2024 Demonstrations, Pilots, and Assessments

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Section One: Introduction

Rhode Island Energy (RI Energy or ~~T~~the Company) invests in demonstrations, pilots, and assessments that support the development of new offerings and, ~~(~~more generally,~~)~~ expand energy efficiency choices for customers. Based on the Public Utility Commission's (PUC) budget guidance during the 2023 planning process, the Company is scaling back its direct application of ~~D~~demonstrations, ~~P~~pilots, and ~~A~~assessments. For the 2024 program year, ~~T~~the Company is investigating several demonstrations, pilots, and assessments ~~for 2024~~ and expects to ~~have~~offer ~~1-2~~one-to-two Residential and Commercial & Industrial (C&I) projects as detailed below.

To cost~~-~~ effectively assess the marketplace for new technologies and program models, the Company intends to use~~tilize~~ two PPL (RI Energy's parent company) memberships: Electric Power Research Institute (EPRI) and ESource.

Electric Power Research Institute

EPRI is an independent non-profit energy research, development~~,~~ and deployment organization with a membership of utilities and other energy companies worldwide. PPL has a long-standing relationship with EPRI, and PPL's CEO is the incoming EPRI Board Chair for 2024. ~~One of EPRI's research areas is called~~ Power Delivery and Utilization, one of EPRI's research areas, has an Electrification and Customer Solutions focus area ~~on Electrification and Customer Solutions~~ with some of the following ~~specific~~ programs ~~including~~:

- Grid-~~E~~edge ~~C~~customer ~~T~~technologies
- Customer ~~i~~Insights
- Electrification
- Advanced ~~B~~buildings and ~~C~~communities

~~Rhode Island~~In 2024, RI Energy will join PPL's EPRI membership ~~in 2024~~ and ~~will~~ conduct an analysis of ~~analyze~~ its research to see if there are relevant opportunities to add to ~~our~~its energy efficiency program portfolio. Once ~~we have~~RI Energy has access, ~~we~~the Company will perform an initial assessment of past reports to determine if there are ~~any worth considering for~~ demonstrations, pilots and assessments it should pursue~~DPAs~~. Then, ~~we~~the Company will initiate a quarterly process to review new studies ~~on an ongoing basis,~~ and also engage with EPRI as much as possible to influence future topic areas that may be of interest ~~in~~ to Rhode Island consumers.

ESource

PPL also has a corporate membership with ESource, a utility member organization ~~that~~ providinges deep market research on energy efficiency and distributed energy programs, policy~~,~~ and technology. One of ESource's research areas is its Technology Assessment Service, which advises utilities on the performance characteristics, technical aspects, and feasibility of new ~~DSM~~demand-side management, distributed energy resources~~DER~~, and electrification technologies and~~&~~ measures. The Technology Assessment Service~~It~~ can help inform the Company~~PPL~~'s strategic technology ~~&~~and innovation efforts for end-use technologies ~~&~~and measure development and assess end-use

Commented [CJ1]: There seems to be a disconnect between what is written in the introduction and definitions sections and what the Company is indicating it will do in Section 3. It is not clear how the Company's use of EPRI membership ties in with the formal process described in the first couple sections of this attachment.

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Commented [AC2]: This will not leave much opportunity for feedback. Would it also make sense here to describe DPAs that might be included in other filings (e.g. SRP/DSM proposals)? Do SRP/DSM proposals have the potential to test small scale offerings/programs like the DPAs included in the EE program framework?

Commented [RIE2R2]: Updated with more details on DPAs

Commented [CJ3]: Are there other research areas that the Company would have access to? If so, please describe the full suite of resources that the Company will be able to access.

Commented [FB(E3R2]: We are only including areas relevant to the EE plan

Commented [CJ4]: We need to see significantly more detail about the Company's plan for this. Is the idea to use this to bring ideas into the process workflow described at the beginning of this attachment and then go from there? Or is this being used as a way to conduct DPAs without going through the process described above?

How will the Company demonstrate that they are doing this work? What are the Company's goals for identification of opportunities? How many opportunities does the Company hope to begin research on?

