

December 18, 2024

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

Re: Docket No. Q022080540 - CPower Comments in the matter of the New Jersey Energy Storage Incentive Program

Dear Secretary Gordon,

Pursuant to the New Jersey Board of Public Utilities' ("Board's") November 7, 2024 Notice in the above referenced proceeding, Enerwise Global Technologies, LLC, d/b/a CPower Energy Management ("CPower") hereby submits comments on the New Jersey Storage Incentive Program ("NJ SIP") proposed in the Board's 2024 Straw Proposal ("Straw Proposal").¹ CPower is a leading Demand Response ("DR") and Distributed Energy Resource ("DER") Service Provider, with over six gigawatts ("GW") of capacity under management across the nation. CPower participates in all the organized wholesale markets as well as over two dozen retail programs designed to incent energy storage and load reductions. CPower was actively involved in the development of the recently launched Connecticut Energy Storage Solutions ("CT ESS") program and has qualified several resources for participation in that program. The NJ SIP proposal strongly resembles the CT ESS and many of the issues raised now in the Straw Proposal were previously addressed in the process to develop the Connecticut program. Generally, CPower's resources are behind the customer meter and, therefore, the comments below focus on the Distributed component of the proposed NJ SIP.

I. INTRODUCTION

CPower commends the Board's efforts to craft a program that will be critical to New Jersey's ability to meet its energy and climate goals. The Straw Proposal makes

¹ Docket No. QO22080540, In the Matter of the New Jersey Storage Incentive Program, 2024 Straw Proposal (Nov. 7, 2024) ("Straw Proposal")

clear that the Board thoroughly considered prior stakeholder comments in this proceeding, including those of CPower. CPower appreciates the Board's attentiveness and thoughtfulness in responding to those comments, particularly on such issues as private ownership and operation of the storage resources, stacking revenue streams, and the pay-for-performance incentive structure. The Board's thoughtful consideration of these issues in the Straw Proposal is a significant step towards successful launch of the NJ SIP.

However, as detailed in CPower's comments below, there is still much to do and little time to do it to implement an effective storage incentive program in time to meet the State's energy storage target of 2,000 MW by 2030. Although it represents significant progress, the Straw Proposal leaves several key program details undecided. One of the most significant undecided details is the incentive level and relative weighting of incentives between fixed and performance. While the level of incentive that each participant is willing to accept will depend in part on several outstanding program parameters, the preliminary incentive value in the Straw Proposal appears significantly below what is offered in other like programs, and therefore potentially insufficient to attract meaningful participation.

CPower also recommends looking to these other programs to help resolve other issues left open by the Straw Proposal, including the event performance requirements and process and the program application requirements and process. For example, CPower advises against risking program delays and costs by approving unnecessary technology upgrades like a designated distributed energy resources management system ("DERMS") to call performance events, which in other states is a relatively simple process, particularly for nonresidential customers. As explained further below, it would be prudent for the Board to incorporate the lessons learned from other similar programs, particularly given the urgency to implement the NJ SIP.

Given this urgency, CPower agrees with other commenters that the Board must move with deliberate haste to decide outstanding program issues and resolve ambiguity if it has any hope of deploying storage resources in the timeline established by the statute. This includes robust early incentive blocks for both Grid Supply and Distributed energy storage. Distributed energy storage, in particular, will play a critical role in New Jersey's energy transition, given the unique ability of this resource to help relieve local constraints and the relative speed with which it can be developed. CPower is aware of the timeline proposed by Calibrant Energy for program development and launch and is generally supportive, assuming key program issues like a minimum incentive level and participation requirements are resolved prior to releasing capacity.

The Comments below provide input on these important issues related to incentive levels, performance and application requirements, and the program rollout timeline, as well as other issues raised by the Straw Proposal. These comments first respond to the questions presented by the Straw Proposal, focusing on the questions related to the Distribution component of this program, consistent with CPower's experience and business model. CPower also addresses other issues not specifically raised by the Straw Proposal's questions, but which are still integral to program success. Board adoption of the recommendations outlined below will continue progress towards an energy storage program that is best situated to meet the State's storage goals and maximize the potential of this program.

II. RESPONSES TO BOARD STAFF QUESTIONS

A. Straw Proposal Question 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?

Although currently unknown program parameters will influence the appropriate incentive levels, the combined incentives in the Straw Proposal appear significantly less than what is offered in other states, resulting in a relatively unattractive program for participants.

While identifying the right incentive level is critical to program success, the question of whether the proposed combined incentive levels are appropriate is difficult to answer without important program details that are currently absent from the Straw Proposal. In particular, the duration of guaranteed incentives, the relative split between fixed and performance incentives, available alternative revenue streams, and the performance requirements are critical inputs for customers to determine whether to participate in the program.² CPower addresses these issues below, but the final determination on such important program details will influence the combined incentives that customers are able to accept to participate in the program.

As to Staff's proposal, CPower initially notes that the 500 kW upper bound of the Medium Project Type is not consistent with the economics of these projects. In CPower's experience, the economies of scale associated with large energy storage projects are generally only realized for projects at a capacity of at least one megawatt. Accordingly, to the extent that the program provides for incentives based on the nameplate capacity of the energy storage resource, it should size the large project type starting at one megawatt or greater. In the alternative, there could be efficiency

² These comments elaborate on these important program design features below.

in simply mirroring the sizing parameters that will be adopted in the Board's modernized interconnection rules, currently proposed to be 25 kW or less for level one interconnection, 25 kW to 2 MW for level two, and greater than 2 MW for level 3.³

Of much greater concern, however, is the level of the net present value ("NPV") incentives proposed in in the Straw Proposal. In particular, the target combined incentive levels in Table 3 of the Straw Proposal appear more consistent with the upfront portion alone in other analogous programs,⁴ rather than the combined upfront and performance incentive. The Straw Proposal contains few details on how its proposed combined incentives were calculated other than to say they are the result of a consultant's "gap analysis" which "estimated the revenue and savings potential of behind-the-meter storage projects" and determined a shortfall relative to "the total installed cost of the systems."⁵ It is important to recognize that while the Straw Proposal's incentives may be sufficient to cover the gap in installed costs for certain customers, there are operational costs that should be accounted for in the performance incentives, including, for example, the opportunity costs associated with participating in program events.

Further, there is a value offered by the storage resources in responding to performance events that is not necessarily included in the gap analysis supporting the proposed combined incentive levels. The Straw Proposal correctly explains that "performance-based incentives for storage resources will be designed to encourage the operation of storage assets in a manner that produces environmental benefits and/or helps the electric grid during times of operational stress."⁶ However, providing such benefits will come at a cost for participating customers and should be compensated accordingly.

Generally, CPower recommends using the incentives available in analogous programs in other states as a guide to what is needed to promote successful program participation. The net present value of the incentives available for the Connecticut Energy Storage Solutions ("CT ESS") programs, for example, appear significantly higher than what the Straw Proposal offers for the New Jersey SIP. In particular, for the CT ESS large customer class, participants receive a \$100/kWh upfront incentive and a \$225/kW performance incentive for years one to five and a \$130/kW

³ Docket No. QO21010085, In the Matter of Modernizing New Jersey's Interconnection Rules, Processes, and Metrics, Renewable Energy and Energy Efficiency Proposed Amendments: N.J.A.C. 14:8-4.2 and 14:8-5 Proposed New Rules: N.J.A.C. 14:8-5.10, 5.11, and 5.12, 14:8-5.2 (June 2, 2024) ("Interconnection NOPR").

⁴ *Compare* Straw Proposal, p. 11, Table 3 *with* Attachment A (Connecticut Energy Storage Solutions Program Manual), p. 41, Table 5.

⁵ Straw Proposal, p. 11.

⁶ Straw Proposal, p. 12.

performance incentive for years six to ten.⁷ Accordingly, based on CPower's calculations, large customers participating at program launch could receive an NPV combined incentive of \$546/kWh.⁸ In stark contrast, the combined NPV incentive contemplated by the Straw Proposal for the Large Project Type category is \$150/kWh.⁹

Even with the higher incentive, the CT ESS program has experienced significant customer attrition. In particular, the attrition rate for nonresidential customers in the first tranche of the CT ESS has been 32.4 percent.¹⁰ Although factors outside of economics may cause projects to drop out of the program, this data at least indicates that projects receiving CT ESS incentives still struggle to reach commercial operation. Accordingly, in order to attract customers to and retain them in the New Jersey SIP, the Board must offer incentives that account for both the gap in total installed costs and the operational and opportunity costs associated with these batteries.

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

CPower takes no position on the OBC incentive adder at this time but encourages the Board to avoid setting aside capacity exclusive to these customers.

Generally, CPower does not oppose the proposed OBC incentives adders, but is concerned with comments during the November 20, 2024 Stakeholder Meeting indicating that Staff is contemplating a set-aside of program capacity for OBC projects. CPower recommends against establishing a specific capacity block for projects in OBCs, as this could result in putting aside capacity that goes unused, which would adversely affect achievement of the Program goals. Such a set-aside would be particularly problematic if the capacity block devoted to the Distributed program is not sufficiently large. An OBC set-aside of an already small block of capacity could result

⁷ Attachment A (Connecticut Energy Storage Solutions Program Manual), p. 41, Table 5 & p. 45, Table 8.

⁸ Attachment B (CPower NPV Calculations of Combined CT ESS Incentives). To CPower's knowledge, the support for the Straw Proposal's incentive proposal is not available, so certain assumptions were required in the attach CT ESS Incentives calculation, including an average event length of 2.5 hours and a discount rate of 10 percent. These assumptions are consistent with CPower's experience in similar programs. The attached calculation also *reduces* the upfront incentive relative to what is provided in the CT ESS Program Manual consistent with the declining block incentive rates that were recently approved by PURA. Docket No. 24-08-05, Decision (P.U.R.A. Dec. 4, 2024), p. 11, available at:

https://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/5dfd10f7c319dfec85258be90050b f9c/\$FILE/240805-120424.pdf. However, these details are of little importance, as even with modifications to the assumptions, the CT ESS Incentives will remain significantly larger than what is proposed by the Straw Proposal, which is the fundamental point of this exercise.

⁹ Straw Proposal, p. 11, Table 3.

¹⁰ Attachment C (Connecticut Green Back Annual Energy Storage Solutions Program – Year 4 Written Exceptions), p. 1.

in capacity blocks that are simply not meaningful in size and therefore would not attract much interest.

 C. Straw Proposal Question 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?
 Straw Proposal Question 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?¹¹

CPower recommends that the Board approach an EDC request for expansive technology upgrades with skepticism, require redundant modes of communication for events, and clarify that the EDCs will not control nonresidential customers' storage resources.

Based on CPower's experience in analogous programs in other states, the communication of performance events is a relatively simple process, particularly for nonresidential customers. Wherever possible, the Board should avoid burdening this program with unnecessary costs and program delays associated with superfluous technology upgrades, particularly a complex DERMS platform. For the CT ESS program, for example, events are generally called using open API, and, to CPower's knowledge, the program did not necessitate significant technology upgrades for the utilities.

Although the Board should avoid costly technology upgrades, it is important that EDC communication protocols include redundant and unaffiliated modes of communication for performance events. In CPower's experience, although generally rare, it is possible for a single mode of communication to fail, resulting in missed dispatch signals for program participants. This unnecessarily undermines the value offered by program resources and creates administrative complications when calculating resource performance. Redundant communication protocols, including something as simple as an electronic message, are a straightforward measure that EDCs should implement to support smooth and successful program management.

Most importantly, if the Board wants robust nonresidential participation in the SIP, it must clearly provide that these customers are not required to cede control of their storage systems to the EDCs. This appears to be the intent of the Straw Proposal, as Staff recognizes the importance of private ownership and operation of

¹¹ CPower views Straw Proposal question 8 and 9 as intertwined and therefore responds to these questions together.

the resources and of "value stacking" potential revenues.¹² However, the Straw Proposal also indicates that distributed storage resources will be "expected to be able to respond automatically" to an EDC dispatch system.¹³ It is not clear what the Straw Proposal means by "respond automatically", but this language at least creates doubt regarding participants' autonomy over their storage resources, which is inconsistent with the pay-for-performance model of the performance incentive.

Further, as explained in prior CPower comments in this proceeding, requiring customer-sited nonresidential batteries to be subject to utility control will create uncertainty about the ability to access value streams outside the proposed incentive program, discouraging investment in these resources and making achievement of program goals more difficult. A proper performance incentive will send market signals sufficient to ensure robust participation. However, resource owners and operators must be able to balance that participation with the other considerations like resiliency and safe operations of the storage system. Otherwise, the NJ SIP will likely struggle to attract meaningful participation, particularly from nonresidential customers.

Installing a battery at a nonresidential customer site requires a significant investment. As a result, such investments are pursued only if the expected net benefits over the life of the project yield a positive return. In order to estimate return on investment, the project sponsor must be able to model costs and benefits. If the battery is subject to utility control, however, this task becomes much more difficult because there is significant uncertainty about how the battery would be dispatched and the extent to which it would create on-bill savings and other benefits, such as resilience. Given this, it will be difficult to attract customer-sited nonresidential batteries to the NJ SIP Program if the program requires direct utility control of these batteries or otherwise limits the customer's ability to freely operate its system.

Notably, nonresidential customers are sophisticated energy consumers who will respond to price signals and incentives with the help of their energy service providers. As such, the NJ SIP Program would be better served by creating performance incentives that reward batteries that respond to dispatch calls during a select set of critical hours, with some limit on the number of dispatches each season. This would create benefits for the system while enabling the project sponsor to make reasonable estimates of future value streams so that they can justify investment in the battery.

¹² Straw Proposal, p. 4.

¹³ Straw Proposal, p. 15.

E. Straw Proposal Question 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?

This Bill is generally consistent with the Board's NJ SIP design in the Straw Proposal, but also reinforces the urgency of finalizing and implementing the program and the need to develop a performance incentive that accounts for more than the installed costs of the storage systems.

Although New Jersey Legislature Bills S225/A4893 ("Bill") have yet to become law, it is currently the best representation available of the legislative vision for an energy storage program.¹⁴ The Board should therefore align the NJ SIP with the Bill requirements as much as possible to ensure a smooth process if it is eventually passed and signed into law. Fortunately, the SIP outlined in the Straw Proposal is already largely consistent with this Bill. However, there are at least two key points to pull from the contemplated legislation that can help guide the Board's process going forward.

First, there is clear Legislative intent to expediently implement an energy storage program and quickly develop projects. The Bill provides that the Board shall issue an order establishing a storage pilot program within 180 days of the bill's effective date.¹⁵ Further, within a year after establishing the pilot program, the bill requires that the Board compose and submit a report to the Legislature reviewing varying aspects of an operational program.¹⁶ In contrast, the Straw Proposal contemplates a "rollout" of the distribution piece of this program in 2026,¹⁷ which would mean a one-year report would not be due until 2027, clearly inconsistent with the timing contemplated by the Bill.

Second, like the proposed SIP, the bill would provide both an upfront (*i.e.*, fixed) and performance incentive, but the bill identifies the purpose of the performance incentive, which goes beyond just bridging the gap in all-in system costs. In particular, the purpose of the performance incentive, according to the bill, is to:

(1) provide fair compensation for the full value of services provided by the energy storage system, including improving

¹⁴ N.J. Senate, No. 225, 221st Legislature, available at <u>https://pub.njleg.state.nj.us/Bills/2024/S0500/225_I1.PDF</u> ("S225").

¹⁵ The bill contemplates an initial pilot program within 180 days and a permanent program within three years. S225, pp. 4 & 7. The process outlined in the Straw Proposal is generally consistent with this approach, as the initial capacity block could serve as the "pilot" phase of the program and the Straw Proposal has already built in annual review and refinement procedures that will help enable a more sustainable "permanent" program.

¹⁶ S225, p. 7.

¹⁷ Straw Proposal, p. 6, Table 2.



the efficiency of the transmission and distribution system and reducing the peak demand placed on electricity generators;

(2) increase the number of cost-effective energy storage systems that are connected to the transmission and distribution system;

(3) facilitate the integration of distributed sources of electricity generation; and

(4) increase the resilience of the transmission and distribution systems through the deployment of back-up power.¹⁸

The Legislature's articulation of the purpose of the performance incentive is consistent with CPower's explanation above of what is needed to foster customer participation. Specifically, the performance incentive must compensate the resources for the value they provide, not just cover the gap in total installed costs, which is more appropriately addressed by the upfront incentive.

III. ADDITIONAL COMMENTS

A. CPower encourages the Board to develop the Distribution component of the NJ SIP with more urgency than is currently contemplated by the Straw Proposal.

CPower joins other commenters in urging the Board to move as expeditiously as feasible to establish the Distribution storage incentive program. New Jersey's 2,000 MW by 2030 storage mandate is laudable, but will not be possible without urgent action by the Board that facilitates both Distributed and Grid Supply projects. The rollout must account for the fact that interconnection of the projects alone could take years to complete.

Therefore, the Board should strive to release the initial blocks for both Distributed and Grid Supply projects in 2025 and make the those blocks sufficiently large so as to ensure meaningful progress towards the 2030 target in the few years remaining. Given that even at this schedule there will only be five years remaining until 2030, CPower recommends procuring at least 400 MW of storage resources in 2025, with at least 200 MW dedicated to Distributed storage. This will provide an opportunity to develop capacity ahead of 2030 and account for the inevitable attrition of projects before COD.

However, key program details must be finalized sufficiently ahead of program rollout to enable customers to assess the full costs and benefits of program participation. This includes, at minimum, application and project maturity requirements, incentive levels, and participation requirements for the performance incentive. CPower is aware of comments suggesting that the Board can establish the fixed incentive quickly and then proceed with the initial block of Distributed storage procurement in parallel with the EDC proceedings to establish to establish the performance incentives. This may be feasible if the Board provides sufficient program details ahead of the initial block to enable customers to analyze the risks of participation, including a minimum guaranteed available incentive and clear participation requirements.¹⁹

Given the urgency, CPower stresses again that the Board should look to already established and successful storage incentive programs, like CT ESS, and incorporate as many of the parameters of those programs as make sense for New Jersey. Such an approach not only provides the Board with the assurances of a battle tested program, but also provides continuity and administrative efficiencies for many of the potential participants in the New Jersey SIP that also participate in these other storage incentive programs. Accordingly, CPower recommends that the Board draw from these other programs with the goal of finalizing as many program rules as possible by the first quarter of 2025 and rolling out the program by the end of the third quarter of that year.

B. CPower supports incentive application requirements that effectively balance the need to prevent speculative projects with the risk of maturity requirements that are not within the control of the project owner or operator.

CPower strongly supports appropriate project maturity requirements that prevent speculative applications while recognizing the realities of project development and financing. In many ways, the Straw Proposal does well in finding such a balance, including by requiring a completed interconnection application upon enrollment in the program. It is important that applicants demonstrate some progress towards and a meaningful likelihood of interconnecting projects.

Conversely, any such required demonstration should not result in projects that are unable to participate due to delays in the interconnection process that are outside of the applicants' control. The Straw Proposal's requirement that project owners submit an interconnection application before applying for NJ SIP incentives likely

¹⁹ Important participation requirements to establish before program rollout include participation time windows (hours of day and months of year), event durations, and expected number of events per season or time period.

strikes the appropriate balance between these two competing concerns. Alternatively, CPower would be open to additional interconnection requirements that do not expose applicants to delays in the interconnection process outside of their control.

Similarly, the Board should provide flexibility in any development deadlines for recipients of upfront incentives for delays that are outside the control of the project owner. The Straw Proposal contemplates a guaranteed commercial operation date 700 days after execution of the interconnection agreement and sometime before December 31, 2030.²⁰ Development delays due to, among other things, interconnection backlogs and supply chain constraints are common and sometimes significant. It should be axiomatic that a project owner should not be penalized for delays in the interconnection process that are not the fault of the project owner. Although the proposed rules appear to allow for an extension of development deadlines for "good cause",²¹ the Board should be explicit that such good cause includes delays that are not the fault of the project owner.

Finally, the Straw Proposal would require applicants for the fixed incentive to obtain "all Major Permits or [have] an execution plan for all Major Permits."²² At this time, CPower has no concerns with requiring an execution plan for all Major Permits, although the Board should clearly define what it expects here to avoid confusion. However, in no event should the Board require that system owners obtain all Major Permits at the time of application. First, "Major Permits" is not currently defined and it is unclear what is included under this term. Further, in CPower's experience, it is often not possible to obtain major permits until after the interconnection process is complete, and therefore not feasible to include in the NJ SIP application. This is because the local authorities often require final designs before issuing permits, and designs can change during the interconnection process. Accordingly, the program rules should avoid requiring Major Permits at the time of application.

C. The Board should clarify that participating storage resources are not required to respond for the entire duration of a call to receive credit for that call when calculating the performance incentive.

Requiring performance for the entire duration of a four-hour event to receive credit for that event is inconsistent with the value provided by participating resources, the pay-for-performance model, and the approach of similar programs. The Straw Proposal would require a resource owner to provide "Response kWs for the entire

²⁰ Straw Proposal, Draft Rule 14:8-14.5(n)-(o).

²¹ Straw Proposal, Draft Rule 14:8-14.5(p).

²² Straw Proposal, Draft Rule 14:8-14.5(r)(1)(iv).

duration of a call (likely up to four hours). A missed call would be registered as 0 kW."²³ This language appears to require resources to respond to the full duration of a call up to four hours in order to receive credit for that call when calculating the performance incentive. In other words, a battery that only responds for 3.9 hours of a 4-hour event would get no credit for that event. Such an approach is simply inequitable.

First, similar energy storage programs generally limit dispatches to three hours, rather than the four-hour duration cap provided by the Straw Proposal.²⁴ CPower recommends that the Board likewise adopt a three-hour dispatch limit, which has worked well in other states and provides more operational flexibility for customers.

More concerning is the apparent requirement that for a storage resource to receive credit for an event, it must perform for the entire duration of that event. Again, other storage performance incentive programs that have adopted the "pay-for-performance" model that the Straw Proposal claims for its program simply average performance of a battery over the events, even if the battery does not perform equally across the entire duration an event. This is true, for example, for both the Connecticut Energy Storage Solutions program and the California Demand Side Grid Support, Option 3 program.²⁵ These programs recognize that even resources that only respond to part of an event are still providing value to the grid. It is simply not fair or reasonable to penalize a storage owner that might fall slightly short of full event performance by zeroing out the energy the resource did provide during the event. A true pay-for-performance approach would require that the EDC simply average resources performance over all events in a season.

The Straw Proposal approach of requiring performance for the full duration of a call will also be more challenging to administer than simply averaging out performance. If a battery goes offline for a few minutes in the middle of a four-hour event, it is not clear how the EDC would monitor for such brief periods of dispatch interruption and excluding the entire dispatch from the performance calculation would be harsh to the extreme. If the Board does allow for some limited period of nonperformance during an event, any such period would be arbitrary and difficult to administer. The Board should simply just follow the proven and simple approach of averaging out performance over the duration of the call.

https://efiling.energy.ca.gov/GetDocument.aspx?tn=256254.

²³ Straw Proposal, p. 15.

²⁴ See, e.g., Attachment A, p. 8, Table 2.

²⁵ See Attachment A, p. 46 ("Performance is measured as the average discharge capacity from the BESS across all Active events during the given season"); see also Demand Side Grid Support (DSGS) Program Guidelines, Third Edition, California Energy Commission, p. 26 (May 2024), available at: https://ofiliag.energy.com/CotDecument.com/2024/2024/

D. Failing to provide a guaranteed term for performance incentives will limit interest in this program and undermine the potential of the program.

Conspicuously absent from the Straw Proposal is any mention of a guaranteed term of performance incentives for the Distributed storage resources. This is a key element of the program that must be included in the NJ SIP rules. Otherwise, customers will not be able to account for the full value of performance incentives when assessing the potential benefits of program participation, needlessly limiting the potential reach and impact of the NJ SIP.

CPower recommends that the NJ SIP rules include a ten-year term for performance incentives, consistent with other like programs.²⁶ A reasonably predictable revenue stream is critical for the customer analysis necessary to justify the significant investments in energy storage systems. Otherwise, the investment risk will be too great for customers who might otherwise participate in NJ SIP, limiting the potential of the program to reach the storage deployment goals required by law. This is particularly true given that other potential sources of revenue, such as those from wholesale markets, are not readily quantifiable or reliable. The ten-year term for performance incentives has worked well in other programs and, to help limit investment risk, the Board should adopt it for the NJ SIP.

E. Requiring two duplicative applications to different program administrators is inefficient and creates unnecessary risk for project owners and operators.

Although not addressed in the Straw Proposal, the accompanying draft rules appear to contemplate separate applications to the Program Administrator for the fixed incentive and the EDC for the performance incentive.²⁷ However, the requirements for each application are essentially the same.²⁸ CPower is not aware of any other similar programs that require two substantially similar applications for the same program and it is not clear why such an approach is necessary here.

In addition to being administratively inefficient and unnecessarily burdensome for applicants, it creates risk that even after the Program Administrator approves the application for the fixed incentive, the EDC could deny performance incentives for the same project. However, there does not appear to be any justification for a project to receive one incentive but not the other, particularly as the applications for the incentives are substantially similar. There is therefore no reason to have two different

²⁶ See, e.g., Attachment A, p. 45.

²⁷ Straw Proposal, Draft Rules 14:8-14.5(j) & 14:8-14.6(j).

²⁸ Straw Proposal, Draft Rules 14:8-14.5(r) & 14:8-14.6(i).

applications. Instead, the Board should follow the generally accepted practice of requiring one application for both the fixed and performance incentives to a single entity, preferably the Program Administrator.

F. The Board should explicitly provide in program rules that participating projects may access alternative revenue streams.

In the Straw Proposal, Board Staff indicated that it "seeks to encourage energy storage owners to engage in 'value stacking'", finding that "[r]evenue from value stacking reduces the need for incentives to move the market at a desired pace."²⁹ CPower supports Board Staff's findings and was encouraged by the seeming recognition that the owners and operators of participating Distributed storage resources should be free to pursue other opportunities to monetize those resources to maximize the value they provide and minimize the incentives required from the NJ SIP. However, certain comments at the November 20, 2024 Stakeholder Meeting seemed to cast doubt over whether the storage owners and operators would enjoy such freedom.

