



December 18, 2024

Via publicaccess.bpu.state.nj.us

Sherri L. Golden
Secretary of the Board
44 South Clinton Ave, 1st Floor
PO Box 350
Trenton, NJ 08625-0350
Re: Docket No. QO22080540

Dear Secretary Golden,

Donnelly Construction, through its Donnelly Energy division (“**Donnelly**”) would like to submit the comments in this letter in response to the straw proposal and request for comments released on Nov 7, 2024 in the matter of the New Jersey Energy Storage Incentive Program 2024 Straw Proposal, Docket No. QO22080540.

Founded in 1977, Donnelly Construction is a leading general contractor, construction manager and property developer headquartered in Wayne, New Jersey. Our company has enjoyed steady growth for over 40 years thanks to our well-earned reputation for excellence, quality, integrity and a firm commitment to always exceeding our clients’ expectations. We currently serve a wide range of sectors, including country clubs, schools, corporate offices, retail stores, medical facilities, restaurants, hotels, and more.

Our three divisions provide a full range of construction services to our clients. Donnelly Construction is a full service General Contractor, Donnelly Energy performs full-scale energy efficiency audits and installations, and Donnelly Facilities Services provides direct manpower and expertise for all types of building maintenance.

At Donnelly Energy, we’re elevating energy efficiency in New Jersey. Our mission is to empower businesses and local governments with cost-effective, sustainable solutions across lighting, HVAC, EV charging, and solar systems. With our exceptional team, we drive the transition to green energy, focusing on reducing both energy bills and carbon footprint.

Donnelly Energy is an approved Direct Install Trade Ally with every New Jersey public utility.

Donnelly Energy was established in 2008 in response to rising energy efficiency concerns from Donnelly Construction’s commercial customer base. As an early adopter and advocate for the Direct Install program in New Jersey, we have been instrumental in helping thousands of small to mid-sized businesses invest in energy efficiency for their facilities. At Donnelly, the customer experience is always top of mind, and we are committed to doing right by our clients, local utilities, and the environment.



From lighting and HVAC to solar energy and EV charging, Donnelly Energy has become the trusted one-stop shop for affordable energy solutions in New Jersey.

Donnelly Energy has helped customers save over \$60 million through state and utility incentives with over 2900 energy efficiency projects installed throughout the state of NJ to date.

We note that BPU Staff is requesting comments on all elements of the Straw, including program design, administrative processes, financial proposals, as well as any other comments on items not specifically addressed in this Straw.

From Donnelly's perspective of working directly with NJ businesses across energy efficiency, EV charging, and solar installations, we believe robust adoption of green technologies from a multitude of commercial businesses is critical to meeting state clean energy objectives.

Our comments are focused on ensuring the New Jersey Energy Storage Incentive Program optimizes adoption of battery storage by Donnelly's existing commercial customer base that is already investing in clean energy and new commercial customers who are best positioned to take advantage of battery storage incentives in support of NJRPII objectives.

The battery storage market is ripe with innovative solutions that can benefit NJ businesses while simultaneously achieving NJSIP goals. Donnelly prides itself on staying abreast of the latest innovations and our comments aim to ensure the BPU and its staff are aware of the most promising battery storage opportunities we have evaluated so program parameters are designed to accommodate these market innovations.

More specifically, Donnelly is interested in leveraging an innovative solar parking lot canopy that integrates modular, plug & play battery storage cartridges into the ceiling of the canopies to bring a unique battery storage opportunity to New Jersey. This design introduces new capabilities into the marketplace that the Board may not have been aware of when establishing the SIP.

For example, in a competitive bid scenario, once a canopy is constructed and interconnected to a local grid circuit, the ability for this canopy to add additional battery storage for future blocks is as simple as adding additional cartridges to the ceiling of the canopy. Since the infrastructure cost of the canopy build is already absorbed, the cost to add additional storage is minimal and the speed at which it can be added, i.e., in days, is unprecedented. Accommodating these capabilities may result in BPU Staff potentially modifying key components of the Straw.

