



Michael Goldman
Director, Business Development and Regulatory Affairs
Generac Power Systems, Inc.
S45W29290 Highway 59
Waukesha, WI 53189

December 12, 2022

Carmen Diaz
Acting Secretary
New Jersey Board of Public Utilities
44 South Clinton Ave., 1st Floor
PO Box 350
Trenton, NJ 08625-0350

Re: Docket No. QO22080540, I/M/O The New Jersey Energy Storage Incentive Program, Comments of Generac Power Systems, Inc. on Straw Proposal

Acting Secretary Diaz:

Generac Power Systems, Inc. (“Generac”) hereby submits these public comments on the New Jersey Storage Incentive Program (“SIP”) Straw Proposal (“Straw”) pursuant to the Board of Public Utilities (“Board”) Notice issued September 29, 2022. Generac is a leading energy technology company that provides advanced power grid software solutions, backup and prime power systems for home and industrial applications, solar + battery storage solutions, virtual power plant platforms and engine- and battery-powered tools and equipment. We have extensive experience developing and participating in energy storage programs in multiple jurisdictions across the country, including Arizona, Connecticut, Massachusetts, New York, and Texas with our PWRCell solar + battery storage and other Generac systems.

The Straw is an important starting point for achieving the energy storage deployment and utilization goals in New Jersey, as set forth in the Clean Energy Act of 2018 and the Energy Master Plan. The following observations and recommendations draw on our experience with similar programs in other jurisdictions to incorporate best practices into the SIP, including:

- Clarify that energy storage aggregators are eligible to participate directly;
- Make the annual fixed incentive an upfront lump sum payment;
- Increase the upfront payment in initial program years to compensate for assumed pay-for-performance value stacking opportunities not yet available;

- Allocate equal capacity targets for Grid Supply and Distributed storage segments;
- Allocate equal capacity targets for residential and C&I customer classes for the Distributed storage segment;
- Exempt Distributed storage systems from uptime performance metrics;
- Allocate a separate capacity target for overburdened communities with an upfront incentive adder;
- Allow for assignment of pay-for-performance incentives to entity of choosing at time of program enrollment (e.g., customer, system owner, aggregator);
- Provide for use of inverter or storage device data for performance measurement and reporting; and
- Adopt additional pay-for-performance program features from the ConnectedSolutions program framework and design.

These comments focus on the Distributed storage market segment and are generally organized to follow the topic headings and organization of the Straw.

I. Discussion

A. **Business Model Considerations**

1. Eligibility Should be Limited to Customer and Third-Party-Owned Storage Devices.

Generac supports the Straw’s recommendation that the “Board adopt a storage business model that encourages private ownership and operation of energy storage devices, consistent with New Jersey’s restructured competitive market structure.” (SIP at 11). This recommendation aligns with the objectives of the Clean Energy Act of 2018, which seeks to advance customer choice, promote competition, leverage the expertise of private market participants to reduce costs for all ratepayers, and foster innovation in meeting New Jersey’s clean energy goals.

2. Energy Storage Aggregators Should be Eligible to Participate Directly.

In addition to limiting participation in the SIP to non-utility owned storage resources and non-utility entities, the Board should clarify that energy storage aggregators are eligible to directly participate in the program and receive direct payment of the fixed and pay-for-performance (“PFP”) incentives. Energy storage programs in other states successfully utilize this model and it is well suited to advance New Jersey’s energy storage goals through the SIP.

An aggregator is a non-utility energy storage developer, original equipment manufacturer (“OEM”) or other third-party that manages the enrollment, operation, customer value proposition and other aspects of the program for a portfolio of participating customer and third-party owned storage devices. The ability to aggregate customer batteries leverages the collective capacity of the aggregators fleet of batteries as a “virtual power plant”

capable of responding in a coordinated fashion to a particular grid need. This enables multiple residential and small commercial batteries to provide similar capacity and service value as a single large battery. Moreover, the aggregator model allows the aggregator to diversify the performance risk across the aggregator's fleet of participating storage devices fosters business model innovation and provides a simple participation pathway for customers. This can provide greater financial certainty to customers and encourages program participation by reducing the administrative burden on customers. The aggregator model also leverages core competencies of third-party market participants, and reduces administrative burdens for the utility. Instead of interfacing with thousands of individual customer batteries, the utility can interface with a small number of aggregators, who then manage the batteries in their fleet, along with the communication, data, customer value proposition, and other program participation elements for the customer.