As CPower previously explained,³⁰ the NJ SIP rules should be clear that storage owners are free to pursue other value streams, particularly value streams that compensate the resources for additional services beyond that which is being compensated by the NJ SIP. The potential value streams for nonresidential customersited storage (in addition to NJ SIP incentives) include, among other things: wholesale market revenues, savings in transmission costs, savings on demand charges, resilience, and net metering credits. The performance incentive can and should compensate resources for values or services that are not already covered by these other sources of revenue, including, for example, distribution system relief and environmental benefits. Accordingly, the NJ SIP rules should explicitly and clearly provide that participating storage resources are able, but not required, to monetize other value streams. Such clarity is necessary to enable customers to understand the full range of costs and benefits of participating in the program.

²⁹ Straw Proposal, p. 8.

³⁰ Docket No. QO22080540, CPower Comments in the matter of the New Jersey Energy Storage Incentive Program (Dec. 12, 2022); Docket No. QO22080540, CPower Comments in the matter of the New Jersey Energy Storage Incentive Program (Sept. 12, 2023).

G. The Board should recognize the need to quickly interconnect storage resources participating in the NJ SIP when it modernizes its interconnection rules in Docket No. Q021010085

Finally, one of the most significant impediments to achieving New Jersey's energy storage deployment goals by 2030 is the interconnection process. CPower understands that the Board is currently considering rules to modernize its interconnection regime in Docket No. Q021010085. As it does so, the Board should consider ways to expedite interconnection of these energy storage systems as much as possible without compromising the integrity of the utility distribution system. CPower has already provided detailed recommendations regarding the interconnection of these facilities,³¹ some of which are consistent with the changes proposed to the Board's interconnection rules, including faster interconnection for export-limited or non-exporting storage.³² CPower commends the Board for updating its interconnection rules at such a critical time and encourages it to consider in its final rules all practical ways to expedite and streamline the interconnection process for energy storage resources.

IV. CONCLUSION

CPower appreciates the Boards consideration of these and past comments on the NJ SIP and looks forward to continuing to work with the Board as the program takes shape through rulemaking and any subsequent proceedings.

Sincerely,

<u>/s/ Lee Ewing</u> Lee Ewing Counsel, Legal and Policy CPower Energy Management <u>Lee.Ewing@CPowerEnergy.com</u> 410-978-2437

³¹ Docket No. QO22080540, CPower Comments in the matter of the New Jersey Energy Storage Incentive Program (Dec. 12, 2022); Docket No. QO22080540, CPower Comments in the matter of the New Jersey Energy Storage Incentive Program (Sept. 12, 2023).

³² Interconnection NOPR, 14:8-5.2(k).









Program Manual

Version January 19, 2024

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Section 1: Acronyms and Glossary

Term	Acronym or Abbreviation	Definition
AC-Coupled BESS		BESS has a separate inverter from Solar PV system
Base Load		Commercial and industrial customer base load will be set equal to the C&I customer's average demand during April-May and October-November from the previous 12 months.
Battery Energy Storage System	BESS	Battery Energy Storage System: electrical, electrochemical, mechanical and other types of energy storage technologies for systems intended to supply electrical energy. Includes battery and inverter for the purposes of this Program.
Behind the Meter Storage	BTM	BESS serving onsite load, and it may be solar-paired or standalone.
BESS Operator		Entity responsible for the coordination of the BESS participating in dispatch events within the Program
BESS Aggregator		Entity responsible for the coordination of BESS participating in dispatch events within the Program, working as an intermediary between the DERMS and the BESS Operator.
Commercial and Industrial	C&I	
Commercial Operation Date	COD	
Confirmation of Funds	COF	
Connecticut Green Bank	CGB; Green Bank	
Customer Enrollment Platform		Salesforce-based portal used by Eligible Contractors and TPOs to apply for ESS incentives on behalf of customers. Managed a by Connecticut Green Bank: https://ctgreenbank.my.site.com/
Department of Economic and Community Development	DECD	
DC-Coupled BESS		BESS and Solar PV system share an inverter
Distributed Energy Resource Management System	DERMS	The dispatching platform utilized by the EDCs to issue notification to Operators to discharge the BESS over a designated time period
Electric Distribution Company	EDC	Eversource and United Illuminating
Eligible Contractor	Contractor	Company responsible for contracting the procurement and installation of a BESS for a customer.
Eligible Third-Party Owner	System Owner; TPO	Company responsible for owning and operating a BESS with a customer through a lease or power-purchase agreement.

Front of the meter storage	FTM	BESS not serving load behind a customer meter.
Installed BESS		BESS is commissioned, approved, and energized, and fully operational, including fully integrated with EDCs DERMS platforms.
Islanding		Ability of BESS to provide back-up power to customer, within a reasonable time, during a power outage.
Last mile		Final internet connection to battery Inverter system. Typically, by battery manufacturer.
Letter of Intent	LOI	Preliminary commitment of the Customer to install a BESS with an Eligible Contractor and/or TPO.
Low-Income Households	Low-Income	Households with incomes below 60 percent of the state median income, and multi-family affordable housing as per PURA Final Decision in Docket 23-08-05.
Maximum Power Point Tracking	MPPT	
Multifamily Affordable Housing	MFAH	As defined by PURA Final Decision (the <u>Affordable Housing Decision</u>) in Docket No. 21-08-02.
Original Equipment Manufacturer	OEM	Manufacturer of BESS product(s).
Override Conditions		Refer to situations where same-day dispatches occur with less than 24 hour notice.
Power Purchase Agreement	PPA	
Program Administrators	PAs; Administrators	
Public Utility Regulatory Authority	PURA; Authority	
Rated Energy Capacity		Nameplate energy capacity of the BESS (kWh).
Reservation of Funds	ROF	
Standalone		A BTM BESS not paired with a source of generation (i.e. solar, wind, etc.).
Terms & Conditions and Data Release	T&C	
Third-Party Inspector		A contractor hired by the Green Bank to inspect projects in the Program.
Underserved Communities	Underserved	Distressed municipalities, according to the most recent list developed by DECD.
Vendor Fee		Any fee taken by a BESS Operator in exchange for operating a customer's BESS, either as a flat rate or a percentage of incentives paid.

Section 2: Summary

Energy Storage Solutions, herein known as the "Program", is a voluntary incentive program offered to the residential, commercial, and industrial customers of The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource) or The United Illuminating Company (UI) who are considering on-site electric energy storage solutions. The purpose of the following sections is to outline the purpose, requirements, steps, and expectations of the key parties involved in the application and incentive process. This document will also serve as a basis for compliance with the decision as listed below. The Program Administrators may submit written request to PURA to modify the Program Manual or other Program guidelines and procedures at an appropriate time.

On July 28, 2021, the Connecticut Public Utilities Regulatory Authority (Authority) issued a final decision in Docket No. 17-12-03RE03, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Electric Storage (Decision) establishing a nine-year electric storage program, which shall be available to all customers and customer classes within the service territories of Eversource and UI, collectively, the electric distribution companies (EDCs).¹ The Decision also establishes the EDCs and the Connecticut Green Bank (CGB) as Program Administrators. The Authority's goal in the proceeding was to develop and implement a program for battery energy storage systems (BESS) connected to the electric distribution system that would provide multiple types of benefits to the grid, including ancillary services, peak shaving, support for the deployment of other distributed energy resources, and customer, local, or community resilience.

In the Decision, PURA identified seven key objectives for the Program, including:

- 1. Provide positive net present value to all ratepayers.
- 2. Provide multiple types of benefits to the electric grid (e.g., customer, local, or community resilience, ancillary services, peak shaving, avoiding or deferring distribution system upgrades, or supporting the deployment of other distributed energy resources).
- 3. Foster the sustained, orderly development of a state-based electric energy storage industry.
- 4. Prioritize delivering increased resilience to low-and-moderate income customers, customers in environmental justice or economically distressed communities 2, medical hardship customers, residents living in public housing, customers on the grid-edge who consistently experience more and/or longer than average outages during major storms, and critical facilities.

¹ Connecticut Public Utilities Regulatory Authority, Final Decision, Docket No. 17-12-03RE03: PURA Investigation Into Distribution System Planning of the Electric Distribution Companies-Electric Storage, issued Jul. 28, 2021, available online at:

https://www.dpuc.state.ct.us/2nddockcurr.nsf/8e6fc37a54110e3e852576190052b64d/6991ef77ba07bae185258752007 994f7/\$FILE/171203RE03-072821.pdf.

² Per Conn. Gen. Stat § 22a-20a, "environmental justice communities" are defined as a municipality on the Department of Economic and Community Development list of distressed municipalities or in a defined US census block. These defined census blocks are in municipalities that are not "distressed;" however, they have census block groups with 30 percent of their population living below 200 percent of the federal poverty level. A current list of environmental justice communities is available at: <u>https://portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Communities</u>.

- 5. Lower the barriers to entry, financial or otherwise, for electric storage deployment in Connecticut.
- **6.** Maximize the long-term environmental benefits of electric storage by reducing emissions associated with fossil-based peaking generation.
- 7. Maximize the benefits to ratepayers derived from the wholesale capacity market.

Residential, commercial, and industrial customers of Eversource and UI are eligible to participate in the Program, with the Authority's end goal of deploying 580 megawatts (MW) of electric storage by 2030.

The Program consists of two key elements:

Passive Dispatch: pre-scheduled by the OEM of Eligible BESS per program rules to 1) dispatch energy during established Passive event periods and 2) be overridden by the EDCs for either Active Dispatch events or emergency situations. Compensated by an upfront incentive administered by CGB.

Active Dispatch: managed by the EDCs, which compensates participants for the average kW³ dispatched during events over the summer and winter seasons. Compensated by a performance-based incentive structure administered by the EDCs.

Customer participation benefits and requirements will be determined by Customer Class as detailed below. Please refer to Section 6 in this Program Manual for detailed participation requirements for Passive and Active demand response incentive attainment.

Customer Description	Passive Dispatch ⁴	Active Dispatch
Residential & Commercial – Fully Enrolled	 Will receive upfront incentives Required to participate in all Passive Dispatch events 	 Will receive performance incentives As a pay-for-performance
Priority Customers ⁵⁶ – Residential & Commercial	 Will receive upfront incentives, including applicable adder(s) Required to participate in all Passive Dispatch events 	program, participation in Active events is optional

Table 1: Program Customer Classes

³ Average kW per season is calculated by dividing the customer's total energy deployed (kWh) by the total duration of all events per season (hours).

⁴ Customers are required to respond to greater than 90% of the Passive Dispatch hours to avoid triggering a claw back in the upfront incentive. See Section 6 for additional details.

⁵ Customers receiving incentive adder as defined in Section 6.1.1.1 to 6.1.1.4.

⁶ Priority Customers that applied to ESS prior to January 1, 2023 may participate in ISO-NE Forward Capacity Markets with approval from Program Administrators.

Residential and Commercial – Active Dispatch Only ⁷	 Will <u>not</u> receive upfront incentives Will <u>not</u> participate in Passive Dispatch events 	
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Customers cannot be simultaneously enrolled in Energy Storage Solutions and ConnectedSolutions. ConnectedSolutions has ended new enrollments as of December 1st 2023.

Table 2 below is a Program summary of the dispatch parameters for the first three (3) years of the Program (2022-2024).

Table 2: Energy Storage Solutions Elements⁸

Program Element	Design Item	Summer	Winter
	Declining-Block Upfront Incentive	Varies by Program step, cust See "Passive Dispatch and U	comer type, and building type. ofront Incentives" section
	Events per Season	All non-holiday weekdays (~60)	N/A
Passive Dispatch	Months	June, July & August	N/A
Fassive Dispatch	Event Duration	5 Hours (uniform dispatch)	N/A
	Anticipated Dispatch Window	3 PM to 8 PM	N/A
	Reserve Capacity	20% Required Reserve	N/A
	Flat Block Performance Incentive	Varies by customer size based Dispatch and Performance Ind	on peak demand. See "Active centives" section
	Events per Season	30 to 60	1 to 5
Active Dispetch ⁹	Months ¹⁰	June through September	November through March
Active Dispatch [®]	Event Duration	1 - 3 hours	1 - 3 hours
	Potential Dispatch Window	12 PM to 9 PM (All Days)	12 PM to 9 PM (All Days)
	Reserve Capacity	Not required by Program	

⁷ This category includes ConnectedSolutions transfer customers. Transfer Customer BESS must meet all Program requirements to be eligible.

⁸ The Program Administrators may choose to alter the dispatch schedule for both Passive and Active Dispatch programs to better achieve RIM targets based on annual EM&V reports. In the event that the Program Administrators determine that an alternate schedule is prudent, customers will be notified of the change before the start of a dispatch season and storage assets will be remotely reprogramed to a modified schedule.

⁹ To the extent possible, EDCs will provide Program Participants notice of Active Dispatch Events 24 hours ahead of an event.

¹⁰ EDCs may need to dispatch in off season months, on an as-needed basis.

Section 3: Enrollment

Customers will be able to enroll in Energy Storage Solutions via their Eligible Contractor (Contractor) or Third-Party Owner (TPO) completing a project application (Application) on the Customer's behalf through an approved Enrollment Platform. The Customer's Contractor or TPO will be responsible for submitting the Customer's Application to the appropriate Program Administrator and the Customer and/or Contractor or TPO will be responsible for registering the BESS into the relevant EDC's existing Distributed Energy Resource Management System (DERMS). Customers (or Contractors or TPOs on their behalf) may also need to submit an Application into the relevant battery storage manufacturer enrollment platform. The time period allocated to complete each enrollment milestone will differ depending on the type of the Customer (commercial or residential) and the size of the project.

In the event that an Application is submitted for upfront or performance-based incentives that are outside the scope of use case examples within the Program Manual, or that were not discussed or presented within the regulatory process, then the Program Administrators have discretion to determine the appropriate incentive consistent with the public policy objectives of PURA.

3.1. New Customer Enrollment Process

The following steps outline the expected process flow for customer enrollment into Energy Storage Solutions, from Application to the verification of system operation and the onset of performance period. Transfer Customers from ConnectedSolutions will follow a modified process described in Section 3.3.

New Customer Enrollment Steps and Milestones

1. Execute Customer Contract or LOI, Terms & Conditions and Data Release; Operational Agreement, and Resiliency Plan (if applicable)

Residential Customers must sign and execute a Customer Contract, Power Purchase Agreement (PPA), or Lease Agreement, noting the designation of associated parties to include TPO, Contractor, and other pertinent parties responsible for administration of the project. The Customer Contract, PPA, or Lease Agreement must comply with the requirements set forth in Sec. 4.3.

C&I Customers may sign a Letter of Intent (LOI).

Residential Customers must agree to and sign the Residential Customer Terms and Conditions and Data Release included in Appendix B.

C&I Customers must agree to and sign the Commercial and Industrial Customer Terms and Conditions and Data Release included in Appendix G.

Both Residential and C&I Customers must agree to and sign the Operational Agreement included in Appendix D.

Qualified customers requesting a Priority Customer Incentive Adder pursuant to Section 6.1.1 must complete the Resiliency Plan included in Appendix F. Only projects on the Grid Edge will be exempt from this requirement.

2. Complete Application

Customers seeking participation in Energy Storage Solutions must be first deemed eligible through an Application process that will remain open through the completion of Step 3. The Contractor or TPO must register their respective Customers using an approved Enrollment Platform to complete the Application. The Contractor or TPO will follow instructions on the Enrollment Platform to submit a complete Application.

Communications and notifications for activity throughout the process will be sent via email to the email addresses on file in the Application.

To be considered complete, each Application will include, but may not be limited to, the following information submitted directly or via attached files in the Enrollment Platform:

- a. Customer, Contractor, and TPO (if applicable) detailed contact and site information
- b. Service address where BESS is to be installed
- **c.** Recent electric bill or data file showing account number, meter information, service and rate type, energy usage (kWh), average annual demand (kW), and annual peak demand (kW). This no longer needs to be provided on active only submissions
- **d.** Designation of operator responsible for "last-mile" communication to the device being dispatched
- e. Designation of incentive recipient (i.e., TPO, default is Customer) and point of contact responsible for Application accuracy
- f. Signed Customer Contract or LOI for BESS
 - i. For Residential projects, a signed sales agreement, lease, or power purchase agreement between the Customer and Contractor or TPO is required.
 - ii. For C&I projects, a signed Letter of Intent (LOI) between the Customer and Contractor or TPO will be accepted during the initial application stage to receive an ROF.
- **g.** System design narrative and design submittals. One-Line Diagram no longer needs to be provided on active only submissions
- h. Projects eligible for a Priority Customer Incentive Adder pursuant to Section 6.1.1 must submit a complete Resiliency Plan using the template located in Appendix F of the Program Manual. Only projects on the Grid Edge will be exempt from this requirement.
- i. Signed Program Terms & Conditions and Data Release

3. Program Administrators Review Project for Eligibility and Technical Accuracy

After Application submittal, Program Administrator staff will review the Application for accuracy and completeness. If additional information is needed, Contractor or TPO will be

notified via email of any deficiencies. The Applicant may be given a time frame to correct such deficiencies, as indicated in an email communication. If after this extended time the Applicant has not provided the requested information, Program Administrators may elect to cancel the incentive application.

4. Program Administrator Approves Project Application and Upfront Incentive

C&I Projects with an estimated upfront incentive below \$500,000 require a Project Approval Form (PAF) that must be approved by all Green Bank Senior Staff. All projects with an estimated upfront incentive greater than or equal to \$500,000 will require approval from the Connecticut Green Bank Board of Directors (BOD). Upon all Application requirements being satisfied, including applicable PAF or BOD approvals, Green Bank staff will electronically send a Reservation of Funds (ROF) letter describing the estimated upfront incentive (where applicable), the milestone approval process and dates, and the expiration date of the fund reservation.

All residential projects shall have up to 24 months to reach commercial operation upon issuance of reservation of funds. Program Administrators may approve extension requests beyond 24 months if the extension criteria below are met.

For commercial projects, PAs may approve extension requests beyond 24 months (if no System Impact Study) or 36 months (if the first extension request was granted) if the extension criteria below are met.

Extension Criteria

Program Administrators may approve project extension requests less than or greater than 12 months, depending on the project's demonstrated need for an extension. Program Administrators may grant a second extension request if at least one of the following five criteria are met: (1) the generation facility or project is unique and more complex than ordinary customer-sided distributed generation installation projects, such as having additional technology-specific regulatory or local siting requirements; (2) the project developer has worked diligently and in good faith in developing the project since inception; (3) the project is near completion or likely to begin commercial operation within the requested extended deadline; (4) a significant portion of the total project investment has already been made and would potentially be stranded if the contract is terminated; and/or (5) the interconnection process extended beyond the utilities' initial estimates and/or significantly (e.g., one month) beyond the average interconnection process timeline.

It should be noted that extension requests will prolong the project completion deadline proportional to the delay experienced and/or the amount of time demonstrated that is needed to complete the project.

Extension requests should be submitted via email to <u>energystorage@ctgreenbank.com</u> with the subject line "Extension Request: ESS-#####¹¹" and will be reviewed on a per-project basis by Program Administrators.

Note: If the customer is applying for transfer from ConnectedSolutions or Active-Only Dispatch, the approval process will be abbreviated as they may not be eligible for an upfront incentive. The ROF will indicate whether a customer is approved for an upfront incentive.

5. Execute Interconnection Application

For all commercial Program applications received on or after March 1, 2023, the Contractor or TPO must submit a completed Interconnection Application to the applicable EDC prior to receiving a Reservation of Funds letter. Additionally, all commercial Program applications that have been or are submitted prior to March 1, 2023 must complete their interconnection application by March 1, 2023. Projects should be interconnected with exporting capabilities where not cost-prohibitive to the customer. Commercial and industrial customers with base load¹² higher than the BESS maximum dispatch capability may also be exempted from exporting requirements.

6. Construction Phase

The Contractor or TPO may pursue the construction schedule that best suits the project needs, although the Program Administrators anticipate that the majority of projects will not begin construction until the Customer Contract has been executed¹³ (as described in Step 1 above). Upon final construction completion and within the allowable timeframe if the extensions highlighted in 3.1.4 are granted, the Contractor or TPO will notify the Program Administrators of the final commercial operation date (COD) via the Customer Enrollment Platform and that the system is ready for verification via submission of project completion materials in the Enrollment Platform. Connection to any building's electrical service or utility meter can only be performed by a licensed Connecticut E-1.

7. Inspection

Effective January 1, 2024, battery inspections will become optional and inspections will be conducted only upon customer request. Customers interested in having their batteries inspected must indicate their preference by opting in during the incentive application process, and the inspection will take place after the project is built and submitted for completion. **Approval and Payment of Upfront Incentive**

Upon confirmation that the system is energized and operational, has passed all applicable inspection(s), and has received final approval from the EDC and CGB (as described in Battery Enrollment Process below), a Confirmation of Funds letter will be issued by the

¹¹ Where "ESS-######" refers to the project's unique project ID as shown in the Enrollment Platform.

¹² Commercial and industrial customer base load will be set equal to the C&I customer's average demand during April-May and October-November from the previous 12 months.

¹³ Customers requesting an Upfront Incentive may not install systems prior to Reservation of Funds (ROF).

Program Administrators confirming the final Upfront Incentive amount. The Upfront Incentive will be approved for payment as described in Section 6.

Note: If the customer is applying for transfer from ConnectedSolutions or Active-Only Dispatch, the battery will not be eligible for an upfront incentive payment.

3.2. New Battery Enrollment Process

The following steps outline the expected process flow for how batteries will be enrolled into Energy Storage Solutions, from Application to the verification of system operation and the onset of performance period. Transfer Customers from ConnectedSolutions will follow a modified process described in Section 3.4.

New Battery Enrollment Steps and Milestones

1. Contract Execution

When the Customer Contract is executed (as described above in Customer Enrollment Process), all relevant data will be input into the EDC DERMS platform and the project will be registered.

2. Verification of System Operation

For all commercial and industrial projects, as well as residential projects over 20 kW AC of system nameplate discharge capacity, the verification of system operation step is required following construction completion and commercial operation. The EDC may inspect the system during operation, either physically in person or virtually, to verify system parameters are within the Application specification, informed by the EDC guidelines and industry approved storage inspection protocols. If the verification inspection or TPO will be given a time frame to rectify and schedule an additional verification inspection or submit proof of correction to the satisfaction of the EDC. Other exceptions or extensions to the approval process may be determined on an individual basis by request from the Contractor or TPO to the EDC.

The Program Administrators shall conduct inspections as needed for any projects pursuant to the process described in Sec. 3.6, unrelated to EDC inspections as described above.

3.3. Transfer Customers Enrollment Process

The following steps outline the expected process flow for how Transfer Customers will be enrolled into Energy Storage Solutions. Note that Passive Dispatch upfront incentives are not available to Transfer Customers; Transfer Customers may only qualify for Active Dispatch performance incentives.

Transfer Customer Enrollment Steps and Milestones

1. Ensure Customer Contract Compliance, Execute Customer Terms & Conditions and Data Release

The Customer must have signed and executed a Customer Contract, Power Purchase Agreement (PPA), or Lease Agreement, noting the designation of associated parties to include TPO, Contractor, and other pertinent parties responsible for administration of the project. If the original Customer Contract, PPA, or Lease Agreement does not comply with the requirements set forth in Sec. 4.3, Contractor or TPO and Customer must sign a Customer Contract addendum to meet the requirements. In addition, Contracts with C&I Transfer Customers must include a provision stating that the TPO or Contractor will operate the battery in such a way that ensures the original warranty and performance guarantee are not voided.

The Customer must also agree to and sign the <u>Data Release and Terms & Conditions</u> <u>Agreement</u> available on the Energy Storage Solutions website and the Customer Terms and Conditions included in Appendix B.

2. Complete Application

Customers seeking participation in Energy Storage Solutions must be deemed eligible through an Application process that will remain open through the completion of Step 3. The Contractor or TPO must register their respective Customers using an approved Enrollment Platform to complete the Application. The Contractor or TPO will follow instructions on the Enrollment Platform to submit a complete Application, noting that the system is already installed and operational.

Communications and notifications for activity throughout the process will be sent via email to the addresses on file in the Application.

To be considered complete, each Application will include, but may not be limited to, the following information submitted directly or via attached files in the Enrollment Platform:

- a. Customer, Contractor, and TPO) (if applicable), detailed contact information
- b. Service address and account number
- **c.** Designation of operator responsible for "last-mile" communication to the device being dispatched
- **d.** Designation of incentive recipient (i.e., TPO, default is Customer) and point of contact responsible for Application accuracy
- e. Signed sales or lease agreement
 - i. For Residential Transfer Customers only: Signed sales or lease agreement between Contractor or TPO and Customer for battery storage system with Customer Contract addendum, if needed, as described in Section 4.3.1.
 - ii. For C&I Transfer Customers only: Signed sales or lease agreement between original installer of the battery storage system and Customer. If warranty and performance guarantee information is not contained in this agreement, then that must be submitted along with the sales or lease agreement. Also, a written document explaining TPO's or Contractor's ability to operate the battery within the warranty/performance guarantee limits must be provided.

- f. System design narrative, design submittals and specification sheets
- g. Priority Customer Designation, if applicable
- h. Signed Program Terms & Conditions and Data Release

As part of the enrollment process, residential participants will be required to complete a survey to better understand their battery storage needs with respect to capacity and duration during an outage. Upon receipt, the Enrollment Platform will provide the Customer and Contractor or TPO with an Application number to track progress. If any associated parties are yet to be selected by the Customer, such as Contractor or TPO, these designations must be made prior to Construction Phase as listed below.