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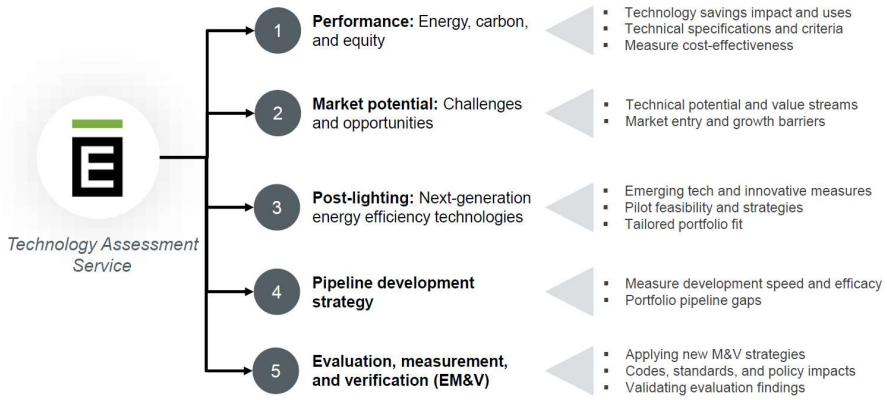
Commented [FB(E5R2]: We are only including areas relevant to the EE plan

performance characteristics, energy impacts, and costs, to help determine potential ~~DPA~~demonstration, pilot, and assessment projects. ESource's Technology Assessment Services are detailed below.



~~We~~ For ESource, the Company will employ a similar analysis process to what was outlined for EPRI above ~~for ESource as well~~. Using PPL's corporate memberships in EPRI and ESource will allow RI Energy to cost share with other PPL affiliates in order to access world-class technology research in a very cost-efficient manner.

~~The Company has developed a framework to assess and test new innovations for the energy efficiency and active demand response portfolios. The Company has applied this framework in developing the solutions described in the 2024 Annual Plan, including new measures and solutions proposed in prior Annual Plans as well as new demonstrations and assessments for 2024.~~

~~**Process:** The Company has developed a standard process by which it tests new ideas and determines if each idea merits a pilot, demonstration, or assessment. There are eight steps in the process. Each idea is first assessed in the **Intake** stage, which determines whether the idea can be offered through the energy efficiency or demand reduction programs and whether the idea is commercially available. Next in the **Concept** stage, the idea's application, target customers, context within existing programs and offerings, market barriers, and preliminary savings potential are identified and developed. Ideas in these two early stages of review make up the Innovation Pipeline, which continually evolves as new promising concepts are vetted and launched.~~

~~The Concept stage necessitates preliminary research and analysis of the product, which will inform the **Plan** stage. Key decisions made during the Plan stage, including whether a pilot, demonstration, or assessment is required to develop the idea and, if so, whether an independent or vendor evaluation approach should be taken. The ideas included in Section 4 are all in the plan stage of development and recommended for a pilot, demonstration, or~~

Commented [CJ6]: Suggest this should be pulled out of EE plan since active demand has shifted to SRP.

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Commented [CJ7]: Ditto to comment above. Won't highlight further instances, but Company should do so in final review of this attachment.

Commented [RIE7R2]: Noted

assessment. The decisions surrounding type and rigor of testing ideas are made with input from the Company Evaluation Measurement & Verification (EM&V) team, EERMC Consultants, and OER.

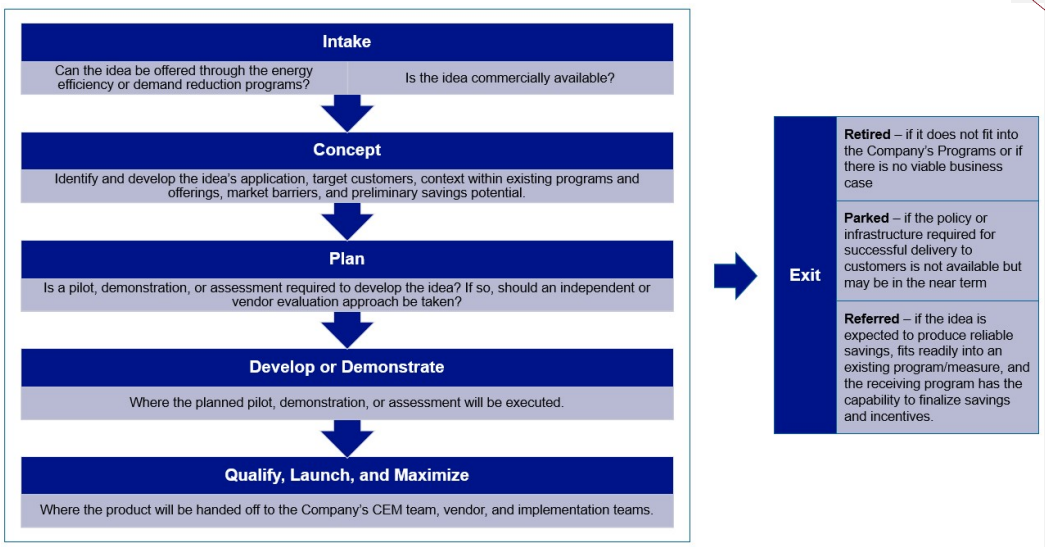
The planned pilot, demonstration, or assessment will be executed in the **Develop or Demonstrate** stage. Updates will be provided to the stakeholder teams on a quarterly basis.