3. *The SIP Should Include Additional Guidance for EDCs' Development of Pay-For-Performance Incentives.*

Generac agrees with the Straw's observation that "EDCs will play a key role in building the grid infrastructure necessary to enable the effective dispatch of energy storage devices." (SIP at 11). As the Straw correctly notes, "this role is particularly important for the Distributed portion of the NJ SIP, where the EDC will interconnect the resources and will be directed to establish pay-for-performance incentives that address the 'value' of storage operations that are tailored to the needs of the particular utility." (SIP at 11). Given the central role of EDCs in implementing the SIP, we encourage the Board to provide additional guidance on key roles and expectations of the EDCs – including the build out of necessary grid infrastructure, interconnecting participating resources, and establishing PFP incentives.

With respect to necessary grid infrastructure, which may include communication and data collection platforms, experience with storage programs in other states supports a "start simple" approach that becomes more sophisticated over time. The "start simple" approach can be implemented initially to provide system-wide grid services (e.g., peak reduction) with location based and other services added over time as the EDCs, customers, and industry gain familiarity with operations and needs of each EDC's system. This allows the EDCs, to gain familiarity with customer-sited storage resources participating as grid assets, facilitates broader customer participation in the near term, and creates the necessary program and infrastructure foundations needed to incorporate additional services and more sophisticated approaches for storage dispatch and integration into the EDCs' grid planning and operations over time.

While we anticipate additional workshops and stakeholder involvement in the identification and valuation of the PFP services and incentives, we encourage the Board to provide additional guidance for the EDCs' development of these elements of the SIP. This guidance should include the timeline for filing proposed PFP services and valuation, along with guidance on the inputs for determining the PFP values.

At minimum, PFP values should incorporate cumulative avoided costs resulting from the

storage devices' provision of the specified service(s) and the demand reduction induced price effect. As a starting point, the Board may consider utilizing avoided cost assumptions from the EDCs' demand side management programs.¹ To enable a near-term program launch, we urge the Board to consider a phased approach for PFP service identification and valuation, starting with system-wide services such as peak demand reduction, as noted above, with additional services layered on over time. Additional recommendations for the PFP portion of the SIP are provided in the sections below. In sum, we urge the Board to provide further direction in line with these recommendations to increase the likelihood of timely and successful implementation of the SIP.

4. *The SIP Should Increase the Upfront Incentive in the Early Program Years to Compensate for Assumed Value Stacking Opportunities Not Yet Available.*

As the Straw correctly identifies, the ability to unlock multiple use capabilities and associated value streams for energy storage resources improves the customer value proposition to support system financing and “reduces the need for incentives to move the market at a desired pace.” (SIP at 11). The Straw’s upfront and PFP incentive structures are predicated on the assumption that energy storage owners will engage in “value stacking.” (SIP at 11).

However, the ability to unlock the “value stack” as contemplated by the Straw is directly tied to market frameworks, price signals and program pathways for storage devices to participate in various programs or other opportunities that enable them to receive revenue or other “value” from the “stack.” That value may be specific to the participating customer through, for instance, rate design options; or as a revenue stream to the system owner as compensation for the ratepayer value delivered through, for instance, the provision of grid services.

The SIP design should account for the fact that the ability to unlock multiple revenue streams in the value stack will likely be limited in the initial years of the SIP as the programs and other pathways necessary to unlock those additional values are developed and implemented. The Straw’s assumption that value stacking will reduce the need for incentives to move the market at the desired pace, should be examined closely to ensure the incentive levels appropriately reflect the value stack available – particularly in the early years of the program.