3. Program Administrators review project for eligibility and technical accuracy

After Application submittal, Program Administrator staff will review the Application for accuracy and completeness. If additional information is needed, Contractor or TPO will be notified via email of any deficiencies. The Applicant may be given a time frame to correct such deficiencies, as indicated in an email communication. If after this extended time the Applicant has not provided the requested information, Programs Administrators may elect to cancel the incentive application.

4. Program Administrator approves project application

Upon all Application requirements being satisfied, the Program Administrator will electronically send a Reservation of Funds letter describing the milestone approval process and dates.

5. Completion Phase

As Transfer Customer projects have been installed prior to Application, Contractor or TPOs are expected to notify the Program Administrators of the commercial operation date (COD) via Enrollment Platform and that the system is ready for verification via submission of project completion materials in the Enrollment Platform within 90 days after Acceptance Letter has been signed.

6. Approval and Enrollment

Upon confirmation that the system is energized and operational and has received final approval from the EDC and CGB (as described in Transfer Battery Enrollment Process Step 3 below), the battery will be enrolled for performance incentive payments as described in Section 7: Program Dispatch and Incentive Structure.

3.4. Transfer Battery Enrollment Process

The following steps outline the expected process flow for how Transfer Customer batteries will be enrolled into Energy Storage Solutions. Note that Passive Dispatch upfront incentives are not available to Transfer Customers; Transfer Customers may only qualify for Active Dispatch performance incentives. Note: Transfer Customers are included in the Residential and Commercial – Active Dispatch Only Customer Class shown in Table 1 on page 6.

Transfer Battery Enrollment Steps and Milestones

1. Application Approval and Acceptance

When the Application has been approved and the Acceptance Letter has been executed (as described above in Transfer Customer Enrollment Process), all relevant data will be inputted into the EDC DERMS platform and the project will be registered.

2. Verification of System Operation

For all commercial and industrial projects, as well as residential projects over 20 kW AC of system nameplate discharge capacity, the verification of system operation step is required following construction completion and commercial operation. The EDC may inspect the system during operation, either physically in person or virtually, to verify system parameters are within the Application specification, informed by the EDC guidelines and industry approved storage inspection protocols. If the verification inspection or TPO will be given a time frame to rectify and schedule an additional verification inspection or submit proof of correction to the satisfaction of the EDC. Other exceptions or extensions to the approval process may be determined on an individual basis by request from the Contractor or TPO to the EDC.

The Program Administrators shall conduct inspections as needed for any residential projects under 20 kW AC of system nameplate discharge capacity, pursuant to the process described in Sec. 4.6.1.

3.5. Enrollment Deadlines and Milestones

Summer Season Application Deadline

For a customer to ensure they can participate fully in the summer season, the project must have received a Confirmation of Funds letter by 11:59 PM on May 31 of that year. Customers can enroll after May 31 for the summer season, however, discharge performance will be set to zero (0 kW average) for any Active events the customer missed. Customers will not be penalized for missing Passive events due to not being enrolled yet.

Winter Season Application Deadline

For a customer to ensure they can participate fully in the winter season, the project must have received a Confirmation of Funds letter by 11:59 PM on October 31 of that year. Customers can enroll after October 31 for the winter season, however, discharge performance will be set to zero (0 kW average) for any Active events the customer missed.

The Program Administrators reserve the right to change these deadlines.

Milestone Deadlines

Milestone	Deadline	
Confirmation of Funds received	May 31 st Summer; October 31 st Winter	
Execute Interconnection Security	Within 6 months after Executed Customer Contract	
Agreement		
Commercial Operation Date	Within 12 Months from Executed ISA*	
Verification of System Operation	Non-compliance issues must be addressed within 90	
	days of inspection (inspection performed closely	
	following Commercial Operation Date)	

*Customers may reserve an additional 6 months from Executed ISA as necessary and at the Program Administrator's discretion.

3.6. Project Verification

3.6.1. Project Inspections

To qualify for an incentive, Contractors or TPOs must agree to provide the Program Administrators with a Self-Inspection report (including all required photos) at project completion, along with all other project completion paperwork. The Program Administrators will review Self-Inspection report submission and follow up with the Contractor or TPO as needed. Contractors or TPOs will submit Self-Inspection reports via the Energy Storage Solutions Enrollment Platform in accordance with guidelines described in the current Process Guides. A copy of the <u>Third-Party Inspection Checklist</u> is posted at the Energy Storage Solutions website.

The Program Administrators reserve the right to have a representative of the Program Administrator conduct a field inspection of the completed system to verify information submitted in the self-inspection report and Application materials, as well as inspect the system with respect to: battery system communication status to assure that the battery can dispatch to meet Program requirements as well as meet customer backup power needs, equipment verification, safety considerations, workmanship, and other considerations such as local and state codes, laws and regulations (though adherence to applicable codes are primarily the purview of municipal inspections). Contractors or TPOs must allow this representative to inspect the completed and interconnected BESS, though Customers may decline the Inspection if they choose. Contractor or TPO and Customer will have the right to be present for the Program Administrators' Field Inspection as safety allows and at the discretion of the inspector. The Program Administrators and inspectors will coordinate inspection following Contractor or TPO's submission of proof of project completion if Host Customer opted into a Third-Party Inspection.

Upon the second instance of a re-inspection at one (1) or more sites, the Contractor or TPO may be required to pay the costs of follow-up inspection.

Discrepancies found between incentive applications and inspection reports will be reviewed by the Program Administrators. The Program Administrators reserve the right to adjust Upfront Incentive calculations based on inspection reports or other submitted documentation and will make a final decision on upfront incentive adjustments due to inspection failures. Upfront Incentive adjustments made as a result of inspection reports may only decrease the total incentive level; never increase. Contractor or TPO is responsible for the original Upfront Incentive calculation and will therefore be held responsible for any reduction in upfront incentive amount as a result of the inspection report or

other submitted documentation. Reduction in upfront incentive as a result of Contractor or TPO mistake or negligence shall not be passed on to customers.

The Program Administrators may decide to inspect a completed system based on the installer history, the Self Inspection Checklist, the customer availability, and if the Host Customer opted into an inspection. The Program Administrators will work to ensure that inspections are performed in a reasonable timeframe and do not impose an excessive burden or inconvenience on customers, or Contractors and TPOs in good standing. Customers may still decline the inspection if they are not available. The Program Administrators may modify its inspection policy to better accommodate Contractors or TPOs. Adjustments to the policy and/or processes will be detailed at the Energy Storage Solutions website.

3.7. Project Completion Policy

To ensure good stewardship of Energy Storage Solutions incentive funds, the Program Administrators will enforce a Project Completion policy. Approval of new incentive applications may be suspended and/or projects considered cancelled by the Program Administrators for projects that are non-compliant based on any of the eligibility requirements outlined above or any of the following rules:

- 1. Project Expiration
- 2. Inspection Failures and Delays
- 3. Completion Deficiencies

3.7.1. Project Expiration

Incentive reservations may be cancelled for projects if their incentive approvals expire. Projects will be considered expired when a Contractor or TPO has projects that have passed the timeframe (as specified in Reservation of Funds letter) listed in incentive reservation letters or on the Energy Storage Solutions website, where applicable, whichever is later. Projects are Expired if all completion paperwork has not been submitted. Expired Projects may have their project status changed to "Cancelled". Contractor or TPO may resubmit for approval at then-current incentive level unless the incentive level has increased and if project has not yet been installed. Incentive payments that were already received for cancelled projects must be returned to the Program Administrators within 30 days of cancellation.

The Program Administrators reserve the right to modify schedule, deadlines, and timelines associated with Project Expiration and will post notice via the Enrollment Platform in the event of any changes.

3.7.2. Inspection Failures and Delays

Incentive reservations may be cancelled if projects fail to meet inspection deadlines:

 Failed Inspection of 90+ days – Any projects in "Failed Inspection" status for 90 days or more. Contractor or TPOs may be granted an exemption if they can demonstrate a delay outside Contractor or TPO control.

- 2. Delayed Self-Inspection Consistent failure to submit Self-Inspection documentation.
- **3.** Fail to report energy data to the Program Administrator's Performance Data Monitoring platform

3.7.3. Completion Deficiencies

Projects will be rejected if responsible party fails to submit complete project completion information and paperwork, including but not limited to: inspection documentation, updated system specifications, certificates, change orders, signatures, audit trails and document revisions.

3.8. Unsubscribing from Energy Storage Solutions

Customers who enroll in Energy Storage Solutions will remain enrolled for 10 years (auto-renewed annually) or until they provide written notice to the Program Administrators that they want to be removed from the Program. Once a season (summer or winter) starts, the customer must stay enrolled for the entire season to receive the performance incentive. A customer cannot un-enroll midway through a season and receive the performance incentive for fewer events than all the other Program participants.

Exiting from the Program before 10 years of system operation, or non-performance in Passive events during this period, will result in non-compliance with Program requirements and the customer will be required to return a prorated portion of the un-earned upfront incentive as determined by CGB.

3.9. Extending Energy Storage Solutions Enrollment

After 10 years of system operation, BESS may still have useful life. Customers wishing to continue participation in Active Dispatches (and associated performance incentives) may apply for an extension (subject to Program availability) and will be eligible to receive performance incentives at the rate at the time of re-enrollment.

3.10. Transfer of Enrollment

The Program Administrators will allow customers to transfer Program enrollment to other customers. If a customer moves out of their residence/facility leaving their BESS behind, the new occupant and BESS owner will be required to notify the EDCs of the change in ownership in order to ensure future performance payments will be processed to the new owner. The new owner will complete a BESS Ownership Transfer Form (See Appendix E) through the Enrollment Platform. Information required will include contact information (name, email, phone), address, and the new utility electric account number. For installations where the seller financed a portion of the BESS and a direct payment recipient was named during the application process, the seller will be responsible for notifying the direct payment recipient of the transfer or decision to unsubscribe from the program.

If a customer moves out of their residence/facility leaving their BESS behind, and the new occupant does not participate in Energy Storage Solutions, then the original customer who entered into the Program Contract is responsible for returning a prorated portion of the upfront incentive upon property transfer.

3.11. Electronic Signatures

Contractors and TPOs may use and allow their retail customers to use electronic signatures in lieu of wet signatures for contracts and other documents in the Program and create such contracts and other documents in electronic form. Electronic signatures must (a) use logically attached or associated with the electronic contract or other document being created and is verifiable, (b) include a date and time stamp of the electronic signature and an electronic audit trail of the electronic signature and the electronic contract or other document that is created, and (c) be sure the electronic contract or other document is and retained in a secure electronic environment that preserves the integrity of the electronic contract and all the information contained therein and can be made available to the Program Administrators upon its request.

Examples of electronic signature technology systems that are acceptable to the Program Administrators include DocuSign, HelloSign and Adobe Sign. Only commercially available third-party platforms are accepted. The Program Administrators will not accept electronic signatures that have been digitally altered, copied, or placed using computer software that does not provide a verifiable electronic audit trail.

Section 4: Eligibility

4.1. Customer and Site Eligibility

To be eligible for Energy Storage Solutions, the customer must have a UI or Eversource electric service account located in Connecticut and the BESS must be located at the electric service account location.¹⁴ Additionally, the residential, commercial, or industrial building must be connected to the grid by agreement with the EDCs and the BESS must be new to the customer.

Systems energized or installed prior to January 1, 2022 are not eligible for the Upfront Incentive but may apply to participate in Energy Storage Solutions as a Transfer Customer provided their application is approved pursuant to Section 3.3. Such customers will only be eligible for Performance Incentives.

Systems energized or installed after January 1, 2022, but prior to the project's equipment OEM becoming approved as Eligible Equipment (up to a maximum of one year) can be approved for an Upfront Incentive at the discretion of the Program Administrators and provided their application is approved pursuant to Section 4. Such customers can be eligible for both Upfront and Performance Incentives at the rates in effect at the time of Reservation of Funds.

Additional capacity added to existing BESS's may be eligible for Energy Storage Solutions, subject to the discretion of the EDCs and an analysis of the proposed system to include age and functionality verification of the existing BESS components.

4.1.1. Ownership

BESS's may be owned by: (1) the customer or (2) a third-party operator (TPO) with the customer's permission as indicated in the Application. All Energy Storage Solutions rules must be met

¹⁴ New construction or new service customers may submit proof that a new service has been requested at application. Incentive payments will not be issued until the Program Administrators have confirmed that electric service has been established with Eversource or UI.
regardless of the BESS's owner. In the instance that there is a change in TPO or Contractor, the Customer must notify the Program Administrators in writing to request an evaluation of the new agreement and/or new TPO.

For customers purchasing a BESS from a qualified Contractor, the customer will retain title to the equipment purchased. The Contractor is responsible for ensuring all equipment is installed in accordance with manufacturer specifications and warranty provisions when system is placed in service. The Contractor will be held responsible for any actions that void equipment warranties due to workmanship.

If the BESS is owned by a TPO, the equipment title shall remain with the TPO.

4.1.2. Energy Efficiency Audits

For residential customers at the time of Completion, the Customer must have either completed a Home Energy Solutions (HES), Home Energy Solutions Income-Eligible (HES-IE), or an equivalent energy assessment¹⁵ after 2011 or must have scheduled such an assessment. Information on scheduling HES and HES-IE assessments is available at:

- Home Energy Solutions-Income Eligible: <u>https://energizect.com/your-home/solutions-list/save-energy-and-money-all-year-long/</u>
- Home Energy Solutions: <u>https://energizect.com/your-home/solutions-list/home-energy-solutions-core-services/</u>

In certain limited circumstances, one-to-four family homes are not required to have HES or HES-IE assessments. Exemptions to the HES audit requirement are permitted in only the following instances:

- 1. BESS is co-located with solar and is participating in the Residential Renewable Energy Solutions (RRES) Program or the solar portion participated in the Residential Solar Investment Program (RSIP).
- 2. Homes built on or after January 1, 1980 are not required to have an energy assessment in order to apply for the Program. If the applicant would like to waive the energy assessment requirement due to the home being built in 1980 or more recently, the applicant needs to provide a property assessor's card verifying the built date with the application submission. Partial new construction or renovations will not be considered for waiving the energy assessment requirement.
- **3.** Gut Rehabilitation: if the home has been or will be completely stripped to its frame and rebuilt, then at minimum, Contractor or Homeowner may follow exception listed above, if applicable.
- 4. Health and Safety Concern: Technician cannot perform energy efficiency audit due to health and/or safety concerns (i.e., mold, asbestos, vermiculite, etc.). In this case, a letter should

¹⁵ Program Administrator will accept energy efficiency audits conducted in-person by a technician certified by the Building Performance Institute (BPI), HERS, or Home Performance with Energy Star. A copy of the audit report must be provided to the Program Administrator. The Program Administrators must approve "HES equivalent" energy audit types.

be provided specifying the issues that prevent the audit or certain measures from being performed.

5. If a home built before January 1, 1980 was not able to move forward with a HES or HES-IE assessment due to the existence of a Health and Safety Concern described above, or if the home is not eligible for efficiency measures to be installed due to the age of the home per HES technician documentation, the Program Administrators will accept proof of completion of a Department of Energy Home Energy Score (DOE HE Score) performed at the residence. In addition, the Program Administrators will also accept proof that a Weatherization Assistance Program (WAP) assessment was performed at the residence within 15 years of the Application.

The Program Administrators recommend that commercial and industrial customers participating in Energy Storage Solutions have an energy efficiency audit performed by a qualified individual prior to system installation to ensure maximum resiliency benefits.

4.2. Storage System Eligibility

Effective January 1, 2024, the EDCs have expanded the list of eligible electric storage technologies (see Appendix A) beyond electro-chemical (or battery) BESSs systems. Other electric storage technologies eligible for the ESS Program include, but are not limited to: hydrogen storage; mechanical storage; thermal storage; and pumped hydropower. , Electric vehicles, however, are not allowed in the ESS Program at this time. All technologies must use the same incentive calculation methodology. The EDCs have detailed their technical and Program requirements below.

4.2.1. Technical Requirements

The Program Administrators have developed the following technical requirements for eligible electric storage technologies with which BESS OEMs, Operators, and Aggregators must comply:

- For new BESS (installed after January 1, 2022): Commercially available, carrying at least a 10-year manufacturer warranty with customer service and technical support provided by the manufacturer.
- For existing BESS (installed prior to January 1, 2022): An original warranty or performance guarantee of 10 or more years, with at least 7 years remaining.
- The equipment supplier should maintain the rated Power Capacity for a 10-year service life of the project with an availability standard (>90% availability is possible).
- The electric storage technologies shall be capable of and must comply with all scheduling commands to provide Power Capacity, Energy Capacity, and Annual Cycle requirements.
- The rated Energy Capacity shall be on an annual schedule over a 10-year period, or based on total energy throughput, to accomplish use-case objectives.
- Minimum 70% round-trip efficiency for all customers.
- Permanently installed, grid connected, and behind-the-meter.
- Adhere to structural, building, and local codes, laws and regulations.
- BESS design approved by the EDC as part of the interconnection process. For residential customers, BESS must be capable of exporting power to the distribution grid unless granted exception from the Program Administrators.

- BESS should be capable of islanding from the grid during outage events¹⁶ and the BESS wiring diagram should indicate how this will be accomplished.
- The equipment provider (Contractor or TPO) should offer service with capacities that include:
 - o Customer enrollment into a DERMS compatible communication interface.
 - Charge and dispatch control of individual systems.
 - Ability to send dispatch commands and receive inverter and critical operating data in real time (max of 15-minute intervals). Performance data upload to the DERMS must take place with no more than 1-month latency.
 - BESS Operators may not charge more than a 20% Vendor Fee for the operation of residential BESS. Any applicable Vendor Fees will be publicly available in the Eligible Equipment List referenced in Appendix A.

There are numerous codes and standards that apply across the BESS technological landscape. Some of these standards apply across all the technologies such as electricity metering, communication standards, building, and electric codes. Individual technologies, such as different battery chemistries or mechanical energy storage, may have specific standards that apply while emerging technologies are pushing these standards to be constantly evolving. Systems installed under Energy Storage Solutions should adhere to all applicable standards including, but not limited to, the following list:

- American National Standards Institute (ANSI 62.41 Surge suppression, ANSI C12.1 AC Electric Metering)
- Institute of Electrical and Electronics Engineers (IEEE 519 Harmonics, IEEE1547 Inverters, Controls, etc.)
- Underwriters Laboratories (UL1741SA Smart Inverters, UL 62109 Inverter safety, UL 1642 – Standard for Lithium Batteries, UL1973 – Stationary Batteries, UL9540a – Thermal Runaway and Flame Propagation)
- National Fire Protection Association (NFPA855 Standard for the Installation of Stationary Energy Storage Systems), latest version
- National Electric Code, latest version
- Connecticut Building Code, latest version
- Local Building and Safety Codes, latest version
- Federal Communications Commission (FCC Part 15A)
- Cyber Security Framework (NIST 800-171, ISO 27001)

Installations adherence to the applicable codes and standards assures safe and successful design, fabrication, procurement, and installation of a fully functional BESS that meets or exceeds all technical requirements, including protective and reverse-power relaying, and connection to the BESS step-up transformer secondary connections and the EDC's Supervisory Control and Data Acquisition (SCADA) interface. All communications equipment/software within the BESS, which are necessary for integration of the existing SCADA network are also driven by these standards and the preference of the EDC.

¹⁶ The BESS must be able to provide back-up power to the customer within a reasonable time in the event of an outage.

4.2.2. Technology Updates

During annual or Program review periods, the Program Administrators will provide an updated list of eligible electric storage technologies to the Authority. The list will include all relevant Program documentation on CGB, EnergizeCT, and the EDCs' respective websites. If a Customer, Contractor, or TPO proposes to participate in Energy Storage Solutions using technologies not already approved, the Contractor or TPO must submit a New Technology Application Form. The Program Administrators will evaluate all applications and the technology will be accepted or rejected at the Program Administrators' discretion based on its conformance to the technical and Program requirements defined above (See Appendix C). If the battery technology is considered pre-approved, the Contractor or TPO will be approved to begin the integration process with the DERMS vendor. The battery technology will not receive final pre-approval until a Scope of Work is signed with the respective DERMS vendor. The Contractor or TPO will then begin completing integration with the DERMS platform as required to obtain final approval in the Program. Integration costs will be borne by the Contractor or TPO.

4.3. Eligible Contractor and Third-Party Owner Requirements

Third-Party Owners (TPOs) are expected to interpret system-wide DERMS dispatch instructions to control an individual storage system operation. Each BESS enrolled in Energy Storage Solutions is required to select a certified TPO responsible for implementing the "last-mile" storage system controls. Contractor requirements for eligibility are also listed, providing detail on the expectation for installation and maintenance contractors.

Prospective Eligible Contractors or Eligible TPOs in the Residential Solar Investment Program (RSIP) as of October 1, 2021 may submit an abbreviated Application, as further detailed on the Energy Storage Solutions website, and as long as the application is submitted in 2022.

4.3.1. Eligible Contractor and Third-Party Owner Eligibility

Eligible Contractors and Third-Party Owners will design, sell, install, and/or service BESSs to customers in Eversource and UI territories. To qualify as an Eligible Contractor or Third-Party Owner, companies or individuals applying to Energy Storage Solutions must be qualified by experience and/or specific training in BESS design and electrical services. Additionally, Eligible Contractors and Third-Party Owners must be properly insured and meet Connecticut's occupational and professional licensing requirements, such as Connecticut Master Electrician (E-1) license and/or Connecticut Home Improvement Contractor (HIC) registration where necessary.

4.3.2. Required Documentation for Eligible Contractors

This section is only applicable to Contractors intending to sell or sell and install a BESS for residential and/or commercial and industrial (C&I) customers or install for a TPO.

To apply to become an Eligible Contractor in Energy Storage Solutions, applicants must provide the following documentation electronically or through the Program Administrator's online Application when available:

1. Complete Application – submitted electronically or online at Program website.

- Technical Capabilities Provide a summary of the Applicant company's experience and training with electric storage systems and related technologies; and Applicant's experience with CGB and EDC programs.
- 3. Bank Reference Letter Provide verifiable evidence of financial solvency and health. Eligible Contractors should demonstrate their business is in good financial standing, has sufficient financial resources, and is able to meet the cash flow requirements of managing multiple projects in the Program. Please submit a bank letter of reference/credit addressed to CGB on the bank's letterhead, including the following details:
 - a. Confirmation of good standing
 - **b.** Minimum balance carried
 - c. Length of time the applicant has been a customer of the bank
 - **d.** Signature of appropriate bank officer

If the financial capacity information is confidential, it must be labeled "CONFIDENTIAL" in the title of the document and be clearly marked "CONFIDENTIAL".

4. E-1 and/or HIC License(s) – Provide a copy of the E-1 license(s) and/or HIC registration(s) under which the applicant is registered. Please follow the guidance in Table 3 below to determine which license(s) must be held depending on type of sales.

Note: all salespersons for HIC companies must be registered as Home Improvement Salespersons (HIS) with each company for which that salesperson is conducting sales. Energy Storage Solutions does not require submission of HIS licenses for individual salespersons but may request them at any time. An owner or principal of an HIC company does not need to have an HIS to conduct sales.

	Reside	ntial BESS	Commercial and Industrial BESS
Company License	E-1	HIC	
Salesperson License		HIS	
Grid Interconnection Electrician's License (Subcontractor or Employee)		E-1	E-1

Table 3: Minimun	Required	Licensing for	Eligible	Contractors
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Solicitors' Permit(s) – "Vendor", "Peddler" or "Solicitor" permits <u>may be required</u> by certain Connecticut municipalities for canvassing and door-to-door sales or lead generation. Check with the municipalities in which you are doing business. Energy Storage Solutions does not require submission of these permits as part of the Application but may request them at any time.

5. Additional Licenses, Education and Training – Provide copies of any additional licenses, education and training obtained by permanent employees or subcontractors who will be directly involved in Energy Storage Solutions.

- 6. Subcontractor Information If the applicant company will use subcontractors to install BESS under Energy Storage Solutions, submit a list of all potential subcontractors along with their license information, and a copy of the applicant company's standard (unexecuted) subcontractor agreement(s). The agreement should be on the applicant company's letterhead and include the following details:
 - **a.** Subcontractor's primary responsibilities
 - b. Contractor's primary responsibilities
 - c. Term of agreement
 - **d.** Any other relevant terms

If any changes to subcontracting agreements are made, the Eligible Contractor must notify the Program Administrators within five (5) business days.

7. Residential BESS Sales Contract and Terms (if applicable) – Provide a sample or blank copy of your standard contract or sales agreement template exactly as provided to a residential customer for the sale of a BESS. Use of the contract template must be pre-approved by the Program Administrators. Contractors will not receive incentive approvals for residential projects using an unapproved contract template. If this contract changes substantively, an updated contract must be promptly provided to the Program Administrators.

All sales contracts between residential customers and Contractors participating in Energy Storage Solutions and requesting an Upfront Incentive must reference the incentive as an upfront cost reduction to the customer. The Upfront and Performance Incentives must always be referred to as "estimated".

Each residential sales contract must be signed by the Eligible Contractor and the customer. All sales agreements will include, but not be limited to¹⁷:

- a. Company license or registration (E-1 and/or HIC)
- **b.** Home Improvement Salesperson (HIS) registration number (if company is an HIC)
- c. Description of BESS location, size, specifications (e.g., make and model), and components
- d. Nameplate power (kW) and energy (kWh) output
- e. Data monitoring and collection responsibilities
- f. Warranty provisions
- **g.** Total BESS system cost, estimated upfront incentive amount, and estimated net customer cost
- h. Payment schedule
- i. Notice of cancellation (in duplicate)

¹⁷ See Energy Storage Solutions website for any additional data requirements.

- j. Current Program Terms & Conditions and Data Release (See Appendix B and <u>Program website</u>)
- k. Any additional information upon request by the Program Administrators
- Commercial and Industrial BESS Sales Contract and Terms (if applicable) Provide a complete copy of your standard contract or sales agreement template exactly as provided to a C&I customer for the sale of a BESS.

All sales contracts between C&I customers and Contractors participating in Energy Storage Solutions and requesting an Upfront Incentive must reference the incentive as "estimated".