Once the develop or demonstration stage is complete, the offering will be finalized and launched through the **Qualify, Launch**, and **Maximize** stages. During these stages, the product will be handed off to the Company's Customer Energy Management (CEM) team, vendor, and implementation teams who manage the product as part of the Company's energy efficiency portfolio.

During any of the above stages, the idea can be placed in the **Exit** process. There are three possible outcomes of an Exit: The product may be **Retired** if it does not fit into the Company's programs or if there is no viable business case. The product may be **Parked** if the policy or infrastructure required for successful delivery to customers is not available but may be in the near term. Finally, the product may be **Referred** directly to the programs if the idea is expected to produce reliable savings, fits readily into an existing program or measure, and the receiving program has the capability to finalize savings and incentives.

Commented [MH8]: May be helpful to have a flow diagram or something similar as a visual for these stages

Commented [RIE8R2]: see diagram below



Evaluation: It is expected that each idea will require a different set of research questions that must be answered prior to qualification and inclusion in programs. Depending on the idea's characteristics, the expected program delivery pathway, and the nature of the uncertainty, the Company plans for different approaches to evaluate the

~~idea during a pilot, demonstration, or assessment. For example, a low touch residential product that is expected to deliver through an upstream program requires drastically different analysis than a high touch industrial measure with few potential customers.~~

~~The CEM team will recommend a research plan for each pilot, demonstration, or assessment approved through the planning process. The team will solicit input from the Company's EM&V team, OER, and EERMC consultants on whether the research requirements can be best met through an independent evaluation, a vendor evaluation, or an internal review. These approaches are further discussed in the following section.~~

Section Two: Definitions

The Company, using guidance from the PUC, has outlined three separate pathways that may be used to investigate ideas: ~~in the Innovation Pipeline~~: ~~Pilot,~~

1. Demonstration,
2. Pilot, or
3. Assessment.

~~It is assumed that any idea selected for a Pilot, Demonstration, or Assessment has been vetted through the Intake and Concept stages outlined above.~~ Ideas are vetted for fit and feasibility, commercial availability, and documented preliminary recommendations of characteristics such as ~~like~~ target customer, market barriers, magnitude of potential savings, and delivery pathway. An ~~pipeline~~ idea will only be recommended as a ~~pilot,~~ demonstration, pilot, or assessment if there are clearly articulated research goals that cannot be answered without a concerted research effort.

The Company has three research pathways that can be applied during ~~a pilot,~~ demonstration, pilot, or assessment:

- Independent Evaluation (highest rigor),
- Vendor Evaluation, or ~~Internal~~
- Review (lowest rigor).

The appropriate research pathway will be chosen jointly by the appropriate Company sector and evaluation leads depending on the needs and potential of ~~a the Pilot, D~~demonstration, pilot, or ~~A~~assessment. The same team will also~~and~~ consider the uncertainty of the savings, scope of the offering, market barriers, and whether the technology is considered ~~under~~ as a ~~pilot,~~ demonstration, pilot, or assessment. The research ~~pathways~~ and evaluation pathways are summarized in Table 1 and defined further below.

Commented [CJ9]: Already provided initialism above, shorten to CEM

Commented [RIE9R2]: Noted

Commented [CJ10]: After reading through this section, it feels like a diagram or flowchart would really aid in the understanding of how DPA process works. Recommend developing one for inclusion in this section. Note that there used to be one in included in prior iterations of the plan (see 2022).

Commented [RIE10R2]: added diagram above

Commented [CJ11]: Please state clearly who makes the decision on what level of rigor is needed.