As the Straw notes, “New Jersey does not currently have a means of pricing the benefits that batteries can provide at the distribution level” (SIP at 22) and we encourage Staff to act expeditiously on its commitment “to adopting changes in regulatory policy that recognize the full wholesale and distribution value of batteries” to value the benefits of energy storage. (SIP at 23). An increase in the upfront incentive could help bridge the gap

¹ See e.g., Energy Efficiency Cost-Benefit Analysis Avoided Cost Assumptions, Technical Memo, May 1, 2019 Update *available at* <https://www.njcleanenergy.com/files/file/BPU/Avoided%20Cost%20Memo.pdf>.

until those regulatory policy changes are implemented to recognize and unlock the value stack for the PFP part of the program.

Accordingly, Generac encourages the Board to consider a higher fixed incentive in the initial years of the program to bridge the gap between available PFP revenue streams and the upfront cost of system financing. As the EDCs make progress in (a) identifying additional distribution grid services; (b) appropriately valuing those services; and (c) incorporating price signals and market participation pathways into the program offerings, storage devices will increasingly be able to unlock additional revenue opportunities, thus reducing the need for upfront incentives as the SIP matures.

We also urge the Board to clarify that customers are permitted to participate in both the Competitive Solar Incentive (“CSI”) Program and the SIP, as long as the participating resource is not getting paid twice for the same service. The ability to receive distinct incentives and revenue streams from participating in and delivering unique and distinct services through separate programs is a fundamental principle to successfully unlocking the value stack. This should not be confused with the same resource participating in separate programs, but receiving compensation for providing the same services and value to both programs.

Solar paired storage has multiple use capabilities and value that the CSI program and the SIP are each attempting to enable and unlock through different program models. The Board can ensure that these two programs complement each other to encourage business model innovation to maximize the benefits that these resources can provide by defining participation rules to clarify that when a customer is capable of providing unique services and value under separate programs, there is no prohibition against participating in multiple programs.

Thus, for the CSI Program and the SIP, we recommend the Board clarify that a customer is eligible to receive the fixed incentive under the SIP and the performance payments under both the SIP and CSI as long as the resource is providing distinct services and value under both programs. This ensures the fixed incentive is maximized to encourage resource deployment, incentivizes business model innovation to unlock the value stack for providing multiple services, and protects ratepayers by ensuring that the resource is not compensated twice for the same service.²

B. Technical Considerations and Proposed Definition of Energy Storage

Generac supports the Straw’s proposed definition of “Energy Storage.” (SIP at 12).

² See e.g., MassSave, Program Materials for ConnectedSolutions for Small Scale Batteries (Aug. 31, 2021) (providing for ConnectedSolutions participants to co-participate in multiple other programs, including the Solar Massachusetts Renewable Target, Net-Metering, and ISO-NE Forward Capacity Market programs and receive the payments, incentive or other program benefits for co-participation in these programs) *available at* <https://www.masssave.com/-/media/Files/PDFs/Save/Residential/connectedsolution-batteries/MA-Resi-Battery-Program-Materials-August-2021.pdf> (hereinafter “ConnectedSolutions Program”).

C. Installed Storage Targets & Deployment Timeline

The Straw proposes a significantly higher installation target allocation for Grid Supply resources than for Distributed storage. (SIP at 14). Generac urges the Board to set equivalent targets for each segment, such that the target for program year (“PY”) 2023/2024 Grid Supply and Distributed storage is 20 MW each, for PY 2024/2025 the target is 30 MW each, for PY 2025/2026 the target is 45 MW each, and so forth. Equal distribution of the targets at this time is appropriate and aligns with the Straw’s stated goal to “show New Jersey’s long-term commitment to storage and to attract long-term commercial interest into New Jersey’s nascent storage industry.” (SIP at 14).

The Straw’s lopsided weighting of the target in favor of Grid Supply storage sends the wrong signal to the substantial Distributed storage segment of the industry. We also recommend that the Board provide equal but separate targets within the Distributed storage segment for residential and C&I projects. This will ensure a more equitable distribution of program funds and allocation of resources between these customer classes within the Distributed storage segment and ensure that a few very large C&I projects are not allocated the entire Distributed storage capacity block.

D. Incentive Structure

The Straw’s two-part structure includes the upfront incentive payment plus the PFP payment. Generac supports this general structure, but recommends refinements to support market uptake and simplify program administration.