Each sales contract must be signed by the Eligible Contractor and the customer. All agreements will include:

- a. Description of BESS system location, size, specifications, and components
- **b.** Nameplate power (kW) and energy (kWh) output
- **c.** Data monitoring and collection responsibilities
- d. Warranty provisions
- e. Total BESS system cost, estimated upfront incentive amount, and estimated net customer cost
- f. Payment schedule
- g. Current Program Terms and Conditions (See Appendix B and website)
- **h.** Any additional data upon request by the Program Administrators
- 9. Workmanship Warranty Provide a copy of Eligible Contractor's workmanship warranty. Contractors participating in Energy Storage Solutions must provide a ten (10) year or longer workmanship warranty. The warranty must cover full costs of labor for repair or replacement of any defective system components or components that failed due to improper or insufficient design or installation.
- 10. General Liability Insurance All Eligible Contractors and subcontractors must carry at least one million dollars in general liability insurance to participate in Energy Storage Solutions. Additionally, all Eligible Contractors and subcontracts must carry worker's compensation, and auto insurance.

4.3.3. Required Documentation for TPOs

This section is only applicable to TPOs which intend to own and operate BESS with lease or PPA to customers in Energy Storage Solutions. Companies may apply as both an Eligible Contractor and TPO if they intend to sell, install, own, and operate BESS to customers.

TPOs will own and operate BESS in agreement with customers in Eversource and UI territories. To qualify as a TPO, companies applying to Energy Storage Solutions must be financially solvent and able to own and operate a fleet of BESS and be properly insured and meet Connecticut's

occupational and professional licensing requirements, such as Connecticut E-1 and/or HIC licenses where necessary.

TPOs are expected to interpret system wide DERMS dispatch instructions to control an individual storage system operation. Each BESS enrolled in Energy Storage Solutions is required to select a certified TPO responsible for implementing the "last-mile" storage system controls.

All TPOs must provide the following documentation:

- 1. Complete Application submitted electronically or online at Program website.
- Technical Capabilities Provide a summary of the Applicant company's experience and training with battery energy storage systems and related technologies; and Applicant's experience with CGB and EDC programs.
- 3. Bank Reference Letter Provide verifiable evidence of financial solvency and health. TPOs should demonstrate their business is in good financial standing, has sufficient financial resources, and is able to meet the cash flow requirements of managing multiple projects in Energy Storage Solutions. Please submit a bank letter of reference/credit addressed to CGB on the bank's letterhead, including the following details:
 - a. Confirmation of good standing
 - **b.** Minimum balance carried
 - c. Length of time the applicant has been a customer of the bank
 - d. Signature of appropriate bank officer

If the financial capacity information is confidential, it must be labeled "CONFIDENTIAL" in the title of the document and be clearly marked "CONFIDENTIAL".

- 4. Agreement(s) with Eligible Contractor(s) TPOs are required to use Eligible Contractors to install BESS under Energy Storage Solutions or become an Eligible Contractor. Submit a copy of each agreement, if applicable, which should be on the TPO's letterhead, and include the following details:
 - a. Eligible Contractor's primary responsibilities
 - b. Eligible TPO's primary responsibilities
 - c. Term of agreement
 - d. Any other relevant terms
 - e. Signatures of all parties

If the TPO changes, cancels, or adds agreements with Eligible Contractors, the Program Administrators must be notified in writing within five (5) business days of the change. The TPO must also submit an updated agreement, and any other applicable documents. The Program Administrators reserve the right to request additional information regarding agreements with Eligible Contractors. TPOs may also apply as Eligible Contractors to coordinate or subcontract their own installations.

- Residential Lease / PPA Contract and Terms (If applicable) Provide a sample of the TPO's standard contract or sales agreement template for residential BESS Leases or PPAs.
- 6. Commercial and Industrial Lease / PPA Contract and Terms (If applicable) Provide a sample of the TPO's standard contract or sales agreement template for commercial and industrial BESS Leases or PPAs.
- 7. General Liability Insurance All TPOs must carry at least one (1) million dollars in general liability insurance to participate in Energy Storage Solutions. Additionally, all Eligible Contractors and TPOs and subcontractors must carry worker's compensation, and auto insurance.

4.3.4. Eligible Contractor and TPO Application Process

The Application process is as follows:

- Prospective Contractor or TPO will submit a <u>complete</u> Application to the Program Administrators at the Energy Storage Solutions website. The Program Administrators shall determine what constitutes a complete Application based on the requirements set forth in this document.
- 2. Each Application will be evaluated for completeness and consistency with the requirements outlined in this document within five (5) business days of submission. The Program Administrators will review the Application and may request additional documentation or information, if needed. Incomplete Applications may take longer to process and may be rejected. Rejected Applicants may resubmit a <u>complete</u> Application at any time.
- **3.** When a complete Application has been submitted, Program Administrators will review the Application. Applications can be rejected at the sole discretion of the Program Administrators. Reasons for rejection include but are not limited to:
 - **a.** Principal(s), executive(s) or staff (including but not limited to: managers, directors, executive staff, subcontractors or salespersons) of Applicant company have been associated with misconduct within Connecticut Green Bank or EDC programs, or have been associated with misconduct within other state or utility programs.
 - b. Principal(s), executive(s) or staff (including but not limited to: managers, directors, executive staff, subcontractors or salespersons) of Applicant company have been associated with illegal activity—criminal or misdemeanor—or unethical behavior that may cast Energy Storage Solutions in negative light or call into question the integrity or workmanship or salesmanship of the Contractor or TPO.
 - **c.** Complaints or negative references from customers, current or past employees or other agencies or organizations.
 - **d.** Other reasons the Contractor or TPO may not be capable of successfully participating in the Program or meeting the Program's consumer protection standards, at the Program Administrators' sole discretion.

- **4.** A letter notifying the Applicant of the Program Administrators' approval (Approval Letter) or denial (Denial Letter) of the Application will be sent electronically. If approved as a Provisional Eligible Contractor, the letter will stipulate the provisions. If denied, Applicant may reapply (correcting for deficiencies noted in Denial Letter).
- 5. Contractor or TPO must attend a training with a Program representative. This training must occur no more than one month before or after approval. Once the training is complete, Contractor or TPO will be granted access to Enrollment Platform. Trainings will be scheduled on a regular basis and posted at https://www.ctgreenbank.com/news-events/events-calendar/ and are available ad-hoc as needed.
- 6. Once approved and trained, Contractor or TPO may begin submitting incentive reservation requests pursuant to their status (Eligible or Provisional), (Residential and/or C&I) and sales type (PPA, Lease, Purchase).
- 7. In order to maintain eligibility in Energy Storage Solutions, Contractors and TPOs must either 1) submit and be approved for at least one project per calendar year, or 2) attend at least one Program training per calendar year. Contractors and TPOs who are not compliant with this requirement will be notified and subsequently removed from public Eligible Contractor and TPO lists.

4.3.5. Eligible Contractor and Third-Party Owner Responsibilities and Conduct

Eligible Contractors and Third-Party Owners' Primary Responsibilities are as follows:

- 1. Provide responsible, accurate and transparent sales and marketing information to customers
- **2.** Uphold a professional degree of workmanship and work collaboratively with the Program Administrators in the best interests of customers
- **3.** Follow all rules of Energy Storage Solutions including, but not limited to, those outlined in this document and in training guides and notices.
- **4.** Submit complete and accurate incentive applications on behalf of customers via the Program workflow platforms.
- **5.** Comply with <u>current</u> Program processes for submission of incentive applications, inspection reports and project completion documents, as outlined in training materials provided by the Program Administrators.
- **6.** Obtain all appropriate local and state permits and approvals to facilitate the installation of the BESS.
- **7.** Maintain all required insurance, licenses, registrations, and certifications as required by Energy Storage Solutions and by applicable local and state law.
- **8.** Comply with all national, state, and local codes and standards, rules and regulations including but not limited to those related to home improvement contracting, electrical work and construction.

- 9. Coordinate installation of grid-tied BESS through direct employees or subcontractors.
- **10.** Complete interconnection applications for UI and Eversource customers and obtain interconnection approval before commissioning.
- **11.** Refrain from installation of BESS systems prior to Program Administrators approval when requesting an upfront incentive.
- **12.** Collaborate with the Program Administrator's third-party inspectors, as needed.
- **13.** Complete system installation (if applicable) and pass all required inspections within a reasonable timeframe.
- **14.** Honor a required minimum ten (10) year workmanship warranty.
- **15.** Respond to BESS outages and other BESS performance and monitoring issues within a reasonable timeframe and in accordance with warranty and contract terms.
- **16.** Configure and maintain access to an Approved Performance Data Provider for each project receiving a Program incentive.
- Understand the public policy objectives of Connecticut Public Act No. 21-53 and Docket No. 17-12-03RE03
- **18.** Hold responsibility for and present a plan for disposal of storage assets at the end of their useful life.

TPOs are required to work with Eligible Contractors to fulfill the above responsibilities. Contractors and TPOs will be held directly accountable for work performed by their staff, subcontractors or other representatives.

4.3.6. Eligible Contractor and Third-Party Owner Non-Performance, Misconduct, Improper and Illegal Behavior

The Program Administrators can, at their sole discretion, impose a probation, suspension, or termination of a Contractor or TPO's eligibility to participate in Energy Storage Solutions, and/or may put on hold, suspend, or terminate incentive payments at any time if Program requirements are not met, or for misconduct, improper, or illegal behavior in connection with Energy Storage Solutions (alleged or convicted), including but not limited to the following:

- 1. Complaints regarding sales, workmanship, and/or service, including, but not limited to:
 - a. Misleading or high-pressure sales tactics
 - b. Providing false, deceptive, or inaccurate information
 - c. Poor customer service
 - d. Poor, improper, or unsafe installation quality
 - e. Billing for equipment not installed, services not rendered or charges that should not be borne by a customer based on Program rules, agreements, or similar circumstances

- 2. Failure to ensure that all applicable employees and/or subcontractors are properly licensed according to Connecticut State law and adhere to the requirements of Energy Storage Solutions.
- **3.** Failure to comply with current State and local laws and ordinances pertinent to home improvement contracting, building, and electrical work, including but not limited to:
 - a. Obtaining proper permits for lead generation, sales, and installations
 - b. Following Occupational Safety and Health Administration (OSHA) regulations
 - **c.** Following National Electric Code (NEC), Connecticut State Building Code(s), municipal building code(s) and ordinance(s).
- 4. Improper incentive activity, including, but not limited to:
 - **a.** Failure to return cancelled incentive funds to the Program Administrators within a thirty (30) day period
 - **b.** Failure to return overpaid or otherwise owed incentive funds to the Program Administrators within a thirty (30) day period. (For example, an incentive could be overpaid due to an incentive reduction based on inspection findings occurring after incentive payment, or premature unenrollment from dispatch programs).
 - c. Failure to pass 100% of upfront incentive as upfront cost reduction to the customer
- 5. Misrepresentation of BESS capabilities and benefits in sales or marketing materials to obtain competitive advantage, including, but not limited to:
 - **a.** Presentation of inaccurate, deceptive, incomplete, or misleading power and energy estimates, including backup power
 - **b.** Presentation of inaccurate, deceptive, incomplete, or misleading economic and environmental benefits
 - **c.** Actions against a customer's best interests (including, but not limited to design and/or sale of a BESS that is not ideal or suited for the customer's property, energy, or economic needs)
 - **d.** Misrepresentation of incentives and credits (i.e., Program incentives, federal ITC, tax liability, etc.)
 - e. Presentation of inaccurate or misleading information about utility electricity rates including assumptions regarding rate escalation and Time of Use (TOU) rates and schedules
 - **f.** Presentation of inaccurate or misleading information regarding incentives, project payback, return on investment or other measures of customer project economics
- 6. Consistent inspection failures, including, but not limited to:
 - **a.** Municipal inspections

- **b.** Utility inspections or witness tests
- c. Program field inspections
- 7. Failure to submit or respond to requests for information, including but not limited to:
 - **a.** Program documentation or information
 - b. Certificate of insurance
 - c. Certifications and licensing applicable to Program Manual
 - d. Permit or interconnection documentation
- 8. Failure to meet Responsibilities described in this document
- **9.** Submission of fraudulent or falsified documents or unauthorized signatures to the Program Administrators or to other State, municipal or utility agencies related to the installation of the BESS, including, but not limited to the manipulation of a signed document or electronic signature.
- 10. Commission of any illegal actions while participating in Energy Storage Solutions, or if principal(s), executive(s), manager(s), salesperson(s) or other key staff (including subcontractors) are suspected or convicted of involvement in criminal or misdemeanor activity that calls into question the integrity or workmanship or salesmanship of the Contractor or TPO, or any other actions or behaviors that cast or potentially could cast Energy Storage Solutions in a negative light or are deemed unethical or improper by the Program Administrators.
- 11. Consistent failure to follow Program procedures.

Contractor or TPO may be given reasonable opportunity to correct problems identified by the Program Administrators, however, the Program Administrators reserve the right to immediately place on probation, suspend or terminate the Contractor or TPO from the Program for any violation or alleged violation of Program rules at the Program Administrators' sole discretion. Suspended Contractors or TPOs may reapply to Energy Storage Solutions after their suspension period has ended. Suspended Contractors or TPOs will submit a new Application, explain how prior violations were remedied if applicable, and include a plan for preventing future issues.

4.3.7. Disciplinary Action and Appeal

Upon the Program Administrators becoming aware of a violation, act, or omission, the Program Administrators may take one or more of the following actions:

- **1.** Contact principal(s) of Contractor or TPO with written description of alleged Program violation(s) and request a written response to the allegations from Contractor or TPO.
- 2. Immediately suspend Contractor or TPO from Energy Storage Solutions and request a written response to the allegations from Contractor or TPO. Suspension may remain in effect as an investigation is conducted.
- **3.** Forward all documentation relevant to Program violation allegations to the Connecticut Department of Consumer Protection (DCP) and/or Connecticut Attorney General's office

and/or PURA's Office of Education, Outreach & Enforcement (EOE) and/or other relevant local, state or national agencies, officials, offices or organizations.

The Program Administrators will review Contractor or TPO response and request additional information as needed.

The Program Administrators will respond in writing with their findings and with any disciplinary action. Such disciplinary action may include, but not be limited to:

- **1.** Probation (including but not limited to a limitation of incentive approvals)
- 2. Suspension from Energy Storage Solutions
- 3. Termination from Energy Storage Solutions indefinitely

If Contractor or TPO disagrees with the decision made by the Program Administrators, the Contractor or TPO may appeal the decision within thirty (30) days of issuance to a review committee consisting of the officers of the CGB and representatives of Eversource and UI. The Contractor or TPO shall have the right to present their appeal within forty-five (45) days from requesting such appeal. The decision of this review committee shall be the final determination on the matter.

The Program Administrators may modify or expedite this process as the situation necessitates or as agreed to by the Contractor or TPO and the Program Administrators. All involved parties are expected to work expeditiously in finding resolution, however, timelines shall not be guaranteed due to the unique nature of each situation.

4.3.8. Important Implementation Notices for Project Completion Policy

Contractors and TPOs with approval suspension will still be able to submit projects to the Program enrollment platform. However, projects submitted during an approval suspension period will be considered for approval at the incentive level in effect at the time the suspension is lifted (i.e., Contractors and TPOs under suspension will not be able to "reserve" prior incentive levels).

These rules are applicable throughout the entire duration of the Program, and the Program Administrators may implement suspensions at any point in time based on non-compliance with these rules.

Contractors and TPOs are ultimately responsible for project management including tracking the status of their projects with respect to this policy.

The Program Administrators reserve the right to adjust these rules and will provide notice of changes. The Program Administrators reserve the right to make the final determination on a Contractor or TPO's standing with respect to these rules, including decisions as to whether Contractor or TPO has achieved compliance and whether suspension may be lifted. The Program Administrators are not obligated to provide exceptions to this policy. The Program Administrators will consider a Contractor or TPO's inability to comply with this Project Completion Policy a violation of Program rules.

4.3.9. List of Eligible Contractors and TPOs

The Program Administrators will maintain a <u>list of Eligible Contractors and TPOs</u>. This list will be available on the Program website.

Section 5: Operational Control

In the event of an emergency within the customer's facility, the customer should call the appropriate emergency services. As quickly as is feasible, the customer should notify their respective EDCs' customer care centers to report the emergency¹⁸.

Eligible BESS in Energy Storage Solutions must be connected to and controlled by the relevant residential or C&I DERMS. The DERMS will send dispatch signals for both the Passive and Active programs. Dispatch events will include Passive and Active events as described in subsequent sections. The EDCs will require each system to include the following the minimum control and monitoring aspects, at minimum:

- Telemetry. Telemetry requirements will include a minimum granular location, charge, discharge, state of charge, and schedule of events. This telemetry should meet the Program requirements of 15-minute interval data at 1-month latency. In addition, the DERMS platform should receive this telemetry from every discrete BESS and not at a fleet level. Additional details are provided below in Section 5.1.
- 2. Dispatching. The EDC will initiate the dispatch of the battery energy storage system through their DERMS platform, accounting for Program dispatch and any ISO-NE override instructions, and the EDC can schedule the dispatch in advance or in real-time.¹⁹ Event packages may include start/stop, charge/discharge, and level of charge/discharge. The Operator will be responsible for "last-mile" operational instructions to the Customer System.
- **3. Override**. If required to maintain the safety and reliability of the grid, EDCs may also override dispatch events scheduled by the ISO-NE for battery energy storage systems participating in their programs and/or operations.

The communication to the BESS may be a direct connection to the DERMS platform. However, other layered communications constructs are acceptable if the system meets the above minimum operational control requirements. This flexibility would allow a BESS Operator to control the "last-mile" communication to the BESS via a third-party system, if that system provided upwards telemetry, dispatching, and override capabilities to the respective DERMS. Notification will be provided to the customer's BESS Operator via an approved API or OpenADR Protocol. (Residential BESS may obtain a temporary exemption upon startup to use SFTP with special exception from Program Administrators).

BESS operation allows support of the grid with high-speed operations driven by the technology of the system components. While synced to the grid, the lithium-ion BESS has proven to respond with full load capability from remote telemetry in the 1-2 second time range. From an offline state, the BESS can sync to the grid and provide full power in less than 30 seconds in most circumstances. The steps required to go from offline to an online state has a relatively simple control sequence and using the Power Conditionings System (PCS) or inverter/transformer to sync to the electrical characteristics of the grid. Figure 1 illustrates a high-level depiction of the hardware required for both the EDC and ISO-NE to manage control of the BESS through the DERMS platform.

¹⁸ Eversource Emergency Contact: (800) 286-2000; UI Emergency Contact: (800) 722-5584

¹⁹ In most cases, the EDCs will schedule a dispatch in advance with a day-ahead notification; however, the EDCs also plan to conduct real-time dispatches.





5.1. Operational Agreements

The EDC and the Customers will enter into an Operational Agreement to manage dispatches. Key elements of the Operational Agreement will be general operating standards, emergency conditions, and dispatching Passive and Active services. Networking and communication of the BESS with EDC supervisory controls will be critical to successful operation over the term of an agreement. Over time, integration with data acquisition (SCADA) systems will improve the performance and value of storage systems, BESS will be expected to incorporate SCADA communications as applicable.

5.1.1. General Operating Standards

The BESS Operator must provide the telemetry (i.e., data from the BESS) capable of communicating the minimum data elements as described below:

 Critical operating parameters that the Operator should monitor throughout the BESS include but are not limited to: inverter AC and DC voltage, current, kW, kVA, kVAR, power factor; battery rack voltage and current, battery module min/max voltage, auxiliary system critical parameters, fire detection/suppression monitoring points, state of charge, and temperature monitoring points of the battery racks.

BESS Operator's telemetry must ensure data can be provided to the DERMS at intervals not to exceed 15 minutes with a maximum latency of one month.

Utility grade meters that were selected according to ANSI standards will need to be maintained throughout the lifetime. Inspection and testing of all meters will conform to Good Utility Practice, but not less often than every five (5) Contract Years at Customer, owner, or BESS Operator's expense. Upon reasonable written request to the Customer, the EDC will request, at its own expense, inspection or testing of any such meters more frequently.

5.1.2. Dispatching Passive and Active Services

The BESS installed through the Program must be capable of meeting the following dispatch requirements, as required by appropriate Customer Class. See Appendix D for Operational Agreement.

Passive Dispatch²⁰

- **Notification:** For BESS systems receiving upfront incentives, the DERMS will provide advance notification to the BESS Operator who will implement discharge information to the Customer's BESS and comply with the following schedule:
 - **Event Window and Frequency**: Passive Dispatch will occur Monday through Friday in the months of June, July, and August, except for holidays. Passive Dispatch hours will be between 3 PM EST and 8 PM EST.
- **Discharge**: Operator will ensure the battery discharges its available energy capacity at a constant rate in each hour during the 5-hour dispatch window, while maintaining a minimum reserve of 20% of rated battery capacity.
- **Participation Term**: The Customer will participate in Passive Dispatch activities for the term of this agreement.

Active Dispatch

- Notification: When ISO New England forecasts electric grid capacity constraints, the EDCs will provide notification to the BESS Operator via the DERMS at least 24 hours in advance of the start of the Active Dispatch event
 - Event Windows and Frequency: The EDCs may initiate between 30-60 requests for Active Dispatch from June through September and up to 5 requests from November through March. The Active Dispatch event will be a maximum of 3 hours between the hours of 12 PM to 9 PM.
- **Discharge:** BESS Operators will be provided with the requested discharge level for the event. Actual performance will be verified based on data captured by the Customer's Operator and reported back to the DERMS.
- Active Dispatch Performance: To receive performance incentives, customers must participate in Active Dispatch events. If a customer does not participate in an event, they will receive 0 kW performance for that event. The Customer's performance incentive is based on the average kW discharge from all events called during each dispatch season (i.e., summer or winter).

Override Conditions

During the term of this Operating Agreement, the EDCs may require an override (i.e., cancel or change the timing of an event) of a scheduled dispatch event based on the following circumstances:

• Overriding Passive Dispatch with Active Dispatch Events: If an Active Dispatch event is scheduled by the EDC during a day with Passive Dispatch already scheduled, the DERMS will send notification to the BESS Operator with start time, stop time, and duration of an Active event at least 24 hours in advance. The planned Passive Dispatch for the scheduled

²⁰ Applies only when the Customer is requesting an Upfront Incentive.

day will be cancelled at that time. The customer will also receive email notification that the Passive Dispatch was cancelled at least 24 hours in advance of the planned Active Dispatch.

- **Other Override Conditions:** EDCs may also override scheduled dispatch events (Passive or Active) for all Customer Classes for the following reasons:
 - o Grid Safety and Reliability. Critical system events that impact system voltage levels, system stability and safety, or distribution system events that are considered emergencies by the EDCs may require override of a customer's BESS. While such conditions are rare, the EDCs will attempt to provide advance notification whenever possible, dependent on the nature of the event. Notification would be provided to the Operator via established communication protocol. Customers will also receive an email notification that the scheduled event is being cancelled.
 - Forecasted Severe Weather Conditions. Known severe weather events that are anticipated to trigger the EDC's Emergency Restoration Plan (ERP) level 1-5 activities may also generate conditions which require an override of scheduled events to ensure the customer's backup capacity is available in case an outage is experienced by the customer. In such an event, EDCs via their DERMS will initiate cancellation notification to BESS Operators of all planned dispatch events (Passive and Active) 48 hours in advance whenever possible. Notification will also be provided to customers whose scheduled events are being cancelled due to severe weather conditions. The cancellation will continue until restoration of incurred outages has been completed or the weather event has ended.

5.2. Battery System Maintenance, Internet Connection, and Durability Responsibility

Contractors and TPOs are responsible for maintaining the Customer's BESS so that it can respond to dispatch events. Performance data is expected to come from the BESS, not a separate meter, as dictated by the ANSI standard mentioned in Section 4.2.1 Technical Requirements. The incentive amount could be affected if: (1) a BESS is not properly maintained, (2) the internet connection to the BESS is not maintained, or (3) any other aspect that would cause the BESS to discharge less or be unable to properly report performance. Electric storage capacities degrade over time, causing them to be able to discharge less power and/or energy. This will also affect the incentive amount. Therefore, prior to enrolling in Energy Storage Solutions, customers and their Contractor or TPO should consider the possibility of smaller than anticipated incentives due to lifecycle management decisions combined with expected performance decreases over the life of the BESS.

Section 6: Program Dispatch and Incentive Structure

CGB will administer the Passive Dispatch declining-block upfront incentive and the EDCs will administer the Active Dispatch ongoing performance incentive. To be eligible for upfront incentives, projects must meet the requirements defined in Section 4 on customer and technology eligibility. Additionally, the BESS must be set to the Passive Dispatch default settings, or another acceptable use case determined by CGB and approved by the Authority, such as Active-Only Dispatch. Systems installed prior to January 1, 2022, are not eligible for the Upfront Incentive but may apply to participate in the Active Dispatch portion of the Program and earn the Performance Incentive provided their application is approved pursuant to Section 3.3.

Program Requirements

The EDCs have developed the following Program requirements:

- There must be an appropriate interconnection agreement that meets the relevant EDC's standard interconnection requirements.
- Ability to meet both the Passive and Active Dispatch needs of the Program, as applicable, including completing software integration with dispatch platforms utilized in the Program, and the ability for technology to receive remote software upgrades.
- Approved electric storage technologies (See Appendix A) will require completing the New Technology Application (Appendix C) to obtain eligibility from the EDCs to engage in the integration process with the DERMS vendors. Costs associated with the integration effort will be borne by the BESS Operator.

The Program will allow for BESS to be both standalone and coupled with other energy resources (e.g., solar), if such configurations are also in compliance with EDC interconnection agreements. Both alternating current (AC)-coupled and direct current (DC)-coupled battery systems are eligible for Energy Storage Solutions.