Commented [FB(E11R2]: added

Table 1. Definitions: Pilots, Demonstrations and Assessments

	Pilot	Demonstration	Assessment
Defining ~~C~~characteristics	• May result in independent program • Long-term, comprehensive engagement required to test and develop offering • Market capabilities may need to be developed	• Technology requires information gathering and field installations	• Technology addresses program need that cannot~~'t~~ be met with other, more certain solutions • Technology does not have a robust basis for energy savings
Cost effective savings information	Unknown or limited	Estimated savings	Unknown or limited
Evaluation Options*	Vendor or Independent	Vendor or Independent	Vendor, Independent, or Internal Review
Savings contribution to shareholder incentive	No	Yes	No
Cost recovery from SBC	Yes	Yes	Yes

* Each evaluation option will include input from EERMC and OER. Evaluation option selection based on factors such as uncertainty of savings, scope of offering, and whether technology is considered a ~~pilot,~~ demonstration, pilot, or assessment

2.1 Pilots

In 2019, the Company redefined what it considers a pilot in accordance with Docket No. 4600-A PUC Guidance Document. Per the Guidance Document, "A pilot is a small scale, targeted program that is limited in scope, time, and spending and is designed to test the feasibility of a future program or rate design. It is incumbent upon the

proponent of a pilot to define these limits in a proposal for PUC review. Ideally, a pilot can provide net benefits and achieve goals, but the primary design and value of a pilot is to test rather than to achieve."[1]

Pilots are designed to explore technologies and approaches to energy management not included in the Company's core energy efficiency programs ~~(Residential, Commercial and Industrial (C&I), and Multifamily)~~ and that could potentially become a new, standalone program.

Pilots enable the Company to test technologies, new energy management strategies, customer adoption, workforce adoption, and cost effectiveness of emerging and new technologies. While pilots are designed to test standalone programs, pilot results may conclude that a standalone program is not recommended or that certain aspects of the pilot should be offered within existing programs. It is likely that pilots will require a long-term commitment and broader set of stakeholder input, given the scope of adding a new core program to the Company portfolio. Savings associated with ~~P~~pilots will not contribute to shareholder incentives. Pilots may be evaluated with either an independent or a vendor evaluation.

A pilot is likely to be recommended when a solution:

- Meets the fit and feasibility criteria of the Intake stage.
- Is clearly defined in the Concept stage, including savings and potential estimates.
- Is unique and robust enough to operate as a standalone program.
- Requires comprehensive, long-term engagement to determine the benefits and structure of a potential standalone program.
- May require creation of new market capabilities for program success.

2.2 Demonstrations and Assessments

Demonstrations

For actions in this Plan that do not fall under the Docket 4600-A definition of pilots, the Company proposes the following definitions for demonstrations and assessments:

Commented [CJ12]: Why is Multifamily included in this list separately from Residential, but Income Eligible is not? This information either isn't needed, or if it is, I'd suggest replacing Multifamily with Income Eligible so that the list aligns with the sectors for which the core programs cover.

Commented [RIE12R2]: Updated

[1] Docket No. 4600-A PUC Guidance Document, Oct~~ober~~ 27, 2017. Section V. Pilots.

Where a pilot will test the feasibility of a new program outside of the existing core programs, a demonstration will test the feasibility of a new product or offering for inclusion in existing programs. It is generally expected that demonstrations will be less time and resource intensive than pilots, since generally there is greater certainty around a narrow, incremental idea added to a program rather than a totally new set of offerings. Savings associated with demonstration projects may contribute to shareholder incentives. Demonstrations may be evaluated with either an independent or a vendor evaluation.

A demonstration is likely to be recommended when a solution:

- Meets the fit and feasibility criteria of the Intake stage.
- Is clearly defined in the Concept stage, including savings and potential estimates.
- May require information-gathering and field installations.
- Offers a robust basis for energy savings.

Assessments

Assessments will be deployed for solutions that address a particular gap or program need but have significant uncertainty around the effectiveness or potential of the solution to realize savings. Because of the uncertainty, assessments will not include field demonstrations or customer installations. Instead, assessments will focus on information gathering to equip Company staff to make a more informed decision of whether and how to proceed with the idea. It is possible that an assessment could recommend further demonstration of the idea or determine the solution should exit the review process. Savings associated with assessments may not contribute to shareholder incentives. Assessments may be evaluated with an independent evaluation, vendor evaluation, or internal review.