1. *The Annual Incentive Payment Should be a Lump-Sum Upfront Payment.*

The Staff Proposal contemplates an annual incentive payment for the “fixed” incentive over a yet-to-be-determined number of years. We strongly urge the Board to instead adopt a one-time upfront lump sum payment structure for the fixed incentive. The purpose of the fixed incentive (i.e., the “non-PFP” revenue from the SIP) is to help bridge the gap between PFP revenues earned from the value stack and the upfront cost of financing the storage system. A one-time upfront lump-sum payment equivalent to the net present value the sum of the annual payments helps customers immediately buy down a portion of the cost of the battery and is thus more attractive from a financing standpoint than the same incentive paid out over a number of years.

We emphasize here our recommendation that the Board give close consideration to increasing the upfront fixed incentive to make up for what will likely be lower than anticipated earning opportunities from the PFP portion of the program in the early years. As additional services and value stacking opportunities become available, the early year “adder” to the upfront payment could be stepped down to reflect the additional PFP values as they become available.

2. *The Incentive Block Step-Down.*

The Straw’s fixed annual incentive structure incorporates a declining block structure with an initial incentive level set to cover approximately 30% of the total fully installed cost of the project. It is our understanding that the Straw intends that once the available capacity in a particular block is subscribed, the next block and corresponding incentive level are immediately opened, as opposed to a step down schedule based on an annual cycle. However, the SIP would benefit from clarification on this program element. This will ensure continuity in incentive availability and avoid “stop and start” paradigm where a block is fully subscribed part way through a year such that additional applications are put on hold until the next block-year.

3. *Distributed Storage Should Not be Subject to Uptime Performance Metrics.*

The Straw specifically seeks input on whether Distributed resources should be exempt from the proposed uptime performance metrics, or if systems under a certain size threshold should be exempt. (SIP at 21). We agree with Staff that performance requirements are complicated and insert significant financial uncertainty into the upfront incentive structure, particularly for smaller resources. Thus, we recommend that Distributed storage should not be subject to uptime metrics.

As a general principle, incentive design should minimize the amount of variability in the revenue a customer will receive from participating in the program. Variability increases customer confusion and program complexity, which makes the customer decision-making process more challenging. This is especially true for the “fixed” incentive if it is subject to change after the customer enrolls, depending on the customer’s uptime performance metric results.

Given the complexity of this structure for smaller systems, we recommend that at minimum, the SIP exempt residential and small commercial storage devices from the uptime availability requirement. As noted in the Straw, units that are unavailable will have their payments reduced through the PFP aspect of the program, thus providing a strong incentive for those devices to participate in the manner the uptime metrics intend to measure. (SIP at 26). At minimum, Staff should exempt residential and small commercial energy storage systems of 25 kW or less from this requirement. If a size limitation is adopted, we urge the Board to clarify that it applies to the cumulative storage capacity, and does not include any paired solar capacity in the calculation to determine exempt status.

4. *The SIP Should Allocate a Separate Target for Energy Storage Projects Located in Overburdened Communities.*

We support the Straw’s proposal to ensure an equitable share of Distributed storage resources are placed in overburdened communities. (SIP at 19). To achieve this, we recommend a separate capacity block with an additional upfront adder for projects located in these communities. We note that there was broad support for this approach based on oral comments provided during Workshop 3 and encourage the Board to adopt this

recommendation to advance these important equity goals.

5. *The Program Term Should Not Exceed 10-Years.*

The Straw proposes a 10-15 year program term over which the fixed incentive will be paid out on an annual basis. We urge the Board to adopt a program term of 10-years to determine the amount of the fixed incentive, and provide the fixed incentive as a lump-sum upfront payment, as discussed above. A lump-sum upfront payment coupled with a 10-year program term aligns the program participation window with typical battery storage warranties (10 years), ensures a sufficiently long-term commitment of the resource to provide ratepayer benefits, and improves financability.

6. *The Performance Based Incentive Portion of the SIP Should Adopt Best-Practices from Programs Implemented in Other States.*

Generac supports the Straw’s proposed performance-based incentive (“PBI”) – also referred to as the PFP – design “to encourage the operation of storage assets in a manner that maximizes environmental benefits and helps the electric grid during times of operational stress.” (SIP at 22). As Staff correctly notes, “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.*” (SIP at 22, emphasis added).

