliferation, views have emerged that indicate engineers no longer need to worry about the size of the wire and instead can "rely" on energy production that is sited at the end of the line. This leaves engineers with a reliability design conundrum. Does the engineer design the wires system not to rely on the Distributed Resources if they are not singularly focused on distribution reliability? Or does the

[33] Ibid.
[34] Ibid.
[35] Ibid.

engineer design a wires system that allows for unfettered use, as headroom disappears with more Distributed Resources interconnecting?

To accomplish the unfettered use scenario, and a landscape akin to what Distributed Resources are currently accustomed to, there may need to be upgrades, *e.g.*, larger wires and additional equipment, to maintain balance and avoid service interruptions if Distributed Resources do not respond. In other words, rather than reducing costs and increasing reliability by mitigating system contingencies for customers, the addition of Distributed Resources could increase costs by requiring the EDCs to build the distribution grid to accommodate the maximum generation and load that the charge-discharge nature of a Distributed Resource may create in pursuit of various value stacking capabilities. The potential for this outcome is increased by the proposed lack of non-performance penalties.

JCP&L does not currently maintain the staffing, near real-time system modeling, or information technology ("IT") processes that would be required for the type of automated call system contemplated. JCP&L will need to significantly invest in, design, and build out a new system that, like PJM, is capable of modeling and stacking Distributed Resources based on location and the services that they are able to provide. JCP&L will then need to develop a process that can automatically call on Distributed Resources, and then, when one resource does not respond to a call, automatically determine the next resource that may be able to provide that service until an appropriate and responsive resource is dispatched.

Relatedly, JCP&L does not have experience with calling generation resources onto the distribution system, which would require the creation and implementation of additional training for engineers and operations staff.

It is imperative that the Board convene workshops to discuss expectations for and compliance with its automated dispatch recommendation. JCP&L further asks that the Board institute an additional round of comments following any workshops prior to requiring automated dispatch. These workshops should also consider compliance and alignment with FERC Order No. 2222.

Finally, while the Straw has focused on program design goals, there has been little mention of the additive costs and burdens on the EDCs. Once the technical expectations and requirements are fleshed out in workshops or technical conferences, the Board should make clear that the EDCs shall receive full and timely recovery of costs, through a rider mechanism, to develop, implement, and administer their obligations under the NJ SIP.

A deep understanding and balance must be struck between those operating energy management control paradigms and Distributed Resource owners to ensure that all parties understand their obligations, including the level of monitoring and control exercised over end use customer device(s). It is expected that customer education will become paramount to facilitate and engage the use of Distributed Resources so that customers are not caught unaware of

responsibilities they have agreed to under program contracts. Therefore, JCP&L recommends that, to ensure maximum contributions from Distributed Resources can be realized, the Board should consider establishing required trainings to ensure that Distributed Resource owners fully understand the programs in which they have agreed to participate.

B. Project Maturity Requirements

1. Grid Supply Projects

The Straw requires each Grid Supply project to meet the following criteria at the time the applicant responds to a competitive solicitation: (1) have an executed system impact study; (2) have site control, either through lease or ownership; (3) have obtained all major permits or have an execution plan for all major permits; (4) have a guaranteed commercial operations date ("COD") prior to December 31, 2030, and after the effective date of the NJ SIP; (5) be planned to be interconnected with the PJM Transmission Network and situated within a transmission zone in New Jersey, or be planned to be interconnected with the distribution system of a New Jersey EDC in a front-of-the-meter configuration; (6) be not enrolled in the Successor Solar Incentive Program; and (7) meet all other economic and non-economic criteria the Board may set by order.[36]

The requirement that a Grid Supply project have received an executed system impact study should be clarified. The meaning of the term "executed" is unclear, and the Company proposes that it would be preferable to explicitly require a "completed system impact study performed by an EDC or transmission service provider."

JCP&L further requests that, to avoid confusion and a potential FERC jurisdictional issue, Board Staff consider rewording the Straw's project maturity requirement (and corresponding rule) that a Grid Supply project "be planned to be interconnected with the PJM Transmission Network and situated within a transmission zone in New Jersey, or be planned to be interconnected with the distribution system of a New Jersey EDC in a front-of-the-meter configuration." There should not be an "or." Any Grid Supply project must be interconnected with the PJM Transmission Network under FERC rules to be eligible for incentives. Elsewhere, in listing "Requirements," the Straw more appropriately states: "The energy storage system must be comprised of new equipment, be a Planned Resource if it is a Grid Supply 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." This language should also be used when listing project maturity requirements and in the rules.