During the Virtual Stakeholder Meeting several comments were made, particularly those applicable to the Grid Supply section of the Straw, that indicated PJM interconnection waits may hinder the ability of the SIP to meet its goals. Many suggestions were made to extend the 550 day limit to have a facility completed. Although this may be reasonable for projects that require more time, other projects such as the canopy installations we would like to deploy do not require 550 days. We suggest BPU Staff consider a separate category for grid supply projects that require more than 550 days as the allocation of too much storage toward this category is likely to increase the risk of the Board not hitting program objectives.



To further offset the risk of one category preventing the achievement of objectives, particularly when new infrastructure solutions such as the identified canopies can meet the long term objectives of the Straw, we believe it is important that the SIP maintain flexibility to reallocate awards across categories in future years as BPU Staff learn what is working and what is not as the program unfolds.

Also important is the ability of a single commercial installation to be able to allocate storage assets across various categories. For instance, with the solar parking lot canopies we have identified as an ideal solution for this program, a solar canopy in the parking lot of a commercial facility can service both BTM and FTM applications. BTM applications use dedicated electrochemical battery storage cartridges to store onsite solar generation, offset high capacity EV charging demand charges, and leverage more economical dedicated thermal battery cartridges to offset HVAC and refrigeration loads. The amount of storage allocated to FTM and BTM applications can be precisely calculated.

This same canopy structure can also support dedicated battery storage cartridges for all available FTM grid services revenue opportunities. Although this may already be contemplated, we would like to affirm our support for the SIP to recognize the flexibility of market offerings by ensuring one installation can win allocations across both grid supply and distribution categories.

We recognize the objectives of the SIP are varied and include optimizing solutions for disadvantaged communities. The Straw accurately acknowledges the criticality of local benefit but without the exposure to new technologies such as the canopy based solution we would like to bring to customers throughout NJ, the incentives for optimizing the impact on disadvantaged communities may not be ideal.

For example, with the canopy solution, every parking lot becomes a potential new revenue generator for that business. Retailers could elect to utilize some of that new revenue to subsidize prices for the goods they sell. In disadvantaged communities this is an opportunity for BPU Staff to leverage storage allocations to not only ensure equity for access to clean energy but to direct allocations in disadvantaged communities to program participants who commit to leveraging a portion of new revenues from battery storage projects to community benefit.

A specific reference to the potential of this opportunity lies in a strategic partnership the canopy vendor has with a leading convenience store company to potentially replace all gas station canopies with new solar canopies that can host battery storage cartridges. This battery storage revenue can be utilized to subsidize groceries at the convenience store, which can be a leading source of grocery supply in disadvantaged communities.

To provide perspective on the scope of this opportunity for all communities, a standard 6-pump gas station canopy can store upwards of 3 MWh of battery storage cartridges directly on a grid circuit. This amount of battery capacity combined with the ubiquitous placement of parking lots significantly increases the hosting capacity of the grid to deploy solar and EV charging in all communities, to include disadvantaged communities. The strategic partner for the canopy solution we would like to bring to NJ businesses currently has over 300 locations distributed throughout New Jersey.

Extending this concept into the parking lots of low income housing to leverage storage allocations to not only increase energy resiliency for overly disadvantaged communities, but to use these new revenues to subsidize rents indicates the potential power of an allocation mechanism that more broadly considers community benefit.

In addition to our more general comments thus far, we offer the following responses to the specific questions called out in the Straw.

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?

MES is a transitional metric that may introduce unwanted complexity for boots on the ground commercial entities that are looking to execute projects. Once the grid transition is complete, MES is obviously moot.

A powerful way to expedite the energy transition is to drive ubiquitous support from NJ businesses to embrace battery storage as an opportunity for their businesses and their customers. Simplicity will facilitate that objective and MES is not simple.

To achieve a complete energy transition, a statewide robust ecosystem needs to develop. Everybody participating in the SIP is a contributor to developing this ecosystem and therefore is contributing to emissions reductions. How the ecosystem is then leveraged by the Board and the EDC's to optimize the reduction of emissions is up to the regulators.

We believe incentives should be focused on creating a mature ecosystem that ultimately has access to reliable market prices for capacity and energy services outside of one off programs.

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

The ultimate incentive for driving grid supply is to move as fast as possible away from BPU programs and towards a mature market with reliable pricing mechanisms for capacity and energy services. Budget allocated to expediting this transition is arguably the best incentive for both market participants and rate payers. The performance incentive program we believe is most consistent with driving towards mature energy markets is one that pays out for executing on the delivery of contracted battery storage services.