PFP programs in other jurisdictions offer best practices in program designs that can be incorporated in the SIP to efficiently deliver these benefits. ConnectedSolutions is a well-established program from which to model the PFP portion of the SIP. As the Straw correctly notes, “[the ConnectedSolutions] programs provide an easy-to-understand incentive to distributed storage resources by providing a \$/kWh payment for customers injecting power when called by the EDC during specific performance hours, usually summer afternoons.” (SIP at 25).

We urge the Board to adopt the Straw’s recommendation that EDC filings address certain minimum requirements, with the following additional specifications, which draw from the Massachusetts ConnectedSolutions program.

Call Hours

The Straw initially proposes that call hours focus on summer peak hours, which typically occur between 3pm – 7pm on weekdays, but notes that each EDC would have the flexibility to determine the season and preferred hours based on its specific needs. (SIP at 25).

Call hours must be clearly articulated in the program materials and should, at minimum specify:

- The maximum number of hours that can be called in a day

- The maximum number of events that can be called in a season
- The call window (e.g. 3 – 7pm)
- The minimum notice to be given before each event (e.g., 24 hours)
- The circumstances under which eligible call windows are suspended (e.g., 48 hours prior to a forecasted significant weather event).

\$/kWh Performance Payment Structure

We generally support the Straw’s proposal for each EDC to adopt a simple \$/kWh payment for storage resources on its system. To facilitate timely program launch and reduce program complexity, we urge the Board to require the EDCs to start with a system-wide service program and payment structure modeled on the ConnectedSolutions peak demand reduction service. As the EDCs gain experience identifying locational and other benefits, additional services and payment adders can be adopted, including geographically variable payments.

To provide financial certainty for program participants, we recommend the SIP include a “rate lock” feature whereby a customer enrolling in a particular program year locks in the PFP incentive level available that year for certain number of years. The ConnectedSolutions program provides a rate lock for 5 years, after which the customer may reenroll in the program under the then applicable rate. This model could be adapted for the PFP portion of the SIP, through, for instance, two successive 5-year rate locks. This would provide an important level of financial certainty for SIP participants, while at the same time allowing the EDCs to update the PFP levels on regular (e.g., annual) intervals for new entrants to the program.

With respect the Straw’s recommendation that “rate and tariff design should align with expected PJM rules related to Federal Energy Regulatory Commission (FERC) Order 2222 and include co-optimizing economic and GHG reduction considerations” (SIP at 25), any requirements related to wholesale market participation should be limited to storage resources that elect to participate in wholesale markets. Staff should clarify that the PFP program is intended to be a *retail* program but includes an option to participate in wholesale markets if the resource is capable of providing both retail and wholesale services and permitted by the applicable rules.

Finally, Generac observes that designing the Distributed storage element of the program as a retail program only will reduce program complexity and provide a simpler pathway to program launch. An EDC with a retail Distributed storage PFP program will be able to incorporate the enrolled capacity into its load forecasts for transmission capacity and other wholesale market planning needs, similar to how EDCs incorporate energy efficiency enrollments, but it is not necessary or desirable to *require* wholesale participation for Distributed storage resources. If the Board determines that greater ratepayer benefits can be derived if distribution-connected resources do not participate in wholesale markets, then the retail market participation values should be reflected through a higher upfront incentive level or greater PFP payments.

Performance Measurement and Calculation of PFP Payments

The Straw proposes that program participants will meet their obligations under the performance based payment portion of the SIP by responding to a call via one of two forms: (1) injecting energy into the distribution system or (2) by reducing the customer's consumption of power from the grid. (SIP at 26). We urge the Board to adopt this definition for how participants may meet their performance obligation.

With respect to the measurement and verification of device performance, we recommend the SIP clarify that participants have the option to measure and report device production and performance during call events via the customer's inverter or energy storage device. The use of inverter data for PFP systems is consistent with how production data is tracked and reported for multiple utility programs in other states and jurisdictions. As outlined in Exhibit A attached to these comments, ISO-NE, the U.S. Department of Treasury, and numerous other states and utilities currently authorize the use of inverter data in lieu of a production meter. This ensures that battery performance is measured at the device level to capture the dispatch of the participating device in response to the call, and ensures that ratepayer funds in the SIP contribute to the cost of deploying energy storage devices, rather than unnecessary and duplicative utility metering.