2. Distributed Resource Projects

The Straw requires each Distributed Resource project to meet the following criteria at the time the system owner responds to a competitive solicitation: (1) the system owner shall have

[36] Id. at 16.

submitted a level 1, 2, or 3 interconnection agreement application to the EDC and received notice confirming that said application was complete; (2) any generation resource the project is paired with produces class I renewable energy; (3) the system owner has full site control, either through lease or ownership; (4) the system owner has obtained all major permits or has an execution plan for all major permits; (5) the project has a guaranteed COD prior to December 31, 2030, and after the effective date of the NJ SIP; (6) the project is owned, leased, or operated by a residential or non-residential customer of an EDC; (7) the project meets all other economic and non-economic criteria the Board may set by order; and (8) the project meets all criteria set by the EDC establishing the performance incentive program.[37]

The proposed requirement that the system owner have applied to an EDC for an interconnection agreement should be more rigorous. Specifically, the Board should require not only that the system owner have applied for and received confirmation of a complete application, but also that the system owner have received approval for the interconnection agreement. Simply having applied and received confirmation of a complete application does not mean that a Distributed Resource project is viable. The Straw should also provide additional clarification that any energy storage system seeking to participate in the NJ SIP must secure a new interconnection agreement with the EDC, even if the proposed system is to be collocated with a DER that has an existing interconnection agreement with the EDC. This includes existing energy storage equipment that was approved under current rules governing net metering of DERs solely for back-up purposes and that is not permitted to operate in parallel with the grid but may have the capability to do so. This is critical to ensure the EDCs have the visibility to be able to maintain the reliability and security of the distribution system.

Relatedly, because energy storage is not addressed in the Board's current rules governing net metering of DERs ("Net Metering Rules"), N.J.A.C. 14:8-4.1 to -4.11, it would be appropriate to either revise those Rules to do so or establish a separate energy storage review process to suggest changes related to this Straw.[38] Indeed, there are several gaps in the current Net Metering Rules relevant to the NJ SIP proposal, which are also not fully addressed in the pending modifications to those Rules. For example, it is unclear whether, when an energy storage device is collocated with a photovoltaic system, the charging energy needs to come only from the photovoltaic system to ultimately generate net metering credit. Likewise, if charging such an energy storage device from the grid is permissible, will the customer be permitted to participate in net metering? In addition, there is the issue of what energy storage power system control capabilities should be required and what standards should apply when collocating a photovoltaic system and an energy storage device? There are a number of power control system certification efforts underway in the industry, but none have matured to the level needed to assure reliability and safety at this time. JCP&L thus recommends that workshops be held with interested stakeholders to develop additional changes to the Net Metering Rules regarding the standards that apply to Distributed Resource systems using power control systems, prior to the implementation of the NJ SIP.

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[37] Id. at 16-17.

[38] The Board is currently considering amending the Net Metering Rules in In the Matter of Modernizing New Jersey's Interconnection Rules, Processes, and Metrics, BPU Docket No. QO21010085.

C. Bid Participation Fees and Pre-Development Securities

The Straw proposes to implement a refundable $1,000 per MW bid participation fee and to further require, for Grid Supply projects awarded a fixed incentive, that the system owner provide a pre-development security of up to $100,000 per MW upon application approval.[39] The Board would deduct amounts from the pre-development security as delay damages if the project were to miss its planned COD.[40]

In response, JCP&L proposes that the bid participation fee be non-refundable, as previously proposed in the earlier Straw Proposal. This would help ensure the seriousness of bidders. JCP&L further supports the pre-development security requirement, as noted in response to Staff's Question No. 4.

D. Technical Requirements

The Straw proposes that to be eligible to apply for incentives, both Grid Supply and Distributed Resource projects must meet the following criteria: (1) the energy storage system must be comprised of new equipment, be a planned resource if it is a Grid Supply 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; (2) 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; (3) meet appropriate financial security and project maturity requirements; (4) 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; and (5) comply with all manufacturers' installation requirements, applicable laws, regulations, codes, licensing, and permit requirements.[41]

JCP&L generally supports the technical requirements listed in the Straw. Further details about each requirement, however, will be necessary prior to launch. Accordingly, the Company respectfully requests that workshops be held to discuss and flesh out each technical requirement.

E. Cost Recovery

The Straw indicates that "ratepayers will support investment in storage resources," suggesting that the recovery of EDC costs will be allowed.[42] The Straw does not, however, specify what form such cost recovery will take.