6.1. Passive Dispatch and Upfront Incentives

CGB, in consultation with the EDCs, is responsible for developing the guidelines governing Passive Dispatch.²¹ Customers that receive an upfront incentive (Residential Customers, Commercial – Fully Enrolled Customers, and Priority Customers, collectively "Passive Dispatch Participants") must participate in the Passive Dispatch portion of the Program.²² This requires setting the BESS to automatically store and dispatch energy through the BESS to reduce demand during summer peak periods (see Table 2). Typically, Passive Dispatch participants will not need to take any action for their BESS to respond to a Passive discharge event. The residential BESS participating in Energy Storage Solutions will be required to have capability to export to the grid in order to maximize benefits to the grid.²³ The conditions that allow for exemption will be detailed in separate Program materials as the factors affecting those conditions evolve.

²¹ Authority, Order No. 3 in Docket No. 21-08-05. "No later than October 1, 2021, the Program Administrators shall also develop and file for the Authority's review and approval rules guiding the distribution of the upfront incentive payment to participating electric storage system owners in Docket No. 21-08-05 consistent with the direction provided in Section III.C."

²² If such customers seek to receive the upfront incentive and/or the upfront incentive adder.

²³ Unless interconnection is cost prohibitive as detailed in the Customer Enrollment Process

As part of the Application process, the Program Administrators will require all Passive Dispatch Participants to sign the Data Release and Terms and Conditions Agreement (see Appendix B) asserting compliance with the Passive Dispatch guidelines. Customers may deviate from Passive Dispatch parameters only under the following circumstances:

- During emergency events as determined by the relevant EDC.
- During Active Dispatch events as determined by the relevant EDC.

During Passive Dispatch events, Passive Dispatch Participants are required to discharge down to 20% of the BESS rated capacity. The Passive Dispatch window is 5 hours in duration.

For example: a BESS with 12.5 kWh rated energy capacity will have 10 kWh available for Passive Dispatch and 2.5 kWh for reserve. During Passive Dispatch, the BESS will discharge at an average rate of 2 kWh per hour for the 5-hour duration. This is illustrated in the chart below:



Figure 2: 12.5 kWh Battery Passive Dispatch

Residential Customers and Priority Customers – Residential are eligible for upfront incentives, administered by CT Green Bank, as defined in Table 4. The residential up-front incentive structure follows a declining block structure with decreasing \$/kWh incentive offerings as Program participation meets stepped capacity milestones.

Incentive Step	Estimated No. of Participants	Capacity Block (MW)	Standard (\$/kWh)*	Underserved (\$/kWh)*	Low- Income (\$/kWh)*	Estimated Average Upfront Incentive per System
1	2,000	10.0	\$250	\$450	\$600	\$4,657
2	3,000	15.0	\$212.5	\$450	\$600	\$4,353
3	5,000	25.0	\$162.5	\$450	\$600	\$3,948
Total	10,000	50.0				

Table 4: CGB Residential Customer Upfront Incentive (2023-2024)

*Upfront incentives are defined based on rated energy capacity (kWh)

† Projects that qualify as Multifamily Affordable Housing (MFAH) are eligible for the Low-Income incentive rate (See MFAH definition in §1)

‡Incentive rates were increased for program year 2024. Contractors with an existing reservation of funds are not permitted to cancel projects for the purpose of reapplying to receive higher incentive rates.

Commercial – Fully Enrolled and Priority Customers – Commercial are eligible for upfront incentives, administered by CGB, as defined in Table 4. The designation between small, medium, and large is based on the customer's annual peak demand. Customers installing an oversized battery system with a power rating greater than their annual peak demand will receive a prorated upfront incentive according to the Tiers described in Table 4. An incentive calculator is available at <u>www.energystoragect.com/contractor-resources</u>.

Assigning the applicable Small, Medium, and Large Upfront Incentive will be determined based on a customer's "annual peak demand", defined as the highest peak demand billed for the twelve (12) months prior to application, as determined by the customer's utility for billing purposes. In the event this calculation is not possible (e.g. no interval data available), Program Administrators may use the billing demand in a customer's utility bill.

Capacity Block (MW)	Upfront Incentive (\$/kWh)*			
	Small Commercial Tier	Medium Commercial Tier	Large Commercial Tier	
50.0	\$200	\$175	\$100	
Small Commercial is a C&I customer with annual peak demand <200 kW Medium Commercial is a C&I customer with annual peak demand 200 kW - 500 kW _arge Commercial is a C&I customer with annual peak demand >500 kW Upfront incentives are defined based on rated energy capacity (kWh).				

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Passive Dispatch Participants will be required to participate in Passive Dispatch for a minimum of 10 years. Exiting from Energy Storage Solutions before the end of this period, or non-performance in Passive events during this period, will result in non-compliance with Program requirements and the system owner will be required to return a prorated portion of the un-earned incentive. The claw back evaluation process will commence at the end of the summer season. The evaluation will determine whether a participating BESS responded to greater than 90% of the Passive Dispatch hours at the enrolled level.²⁴ The first year that the system is non-compliant with this threshold, the customer will be responsible for returning 10% of the upfront incentive ("Violation Fee 1").²⁵ Upon the second year of non-compliance, the customer will be charged a second fee equal to a pro-rated amount of the upfront incentive based upon remaining years in the Program ("Violation Fee 2"). After Violation Fee 2, the customer will no longer be considered a participant in Energy Storage Solutions. In the event that the customer does not pay the Violation Fees as described above, performance incentive payouts will be swept by CGB until the cost of the violation fee is recovered. If no performance incentive payouts are available to be swept, the customer will be billed by CGB.

If the customer is able to demonstrate a valid reason for non-compliance (e.g. manufacturer recall), they may appeal the Violation Fees to CGB directly. Program Administrators will conduct an investigation and will notify the customer in writing whether the penalty is upheld.

Passive Dispatch Participants will also be automatically enrolled in Active Dispatch.

6.1.1. Upfront Incentive Priority Customer Adder

Customers that qualify as one or more of the following priority class customers will be eligible for an additional incentive adder including Customers on the Grid Edge, Critical Facilities, C&I Customers replacing Fossil Fuel Generators, and Small Business Customers. Definitions and limitations for each customer class are defined below²⁶.

Upfront Incentive Adder	Customer Category
+25%: Non-Residential	Small Business
	Critical Facilities
	Customers Replacing Fossil Fuel Generators
	Grid Edge
+50%: Residential	Grid Edge

Table 6: Upfront Incentive Priority Customer Adder

6.1.1.1 Customers on the Grid Edge

Customers on the Grid Edge are defined as (1) the top ten percent of circuits with the highest number of outages per customer during major storms since July 1, 2012, and (2) the top ten percent

²⁴ As described above, Passive Dispatch Participants are expected to uniformly dispatch 80% of useable energy over the 5-hour Passive Dispatch window.

²⁵ For systems enrolled mid-season, the period between the beginning of the season and enrollment in the program will not be assessed as "non-compliance" in the first year.

²⁶ Priority Customers that applied to ESS prior to January 1, 2023 may participate in ISO-NE Forward Capacity Markets with approval from Program Administrators. See ESS Program Manual dated January 2, 2022 for more information.

of circuits with the longest outages due to major storms since July 1, 2012. <u>A map of circuits</u> that meet grid edge criteria can be found in the Program's website.

6.1.1.2 Critical Facilities

As of January 1, 2024 Critical Facilities shall be defined by the revised definition according to Gen. Stat. § $16-243y(a)(2)^{27}$. Customers must provide a resiliency plan when applying for this designation. EDCs will confirm applicant's qualification as a critical facility as part of the application process.

6.1.1.3 Commercial and Industrial Customers Replacing Fossil Fuel Generators

This category applies to customers who are replacing their existing fossil fuel generators with electric storage systems. Customers must provide a resiliency plan when applying for this designation.

6.1.1.4 Small Business Customers

Small business customers are commercial and industrial customers with less than 200 kW annual peak demand. Customers must provide a resiliency plan when applying for this designation.

6.1.2. Calculation of Upfront Incentive

The calculation of the upfront incentive is primarily based on the usable energy capacity (kWh) of the BESS, with some limiting factors. The upfront residential incentive is calculated based on the **minimum** of the following three formulas:

- Residential Formula 1: BESS rated energy capacity (kWh) * [\$250/kWh]²⁸
- Residential Formula 2: 50% of BESS total installed cost
- Residential Formula 3: Maximum per project incentive of \$16,000²⁹

The upfront non-residential incentive is calculated based on the **minimum** of the following two formulas:

- Non-Residential Formula 1: BESS rated energy capacity (kWh) * [Rate applicable to demand tier]³⁰.
- Non-Residential Formula 2: 50% of BESS total installed cost

Non-Residential systems are limited in power (kW) eligible to receive an upfront incentive to 150% of the customer's annual peak demand or 2 MW, whichever is greater. The following illustrative examples demonstrate how the incentive calculations work. For additional examples and a calculator tool, please visit the <u>Energy Storage Solutions website</u>.

Example 1 - In the case of one 5 kW, 13.5 kWh battery with an installed cost of \$20,000, for a standard Residential Customer:

• 13.5 kWh * \$250/kWh, or \$3,375

²⁷ Critical Facilities Definition to be used as of January 1, 2024 https://www.cga.ct.gov/2023/act/pa/pdf/2023PA-00157-R00HB-06853-PA.pdf

²⁸ kWh level as determined depending on the project type and incentive level as provided in Table 4.

²⁹ Residential Formula 3 does not apply to Multifamily Affordable Housing installations

³⁰ kWh level as determined depending on the project type and incentive level as provided in Table 5.

- 50% of \$20,000, or \$10,000
- Maximum incentive of \$16,000

The customer would receive an upfront incentive of \$3,375.

Example 2 – In the case of two batteries that add up to 15.2 kW, 36 kWh with an installed cost of \$30,000, for a priority Residential Customer:

- 36 kWh * \$250/kWh, or \$9000 + 50% adder = \$13,500
- 50% of \$30,000, or \$15,000
- Maximum incentive of \$16,000

The customer would receive an upfront incentive of \$13,500.

Example 3 – In the case of two batteries that add up to 10 kW, 27 kWh with an installed cost of \$30,000, for a low-income Residential Customer:

- 27 kWh * \$600/kWh, or \$16,200
- 50% of \$30,000, or \$15,000
- Maximum incentive of \$16,000

The customer would receive an upfront incentive of \$15,000.

Example 4 – In the case of one 250 kW, 675 kWh battery for a medium-sized Commercial customer with an annual peak demand of 240 kW and an installed cost of \$378,000:

- 675 kWh * \$175/kWh, or \$118,125
- 50% of \$378,000, or \$189,000

The customer would receive an upfront incentive of \$118,125.

Example 5 – In the case of one 1.9 MW, 10 MWh battery for a large-sized Commercial customer with an annual peak demand of 2 MW and an installed cost of \$2,500,000:

- 10,000 kWh * \$100/kWh, or \$1,000,000
- 50% of \$2,500,000, or \$1,250,000

The customer would receive an upfront incentive of \$1,000,000

Example 6 – In the case of one 1 MW, 5 MWh battery for a small-sized Commercial customer with an annual peak demand of 180 kW and an installed cost of \$1,750,000:

- System is > 150% of customer's peak demand, but < 2 MW. Incentive cap not exceeded.
- 5,000 kWh * \$200/kWh, or \$1,000,000
- 50% of \$1,750,000, or \$875,000

The customer would receive an upfront incentive of \$875,000

Example 7 – In the case of one 3 MW, 15 MWh battery for a large-sized Commercial customer with an annual peak demand of 750 kW and an installed cost of \$3,500,000:

- System is > 150% of customer's peak demand and > 2 MW, exceeding incentive cap
- 150% of peak demand = 1.125 MW. Capped system size is 2 MW

The project must be redesigned by the contractor or may request a prorated Upfront Incentive.

6.2 Active Dispatch and Performance Incentives

When an Active Dispatch event is called the Passive Dispatch event for that day is cancelled. In the situation that an Active Dispatch event is called by the EDCs during the Passive Dispatch hours, the Active Dispatch shall take precedence over the Passive Dispatch event.

	Summer	Winter
Season Dates	June 1 – September 30	November 1 – March 31
Number of Events	30-60	1-5
Event Duration	1 - 3 hours	1 - 3 hours
Timing	12:00 PM to 9:00 PM	12:00 PM to 9:00 PM

Table 7: Summer and Winter Active Dispatch Parameters

The incentive rate tied to performance during Active Dispatch events for each option is shown in Table 8.

Table 8: Active Dispatch Performance Incentive for Cycle One (2022 – 2024)

BESS Performance Period	Opening Period (Years 1 – 5)	Closing Period (Years 6 – 10)
Summer Performance Incentive (\$/kW)*	\$200	\$115
Winter Performance Incentive (\$/kW)*	\$25	\$15
*Performance incentives are based on avera system performance during events as indica	age kW-AC contribution during the term of term	he season, determined by actual late capacity.

Participating customers are eligible to receive performance incentives for the same BESS for up to 10 years. These 10 years of eligible performance incentives are split into an opening period (years 1 - 5) and a closing period (years 6 - 10). Customers may also be granted a construction hold commencing on the Reservation of Funds (ROF) date (if extensions are granted per Sec. 3.1.4). The construction hold will temporarily lock in the performance incentive rates at that cycle while the BESS is built. The extension hold requires certain milestones are met as described in Section 3: Enrollment. Systems built under the granted timeframe (if granted an extension per Sec. 3.1.4) may be immediately eligible to start their opening period. Systems that require longer than the granted timeframe of construction or those that do not meet the required milestones within the hold must reapply to Energy Storage Solutions and will be reviewed under the cycle rates current to that time.

If a system's opening period commenced mid-season, that system will receive 0 kW as performance for any events missed but will be allowed to earn performance on any remaining events of that season.

Milestone	Duration
Application to Program	-
Application Approval	30 days (Max) from Application
Construction Hold	36 Months (Max) from ROF Approval (Described in Section 4: Enrollment)
Opening Period Start	The sooner of: 36 Months from Application approval or System ready for dispatch
Closing Period Start	5 Years from Opening Period Start
Program Performance End	5 Years from Closing Period Start

Table 9: Project Application and Approval Timeline

6.3 Active Dispatch Incentive Rates and Average Performance

Performance is measured as the average discharge capacity from the BESS across all Active events during the given season. If the BESS is dispatched with less than 24 hours notice, the event will not be counted in the calculation of the seasonal performance incentive however, BESS that participate in such events will be compensated for their performance at the applicable rates. If a customer opts out of an event or has some communication or other issue that prevents them from discharging during an event, they will be given a 0 kW performance for that event. These will affect the customer's average performance and incentive.

The performance incentive rates refer to the average dispatch amount across all events of the dispatch season. Approved Contractors or TPOs must provide twenty-four hours a day, seven days a week service with 15-minute intervals (or more granular data) for the entire demand response season in order to receive fees or for their customers to receive performance incentives. Lapses in service that result in missing data during an event will result in performance being measured at 0 kW-AC for the duration of the missing data. Performance per event is equal to the average discharge rate of the BESS in kW-AC over the length of the event as described below.

Customers cannot increase their performance for an event by curtailing solar photovoltaic production to increase the BESS discharge rate. For example, if the inverter size limits the total production of the solar photovoltaic system and BESS, then the Customer cannot limit the solar photovoltaic system during a dispatch event so that the battery can discharge more. As a result, the Program Administrators will require that the BESS provides discharge performance value disaggregated from coincident solar production. Solar inverters and controllers must operate in maximum power point tracking (MPPT) mode at all times and this parameter must be reporting to the DERMS platform through the Supplier SCADA system.

Active Dispatch does not require the customer to hold any reserve capacity. Events will dispatch assuming all capacity is available to the Program. Therefore, customers may dispatch their full capacity during Active Events to maximize performance incentives. This would yield an average dispatch of 1/3 of the usable energy capacity per hour during a 3-hour event for a fully charged battery.

Using the previous example of a 12 kWh system, a customer with a fully charged system would be able to participate at 4 kWh per hour over a 3-hour Active Dispatch event, for an average of 4 kW for that event.

Continuing with this example, a typical summer season may have 40 Active Dispatch events call. This customer did not participate in 5 events. This could be due to many reasons such as the BESS not being installed until mid-season, customer opt-outs, or the Operator was unable to provide data. In all cases of non-participation, the customer is given 0 kW across those event hours. However, for the remaining event hours the customer participated at an average hourly output of 4 kW. The average of 5 3-hour events at 0 kW and 35 3-hour events at 4 kW is an average summer seasonal performance of 3.5 kW. The summer performance incentive will be calculated as \$200/kW x 3.5 kW = \$700.

The average season performance for winter events will be a separate additive incentive calculation using the same process, based on the winter performance rate. If the customer in the example participates, as expected, at 4 kW for all winter event the incentive would be calculated as: $25/kW \times 4 kW = 100$. Over the course of both seasons this customer was able to earn 700+100 = 800 in Active Dispatch performance incentives for the year.

The calculation of incentive benefit specified here is subject to change by the Program Administrators (with PURA's approval) and will be indicated on the <u>Program website</u>, customer enrollment forms and other Program materials.

6.4 Incentive Payment Process

CGB will administer all upfront incentive payments following the approval of the Application, an inspection if opted in or self-inspection of the system's installation at the discretion of the Program Administrators, and the provision of proof of enrollment in both Active and Passive Dispatch portions of Energy Storage Solutions. The relevant EDC will administer the incentive payments for summer and winter performance, as calculated in the "Incentive Rates and Average Performance" section and will be paid by the EDC approximately 6-8 weeks following the Summer and Winter seasons. Once enrolled in Energy Storage Solutions, the EDC will add the customer's BESS to their DERMS system.

6.4.1 Upfront Incentive Payments

Upfront incentives are provided as upfront discounts or reflected in the customer's purchase or lease agreement with their Contractor or TPO. CGB will disburse upfront incentive reimbursements to eligible Contractors, TPOs, or participating BESS owners as indicated on the Application. If payments to entities besides the Customer account holder (i.e., TPO) are requested the Customer and other entity must both sign and acknowledge this on the Application.

After incentive approval and once the system is installed and energized, Contractors and TPOs shall submit proof of project completion and interconnection through the online enrollment platform. Once verified by CGB that installation was performed in accordance with the original or amended incentive application, all completion documentation has been submitted and approved, Passive Dispatch enrollment has been verified, and all applicable Program requirements have been met, the project will be eligible to have the upfront incentive reimbursed to the Contractor or TPO. CGB will process incentive reimbursement payments to Contractors and TPOs in monthly batches.

If a battery system is not installed properly or in accordance with the proposed system specifications submitted to the Program Administrators, CGB reserves the right to withhold or recalculate upfront incentive payments based on actual installed equipment and site conditions. Additionally, the Program Administrators may stop approving incentive applications and/or withhold payments for Contractors and TPOs that consistently have problems properly installing BESS and/or complying with the requirements of Energy Storage Solutions.

Additional information regarding the upfront incentive payment will be made available by the Program Administrators in a separate document on the Energy Storage Solutions <u>website</u>.

6.4.2 Performance Incentive Payments

Performance incentives will be calculated in accordance with Section 6.3. and paid by the EDCs following the Summer and Winter seasons.

6.4.3 Direct Payments

Battery storage owners will have access to direct payment options, which will support PURA's key Program objectives, including facilitating deployment of battery storage in LMI and vulnerable communities, while at the same time reducing risk to homeowners and capital providers and lowering system financing costs.

Customers can designate a direct payment payee at the time of enrollment, and EDCs will assign upfront and/or performance incentive payments in part of in full to a TPO or financial institution, as specified by the Customer.

6.5 Days for Demand Response Events (Active and Passive)

Active discharge events are called on weekends, weekdays, or holidays – for both summer and winter.

Passive discharge events are limited to non-holiday weekdays during the Summer season (June, July and August) only. Holidays excluded from Passive Dispatch events include:

Dispatch Season	Holiday	Typical Date
Summer	Independence Day	July 4
Summer	Juneteenth	June 19

Table 10: Holidays for Passive Dispatch Events

6.6 No Demand Response Events Before Large Storms

Customers often purchase energy storage systems in part for backup power during power outages. Under non-storm operating scenarios, no more than 80 percent of usable energy capacity will be used during Passive events, leaving 20 percent available for backup power. The EDCs will not call events (Active or Passive) for the two (2) days preceding any predicted Emergency Restoration Plan level (level 1-5) outage events, leaving the customer to use the BESS as the customer deems appropriate.

6.7 Performance Testing

The Program Administrators may conduct performance tests of the BESS during installation or during periodic inspections. However, the Program Administrators may periodically elect to run communication tests to ensure all notification processes are functioning. A BESS Commissioning & Acceptance Testing program that will ensure that system perform as designed and that the system meets the Technical Requirements and performs as expected. Commissioning documentation typically includes but is not limited to:

- Electrical Design verification
- Certificates of Code Compliance
- Power/Energy Capability testing
- Modes of Operation testing in Local/Remote Control
- Functional acceptance testing of fire detection and suppression
- Network Integration and SCADA point verification
- First Responder orientation record

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Section 7: Storage Configuration Considerations

7.1 Storage Configurations & Interconnection

7.1.1 Renewable Energy Plus Storage

Customers with interconnected renewable energy systems, such as solar photovoltaics and wind turbines, may participate in Energy Storage Solutions. The investment tax credit (ITC), also known as the federal solar tax credit, may provide added incentives for energy storage systems charged by renewable energy systems. The battery system's performance will be limited by the terms and conditions established in the approved interconnection agreement.

7.1.2 Storage Only Systems

Customers who do not have a renewable energy system but do have an energy storage system that charges from the grid may participate in Energy Storage Solutions. If the customer will be discharging electricity to the grid, they must go through the normal interconnection process with their relevant EDC. The battery system's performance will be limited by the terms and conditions established in the approved interconnection agreement.

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Section 8: System Disposal

8.1 Eligible Contractor and Third-Party Owner Responsibilities

The decommissioning of any BESS participating in Energy Storage Solutions shall be completed by the Contractor, TPO, or another party as designed by the Contractor or TPO. The Contractor or TPO shall be held responsible by the Program Administrators for ensuring that all appropriate steps have been taken to dispose of and recycle all BESS components in such a manner that minimizes waste and environmental harm in compliance with all local, state, and federal regulations.

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Appendix A: List of Eligible Electric Energy Storage Systems (Eligible Equipment List)

The most current Eligible Equipment List is available at https://energystoragect.com/submitted ess system status list/.

All new applicants must submit a New Technology Application (Appendix C) to be reviewed and approved by the Program Administrators to be added to the Eligible Equipment List. The BESS equipment will be approved once the New Technology Application has been reviewed and approved, and the equipment manufacturer and/or BESS Operator or Aggregator has signed a Scope of Work, including a plan of integration, with the respective Distributed Energy Resource Management System (DERMS) provider. Final Approval of equipment is contingent upon completing integration with the respective DERMS.

Appendix B: Residential Customer Terms and Conditions and Data Release

ENERGY STORAGE SOLUTIONS

RESIDENTIAL CUSTOMER TERMS AND CONDITIONS and DATA RELEASE

Welcome to Energy Storage Solutions ("Program"). By becoming a Participant of the Program, you may reduce stress on the grid in your electricity service area. By participating in the Program, you may be eligible to receive the Reward described below, subject to these Program Terms and Conditions ("Terms"). To become a Participant in the Program, you must submit an application to, and have it accepted by, both the Sponsor and the Program Administrator via an Eligible Contractor or Eligible Third-Party Owner (as each is defined below). You must have an installed and operational BESS, pre-approved by the Program Administrators, to participate in this Program.

Binding Agreement. By applying for the Program, you agree to comply with and be bound by these Terms if your application is accepted and approved by the Sponsor and the Program Administrator (as defined below). However, in the event your application is not accepted or approved, you will not be subject to these Terms. Failure to comply with these Terms may result in your unenrollment from the Program. The decisions of the Sponsor and the Program Administrator regarding your eligibility to participate are final and binding in all respects. Sponsor reserves the right in its sole discretion to unenroll any Participant for, among other things: (1) tampering or attempting to tamper with the operation of the Program; or (2) violating these Terms or the terms and conditions of use of any of Sponsor Parties' property or service. Any false information provided within the context of the Program by any Participant is a violation of these Terms and may result in the immediate unenrollment of a Participant and forfeiture of any Reward.

About the Program. Applicants whose applications to participate in the Program are submitted by the enrollment deadline and accepted by the Program Administrator ("Participants", "you", and "your") and who fully comply with these Terms may receive an incentive, as set forth below ("Reward"), to be provided to you by Program Administrator following the conclusion of the Program term. To receive the Reward, you must be accepted as a Participant by the Sponsor and Program Administrator, and your participation must not be withdrawn or terminated. Acceptance of these Terms does not guarantee eligibility or approval for the Program or any Reward thereunder.

Definitions. In the context of these Terms,

- The Program is provided by EnergyHub, Inc., 41 Flatbush Avenue, Suite 400A, Brooklyn, NY 11217 ("**Sponsor**").
- "Adjustment Events" mean times during the Program Period when the DER Vendor will [control Participant's Device(s) (on behalf of the Sponsor Parties) to signal the Device to charge, discharge, or change its mode of operation, change device mode, setpoint, or other settings, as applicable].
- "BESS" means your battery energy storage system
- "DER" means distributed energy resource
- "DER Vendor" means
- "Device" means your BESS, which can be monitored and operated during the Program by DER Vendor's network operations center.
- "Eligible Contractor" means a qualified contractor who has been approved by the Energy Storage Solutions Program Administrators
- "Eligible Third-Party Owner" means a qualified Third-Party Owner who has been approved by the Energy Storage Solutions Program Administrators.
- "FAA" means the Federal Arbitration Act.