We urge the Board to clarify that performance data for the PFP element of the SIP will be measured at the device level, and that customers may utilize inverter or storage device production data for performance reporting purposes.

With respect to calculating the kWh performance upon which the PFP payment is based, the Straw proposes to utilize a methodology similar to that used in the ConnectedSolutions program whereby the average response in kWh (via injected energy and/or reduced grid consumption) over the event season is multiplied by the \$/kWh payment established for that event season. Generac supports the use of this method for the performance payment calculation.

Payments to Resource Owners

Generac understands the Straw's recommendation that PFP payments may be made directly to the resource owner (SIP at 26), as one option for the payment structure under the program. We urge the Board to further clarify that program payments – inclusive of both the upfront payment and PFP payment – may be made to the entity selected at the time of program enrollment, which could be the resource owner (i.e., customer of record if they own the system or a third-party owner of the system) or an aggregator, if the resource elects to assign payments to that entity. Allowing parties to assign the payments to the entity of their choosing allow participants the flexibility to direct payments as needed to facilitate contracting between the entities facilitating program participation (i.e., customer, developer, aggregator, etc.).

We further recommend the Board clarify that payments are to be cash payments from the utility to the selected entity, as opposed to a bill-credit or other compensation mechanism

specific to the customer of record. The direct cash payment is an important program design feature to allow the selected entity to manage the value proposition of program participation with their customers and other entities facilitating participation, and more broadly fosters business model innovation.

We also strongly urge the Board to adopt the Straw's recommendation that Distributed storage resources not be subject to penalties or a decrease to the fixed payment if they do not respond to a particular call. The consequence of electing to not respond to call is instead that the resource's average response kWhs would decrease and the resource owner would receive a lower PFP payment. (SIP at 26). This tracks with other programs designed on an economic dispatch model and sends the appropriate signal to encourage customer enrollment.³

Mechanism for Calling Resources

The Straw proposes that “each EDC will be required to develop a system for calling resources and communicating with distributed storage resources, many of which are expected to respond automatically.” (SIP at 26). We support the Straw's proposal that EDCs develop communications systems for dispatching DERs, but note that depending on the dispatch method and service need, there will likely be differences in the amount of notice prior to responding to the forecasted event (e.g., 24 hours) depending on whether the service is delivered via automated, scheduled, or remote dispatch. Storage aggregators play a key role in both enrolling resources in the program for automated, scheduled and remote dispatch.

Some services may be automated through advanced inverter functionality, while others will be dispatched either on a set schedule (i.e., “scheduled dispatch”) or in response to utility forecasted events (i.e., “remote dispatch”). For a “scheduled dispatch” the resource is scheduled to discharge at specific rate, at a set time, for a specified number of hours. For a remote dispatch service, the EDC forecasts an event that will occur at some point in the near future (i.e., peak demand event) and delivers the event call to the aggregator, which then dispatches its devices to discharge in response to the event call instructions. The EDC should not communicate directly to the individual device.

Moreover, while we would encourage EDCs to utilize a distributed energy resource management system (“DERMS”) platform to send the remote dispatch signal to the aggregator or OEM, who would then be responsible for the “last mile” dispatch down to the device, we emphasize that a DERMS platform is not necessary to launch the PFP Distributed storage program. Scheduled dispatch or remote dispatch through other communication pathways as simple as an automated email can be utilized to enable timely program launch in the near term while DERMS capabilities are developed for later implementation.

We emphasize that while DERMS functionality will enable more sophisticated program operational capabilities—such as advanced communication protocols, automated

³ See, e.g. ConnectedSolutions Program.

integration into EDC energy management systems, improved visibility into DERs on the system, streamlined production data and performance verification integration into EDC backend systems, among others—onboarding the DERMS functionality will take time and resources. We encourage the Board to direct the EDCs to provide a plan enabling DERMS functionality including potential costs and timelines for development, but emphasize that the lack of these capabilities at this time is not a barrier to PFP program implementation and should not be construed as such by the utilities.