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[39] Straw at 17-18.
[40] Id. at 18.
[41] Ibid.
[42] Id. at 8.

JCP&L asserts that greater certainty of timely cost recovery is needed. The EDCs should be allowed full and timely recovery of all costs incurred to support the NJ SIP, preferably by a rider mechanism, including any necessary capital investment, administrative costs, and costs of performance incentives paid and administered by the EDCs.

III. COMMENTS IN RESPONSE TO STAFF'S SPECIFIC QUESTIONS

A. Grid Supply

1. Should a performance incentive based on net avoided emissions be proposed only if PJM or another entity produces a day-ahead, marginal emissions signal?

Under the Straw, only fixed upfront incentives would be available to Grid Supply energy storage systems at the time of launch.[43] No performance-based incentives for net avoided emissions would be available at that time, given the current lack of data providing a sufficiently accurate, day-ahead, marginal emissions signal.[44] The Straw proposes that if such data were to become available, either through PJM or another party, the Board may then make a performance-based incentive for net avoided emissions available to Grid Supply energy storage systems.[45]

JCP&L agrees that a performance-based incentive for net avoided emissions should be made available to Grid Supply energy storage systems only if PJM or a governmental entity provides a sufficiently accurate, day-ahead, marginal emissions signal. Without such a signal, each EDC's ability to align its storage dispatch system with GHG reduction goals would be compromised. If such a signal were to become available, the EDCs should receive an opportunity to provide further commentary.

2. In the absence of a day-ahead emissions signal, should the SIP institute another form of performance incentive for Grid Supply projects?

Because it is unclear what form an alternative performance incentive for Grid Supply projects would take, JCP&L declines to comment on this issue. That said, naturally, a Grid Supply resource that fails to respond to a call should not receive any performance incentive. But the loss of a performance incentive alone will not be enough to support EDC program efforts, especially if these programs will ultimately be used by the EDCs to meet reliability objectives or other program performance standards established by the Board. Consideration should thus be given to developing performance matrix criteria for Grid Supply projects that require them to achieve a minimum level of performance when called upon by the EDCs or risk receiving penalties or the loss of the contract

[43] Id. at 13.
[44] Ibid.
[45] Ibid.

with the EDC. JCP&L respectfully asks that Staff convene workshops to discuss non-responsiveness and penalties.

3. What other changes or alternatives would you propose to the GHG Performance Incentive?

JCP&L declines, for now, to propose any changes or alternatives to the GHG Performance Incentive. The Company does, however, encourage Staff to address performance incentives and potential tradeoffs in a series of workshops.

4. How can the Board mitigate the risk of Grid Supply projects not operating/performing after receiving upfront incentives?

The Straw proposes that, in implementing the Grid Supply Segment of the NJ SIP, the Board fund and award upfront incentives to Grid Supply projects based on a competitive solicitation process.[46] As part of that process, each applicant would need to not only demonstrate that its Grid Supply project meets certain project maturity requirements—including, without limitation, economic criteria that the Board may set by order—but also pay a refundable bid participation fee to the Board.[47] The Board may then require any successful applicant awarded an upfront incentive to provide a pre-development security of up to $100,000 per MW.[48] The pre-development security would be used to impose penalties for delays on project development milestones.[49]

Initially, requiring successful applicants to submit a pre-development security would be appropriate, as such a requirement would not only corroborate the viability of the Grid Supply project, but also be consistent with the general practice in the wholesale market. Further, as previously noted, consideration should be given to developing performance matrix criteria for Grid Supply projects that require them to achieve a minimum level of performance when called upon by the EDCs or risk receiving penalties or the loss of the contract with the EDC. JCP&L again respectfully asks that Staff convene workshops to discuss non-responsiveness and penalties

a. Are the reporting requirements proposed herein sufficient?

JCP&L takes no position on the sufficiency of the reporting requirements proposed in the Straw for Grid Supply projects.

[46] Id. at 6, 10.
[47] Id. at 16-18.
[48] Id. at 18.
[49] Ibid.

b. Should there be a clawback clause to recover fixed incentive payments from energy storage systems that cease operating shortly after coming online?

JCP&L supports a claw-back clause to ensure project accountability and preserve funding. Not only should the claw-back clause apply in situations where a Grid Supply project ceases operating shortly after coming online, but also where a Grid Supply project more broadly fails to meet operational targets during the expected life of the project. Relatedly, as mentioned above, consideration should be given to developing performance matrix criteria for Grid Supply projects that require them to achieve a minimum level of performance when called upon by the EDCs.

c. What should be the metric of success for a specific project be (e.g., discharging power during peak demand periods) for Grid Supply energy storage systems? In other words, what metrics should the Board consider when evaluating operation?