- "Participant" means an applicant that has been accepted into the Program by the Program Administrator.
- "Program" means the Energy Storage Solutions Program.
- "Program Data" means data related to your identity, your Adjustment Event opt-in or opt-out status, your energy usage and/or energy production, your Program Administrator account, your [electricity / gas] bill, and operational data about your Device(s).
- **Program Manual**" means the Program manual published by the Program Administrators on their websites, as may be amended, supplemented, or otherwise modified from time to time.
- "**Program Period**" means the duration of the Program, as described in the Program Manual. [The Summer Program runs from June 1st September 30th; the Winter Program runs from November 1st March 31st.]
- "Program Administrators" means Connecticut Green Bank, United Illuminating, and Eversource, their respective successors and assigns, and each of their respective affiliates, agents, directors, officers, and employees.
- "Reward" means an incentive offered to you for participation in the Program.
- "Service" means the connection between your Device(s) and the DER Vendor platform.
- "Sponsor Parties" means Sponsor, DER Vendor, and Program Administrator, their respective successors and assigns, and each of their respective affiliates, agents, directors, officers, and employees.
- "Terms" means these Program Terms and Conditions.

Application Consent by Participant. By submitting an application to enroll as a Participant, you authorize the Sponsor Parties to 1) collect and exchange data related to your identity, your Adjustment Event opt-in or opt-out status, your energy usage and/or energy production, your Program Administrator account, your electric bill, and operational data about your Devices, including any such data for the period of up to eighteen months prior to the date of Participant's enrollment (collectively, "Program Data"), solely for the purposes of determining your eligibility for the Program and operating the Program; 2) review and analyze all of your Program Data for the purposes of the Sponsor Parties fulfilling their obligations under the Program and applicable law, improving the Program and as otherwise permitted by applicable law, and to exchange conclusions with each other and publish results based on those conclusions, provided that they treat all such Program Data in accordance with their respective privacy policies; 3) automatically signal your Devices to take part in Adjustment Events for this Program or for general system testing purposes; 4) send you emails, text messages and other notifications related to the Program, including about your enrollment status and Program-related adjustments to your Devices; 5) send you emails, text messages and other notifications related to surveys about the Program and to share your responses to such surveys among the Sponsor Parties; 6) summarize the results of the Program in publicly-available studies, provided that any Program Data included in such studies will be anonymous such that you are not individually identifiable. In the event that Participant unenrolls, withdraws or the Program is terminated, the Sponsor Parties shall be permitted to use any of the Participants Program Data which was gathered prior to such date in accordance with these Terms.

Eligibility and Enrollment. You may apply to become a Participant and participate in the Program if you meet the following eligibility criteria and do the following:

- You must be at least 18 years of age;
- You must have one or more Devices that are compatible with and connected to the DER Vendor platform ("Service") and compatible with the Program design;
- Maintain an active account in good standing on the Service and a continuous connection between your enrolled Devices and the Service;
- Assist Sponsor Parties' support personnel in troubleshooting and resolving connectivity, firmware and other Device-related issues;
- Have an active electric account with your Eversource or United Illuminating in the state of Connecticut;
- Have a Home Energy Solutions or equivalent energy efficiency auditor conduct an audit of the location of the Device prior to the disbursement of any Reward;
- Grant the Program Administrators the right to inspect the Device prior to the disbursement of any Reward;
- Remain in compliance with any Program requirements and the Program Manual; and
- Not remove the Device from the State of Connecticut for ten (10) years after the Participant's enrollment in the Program or move the Device to a different location within the State of Connecticut without the approval of

the Program Administrators. This requirement shall survive Participant's termination, unenrollment or withdrawal from the Program or the termination of the Program prior to such date.

Program Period. The Program will run for the Program Period. You may be automatically re-enrolled in subsequent Program Periods at Sponsor's discretion, subject to the then-current Terms for the Program. You may unenroll from the Program at any time

Program Description. Participant agrees to allow DER Vendor, on behalf of the Sponsor Parties, to control the Participant's Devices during the Program Period. Such adjustments are referred to as "**Adjustment Events**." Adjustment Events may signal the Device to charge, discharge, or change its mode of operation, change device mode, setpoint, or other settings. For certain types of services offered by the Sponsor Parties, an Adjustment Event may occur even if the Device is in any kind of hold mode at the start of the Adjustment Event. Participant may opt out of a current or future Adjustment Event at any time by directly adjusting the Device or contacting DER Vendor. Note, that by opting out of over 10% of Passive Adjustment Events you are at risk of surrendering some or all of the Reward and may have to return any previously received Reward, as more particularly described in the Program Manual.

How to Apply. You can apply to participate in the Program through an Eligible Contractor or Eligible Third-Party Owner. The Sponsor Parties may accept or reject your application in their discretion.

How to Withdraw. Once you are accepted as a Participant in the Program, you may withdraw by emailing the Sponsor contact address specified below. Withdrawal will not affect the other services provided by the Sponsor Parties to you. By withdrawing, you may (1) have to surrender some or all of the Reward and may have to return any previously received Reward, as more particularly described in the Program Manual, (2) not be able to participate in the Program in the future or other programs offered by Sponsor.

Program Termination. Sponsor's ability to offer the Program is contingent on receiving certain approvals and acceptances from Program Administrator. If such approvals and acceptances are withheld or withdrawn, or if the Program is declared unlawful, the Program will be terminated along with the Reward. Further, Sponsor's ability to offer the Program to you is contingent on Sponsor's agreements with DER Vendor, and in the event such agreement(s) terminate for any reason, your participation in the Program will be terminated along with the Reward. In the event of such termination, DER Vendor may provide notice to you by email, and Sponsor may provide notice at <u>www.energyhub.com</u>. Termination of the Program will not affect any payment obligations you may have for your DER Vendor Device, and your DER Vendor customer agreement will remain in effect.

Disqualification. The Sponsor Parties may terminate your participation in the Program and Reward at any time and without liability upon notice to you via email if you violate these Terms or applicable law, if you do not comply with any reasonable request from a Sponsor Party in connection with this Program, if your Program Administrator declares you ineligible for the Program, if your account with Sponsor or DER Vendor is no longer in good standing, or if you do not maintain a continuous connection between your enrolled Device(s) and the Service. If you enroll in a conflicting energy program through Sponsor Parties, Sponsor may terminate your participation in the Program without liability and without notice. Disqualification from the Program will not affect any payment obligations you may have for your DER Vendor Device, and your DER Vendor customer agreement will remain in effect.

Privacy Notice. By participating in the Program, you agree that the Sponsor Parties may collect your personal information or data and that if they cannot collect the required information or data, you may not be eligible to participate in the Program. Sponsor Parties will administer your personal information and usage data consistent with these Terms

and each company's then-current privacy policy. Sponsor's privacy policy is located at: <u>http://www.energyhub.com/privacy-policy</u>

Connecticut Green Bank ("Green Bank") is a public agency for purposes of the Connecticut Freedom of Information Act ("FOIA"). Any material submitted to the Green Bank will be considered a public record and will be subject to disclosure under FOIA. Under Connecticut General Statute §1-210(b) and § 16-245n(d), FOIA includes exemptions for trade secret and commercial or financial information given in confidence. Only the particular information falling within a statutory exemption can be withheld by the Green Bank. In no event shall the Green Bank or any of its officers, directors or employees have any liability for the disclosure of documents or information in the Green Bank's possession where the Green Bank, or such officer, director or employee in good faith believes the disclosure to be required under FOIA or other law.

Changes in Your Electricity Costs. Sponsor Parties are not responsible for any changes in your electricity costs during the Program.

Information. You represent and warrant to Sponsor that the information you provide to Sponsor while applying for and during the course of the Program is accurate and complete, and you agree to promptly notify Sponsor if any information you provided during your application for the Program has changed.

General Conditions. This Program is governed by the laws of the State of Connecticut without regard to its applicable principles of conflicts of law. The Sponsor Parties' failure to enforce any term of these Terms shall not constitute a waiver of that provision. THE SPONSOR PARTIES ARE NOT RESPONSIBLE OR LIABLE FOR ANY INCORRECT OR INACCURATE PROGRAM APPLICATION INFORMATION, AND ASSUME NO RESPONSIBILITY FOR (I) TYPOGRAPHICAL OR OTHER ERRORS IN THE PRINTING OF THE PROGRAM MATERIALS OR THE OFFERING OR ANNOUNCEMENT OF ANY REWARD, (II) ANY ERROR, OMISSION, INTERRUPTION, DEFECT OR DELAY IN OPERATION OR TRANSMISSION AT ANY WEBSITE, (III) FAILURE OF ANY APPLICATION TO BE RECEIVED BY SPONSOR DUE TO TECHNICAL PROBLEMS, TELEPHONE SERVICE PROBLEMS, PRINTING ERRORS, HUMAN ERROR OR TRAFFIC CONGESTION ON THE INTERNET OR AT ANY WEBSITE, (IV) COMMUNICATIONS LINE, HARDWARE AND/OR SOFTWARE FAILURES, (V) DAMAGE TO ANY COMPUTER OR DEVICE (SOFTWARE OR HARDWARE) RESULTING FROM PARTICIPATION IN THE PROGRAM, (VI) THEFT OR DESTRUCTION OF, TAMPERING WITH, UNAUTHORIZED ACCESS TO, OR ALTERATION OF APPLICATIONS AND/OR PROGRAM APPLICATION INFORMATION, OR (VII) APPLICATIONS WHICH ARE LATE OR LOST, OR (VIII) ANY LOSS OF INCOME DUE TO DEVICE CONTROL. THE PROGRAM ADMINISTRATORS ARE NOT RESPONSIBLE, AND ASSUME NO RESPONSIBILITY OR LIABILITY, FOR: (IX) WORK OR WORKMANSHIP OF DER VENDOR, OR (X) ANY DESIGN, ENGINEERING, CONSTRUCTION, PERMITTING, LICENSSING, CERTIFICATION, APPROVAL, PERFORMANCE, OR SAFETY OF THE DEVICE. PARTICIPANT ASSUMES ALL RISK OF PARTICIPATION IN THE PROGRAM. TO THE MAXIMUM EXTENT PERMITTED BY LAW, YOU INDEMNIFY AND AGREE TO KEEP THE SPONSOR PARTIES (AND EACH OF THEIR RESPECTIVE AFFILIATES, AGENTS, DIRECTORS, OFFICERS, AND EMPLOYEES) INDEMNIFIED AT ALL TIMES FROM AND AGAINST ANY LIABILITY, CLAIMS, DEMANDS, LOSSES, DAMAGES, COSTS AND EXPENSES THAT ARISE FROM OR ARE RELATED TO ANY ACT, DEFAULT OR OMISSION BY YOU AND/OR A BREACH OF ANY WARRANTY BY YOU AND/OR TO ANY ACT, DEFAULT OR OMISSION BY YOU UNDER THESE TERMS. TO THE MAXIMUM EXTENT PERMITTED BY LAW, YOU AGREE TO HOLD THE SPONSOR PARTIES (AND EACH OF THEIR RESPECTIVE AFFILIATES, AGENTS, DIRECTORS, OFFICERS, AND EMPLOYEES) HARMLESS FROM ANY INJURY OR DAMAGE CAUSED OR CLAIMED TO BE CAUSED BY PARTICIPATION IN THE PROGRAM AND/OR USE OR ACCEPTANCE OF ANY REWARD OTHER THAN FOR: (1) DEATH OR PERSONAL INJURY ARISING AS A RESULT OF SPONSOR'S NEGLIGENCE OR BREACH OF CONTRACT; OR (2) THE SPONSOR PARTIES' FRAUDULENT MISREPRESENTATION OR DELIBERATE BREACH OF CONTRACT. THE SPONSOR PARTIES (AND EACH OF THEIR RESPECTIVE AFFILIATES, AGENTS, DIRECTORS, OFFICERS, AND EMPLOYEES) HAVE NO LIABILITY TO ANY PARTICIPANT FOR ANY LOSS, DAMAGE, COSTS OR EXPENSE INCURRED AS
A RESULT OF OR IN CONNECTION WITH A PARTICIPANT'S PARTICIPATION IN THE PROGRAM. If any provision of these Terms is held to be invalid or unenforceable, all remaining provisions of these Terms will remain in full force and effect. These Terms will be binding on the Sponsor Parties and their respective successors and assigns, and Participant. Participant may not assign these Terms without the written consent of Sponsor whereas Sponsor may assign these Terms to any third party. The Sponsor Parties are not responsible for the policies, actions, or inactions of others that might prevent the Participant from entering, participating, or claiming a Reward. For the avoidance of doubt, it is specifically understood and agreed that there shall be no personal liability on the part of any affiliates, agents, directors, officers, and employees of each Sponsor Party under these Terms.

These Terms constitutes the entire agreement between Sponsor Parties and a Participant relating to the subject matter hereof and supersedes all other such prior or contemporaneous oral and written agreements and understandings.

Arbitration. If the you and the Sponsor do not resolve any dispute by informal negotiation, any other effort to resolve the dispute will be conducted exclusively by binding individual arbitration governed by the Federal Arbitration Act ("FAA"). You are giving up the right to litigate (or participate in as a party or class member) all disputes in court before a judge or jury. Instead, all disputes will be resolved on an individual basis before a neutral arbitrator, whose decision will be final except for a limited right of appeal under the FAA. Any court with jurisdiction over the parties may enforce the arbitrator's award.

No Class Action Procedure. Notwithstanding any of the foregoing or any other provision of these Terms, class arbitration or class actions are not permitted under any circumstance. You and the Sponsor agree that, by entering into this Agreement, THE PARTIES MAY BRING CLAIMS AGAINST THE OTHER ONLY IN THEIR RESPECTIVE INDIVIDUAL CAPACITY, and not as a plaintiff or class member in any purported class or representative proceeding. Further, you agree that the arbitrator may not consolidate proceedings or more than one person's claims, and may not otherwise preside over any form of a representative or class proceeding. Although the non-availability of any form of representative or class proceeding is clear from this Agreement, should any dispute arise regarding or relating to the existence, validity, enforceability, or interpretation of the No Class Action procedures provisions above, the federal court located in Connecticut, Connecticut shall have the sole and exclusive jurisdiction to hear and determine the issue.

Changes to the Terms. Sponsor may modify these Terms at any time. We will notify you by email at the most current email address we have on record for you when we make any material changes to these Terms, and the effective date of the modified Terms, which will be after the date of our notice to you. Your continued participation in the Program thereafter signifies your acceptance to such modified Terms. The modified Terms will apply only to disputes that arise after the effective date of such modified Terms. We will also post the most current version of the Terms on our website specified below and encourage you to check this site frequently.

Acceptance of Agreement. The use of an electronic signature process to accept and sign these Terms, including your indication of acceptance of these Terms by a click-through or click-wrap process presented on Sponsor's website, shall constitute effective execution and delivery of these Terms, and shall form a binding contract between you and the Sponsor, and the other Sponsor Parties shall be express third party beneficiaries hereof and may enforce the provisions hereof as if they were a party hereto..

Additional Program Details. Additional program details are available at <u>www.energystorageCT.com</u>. Contact information for Sponsor Parties and DER Vendor:

Connecticut Green Bank

75 Charter Oak Ave., Suite 1-103, Hartford, CT 06106 (860) 563-0015 | <u>energystorage@ctgreenbank.com</u>

EnergyHub

41 Flatbush Ave, Suite 400A Brooklyn, New York 11217

(718) 522-7051 | info@energyhub.com

DER VENDOR NAME

ADDRESS

CITY STATE

PHONE | EMAIL

Customer Signature

Customer Name

Date

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NEW TECHNOLOGY APPLICATION

Version January 19, 2024

Energy Storage Solutions is overseen by the Public Utilities Regulatory Authority (PURA), is paid for by ratepayers, and is administered by the Connecticut Green Bank, Eversource, and United Illuminating (Program Administrators).

ALL SUBMITTED INFORMATION IS PUBLIC RECORD DO NOT SUBMIT ANY PROPRIETARY OR CONFIDENTIAL INFORMATION

Section 1 – Introduction

Thank you for your interest in Connecticut Energy Storage Solutions (Program). **The New Technology Application (NTA) is for the qualification of <u>complete</u> Battery Energy Storage Systems (BESS³¹) in the Program.** The resulting approval to the Eligible Equipment List will be for a battery and inverter combination that holds all necessary UL certifications and has a means of communicating with the Distributed Energy Resource Management System (DERMS) associated with the BESS's target customer sector. A complete Glossary of Terms is provided at the end of this document.

NTAs submitted for a battery only (with no inverter listed or integrated) or for an inverter only (with no battery listed) will be rejected. The intent of this document is to qualify **complete BESS** for use in Energy Storage Solutions. **Applications are to be submitted on a per-UL 9540 listing basis.** If a BESS holds multiple UL 9540 listings for multiple configurations, you must submit an additional application per UL listing.

Before completing this Application, first confirm if the BESS is already eligible by visiting <u>energystoragect.com/submitted ess system status list/</u>. If the equipment is not on the Eligible Equipment List or requires revision, follow these steps:

- 1. Complete this Application:
 - Equipment status will be based on your responses. Make certain to answer ALL required and applicable questions.
- 2. Obtain and attach all UL certifications from Nationally Recognized Testing Laboratories (NRTL)³². The following UL listings are required:
 - UL 1973
 - UL 1741 SA (with reference to IEEE 1547-2018 2nd ed.)
 - UL 9540

Obtain and attach all product data specification sheets.

3. Submit the Application and supporting documents at <u>energystoragect.com/new-technologies-request-application/.</u>

ALL BESS MUST BE ABLE TO COMMUNICATE WITH THE APPLICABLE DISTRIBUTED ENERGY RESOURCE MANAGEMENT SYSTEM (DERMS) PLATFORM TO RECEIVE FINAL APPROVAL.

³¹ See definition in Section 6 – Glossary of Terms

³² Program Administrators reserve the right to request additional and new certifications as they become available in the markets. All certifications must be current.

Section 2 – Applicant

APPLICANT COM	PANY INF	ORMATION						
Applicant Compan	y Name							
Applicant Contact	Name							
Applicant Company Address								
		Street, City, Stat	Street, City, State, Zip					
Contact Phone			Contact Email					
Target Customer C	Class	Residential	Commercial & Ind	lustrial (C&I) □ Both				
What is Applicant (Company's	s role in deploying	BESS? (Select all th	nat apply)				
ESS Aggregator	· 🗆 ESS (Operator 🗆 BESS	SOEM 🗆 Inverter (DEM □ Battery OEM □ Other (describe)				
Other role:								
Applicant Compan	y Descript	ion						

Section 3 – BESS Equipment

Note: If you are applying for a BESS with multiple size or inverter configurations, all configurations must be included under the same UL 9540 listing. If any configuration is part of another UL 9540 listing, you must submit separate applications for those configurations.

Complete the section below for the **<u>battery</u>** portion of the BESS.

BATTERY INFORMATION						
Battery Manufacturer Company Name						
Contact Name						
Contact Email						
Contact Phone						
Battery Model(s)						
Battery Nameplat	te Power (kW)					
Battery Namepla	te Energy Capacity (kWh)					
Battery Maximum	n Continuous Discharge R	Rate (kW)				
Battery Nominal	Voltage (VAC)					
Battery Round Tr	ip Efficiency (%)					
Battery Warranty	Term (Years)					
Battery model(s)	certified to UL 1973?	□ Yes □ No	If no, expected date:			
Battery model(s)	commercially available?	🗆 Yes 🗆 No	If no, expected date			
Additional notes	(if applicable)		•			

Complete the section below for the *inverter* portion of the BESS.

INVERTER INFORMATION

Inverter and Battery are integrated as a single		□ Yes □ No			
model					
Inverter Manufacturer	Inverter Manufacturer				
Phone					
Inverter Model(s)				-	
Inverter Nameplate Power (kW)					
Inverter Phase		□ Single Phase	□ Multi	-	
		Phase			
Inverter Output Voltage (V)				-	
Inverter Maximum Continuous Curre	ent (A)			1	
Inverter Maximum Continuous Powe	er (VA)			1	
Inverter Warranty Term (Years)				-	
Inverter model(s) received []		If no expected		-	
1741 SA?		date:			
Inverter model(s) commercially		lf no expected		-	
available?		date.			
	NO	uale.		-	
Additional notes (if applicable)					
				-	

Complete the section below for the BESS. **The BESS is defined as the combination of the above Battery(s) and Inverter(s)**. No incentive will be issued for a BESS that does not hold a UL 9540 certification. UL 9540 field certifications may be accepted on a case-by-case basis.

BESS INFORMATION		
BESS is certified to UL 9540?	□ Yes	□ No
If no, please explain reason and estimated timeline for UL 9540 certification:		

Section 4 – BESS Operator and DERMS Communication

Provide information about the **BESS Operator** by completing the section below. The BESS Operator is the entity responsible for connecting the BESS equipment to the relevant DERMS provider.

The **BESS Operator** is often the inverter manufacturer but can also be a third-party integrator such as a developer or owner-operator.

If the Applicant Company only manufactures batteries and the BESS utilizes an inverter made by a different company, you may need to coordinate with the inverter manufacturer to complete this section.

This section will determine if the BESS:

- 1. Is capable of transmitting data to its respective DERMS platform,
- 2. Can meet Passive Dispatch requirements, and
- Meets UL 9540 safety certification requirements.

BESS OPERATOR INI	FORMATION				
BESS Operator Company Name					
Contact Name					
Contact Email					
C&I Only: BESS Operator is integrated with Generac Grid Services?					
If no, expected integration date					
Residential Only: BESS Operator is integrated with EnergyHub?					
If no, expected integration date					
Does BESS Operator charge a Vendor Fee ³³ ? □ Yes □ No					
If yes, what fee?					

³³ See definition in Section 6 – Glossary of Terms

СС	MMUNICATION CRITERIA	
1.	Can the BESS Operator receive a control signal from a DERMS and pass that control signal to the BESS at the customer site?	□ Yes □ No
2.	As part of the control signal, can the BESS Operator, at a minimum, communicate start time, end time, and magnitude of discharge on a per-event basis for each BESS?	🗆 Yes 🛛 No
3.	Can the system dispatch and cancel/override an event if it receives notification from a DERMS provider?	□ Yes □ No
4.	Is the company willing to commit to developing a communication pathway at their own expense to the DERMS platform through an API integration?	□ Yes □ No
5.	C&I only : Is the BESS Operator capable of integrating using the DERMS Vendor API Self Development Kit (SDK) for Concerto?	□ Yes □ No □ N/A
6.	Residential only: Is the BESS Operator capable of integrating using Open ADR Protocol?	□Yes □No □N/A

If you answered No to 5 or 6 above, describe the resources you have available to commit to integration with the respective DERMS, along with estimated timeline for integration:

TELEMETRY REQUIREMENTS						
1. Does the BESS Operator maintain cloud storage of telemetry data?	□ Yes □ No					
If so, describe:						
 At what interval does the BESS Operator maintain telemetry data? (i.e. 15 minutes, 1 hour, 1 day, etc.). The Program requires a 15-minute interval, at minimum. 						
3. At what latency does the BESS Operator communicate telemetry data with the DERMS? (i.e. 15 minutes, 1 hour, 1 day, etc.). The Program requires a one-month latency, at most.						
Additional notes on telemetry (if applicable):						

Passive Dispatch is a requirement of the Program for customers receiving upfront incentives. The BESS Operator will be responsible for meeting the Passive Dispatch criteria.

SCHEDULING REQUIREMENTS - PASSIVE DISPATCH	
1. BESS can be pre-programmed by BESS Operator to discharge to 20% rated capacity Monday through Friday (except holidays) during the months of June, July, and August uniformly between the hours of 3PM and 8PM.	🗆 Yes 🗆 No
If no, describe:	
2. The BESS Operator will ensure BESS discharge is regulated to an even discharge over those 5 passive dispatch hours (Existing charge – 20% SOC)/5.	🗆 Yes 🛛 No
If no, describe:	
3. BESS Operator can override Passive Dispatch events for BESS when Active Dispatch events are requested for those scheduled days <u>or</u> when requested by DERMS due to forecasted severe weather.	🗆 Yes 🗆 No
If no, describe:	

Section 5 – Application Submission

WHAT HAPPENS NEXT?

- 1. After the Application and supporting documents (UL Certifications and Product Specification Sheets) are submitted, you will receive an email confirmation including an application number (NTA-####).
- 2. The Program Administrators will request additional information, if necessary, and/or inform you of the decision, along with comments, to approve or deny the BESS in the Program.
- 3. Application resubmittal guidelines are stated in the *Program Guidelines for Energy Storage Solutions*.

Contact energystorage@ctgreenbank.com with any questions or concerns.

Section 6 – Glossary of Terms

TERM	DEFINITION
Active Dispatch	Events where a BESS dispatches energy to reduce demand during summer and winter peak periods as determined by the EDCs based on anticipated grid demand. Active Dispatch events are typically scheduled day-ahead.
Aggregator	Entity responsible for the coordination of the BESS with a BESS Operator to participate in dispatch events within the Program
ΑΡΙ	Application Programming Interface, which is a software intermediary that allows two applications to talk to each other
Eligible Equipment List	The Eligible Equipment List includes equipment that has been submitted to be included in the Energy Storage Solutions program. Final approval requires the equipment to be fully of integrated with the respective DERMS platform (residential and/or commercial)
BESS	Battery Energy Storage System: electrical, electrochemical, mechanical and other types of energy storage technologies for systems intended to supply electrical energy. Includes battery and inverter for the purposes of this Program.
BESS Aggregator	Entity responsible for the coordination of BESS participating in dispatch events within the Program, working as an intermediary between the DERMS and the BESS Operator.
BESS Operator	Entity responsible for the coordination of the BESS participating in dispatch events within the Program
DERMS	The "Distributed Resource Energy Management System" is the platform utilized by the Electric Distribution Companies to notify the Battery Operators of scheduled events requiring Battery Energy Storage System actions.
EDCs	Electric Distribution Companies (Eversource Energy and The United Illuminating)
OpenADR	Open Automated Demand Response, provides a non-proprietary, open standardized demand response interface that allows electricity providers to communicate demand response signals directly to existing customers using a common language and existing communications
Passive Dispatch	Events where a BESS dispatches energy to reduce demand during summer peak periods. Passive Dispatch events are pre-scheduled by the Program Administrators and BESS Operators must program this event schedule into the BESS. See energystorageCT.com for complete schedule.
Program	Energy Storage Solutions is a program offered through the Program Administrators
Program Administrators	Collectively the Connecticut Green Bank, Eversource Energy, and The United Illuminating Company

Round Trip Efficiency	Round-trip efficiency is the percentage of electricity that can be put into storage and later retrieved
UL 1741 SA	Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources, Supplement A for United Laboratories 1741 – Details safety requirements applicable to a variety of equipment for use in standalone or interactive power systems
UL 1973	Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications – A certification standard for batteries used for energy storage with a focus on the battery's ability to withstand simulated abuse.
UL 9540	Standard for Energy Storage Systems and Equipment - As specified in the National Fire Protection Association (NFPA) 855, United Laboratories 9540 certifies the safety requirements for Battery Energy Storage Systems.
Vendor Fee	Any fee taken by a BESS Operator in exchange for operating a customer's BESS, either as a flat rate or a percentage of incentives paid.