We encourage the Board to move expeditiously in adopting the SIP with clear directives and timelines for the EDCs to identify peak demand reduction and potentially other system-wide services to be provided by the PFP program and the corresponding kWh value for these services to enable program launch in the near term. As additional services, including location specific needs, and more sophisticated management capabilities are adopted by the EDCs, the PFP program can evolve to incorporate additional services and unlock additional elements of the value stack.

E. Project Maturity Requirements, Geographic Limitations, and Participation Fees

The Straw recommends “that projects be required to meet one of the following criteria at the time they reserve MW capacity in a block: (i) demonstrate a sufficiently advanced position in the PJM queue (taking into account the realities of the ongoing PJM interconnection reform process), (ii) demonstrate a comparable interconnection position in a state-jurisdictional queue, or (iii) for net metered projects, demonstrate conditional approval of their utility interconnection request. In addition, projects would be required to pay a non-refundable solicitation participation fee of \$1,000 per MW of nameplate capacity.” (SIP at 27)

We appreciate the Straw’s proposal to ensure the capacity blocks reservations are held by viable projects while balancing this with the need for participants to know the level of incentive they will receive before they commit to substantial investment in an energy storage system. Given the complexities of project development for larger systems, it is reasonable to require more assurances than what would be reasonable for smaller systems. As such, we recommend the Board clarify that project maturity requirements for residential and small commercial Distributed storage projects are satisfied when the EDC receives a completed interconnection application. This will provide residential and small commercial participants sufficient certainty about their capacity block reservation as early in the process as possible without compromising the reservation queue for this customer segment.

We also note the Straw’s proposed “solicitation participation fee” and “Bid Participation Fee” of \$1,000 per MW of nameplate capacity, respectively. (SIP at 27-28). We urge the Board to consider waiving these fees for residential projects, or at minimum for projects located in overburdened communities.

F. Commercial Operation Date Requirements

We generally support the Straw's proposed Commercial Operation Date ("COD") requirements and agree with Staff that "the more stringent the pre-registration requirements for demonstrating project viability, the less time there should be needed between registration and project COD." (SIP at 29). However, we emphasize again here our recommendations above that the Board allocate separate capacity for residential and C&I projects within the Distributed storage block.

Allowing C&I projects 18 months to complete a project will likely tie up substantial amount of capacity with long lead times to construction relative to smaller residential systems. Creating separate capacity blocks for residential and C&I customers will ensure that the more stringent COD requirement for these larger projects can achieve its intended goals without the unintended negative consequence of hindering deployment of residential projects.

II. Conclusion

Generac appreciates the opportunity to provide these comments on the Straw Proposal. We respectfully urge the Board to adopt the recommendations provided herein and we look forward to continued collaboration as the Board moves forward with the development of the NJ SIP.

Respectfully submitted,

/s/ Michael Goldman

Michael Goldman

Director, Business Development and Regulatory Affairs

Generac Power Systems, Inc.

S45W29290 Highway 59

Waukesha, WI 53189

Email: mgoldman@generacgs.com

Phone: (608) 213-3570

Exhibit A

Examples Programs that Utilize Inverter Data for System Production Information

State	Program	Description
California	Self-Generation Incentive Program (SGIP) ⁴	For storage systems of 30 kW or less, performance audit monitoring and verification may use data from metering systems built into the storage device. This is used to verify operation of the system in accordance with program requirements (e.g., annual cycling requirements).
New York	NY-SUN Incentive Program ⁵	Participant solar systems must have monitoring equipment, which at the contractor's election may include a production meter, online monitoring system, inverter display recorded production, or another method.
Pennsylvania	Alternative Energy Portfolio Standard - SREC Generation ⁶	All solar generation installed after May 18, 2017 require production metering for SREC generation. Inverter readings qualify as metered data for this purpose.

⁴ Self-Generation Incentive Program Handbook, Section 5.5.2.2, pp. 79-80 (August 29, 2022) *available at* <https://www.selfgenca.com/home/resources/#handbook>.