An assessment is likely to be recommended when a solution:

- Has questions of fit and feasibility in the Intake stage.
- Addresses a program need that cannot be met with other, more certain options.
- Lacks a robust basis for energy savings.

The Company employ~~ee~~s three methods for conducting ~~pilots,~~ demonstration, pilot and assessment evaluations, described below.

2.3 Evaluations

Independent Evaluations

Independent evaluations apply the greatest level of rigor to the ~~pilot,~~ demonstration, pilot, or assessment and require broad coordination between teams. The Company participates in the planning and review process, but the evaluation itself is subject to the procurement process, oversight, and methods outlined in Attachment 3. The third-party evaluator develops the evaluation plan prior to customer installations to ensure the number and condition of customer installations are appropriately rigorous. The evaluator does not necessarily perform customer installations; however, they ~~but is~~are involved to the extent required to ensure appropriate metering and customer feedback needed for the final analysis.

An independent evaluation is likely to be recommended if a solution:

- Is expected to contribute significant savings towards program savings goals.
- Must consider a population-level analysis, as opposed to site-specific analysis, to answer research questions.
- Poses policy or baseline questions that should be addressed through the evaluation framework.

Vendor Evaluations

Vendor evaluations are managed by internal staff, with a single vendor completing all tasks. Vendor evaluations may be applied to a ~~pilot,~~ demonstration, pilot, or assessment. This evaluation pathway engages vendors to provide initial research on market readiness, market barriers, customer interest, and work in other territories, before they assess, install, and analyze the results of the technology. The vendor must not have a financial interest in the outcome of the pilot, demonstration, or assessment and must have the necessary engineering, research, or measurement and verification (M&V) experience to evaluate the idea in an unbiased manner. The vendor ultimately recommends whether and how to integrate the technology into the programs and presents key information to inform deployment of the offering, such as target customers, market barriers, savings methodology, and best practices for installations and commissioning. The key differences between a vendor evaluator and independent evaluator relate to oversight and coordination with the Rhode Island Evaluation, Measurement & Verification (~~RI~~ EM&V) framework described in Attachment 3.

A vendor evaluation is likely to be recommended if a solution:

- Is not expected to contribute significant program savings, either because it is a niche application or the per-project savings are relatively small.
- Is expected to be delivered through a custom pathway with site specific information inputs available during program delivery

Internal Reviews

Internal reviews may use internal resources to explore a product through an ~~A~~assessment. The Company typically relies on external resources for pilots and demonstrations in order to leverage outside expertise and maintain the integrity of the savings calculations. Internal reviews focus on key questions of uncertainty or policy related to technologies under investigation. An internal review can draw on available external resources and data, but will perform the research, analysis, and recommendations internally.

An internal review is likely to be recommended if:

- The solution is examined as an ~~A~~assessment.
- Research questions can be answered without customer installations.
- Research can be delivered with internal resources and external resources available without undertaking a procurement process (such as ESource).

Section Three: Summary of Demonstrations, Pilots and Assessments

~~Based on PUC budget guidance during the 2023 planning process, the Company is scaling back its direct application of Pilots, Demonstrations, and Assessments. The Company is investigating several pilots, demonstrations, and assessments for 2024 and expects to have 1-2 Residential and Commercial & Industrial projects in the second draft of the plan.~~

3.1 2023 Demonstrations, Pilots, and Assessments

Here is a status list of current/recent ~~DPAs~~demonstrations, pilots, and assessments from the Company's Q2 2023 Energy Efficiency Quarterly Report:

Demonstration, Pilot and Assessment Name		Q1 2023 Updates
Final Gas Appliances - Assessment - Residential	Date	08/07/2023
	Stage	Final
	Recent Activity	Study report finalized~~.~~
	Next ~~s~~Steps	Apply study results to program design
Gas DR - Pilot - C&I	Date	08/02/2023
	Stage	Demonstrate
	Recent Activity	Active for Winter 2022-23

Commented [AC13]: Much like the EM&V Attachment describes recent evaluations, it would be helpful to tabulate recent DPAs, or at least ones that have moved forward/been adopted

Commented [RIE13R2]: Added

Commented [CJ14]: Agree that this section should still include a summary table of all DPA's proposed in 2024.