JCP&L proposes that the Board consider the following metrics when evaluating the success of each Grid Supply energy storage system:

- **Operational availability**, *i.e.*, the percentage of time the system is available to dispatch power during both charge and discharge scenarios;

- **Peak discharge performance**, *i.e.*, the system's contribution to grid stability during periods of high demand; and

- **Outage performance**, *i.e.*, the percentage of time the system is available to dispatch power during significant outages affecting large numbers of an EDC's customers.

The Company suggests that workshops be held to discuss charge incentives in conjunction with discharge incentives.

5. Should Grid Supply energy storage projects that replace or demonstrably reduce the run-time of fossil-based peaker plants in overburdened communities be evaluated solely on price or receive additional weight or a preference in competitive solicitations? If additional weight or preference is warranted, please specify how.

JCP&L declines to comment on this issue.

B. <u>Distributed</u>

6. The distributed incentive level breakdown provides varying incentive levels for different sized energy storage systems to account for cost differences. Are the proposed incentive levels appropriate?

JCP&L declines to comment on whether the proposed incentive levels are appropriate.

7. Are the incentive adders for OBCs too high, too low, or should the proposed OBC incentive otherwise be modified?

JCP&L declines to comment on whether the proposed incentive adders for OBCs are too high, too low, or should otherwise be modified.

That said, while JCP&L supports the Straw's goal of incenting the placement of Distributed Resources in OBCs, the Board should be mindful of the impact that incentive adders may have on customer bills. Relatedly, JCP&L agrees with the Straw's recommendation of not providing additional incentives to place Grid Supply resources in OBCs.

8. How far along are the EDCs in implementing the technology needed to issue calls for the performance incentive portion of the SIP? Will this affect the design of the performance incentive?

JCP&L is not far along in implementing the technology needed to issue calls for the performance incentive portion of the NJ SIP proposed in the Straw. The Company does not currently maintain the staffing, near real-time system modeling, or IT processes that would be required for the type of automated call system contemplated. The Company will need to significantly invest in, design, and build out a new system that, like PJM, is capable of modeling and stacking Distributed Resources based on location and the services that they are able to provide. The Company will then need to develop a process that can automatically call on Distributed Resources, and then, when one resource does not respond to a call, automatically determine the next resource that may be able to provide that service until an appropriate and responsive resource is dispatched.

Relatedly, JCP&L does not have experience with calling generation resources onto the distribution system, which would require the creation and implementation of additional training for engineers and operations staff.

Without the requisite technology, the ability of each EDC to award performance-based incentives to Distributed Resources would be highly constrained. This concern should be factored into the design of the performance incentive.

It is imperative that the Board convene workshops to discuss expectations for, and compliance with, its automated dispatch recommendation. JCP&L further respectfully asks that

the Board institute an additional round of comments following any workshops prior to requiring automated dispatch. These workshops should also consider compliance and alignment with FERC Order No. 2222.

Finally, while the Straw has focused on program design goals, there has been little mention of the additive costs and burdens on the EDCs. The Board should make clear that the EDCs shall receive full and timely recovery of costs, through a rider mechanism, to develop, implement, and administer their obligations under the NJ SIP.

9. Should the Board require EDCs to implement a designated distributed energy resources management system (DERMS) to effectively manage and dispatch resources across their systems?

JCP&L agrees that deployment of a DERMS is necessary to effectively implement many provisions of this Straw. Given the breadth of the NJ SIP, a DERMS will be necessary to effectively manage the large volume of real-time data, including input signals, and to effectively dispatch available NJ SIP resources. The goal of 2,000 MW dispersed statewide, accounting for the territory served by JCP&L, would be far beyond the capacity of JCP&L's existing staff and operational systems currently used to manage in real time. The Board should thus support each EDC's implementation and maintenance of a DERMS.

To that end, the EDCs should be allowed full and timely recovery of all costs to design and implement a DERMS, preferably by a rider mechanism, including all capital investment costs, administrative costs, and all ongoing cost of managing and maintaining a DERMS.

C. Other

10. Do any aspects of this program need to be modified to address NJ Legislature Bills S225/A4893, should the bill be signed into law?

JCP&L declines to respond to this question.

* * *

JCP&L again thanks the Board for the opportunity to provide these comments. If you have any questions, please do not hesitate to contact me.

Respectfully submitted,

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