Appendix D: Operational Agreement

OPERATIONS AGREEMENT FOR ENERGY STORAGE SOLUTIONS

ALL FIELDS ON THIS PAGE ARE REQUIRED TO COMPLETE YOUR APPLICATION				
Electric Distribution Company Serving Site of Eversource United Illuminating				
Installation				

CUSTOMER/ACCOUNT HOLDER INFORMATION					
Customer's Name	Name on Account (if different) Phone				
Street Address	City		State	Zip	
Electric Account Number		Email Address			

THIRD-PARTY OWNER INFORMATION (If applicable)							
Company Name Contact Name Phone							
Street Address	City	State	Zip				
Email Address							

BATTERY ENERGY STORAGE SYSTEM (BESS) INFORMATION								
BESS Manufacturer:	Inverter Model Number	Battery Model Number						
Max Power Rating (KW):	Continuous Power Rating Usable Energy Rat (KW): (kWh):							
Round Trip Efficiency:	Unique Battery ID:							
Is BESS Paired with PV Solar	Yes	No						

OTHER INFORMATION		
Performance incentives should be sent to:	Customer	Third-Party Owner
Party responsible for "last mile" service (Operator):	BESS Manufacturer	Third-Party Owner

CUSTOMER ACCEPTANCE OF TERMS AND CONDITIONS

I CERTIFY THAT I HAVE READ AND AGREE TO THE OPERATIONAL TERMS AND CONDITIONS AND OBLIGATIONS IN THIS OPERATING

DATE	PRINT NAME	AUTHORIZED SIGNATU	IRE	
				X

OPERATIONAL REQUIREMENTS FOR PARTICIPATION

Energy Storage Solutions (Program) is a voluntary incentive program offered for Battery Energy Storage Systems (BESS) to residential, commercial, and industrial customers of Eversource and The United Illuminating Company (UI) (Electric Distribution Companies (EDCs)). Residential, commercial, and industrial customers of the EDCs are eligible to participate in the Program. Detailed information about the Program can be found in the Program Manual. The operation of the Program consists of two dispatch strategies (i.e., EDCs call on BESS to provide electricity to support the electric grid):

Passive Dispatch: All BESS systems installed and receiving upfront incentives as part of the Program will be interconnected with Passive Dispatch as the default system setting by the Operator.

Active Dispatch: A performance-based incentive structure that compensates participants for the average kW dispatched during events over the summer and winter seasons.

Key Definitions

BESS: Battery Energy Storage System, as described in the Program Manual.

Customer: The residential or commercial entity owning the premise where the battery is installed and maintaining an active electric account with the EDCs.

Contractor: The entity responsible for development of the BESS project with the Customer and (where applicable) Third-Party Owner.

Third-Party Owner: A third-party entity that owns the BESS and maintains a lease or power-purchase agreement with the Customer.

Operator: The party responsible for "last mile" communications to the BESS. This could be the BESS Manufacturer or Third-Party Owner.

Last Mile: Refers to the telemetry and associated BESS communication and data transfer by Operator.

DERMS: The "Distributed Energy Resource Management System" is the platform utilized by the EDCs to notify the Operators of scheduled events requiring BESS actions.

Term: The duration of this agreement will be 10 years beginning on Commercial Operation Date (as defined in the Program Manual).

Operational Requirements for Participation in Program

BESS Operating Requirements: BESSs in the Program must be connected to and responsive to the DERMS with the following minimum control and monitoring aspects:

Telemetry: The Customer's Operator must provide the telemetry (i.e., data from the BESS) capable of communicating the minimum data elements as listed in the Program Manual. Telemetry must ensure data can be provided to the DERMS at intervals not to exceed 15 minutes with a maximum latency of one month.

System Monitoring: The Customer's Operator must ensure the BESS is capable of continuously monitoring and reporting BESS minimum status data as listed in the Program Manual.

BESS Functionality: The BESS must include functionality for remote charging, discharging, and ramp rate control operations for all 24 hours in a day, 365 days a year, and be capable of managing the state of charge while being synced to the distribution system grid.

Connectivity: The BESS must maintain connectivity to the DERMS throughout the term of this agreement.

Maintenance and Reporting: Over the full term of the agreement, the Customer will ensure that a) the battery is properly maintained (i.e., manufacturer-recommended maintenance is performed), and b) interconnection connections and internet service provider connectivity is maintained. The Customer's Operator will ensure the BESS meets the minimum reporting requirements under the Program.

• **Contact Information**: To accurately receive applicable notifications, Customers and Operators are responsible for notifying the EDCs of changes in contact information.

Dispatching Requirements

Customers are obligated to participate in the following EDC dispatch activities required by the Program:

- Passive Dispatch³⁴
 - Notification: For BESS systems receiving upfront incentives, the EDCs' DERMS will provide advance seasonal notification to the Customer's Operator who will implement discharge requirements to the Customer's BESS and comply with the following schedule for Passive Dispatch:
 - Event Window and Frequency: Passive Dispatch will occur Monday through Friday in the months of June, July, and August, except for holidays. Passive Dispatch hours will be between 3 PM and 8 PM Eastern.
 - **Discharge**: Operator will ensure the battery discharges its available energy capacity at a constant rate in each hour during the 5-hour dispatch window, while maintaining a minimum reserve of 20% of rated battery capacity.
 - **Participation Term**: The Customer will participate in Passive Dispatch activities for the term of this agreement.
- Active Dispatch
 - Notification: When ISO New England forecasts electric grid capacity constraints, the EDCs will provide notification to the Operator via the DERMS at least 24 hours in advance of the start of the Active Dispatch event. Notification will be provided to the Customer's Operator via an approved Application Programming Interface or Open Automated Demand Response Protocol. Residential BESS Operators who have been granted permission to communicate through secure File Transfer Protocol until July 1, 2022 will receive notification by email from the DERMS.
 - Event Windows and Frequency: The EDCs may initiate between 30 to 60 requests for Active Dispatch from June through September and up to 5 requests from November through March. The Active Dispatch event will be a maximum of 3 hours between the hours of 12 noon to 9 PM Eastern.
 - Discharge: DERMS will request Operators to fully discharge Customers' BESS during events. Actual

³⁴ Only required when Customer is requesting an Upfront Incentive

performance will be verified based on data captured by the Customer's Operator and reported back to the DERMS.

 Active Dispatch Performance: To receive performance incentives, Customers must participate in Active Dispatch events. If a Customer does not participate in an event, they will receive 0 kW performance for that event. The Customer's performance incentive is based on the average kW discharge from all events called during each dispatch season (i.e., summer or winter).

Override Conditions

During the term of this Operating Agreement, the EDCs may require an override of a scheduled dispatch event (i.e., cancel or change the timing of an event) based on the following circumstances:

- Overriding Passive Dispatch with Active Dispatch Events: If an Active Dispatch event is scheduled by the EDCs during a day with Passive Dispatch already scheduled, the DERMS will send notification to the Operator with start time, stop time, and duration of an active event at least 24 hours in advance. The planned Passive Dispatch for the scheduled day will be canceled at that time by the Operator. The Customer will also receive email notification that the Passive Dispatch was canceled at least 24 hours in advance of the planned Active Dispatch.
- Other Override Conditions: EDCs may also override scheduled dispatch events (Passive or Active) for the following reasons:
 - Grid Safety and Reliability: Critical system events that impact system voltage levels, system stability, and safety, or distribution system events that are considered emergencies by the EDCs may require override of a Customer's BESS. While such conditions are rare, the EDCs will attempt to provide advance notification whenever possible, dependent on the nature of the event. Notification would be provided to the Operator via established communication protocol. Customers will also receive an email notification that the scheduled event is being canceled.
 - Forecasted Severe Weather Conditions: Known severe weather events that are anticipated to trigger the EDCs' Emergency Restoration Plan level 1-5 activities may also generate conditions which require an override of scheduled events to ensure the Customer's backup capacity is available in case an outage is experienced by the Customer. In such an event, EDCs, via their DERMS, will initiate cancellation notification to Operators of all planned dispatch events (Passive and Active) 48 hours in advance whenever possible. Notification will also be provided to Customers that scheduled events are being canceled due to severe weather conditions. The cancellation will continue until restoration of incurred outages has been completed.

TERMS AND CONDITIONS

1. Incentives

Subject to these Terms and Conditions, the Electric Distribution Companies (EDCs) will pay Incentives to the Customer or their designated Operator based on performance during Active Dispatching events.

2. Definitions

- a) "Customer" means the residential or commercial customer owning the premise where the battery is installed and maintaining an active electric account with the EDCs.
- b) "Operator" means the party responsible for "last mile" communications to the BESS. This could be the BESS Manufacturer or Third-Party Owner.
- c) "BESS" refers to Battery Energy Storage System as described in the Program Manual.
- d) "Facility" means the Customer location served by the EDCs where BESSs are to be installed.
- e) "Incentives" means those payments made by the EDCs to Customers or to their designated Operator pursuant to the Program Materials and these Terms and Conditions. Incentives may also be referred to as "Rebates".
- f) "Program" means the Energy Storage Solutions offerings provided by the EDCs to Customers.
- g) "Electric Distribution Company" or "EDC" means The Connecticut Light and Power Company dba Eversource or United Illuminating (UI).
- h) "Program Materials" means the documents and information provided by the EDCs specifying the qualifying BESS, technology requirements, costs, and other Program requirements, which include, without limitation, Program guidelines, Program requirements, and application forms.
- i) "ISO-New England" is the entity responsible for reliably operating New England's bulk electric power generation and transmission system.
- 3. Operational Agreement Process and Requirement for EDC Approval
- a) The Customer shall submit a completed and executed Operational Agreement in the form specified by the EDCs.
- b) Customer agrees to provide EDC vendors or contractors access to utility data, including usage and billing.
- c) The EDC is not obligated to pay any incentives until the customer has completed all Program requirements to obtain approval for a Commercial Operation date and has demonstrated performance in accordance with the Program Manual.

- d) The EDCs reserve the right to approve or disapprove of any Operational Agreement.
- e) All storage-related projects are required to receive approval through the EDC's Interconnection Process. Participation in the Program does not alter the Customer's Interconnection Service Agreement.

4. Pre and Post Installation Verification

If the EDC determines that the BESS was not installed in accordance with these Terms and Conditions, the Program Materials, and Program Administrator's Approval, the EDC shall have the right to require modifications before having the obligations to make any incentive payments.

5. Monitoring and Inspection

As a condition of receiving an incentive, the Customer and/or Operator agree to provide site access and information pertaining to the BESS to the EDC and cooperate with the EDC regarding such activity. By participating in the Program, the Customer and Operator acknowledge and agree that no activity by the EDC includes any kind of safety, code or other compliance review. Customer agrees that EDC may perform monitoring and inspection of the BESS for a three-year period following completion of the installation in order to determine the actual demand reduction (discharge) and energy savings.

6. Incentive Amounts, Requirements for Incentives, and Incentive Payment Conditions

- a) The EDCs reserve the right to adjust and/or negotiate the Incentive amount.
- b) The EDCs shall not be obligated to pay the Incentive amount until all the following conditions are met:
 - (1) The customer has an approved Commercial Operation Date.
 - (2) All applicable permits, licenses, and inspections have been obtained by Customer.
- c) Upon the EDCs written request, the Customer will be required to refund any Incentives paid if the Customer does not comply with these Terms and Conditions and Program requirements.
- d) The EDCs shall use commercially reasonable efforts to pay the Incentive amount within six to eight weeks after the end of each program season.

7. Program/Terms and Conditions Changes

The EDCs reserve the right, for any reason, to withhold approval of BESSs, and to cancel or alter the Program, at any time without notice. Approved Operation Agreements will be processed under the Terms and Conditions and Program Materials in effect as of the date the Operational Agreement was approved by the EDCs.

8. Publicity of Customer Participation

The Customer grants to the EDC the right to use and reference for promotional and regulatory purposes the Customer's participation in the program, the details of the BESS project and the energy savings or demand reduction (discharge), the amount of incentives paid to the Customer, and any other information relating to the Customer's participation in the Program.

9. Indemnification and Limitation of the EDCs' Liability

The Customer shall indemnify, defend, and hold harmless the EDCs, their affiliates and their respective contractors, officers, directors, employees, agents, and representatives from and against any and all claims, damages, losses and expenses, including reasonable attorneys' fees and costs incurred to enforce this indemnity, arising out of, resulting from, or related to the Program or the performance of any services or other work in connection with the Program ("Damages"), caused or alleged to be caused in whole or in part by any actual or alleged act or omission of the Customer, any subcontractor, agent, or third party, or anyone directly or indirectly employed by any of them or anyone for whose acts may be liable. To the fullest extent allowed by law, the EDCs' aggregate liability, regardless of the number of claims, shall be limited to paying approved Incentives in accordance with these Terms and Conditions and the Program Materials, and the EDCs and their affiliates and their respective contractors, officers, directors, employees, agents, and representatives shall not be liable to the Customer or any other party for any other obligation. To the fullest extent allowed by law and as part of the consideration for participation in the Program, the Customer waives and releases the EDCs and their affiliates from all obligations (other than payment of an Incentive), and for any liability or claim associated with the BESS, the performance of the BESS, the Program, or these Terms and Conditions.

10. No Warranties or Representations by the EDCs

- a) THE EDCS DO NOT ENDORSE, GUARANTEE, OR WARRANT ANY CONTRACTOR, MANUFACTURER OR PRODUCT, AND THE EDCS MAKE NO WARRANTIES OR GUARANTEES IN CONNECTION WITH ANY PROJECT, OR ANY SERVICES PERFORMED IN CONNECTION HEREWITH OR THEREWITH, WHETHER STATUTORY, ORAL, WRITTEN, EXPRESS, OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THIS DISCLAIMER SHALL SURVIVE ANY CANCELLATION, COMPLETION, TERMINATION OR EXPIRATION OF THE CUSTOMER'S PARTICIPATION IN THE PROGRAM. THE CUSTOMER ACKNOWLEDGES AND AGREES THAT ANY WARRANTIES PROVIDED BY ORIGINAL MANUFACTURERS, LICENSORS, OR PROVIDER' OF MATERIAL, EQUIPMENT, OR OTHER ITEMS PROVIDED OR USED IN CONNECTION WITH THE PROGRAM UNDER THESE TERMS AND CONDITIONS, INCLUDING ITEMS INCORPORATED IN THE PROGRAM, ("THIRD PARTY WARRANTIES") ARE NOT TO BE CONSIDERED WARRANTIES OF THE EDCS AND THE EDCS MAKE NO REPRESENTATIONS, GUARANTEES, OR WARRANTIES AS TO THE APPLICABILITY OR ENFORCEABILITY OF ANY SUCH THIRD-PARTY WARRANTIES. THE TERMS OF THIS SECTION SHALL GOVERN OVER ANY CONTRARY VERBAL STATEMENTS OR LANGUAGE APPEARING IN ANY EDCS' OTHER DOCUMENTS.
- b) Neither the EDCs nor any of their employees or contractors are responsible for determining that the design, engineering, or installation of the BESS is proper or complies with any particular laws, codes, or industry standards.

The EDCs do not make any representations of any kind regarding the benefits or energy savings and/or demand reduction to be achieved by the BESS or the adequacy or safety of the BESS.

- c) The Customer agrees that he or she is responsible (directly based on his or her own judgment, or indirectly based on the advice of an independent expert but not the EDCs) for all aspects of the BESS and related work, including but not limited to: selecting the equipment; selecting Contractors to perform the work; inspecting the work and the equipment; ensuring that the equipment is in good working order and condition; ensuring that the equipment is of the manufacture, design specifications, size, and capacity selected by the Customer and/or their designated Operator, and that the same is properly installed and suitable for the Customer's or the OPERATOR's purposes; and determining if work was properly performed.
- d) The Customer agrees and acknowledges that each of the EDCs are not manufacturers of, or regularly engaged in the sale or distribution of, or experts with regard to, any equipment or work.
- e) The provisions of this Section 10 shall survive the termination, cancellation, or completion of the Customer's or their designated Operator's participation in the Program.

11. Equipment, Contractor Selection, and Contracting

The Customer or their designated Operator is responsible for selecting and contracting with the design and installation Contractor(s) if different than said Operator. The Customer's Operator shall be responsible for enforcing all such contracts and for assuring that the BESS meets Program requirements and applicable laws, regulations, and codes, and that the Contractor(s) are properly qualified, licensed, and insured. Notwithstanding the foregoing, the Customer acknowledges that the EDCs reserve the right to deny an Operator or Contractor to participate in this Program or provide equipment or services. The EDCs also have the right to exclude certain equipment from the Program.

12. Removal of Equipment

The Customer agrees, as a condition of participation in the Program, to properly remove and dispose of or recycle the equipment and components in accordance with all applicable laws, and regulations and codes. The Customer agrees not to re-install any of removed equipment in the state of Connecticut or the service territory of any affiliate of the EDCs and assumes all risk and liability associated with the reuse and disposal thereof.

13. Energy and Demand Reduction Benefits

The EDCs are entitled to 100% benefits and rights associated with the BESS.

14. Customer and OPERATOR Must Declare and Pay All Taxes

The benefits conferred upon the Customer or their designated Operator through participation in this Program may be taxable by the federal, state, and/or local government. The Customer is responsible for declaring and paying all such taxes assessed to the Customer. The Operator is responsible for declaring and paying all such taxes assessed to the Operator. The EDCs are not responsible for the payment of any such taxes.

15. Counterpart Execution; Scanned Copy

Any and all agreements and documents requiring signature related hereto may be executed in several counterparts, each of which, when executed, shall be deemed to be an original, but all of which together shall constitute one and the same instrument. A scanned or electronically reproduced copy or image of such agreements and documents bearing the signatures of the parties shall be deemed an original and may be introduced or submitted in any action or proceeding as competent evidence of the execution, terms, and existence of such agreements and documents, notwithstanding the failure or inability to produce or tender an original, executed counterpart of the same and without the requirement that the unavailability of such original, executed counterpart of the same first be proven.

16. Interconnection Service Agreement

Participation in this program must be done in compliance with the Connecticut Public Utilities Regulatory Authority-approved Guidelines for Interconnection and the Customer's Interconnection Service Agreement, if applicable.

17. Miscellaneous

- a) Paragraph headings are for the convenience of the parties only and are not to be construed as part of these Terms and Conditions.
- b) If any provision of these Terms and Conditions is deemed invalid by any court or administrative body having jurisdiction, such ruling shall not invalidate any other provision, and the remaining provisions shall remain in full force and effect in accordance with their terms.
- c) These Terms and Conditions shall be interpreted and enforced according to the laws of the state of Connecticut.
- d) In the event of any conflict or inconsistency between these Terms and Conditions and any Program Materials, these Terms and Conditions shall be controlling.
- e) Except as expressly provided herein, there shall be no modification or amendment to these Terms and Conditions or the Program Materials unless such modification or amendment is in writing and signed by a duly authorized officer of the EDCs.
- f) The provisions of Sections 4, 5, 6, 7, 8, 9, 10, and 11 (including any other sections herein that specifies by its terms that it survives termination) shall survive the termination or expiration of the Customer's participation in the Program.

18. EDC Acceptance of Application and Customer's Participation Timeframe

The Customer's participation in the Program is contingent upon the Program Administrator's approval of the Operational Agreement for a term of ten (10) years unless the Customer notifies the Operator of its intention to withdraw from the Program or the Program Administrator terminates the Customers' participation in accordance with the above Terms and Conditions.

This program is overseen by the Public Utilities Regulatory Authority (PURA), is paid for by ratepayers, and is administered by the Green Bank, Eversource, and UI.

Appendix E: Ownership Transfer Enrollment Form

ener	av storade
	SOLUTIONS
wnership Transfer	r Form
Velcome to the Energy Storag for a customer purchasing a inergy Storage Solutions. Sind latform, this shortened applica	ge Solutions ownership transfer customer application. This application home with a pre-existing battery system that was previously enrolled ce the battery information has already been collected on our enrollmen ation only requires the new customer's information.
First Name	
Last Name *	
Phone *	
####-#####	
Email •	
Addrose Line 4 •	
Address Line 1 *	
Address Line 2	

Contact Information

Appendix F: Resiliency Template

Resiliency Plan Process

In Docket No. 22-08-05, PURA identified four (4) customer categories that are allowed to receive upfront incentive adders.
These customer categories are: grid edge, critical facilities, C&I customers with fossil fuel generators, and small business customers (<200 kW Peak Demand).
As a requirement of the application process, critical facilities, C&I customers with fossil fuel generators, and small business customers (as defined in the Program Manual) must submit a resiliency plan to demonstrate how their system would be recharged when grid-charging is otherwise unavailable. Additionally, customers with onsite fossil-fuel generation must demonstrate their onsite generator has been decommissioned.
The Program Administrators have developed a template as a resource for customers and contractors
to evolve a resiliency plan. The resource will include.
(1) Quotomor's contact information
(2) Contractor's information
(3) Battery Energy Storage System information, including battery and inverter make and models.
(4) Customer's criterion that makes them eligible to retain capacity rights, and for which a Resiliency Plan is being requested
(5) Description of Blue Sky Operating Procedure
(6) Description of Black Sky Operating Procedure – extreme weather conditions that may trigger the resiliency plan
(7) Description of onsite generation equipment (if applicable) and resiliency capabilities
The Resiliency Plan template will be available in two forms, as a fillable .PDF file that can be
downloaded from the application platform, completed, and uploaded by contractor as part of their
application at a later time by the contractor, or it can be completed online during the application
process. A copy of the completed Customer Resiliency Plans will be provided to the EDCs for their records.

Energy Storage Solutions Program Resiliency Plan

Date: XX/XX/XXXX

Data fields to be captured during the incentive application process

	Contact Information Customer/End-User							
1	Company Name							
2	Address, City, State, Zip Code							
3	Contact Name							
4	E-Mail							
5	Phone Number							
6	Type of Business							
7	Business Hours of Operation							
8	Customer rate class information							
	Contact Information (Contractor						
9	Company Name							
10	Address							
11	Contact Name							
12	E-Mail							
13	Phone Number							
	Battery Energy Storage System Information							
14	Battery Manufacturer							
15	Battery Model(s) and quantity ea.							
16	Inverter Manufacturer							
17	ESS Technology							
18	Inverter Model							
19	Name Plate Inverter Rating Power (MVA)							
20	Name Plate Rating Energy Storage Capacity (MWh)							
	Battery Storage Info	ormation						
21	Are you a small business as defined by the Program Manual?							
22	Are you a critical facility as defined by the Program Manual?							
23	Are you a C&I customer with onsite fossil fuel generation?							

24	Are you on the Grid Edge as defined by the Program Manual?	
	Blue Sky Operating F	rocedure
	Will the stars as suctors he used for doily pools	
28	shaving of the site's electrical use?	
29	What percent of the storage capacity will be held in reserve at all times for resilience needs?	
	Black Sky Operating I	Procedure
30	How many hours a day of back up operation will the energy storage system enable during outage event?	
30b	What percentage of normal energy consumption (kWh) with the Energy Storage System enable during outage events?	
31	Please describe how you expect to recharge the storage asset for a multi-day event to facilitate the operation described above.	
32	For a typical 24-hour period, please provide an hourly profile for:	
32a	Expected load supported by battery during a multi-day outage event	COMPLETE BESS LOAD PROFILE- LOAD DATA
32b	Expected energy storage system dispatch during a multi-day outage event	COMPLETE BESS LOAD PROFILE- LOAD DATA
	Onsite Generat	ion
33	Will this storage system replace an existing for formal formation for the formation of the	
33a	Please specify Make, Model, Size (MW), Year Installed	
33b	If onsite fuel storage is required for existing generator, please indicate size of fuel storage tank.	
34	How many hours of back up operation does the generator enable during an outage event?	
34a	What percentage of normal energy consumption (energy use) does the generator enable during an outage event?	
35	Are there any other onsite generation resources (e.g. solar PV, fuel cells, CHP or other, which are not replaced by the battery storage)?	

35a	If so, please specify the Type, Make, Model, Size (MW electric), Fuel Source, and Age					
35b	If onsite fuel storage is required for other generation resources, please indicate size of fuel storage tank.					
	Limitation of Liability					

WITH RESPECT TO ANY LIABILITY HEREUNDER, THE ELECTRIC DISTRIBUTION COMPANY SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS, OR BUSINESS INTERRUPTION DAMAGES, WHETHER BY STATUTE, IN TORT OR IN CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE.

Load Data

ltem #	Load Data Profiles to support customer/contractor Resiliency Plan (Customers over 500 KW Peak Should Review Hourly Interval Load Profiles)												
1	Average Daily Energy Usage last 24 months (kWh)												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Workday												
	Weekend												
2	Maximum Peak Demand last 24 Months (kW)												
	Workday												
	Weekend												
3				Expect	ed Load	d Profile	Requi	ring BE	SS Sup	port			
	Hour		Expec	ted BE	SS Load	d (kW)		Ex	pected	Discha	rge of E	ESS (k	W)
	1:00												
	2:00												
	3:00												
	4:00												
	5:00												
	6:00												
	7:00												
	8:00												
	9:00												
Ľ	10:00												
bu	11:00												
ipr	12:00												
ũ	13:00												
n	14:00												
Ĕ	15:00												
	16:00												
	17:00												
	18:00												
	19:00												
	20:00												
	21:00												
	22:00												
	23:00												
	24:00:00												
					Limita	ation of	Liabili	ity					

WITH RESPECT TO ANY LIABILITY HEREUNDER, THE ELECTRIC DISTRIBUTION COMPANY SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS, OR BUSINESS INTERRUPTION DAMAGES, WHETHER BY STATUTE, IN TORT OR IN CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE.