⁵ NY-SUN Upstate and Long Island Program Manual, Section 3.4, p. 46 (June 2022) *available at* <https://www.nyserda.ny.gov/All-Programs/NY-Sun/Contractors/Resources-for-Contractors> (note: this citation references the upstate and Long Island regional program segment but the rules are the same for the downstate New York segment).

⁶ Pennsylvania Pub. Utils Comm'n, L-2014-2404361, Second Amended Final Rulemaking Order at p. 111 (Oct. 17, 2016), *available at* <http://www.puc.pa.gov/pcdocs/1483199.doc>.

Illinois	Adjustable Block Solar Incentive Program (ABP) ⁷	The ABP, a long-term SREC contract program, allows systems of 10 kW or less with inverters certified to +/- 5% accuracy with either web-based or digital output displays to qualify for production measurement. For systems over 10 kW and less than 25 kW, inverters with integrated ANSI C.12 compliant production meters are also allowed, provided that the inverter is UL-certified and has a digital or web-based output display.
Vermont	Green Mountain Power (GMP) BYOD Program ⁸ , Enphase IQ Battery Pilot ⁹ , and Tesla Powerwall Program ¹⁰	Under GMP's BYOD program, GMP dispatches and monitors the performance of battery storage systems enrolled in the program remotely, including using the SolarEdge Monitoring Platform. Separate battery metering is not required for program participation.

⁷ Illinois Power Agency, Adjustable Block Program Guidebook, Section 4.N, p. 70 (October 18, 2022) *available at* <https://illinoisabp.com/program-resources/>.

⁸ Green Mountain Power, Bring-Your-Own-Device “BYOD” Terms & Conditions (Nov. 2020) *available at* <https://greenmountainpower.com/wp-content/uploads/2020/11/BYOD-Customer-Agreement-11-2-20.pdf>.

⁹ Green Mountain Power, Enphase IQ Battery, Energy Storage Lease, pp. 5-6 (March 2022), *available at*: <https://greenmountainpower.com/rebates-programs/home-energy-storage/enphase-battery/>.

¹⁰ Green Mountain Power, Tesla Powerwall, V.P.S.B. No. 9, Second Revised Sheet 292 (June 1, 2020) *available at*: <https://greenmountainpower.com/rebates-programs/home-energy-storage/powerwall/>.

New Hampshire	Liberty Utilities Residential Storage Pilot ¹¹	Liberty’s initial utility-owned storage version of this program uses Tesla Powerwalls and the accompanying GridLogic platform for remote dispatch and monitoring. Separate battery metering is not required for program participation.
Federal	Treasury 1603 Grant Program ¹²	The 1603 Grant Program requires annual production reporting for five years by grant recipients. Recipients may use inverter readings if the inverter has a display showing total production to date.
ISO-NE	On-Peak and Seasonal Peak Demand Resources ¹³	Solar resources enrolled as this type of resource are subject to minimum measurement requirements and providers must submit plans specifying how these requirements will be met. The requirements are technology agnostic and governed by accuracy and certification parameters. Providers may submit alternative plans that are consistent with these generalized parameters for ISO-NE approval. Thus, separate revenue grade metering is not required if the minimum requirements can be met through other equally reliable means.

¹¹ New Hampshire Pub. Utils Comm’n, Docket No. 17-189, Supplemental Testimony of Heather Tebbetts at p. 19 (Feb. 9, 2018) *available at* https://www.puc.nh.gov/regulatory/Docketbk/2017/17-189/MOTIONS-OBJECTIONS/17-189_2018-02-09_GSEC_STESTIMONY_TEBBETTS.PDF.

¹² U.S. Dept. of Treasury, Treasury 1603: Recommendations for Annual Report Production Documentation (February 2013) *available at*: <https://home.treasury.gov/system/files/216/Recomendations-for-annual-report-production-2013-Feb.pdf>.

¹³ ISO New England Manual for Measurement and Verification of On-Peak Demand Resources and Seasonal Peak Demand Resources (Effective Oct. 2018) *available at* https://www.iso-ne.com/static-assets/documents/2018/10/manual_mvdr_measurement_and_verification_of_onpeak_and_seasonal_peak_demand_resources_rev07_20181004.pdf.