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

Elimination of GHGs is the end result of the clean energy transition. The collective effort of all programs and all participants are aimed at this objective. Each contribution is of equal importance to building an inclusive ecosystem. Allocating performance incentives to some projects over others to optimize near term GHG benefits comes at the cost of simplicity, clarity of mission, inclusion, and leadership effectiveness.

The end result of 100% clean energy is the mission and getting there is best achieved through leadership communicating a clear mission that values every contribution. Picking specific GHG lowering initiatives that value the contribution of one participant over another is likely counterproductive.

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

With performance incentives and penalties.

a. Are the reporting requirements proposed herein sufficient?

Actual performance is simpler, more important, and more effective than any reporting requirements. For operating projects it is either achieved or it is not. Until operations are initiated, reporting is all that exists.

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

Yes. Those resources need to be recovered and redeployed.

c. What should 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?

Our assumption is the ultimate goal of the BPU is to develop a reliable market based system where storage assets provide contracted capacity services and ancillary services to the EDCs, in addition to participating in day-ahead and same-day energy markets as those mature. In such a market system, projects will be rewarded as they participate in the market and penalized if they fail to meet their obligations. This process is well established in California. By introducing these metrics prior to a robust market being developed, the Board will likely facilitate a smoother transition from individual programs to a mature market system.

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.

The overarching mission of the Board is completing the energy transition to 100% clean energy. The efforts of all participants are additive to achieving that mission because they all contribute to building the comprehensive clean energy ecosystem required to ultimately eliminate fossil fuels.

At maturity, adequate pricing mechanisms for capacity and energy markets need to exist. To provide the smoothest transition to a market solution based on price, the solicitation period should also use price to select projects.

To evaluate specific benefits to overburdened communities while allocating on price, the benefit in question should be quantified by converting the benefit to a price.

For example, if a portion of the battery storage revenues from a canopy in a low income housing parking lot is allocated to rent subsidies, that benefit can be quantified and compared to other overburdened community benefits valued on price.

If the benefit is not able to be accurately quantified, it will be too subjective and likely undermine trust in the process.

Distributed

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?

The incentives should be a sliding scale or the same for each project. Any time artificial tiers are introduced, significant inefficiencies and gaming can follow. For example, one more kW will always be added to get to the next tier.

Although a simple sliding scale solves this problem, the real problem with varying incentive levels based on costs relates to trying to capture the true costs of a project. Costs will be impacted by time to deployment and innovations in the marketplace. Both are difficult to predict.

The canopy example used throughout this response provides a good example. Although our comments thus far have focused on battery storage cartridges in the canopy ceiling, the same canopy supports solar generation, EV battery charging cartridges, thermal storage cartridges, high performance compute cartridges (GPUs for AI data center computations), as well as other revenue generating opportunities.

The actual cost of the canopy attributed to battery storage services is ultimately determined by market forces that dictate the optimal mix of cartridges in the canopy ceiling to optimize revenue across the canopy. Adding to the difficulty of capturing costs within categories based on the size of the deployed storage is the fact that the cartridges are modular. They can be easily added or removed from the canopy depending on market need. In the real world this means one canopy installation can bounce back and forth between different categories.

The best way to equitably account for this type of flexibility across the entire program may be to have one incentive level regardless of size, especially for BTM applications where the size variations are not that significant and the suggested economies of scale feel outsized relative to the size range.

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

For vendors who can put a project anywhere, i.e., the canopy solution, the added OBC incentive raises the question as to why a project would be placed anywhere other than an overburdened



community. Whether the incentive is too high or too low depends on the objective of the incentive and the capability of the projects that win allocations.

One modification relates to previous comments to #5 above where it was suggested that the benefit to overburdened communities be quantified and that allocations within the OBC incentive be awarded based on the magnitude of the community benefit the incentive creates.

- 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?**

No answer.

- 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?**

Comments from the Virtual Stakeholder Meeting correctly point out that managing calls and dispatching resources for C&I installations is working effectively in the market outside of NJ today. As such, EDCs do not need to build custom DERMS.

Sincerely,

Rod Donnelly

CEO