RESILIENCY PLANNING TEMPLATE

What actions will you take to identify and connect the loads you will require to have the BESS provide adequate backup for a singular and a multi-day event?

What is your plan to implement back up services from the BESS when an outage occurs? Describe what actions you will take to ensure your battery is discharging when needed to serve the designated loads.

If you are requiring coverage for multi-day outages, what is your plan to manage battery availability for the designated loads?

Appendix G: Commercial and Industrial Customer Terms and Conditions and Data Release

energy storage

COMMERCIAL AND INDUSTRIAL (C&I) CUSTOMER TERMS AND CONDITIONS and DATA RELEASE

Version 8/1/2022

This Energy Storage Solutions Data Release and Terms & Conditions Agreement is expressly incorporated into the battery energy storage system (BESS) sales agreement between the Customer and the Eligible Contractor (Contractor) or Third-Party Owner (TPO). This Data Release must be signed by all C&I Customers participating in Energy Storage Solutions. In the event of any conflict between this Data Release and any other terms and conditions agreed to by the Customer, this Data Release shall control.

Energy Storage Solutions is overseen by the Public Utilities Regulatory Authority (PURA), is paid for by ratepayers, and is administered by the Green Bank, Eversource, and UI

WHY WE NEED A RELEASE – For Connecticut Green Bank, Eversource and United Illuminating (collectively "Program Administrators") to accurately measure performance in Energy Storage Solutions (Program), we need access to battery energy storage system (BESS) performance data (Data). This Data will allow us to aggregate and understand Customer benefit and ensure compliance with Program rules. This Data will also be used by Program Administrators to evaluate the effectiveness of the Energy Storage Solutions incentives. We take the security and privacy of your information very seriously. The Program Administrators will protect the confidentiality of your Data in compliance with all applicable laws. Data may be anonymized and released in the aggregate for research purposes, but we will never release personal data, and we will never sell or rent aggregated data.

BESS PERFORMANCE DATA RELEASE – As the Customer associated with this BESS, I hereby authorize and give permission to the Program Administrators named above to use the Data in connection with calculating estimated and actual benefits and for evaluating the effectiveness of the Program. This permission is given for 1) my historic energy usage and monthly and total amount of energy used at my utility service address; 2) my BESS performance including Active and Passive Dispatch event participation; and 3) program-related information. In addition to the use of the Data for the evaluation of the Program, the Data may also be anonymized and released in the aggregate.

PROGRAM DATA RELEASE – As a recipient of incentives supported by the Program Administrators, including the Connecticut Green Bank, a quasi-public agency of the State of Connecticut, I hereby authorize Connecticut Green Bank and other Program Administrators named above to access my Data and release it to program partners for confidential use in connection with calculating estimated and actual energy savings, evaluation of the effectiveness

of this product, and understanding performance of this type of incentive in the aggregate; and, in addition, I authorize Connecticut Green Bank to use my anonymized data or anonymized aggregated Data.

RELEASE PERIOD – This authorization covers Data for the period starting 18 months before the date below and ending at the time of decommissioning of the BESS.

TERMS & CONDITIONS – The Energy Storage Solutions Eligible Contractor or Third-Party Owner (TPO) agrees to and will incorporate the following terms into each agreement / lease / power purchase agreement between the Contractor and Customer and/or TPO if an Energy Storage Solutions incentive is requested, and will ensure that Customer provides signature as proof of agreement to these terms:

- 1. Neither the Connecticut Green Bank, Eversource Energy, United Illuminating (Program Administrators) nor the State of Connecticut: (1) endorses the workmanship of any Contractor; nor (2) guarantees, warranties, or in any way represents or assumes liability for any work proposed or carried out by a Contractor. Additionally, the Program Administrators are not responsible for assuring the design, engineering, and construction of any BESS is proper or complies with any particular laws, regulations, codes, licensing, certification and permit requirements, or industry standards. The Program Administrators do not make any representations of any kind regarding the results to be achieved by the system or the adequacy or safety of such measures.
- **2.** Where applicable, Contractor shall pass on to the Customer 100% of the Upfront Incentive as an up-front reduction in the total price of the BESS.
- **3.** Customer understands that completing this Data Release and Terms & Conditions Agreement does not guarantee approval for incentive(s) or participation in the Program.
- 4. No BESS receiving Upfront and/or Performance-Based Incentives shall be removed from the State of Connecticut for the 10 years of the Energy Storage Solutions program contract.
- 5. Contractor and/or TPO and Customer agree to install a revenue-grade meter and an approved web-based monitoring system on the BESS and maintain working connection with the Distributed Energy Resource Management System (DERMS) dispatch platform for the useful life of the battery energy storage system.
- 6. Contractor and/or TPO and Customer acknowledge that the Program Administrators maintain the right to inspect all BESS prior to disbursement of incentive payment. Customer should make reasonable effort to coordinate with the inspector to allow inspection to take place.
- 7. Contractor and/or TPO and Customer acknowledge that the Connecticut Green Bank is a public agency for purposes of the Connecticut Freedom of Information Act (FOIA). Any material submitted to the Green Bank will be considered a public record and will be subject to disclosure under FOIA. Under Connecticut General Statute §1-210(b) and § 16-245n(d), FOIA includes exemptions for trade secret and commercial or financial information given in confidence. Only the particular information falling within a statutory exemption can be withheld by the Green Bank. In no event shall the Green Bank or any of its officers, directors or employees have any liability for the disclosure of documents or information in the Green Bank's possession where the Green Bank, or such officer, director or employee in good faith believes the disclosure to be required under FOIA or other law.
- 8. In consideration for participation in the ESS, Customer does hereby disclaim, release, and forever discharge the Program Administrators, their officers, board, and employees jointly and severally from any and all

actions, causes of actions, claims and demands for, upon, or by reason of any damage, loss, or injury, which hereafter may be sustained by Customer for participating in the Program.

9. Contractor and/or TPO and Customer agree that the Program Administrators shall have access to all dispatch and energy data generated from the BESS, either directly from the BESS or through a Distributed Energy Resource Management System (DERMS) for the useful life of the BESS. Contractor and/or TPO and Customer hereby authorize the Program Administrators to access such data without their or any BESS vendor's prior authorization or approval.

Customer Signature	Customer Name	Date	
Customer Company			
Contractor Signature	Contractor Name	Date	

ATTACHMENT B (CPower NPV Calculations of Combined CT ESS Incentives)

Battery Size	Upfront Incentive \$/kW			Wh	Performance Incentive \$/kW						Average event length			2.5 hrs			
0.25 kW			Small	Medium	Large				Summer	W	/inter			Discount	Rate		10%
1 kWh			182	2 159.2	59	1	1-	5		200	25						
		-				_	6-3	10		115	15						
Upfront Incentive \$/kWh						Performance Incentive \$/kW						Total					
Year	Small		Medium	Large		Small	Me	edium	Large			Small		Medium	L	_arge	
	1	182	159	91			90	90)	90		2	272	2	49	181	
	2						90	90)	90			90		90	90	
	3						90	90)	90			90		90	90	
	4						90	90)	90			90		90	90	
	5						90	90)	90			90		90	90	
	6						52	52	2	52			52		52	52	
	7						52	52	2	52			52		52	52	
	8						52	52	2	52			52		52	52	
	9						52	52	2	52			52		52	52	
1	.0						52	52	2	52			52		52	52	
NP	٧											\$6	529	\$6	808	\$546	

Attachment C (Connecticut Green Back Annual Energy Storage Solutions Program – Year 4 Written Exceptions)

75 Charter Oak Avenue, Suite 1 - 103, Hartford, CT 06106 T 860.563.0015 ctgreenbank.com



November 18th, 2024

Jeff Gaudiosi, Esq. Public Utilities Regulatory Authority 10 Franklin Square New Britain, CT 06051

RE: Docket No. 24-08-05– ANNUAL ENERGY STORAGE SOLUTIONS PROGRAM REVIEW – YEAR 4 WRITTEN EXCEPTIONS

Dear Mr. Gaudiosi,

The Connecticut Green Bank ("Green Bank") respectfully submits the following comments below into the above referenced docket ("Docket") in response to that certain Notice of Request for Written Exceptions and the Proposed Final Decision ("PFD") issued by the Public Utilities Regulatory Authority ("PURA" or the "Authority") on November 1st, 2024 (the "Notice"). The section below is organized based on the corresponding sections in the Decision.

The Green Bank appreciates PURA's direction regarding the adoption of stakeholder comments and generally agrees with the PFD. The Green Bank wishes to further expand upon the items listed below.

I. Upfront Incentives

• Commercial Upfront Incentives

Once a Final Decision is issued by the Authority, Green Bank will notify all Commercial and Industrial ("C&I") developers of the approved incentives rates and will proceed to review all submitted applications currently sitting in queue. Green Bank would like to provide an update to the Authority that the current attrition rate for C&I projects in Tranche 1 is about 32.4% as of November 14th, 2024. There are currently 16 approved projects (33.8 MW) remaining in Tranche 1 pending installation. This attrition rate may grow over time, for example, as projects learn if they are or are not included in the current interconnection cluster study or whether they must wait another year to enter the study and/or if they need a distribution study.

II. Interconnection Reform

While the Interconnection Working Group ("IX WG") is making strides in some areas, it is still unclear if publicly available interconnection queue data will be made available containing all the specific project data from Docket No. 23-08-05's Order 26¹², which states,

No later than August 1, 2024, and annually thereafter, each EDC shall file as compliance an ESS Interconnection Report, as detailed in Section IV.D., in the applicable annual review proceeding (i.e., in 2024, Docket No. 24-08-05). The Report shall consist of a summary of the state of interconnection for all commercial ESS projects and shall include, at a minimum: (1) the interconnection status of each commercial ESS project; (2) the expected EDC interconnection approval due date for each commercial project per EDC interconnection guidelines, as applicable; (3) the date all required interconnection materials were submitted to the utility for each commercial ESS project; (4) the number of days from when all required interconnection materials were submitted to the utility for each commercial ESS project up to the completion of the interconnection process; (5) the attrition rate for all commercial ESS projects, based on the withdrawal of a project's interconnection application; (6) a list of the most common reasons for ESS interconnection delays; and (7) EDC-proposed solutions for each of the most common reasons delaying ESS interconnections.

Docket No. 24-08-05's PFD does include Order 16, which is beneficial to see as most of this information is not publicly available elsewhere; however, it is only provided once a year, which may be too infrequent and inadequate for developers.

As developers have a very short amount of time to decide whether a project will be able to move forward in the Interconnection queue and will be required to pay a substantial fee to move the project forward, having data from the Order 16 reports made available on a more frequent basis, such as weekly, would be beneficial for developers in the Program. If Order 16 data was to be made available on a weekly basis, it would help developers be able to see where all their projects stand in a downloadable report per EDC rather than individually in the PowerClerk platform. The Order 16 reports can also be made available in the reporting section of the ESS website to increase visibility if the Authority would prefer.

III. Passive Dispatch

• Dispatch Length

The Authority's decision to allow a reduction of the Passive Dispatch window to three hours during the 5 PM to 8 PM timeframe is greatly appreciated. Green Bank will be working to notify

 $^{^{\}rm 1}$ Docket No. 23-08-05 Order 26 UI filed July 30th, 2024

https://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/3a19facbd764b3bb85258b6a006e2 ca1?OpenDocument

² Docket No. 23-08-05 Order 26 Eversource filed August 1st, 2024

https://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/f15dbde054c3140085258b6c0065 9239?OpenDocument

Original Equipment Manufacturers ("OEMs") of this change when it goes into effect and has begun scheduling discussions with OEMs to ensure they will be prepared for the new Passive requirements in Summer 2025. It is still unclear, however, whether SunPower systems will be able to participate in future seasons without a successor integrator appointed. The Green Bank is still exploring ways to maintain SunPower systems' ability to respond to Energy Storage Solutions ("ESS") events.

• Definitional Changes

The Authority's decision to standardize the definition of 'available energy' separately from 'nameplate capacity' and 'usable energy' is welcomed by Green Bank. Green Bank will update the Program Manual and work with the Evaluation, Measurement, and Verification ("EM&V") consultant to ensure that Benefit Cost Analyses ("BCAs") reflect this definition moving forward.

• Compliance with Dispatch Requirements

Green Bank will work with stakeholders to draft a detailed proposal to revise the Program's upfront incentive payment model for new customers by May 1st, 2024, to comply with Order 22 of the PFD. Green Bank is requesting a clarification in the order to remove the word "all" in the first sentence as Program Administrators and program participants may need the flexibility to consider different options for residential homeowner-owned systems versus Third Party Owned ("TPO") systems as well as C&I systems, as they may all be looking for different options. In recent conversations with C&I developers, we have learned that time value of money is fundamental for the viability of C&I projects, and an upfront incentive paid over time would not necessarily be adequate to move these projects forward.

An assessment of the performance of systems under the new Passive Dispatch changes made in the Final Decision of Docket No. 24-08-05 will not be available at the time of submission of Order 22. It would be beneficial to have the assessment results prior to Order 22's submission to see if systems are performing better under the new passive dispatch calculation.

• Passive Dispatch Formula

Green Bank would like to request clarification on the language used in the Passive Dispatch formula. Specifically, in the first section of Table 9, in the Formula Component, Green Bank believes the intent of the formula could be described as follows:

• Each Passive hour is given a score that is calculated as follows:

(Energy dispatched during Passive event hour) / (1/3 of a system's available energy at the start of the respective Passive dispatch event)

- The allowable range for each hour's score is 0 to 2 and scores that calculate as greater than 2 will be capped at 2.
- A total score for the season is given as the sum of all individual Passive hour scores.

If this is the intent of PURA's Formula Component in the first section of Table 9, Green Bank believes the language in the table needs to be slightly adjusted to better describe the intent.

While Green Bank fully supports the Authority's decision to adjust the Passive Dispatch event participation formula to mitigate the likelihood of customers being adversely affected by the Program's clawback provision for reasons outside of their direct control, clarifying the intent of this proposed formula is important as Green Bank is learning there is confusion surrounding it. It is the Green Bank's perception that this formula is meant to account for batteries' participation in active, passive and weather-related events by which batteries contribute to achieve one or more program objectives, including but not limited to providing grid benefits, peak demand reduction, resiliency, and others. Green Bank's recommendation is to refer to this formula as the "Dispatch Season Performance Formula" rather than the "Passive Dispatch Performance Formula", as this may help alleviate some of the growing discomfort among developers and TPOs.

• Clawback Formula

Green Bank would like to request a clarification on the formula used for calculating the prorated Clawback. Green Bank believes the following small adjustments should be made (shown in redline):

(1 - (value given by the numerator of the passive dispatch event performance formula / 0.90)) * (upfront incentive value * 10%)

• Upfront Incentive Clawback Provision

Appreciation is extended to the Authority for considering the proposed "Responsible Party" language. However, the PFD addresses an unintended ambiguity in the Program Manual (emphasis added):

However, the Authority declines to shift responsibility for the upfront incentive clawback fee away from the **system owner**, as proposed by the Program Administrators. The **system owner**, who agrees to and signs the Program's operational agreement and terms, shall remain responsible for all clawback fees.

The current Program Manual is ambiguous regarding whether the customer or the system owner is responsible for the clawback. Sec. 6.1 refers to both the "system owner" and "customer", however those entities are not interchangeable for a leased BESS. The Green Bank will adjust the Program Manual accordingly to reflect that the system owner—whether the customer or a third-party system owner—shall be responsible for the clawback. The Green Bank believes this clarification will ensure that lease customers—many of whom qualify as low-income—do not bear an undue burden for operational issues that are beyond their control and are not responsible for repaying an incentive that they did not receive directly.

Green Bank is seeking clarification regarding OEM storm data due on September 15th. This request should be optional for OEMs as some OEMs may not have storm data currently. It will be in the best interest of OEMs and homeowners if this data is provided, however, it might not always be available or in a usable format. If OEMs do not have storm data, Green Bank is exploring the possibility of sourcing weather data and will analyze whether this data can be used in lieu of missing storm guard data that may be able to be used across the fleet.
IV. Battery Recycling

Green Bank would like to emphasize several key recommendations that emerged from the Endof-Life Working Group process, as outlined in the miscellaneous recommendations on slides 94-96, filed under Docket No. 24-08-02 on July 31, 2024³.

- Recommendation 5a suggests that the End-of-Life Working Group should continue under the leadership of either PURA or DEEP. As the issues with projects coming to End-of-Life will continue to grow, the Green Bank looks forward to participating in future discussions as a solar asset manager and Energy Storage Solutions co-program administrator.
- Recommendation 5b proposes that DEEP initiate a process to qualify and publish a roster of state-approved recyclers for batteries and solar panels. Establishing this list promptly would benefit stakeholders by providing a clear and reliable resource for sustainable recycling options in the interim.
- Recommendation 5f and 5g collectively propose that PURA consider the opportunity to use second-life solar panels and batteries in regulated programs and whether replacement of outdated systems should be incentivized (rather than simply removal). We believe that these are worthy discussion points for next year's RRES docket.
- Recommendation 5h proposed that the Green Bank and DEEP be directed to engage with nearby states on developing a regional approach to this topic. We maintain that working with state agencies from across the eastern seaboard region could uncover potential efficiencies and enhance collaboration. We would be excited to work with DEEP to launch this initiative.

V. Performance Data Access

Further guidance is requested from the Authority on two key points: (1) whether the request applies to both active and passive data, and (2) clarification regarding the timeline for providing performance data to individual battery owners. Based on experience with the EDCs, DERMS providers, and OEMs, at least 90 days are anticipated after the active dispatch season concludes to prepare this data. This timeline would need to account for current Program Guidelines, which allocate OEMs 30 days to report telemetry data, followed by the necessary steps of data collection, formatting, cleaning, and analysis. It is the Program Administrator's experience that this process takes between 6 and 8 weeks.

Green Bank believes that should the DERMS providers be required to provide active and passive performance data, then a shorter timeframe may be achievable.

³ Docket No. 24-08-02 Order 35 Filed on July 31st, 2024

https://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/21239f45ea89fe7585258b6b006fa f9e/\$FILE/End-of-Life%20Working%20Group_Solar%20and%20Battery%20End-of-Life%20Considerations%20encl..pdf

VI. ESS Program Data Dashboard

The "Download Project Data" file which contains ESS Enrollment data has been updated on the ESS Program Dashboard as of November 5th, 2024. Moving forward, Green Bank will upload the Project Enrollment Data monthly and Performance Data at least 90 days after the end of the active season, or earlier, if available.

Over the past two years Green Bank has provided aggregated battery performance data from January through December, but moving forward, based on the time and cost it takes to collect and clean telemetry data, Green Bank will provide battery performance data only for the months that correspond to dispatch seasons. This results in providing data from June 1 through September 30, and then November 1 through March 31, unless otherwise advised by the Authority.

VII. Program Redlines and Recommendations

• Eligibility for Upfront Incentives

Green Bank understands the Authority's decision on this matter and agrees that customers who have already paid for a BESS without an incentive have demonstrated that the upfront cost is not a complete barrier to deployment. However, the intent of this revised language was to simplify the original language to a broader range of customers who may have missed an opportunity to apply for incentives. The Green Bank proposes a slight change to better capture the original intent with clear rules, which is redlined as follows:

Systems energized or installed after January 1, 2022, but prior to the project's contractor or equipment OEM becoming approved as Eligible Equipment (up to a maximum of one year) can be approved for an Upfront Incentive at the discretion of the Program Administrators and provided their application is approved pursuant to Section 4. Such customers can be eligible for both Upfront and Performance Incentives at the rates in effect at the time of Reservation of Funds.

The above changes will remove ambiguity surrounding the "installation date" which is difficult to prove, whereas the "energized" date is clear and documented by the Electric Distribution Companies ("EDCs") in an Approval to Energize letter. Further, the removal of "OEM" clarifies that this rule applies to the specific BESS model, and not the OEM broadly. The additional consideration for a contractor's eligibility will allow flexibility for customers working with new contractors who have not yet integrated the ESS Program requirements into their own operations. Finally, removing "at the discretion of the Program Administrators" will provide assurance that the rule applies objectively when criteria are met, and are not subject to individual review. The Green Bank believes these modifications will allow customers to benefit from the Upfront Incentive in special circumstances where operations were performed out of order by their contractor or OEM.

• Passive Dispatch Test Events

Passive Dispatch events are pre-scheduled by the Program Administrators, and BESS Operators must program this event schedule into the BESS. Green Bank will work with existing and potential OEMs to evaluate the feasibility of arranging optional test events.

• Energy Storage Aggregators

The decision to allow Energy Storage Aggregators in the Program is welcomed. As Green Bank learns more about the role of Aggregators in the Program, we would like to meet with various Aggregators over the first Quarter of 2025 to develop and incorporate these changes into the Program, and respectfully requests that the Authority approves that the Green Bank delivers a complete set of guidelines for the participation of Aggregators in the Program. This would include, among other things, roles and responsibilities, modifications to the Eligible Contractor and Third-Party System Owner application along with the NTA, as appropriate, and a redline Program Manual that incorporates the role of Aggregators in the program.

• RIM Methodology Changes

Green Bank thanks the Authority for the opportunity to continue to provide counterfactual one, and if Green Bank chooses to also include Counterfactual six when providing BCA analyses related to program performance and potential changes. Green Bank would like to, once again, highlight the definitions of Counterfactual one and six as provided in Docket No. 24-08-05 Interrogatory Response CAE-2⁴. Counterfactual one and counterfactual six are defined in Chapter 1 of the Avoided Energy Supply Components in New England: 2024 Report (AESC 2024) as follows⁵:

Counterfactual #1: A future in which Program Administrators install no new energy efficiency, building electrification, or active demand management (demand response and energy storage) resources in 2024 or later years.

Counterfactual #6: A future in which Program Administrators continue to install new energy efficiency, active demand management, and building electrification resources, except for all behind-the-meter storage resources.

Using counterfactual one for the first 3-year cycle of Energy Storage Solutions is a way to look back at progress and counterfactual six is a way to look ahead at the second 3-year cycle as the grid is modernized to include new energy efficiency and active demand management projects. The Department of Energy and Environmental Protection Conservation and Load Management program is a different program from Energy Storage Solutions, and it should be expected that each program be measured in a different way.

⁴ Docket No. 24-08-05 Interrogatory CAE-2 Response filed July 26, 2024. https://www.doug.state.ct.us/dockeyrr.psf/8e6fc37a54110e3e852576190052b64d/77719346

https://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/777193467f4b940785258b66006b abcb?OpenDocument

⁵ Page 1, Avoided Energy Supply Components in New England: 2024 Report, Amended May 24, 2024, available at: <u>https://www.synapse-energy.com/aesc-2024-materials</u>

Green Bank's position is that counterfactual six for Connecticut is designed to measure the avoided costs of CT Energy Storage Solutions. Altering the RIM calculation methodology would not necessarily disrupt the consistency of the Program's EM&V analysis, particularly if new counterfactuals lead to significantly different results. Furthermore, there is no alteration to the RIM calculation methodology – the EM&V consultant is merely updating the avoided cost values and using the exact same RIM methodology that has been used even before the program's inception. The peak reduction has remained the same, the updated avoided costs reflect the new best estimates of value, in this case now more applicable to Behind-the Meter ("BTM") energy storage, we're using the exact same BCA methodology and avoided costs from the 2024 AESC, we're just applying the values that are "per unit of energy storage savings" rather than the values that are "per unit of EE/EH/DR savings"

VIII. Existing and New Orders

At this time, Green Bank is requesting the Authority's permission to make a few small updates to the recipients on a few Orders from Docket No. 24-08-05's PFD⁶ below.

- Order 2, please list Green Bank and remove the "EDCs" or adjust to Program Administrators as this data is updated on the Energy Storage Solutions Website⁷ by Green Bank after an OEM becomes eligible in the Program.
- Order 19, please list the EDCs instead of "Eversource" as United Illuminating's Order 26⁸ in Docket No. 23-08-05 lists an ESS Approved project in "Withdrawn" status.
- Order 9, please list Green Bank instead of "Program Administrators" as Green Bank is responsible for Enrollment Data.

Helping to clarify the different roles and responsibilities of Program Administrators as mentioned in Green Bank's response to Docket No. 24-08-05's CAE-11⁹ filed on July 26, 2024, will be beneficial.

IX. EM&V Assignability

Program Administrators are currently in the process of running a competitive Request for Proposal for an Energy Storage Solutions EM&V Consultant. The Green Bank follows a competitive bid process every three years and as a new EM&V consultant is determined, the

⁹ Docket No. 24-08-05 Interrogatory response CAE-11

⁶ Proposed Final Decision Docket 24-08-05 dated November 1st 2024

https://www.dpuc.state.ct.us/dockcurr.nsf/4b3c728dd1c0d642852586db0069aa70/4f3836e932e8f0c585258bc80045f 29b/\$FILE/24-08-05%20PFD%20.pdf

 ⁷ Energy Storage Solutions Eligible Equipment List <u>https://energystoragect.com/submitted_ess_system_status_list/</u>
⁸ Docket No. 23-08-05 Order 26 (UI) filed July 30th 2024,

https://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/3a19facbd764b3bb85258b6a006e2 ca1?OpenDocument

https://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/9a6aefbc1be145fc85258b66006bb 0d8/\$FILE/Docket%2024-08-05%20CAE-11%20Response.pdf

Green Bank will file correspondence to notify the Authority when the new EM&V consultant has executed contracts with all three Program Administrators.

The Green Bank greatly appreciates the opportunity to provide Written Exceptions and the Authority's consideration of the above Written Exceptions.

Respectfully submitted,

By:

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