We would also like to see the Plan speak to recently completed or still in process DPAs from the prior one or two years. Including a table similar to what the Company includes in its year-end report would allow for improved understanding of how prior years' activity does or does not tie into upcoming year activities.

Commented [RIE14R2]: Noted

Commented [AC15]: This will not leave much opportunity for feedback. Would it also make sense here to describe DPAs that might be included in other filings (e.g. SRP/DSM proposals)? Do SRP/DSM proposals have the potential to test small scale offerings/programs like the DPAs included in the EE program framework?

Commented [RIE15R2]: Interesting question. Will have to discuss internally.

Demonstration, Pilot and Assessment Name		Q1 2023 Updates
	Next ~~steps~~Steps	Moved to System Reliability Procurement ~~SRP~~
Gas Leak Survey - Demonstration - C&I	Date	05/09/2023
	Stage	Demonstrate
	Recent Activity	Working with vendors to determine savings calculation assumptions and post-verification procedures.
	Next steps	Test post verification procedures at sites.
Rightsizing Remote Terminal Units - Assessment - C&I	Date	05/05/2023
	Stage	Plan
	Recent Activity	Completed assessment, which identified ~~ID'd~~ strategies for RTU right-sizing
	Next ~~s~~Steps	Integrate strategies into program design and implementation
Automated Remote Terminal Unit Optimization - Demonstration - C&I	Date	08/02/23
	Stage	Demonstrate
	Recent Activity	Recruited customers; installed product and monitoring equipment
	Next ~~s~~Steps	Measure summer performance
Commercial Weatherization - Assessment - C&I	Date	05/05/2023
	Stage	Demonstrate
	Recent Activity	Completed ~~Wx~~ weatherization ~~T~~training with ~~V~~vendors, gathering feedback and research ongoing for offering development
	Next ~~s~~Steps	Develop Express Tool
Air Curtains - Demonstration - C&I	Date	01/26/2023
	Stage	Qualify
	Recent Activity	Opted to develop measure offering, in line with MA PA's.
	Next ~~s~~Steps	Collaborate with MA to develop program offering and develop go-to-market plan
Smart Valves for Chilled Water Systems - Demonstration - C&I	Date	07/28/2023
	Stage	Plan
	Recent Activity	Final reported submitted

Demonstration, Pilot and Assessment Name		Q1 2023 Updates
	Next ~~s~~Steps	Review report and develop plan on next steps

~~To cost-effectively assess the marketplace for new technologies and program models, the Company intends to utilize PPL's membership in the Electric Power Research Institute (EPRI). EPRI is an independent non-profit energy research, development, and deployment organization with membership of utilities and other energy companies worldwide. One of EPRI's research areas is called Power Delivery and Utilization which has a focus area on Electrification and Customer Solutions with specific programs including:~~

- ~~Grid-Edge Customer Technologies~~
- ~~Customer Insights~~
- ~~Electrification~~
- ~~Advanced Buildings and Communities~~

~~Rhode Island Energy will join PPL's EPRI membership in 2024 and will analyze its research to see if there are relevant opportunities to add to our program portfolio.~~

Commented [CJ16]: Are there other research areas that the Company would have access to? If so, please describe the full suite of resources that the Company will be able to access.

Commented [FB(E16R2]: We are only including areas relevant to the EE plan

3.2 2024-2026 Commercial & Industrial Demonstrations, Pilots and Assessments

3.2.1 C&I Weatherization ~~Assessment~~ Demonstration

Demonstration Stage

The C&I Weatherization ~~Assessment~~Demonstration is a ~~C~~concept.

Innovation Overview

The C&I Weatherization ~~is a~~~~Assessment~~demonstration will explore opportunities to expand on historical weatherization ~~(Wx)~~ efforts. Although ~~Wx~~ weatherization has not historically constituted a major portion of the C&I ~~p~~Portfolio, the Company will seek~~s~~ to explore cost-effective opportunities to expand in this area. ~~-~~Any ~~Wx~~ weatherization expansion will be evaluated for cost ~~-~~effectiveness within the existing C&I program framework (i.e.~~,~~ based on electric and gas savings only). However, improved building envelope and insulation are often seen as prerequisites to electrification, and ~~Wx~~ weatherization will also be viewed in the broader context of its potential to contribute to electrification efforts.

Commented [CJ17]: We need to see significantly more detail about the Company's plan for this. Is the idea to use this to bring ideas into the process workflow described at the beginning of this attachment and then go from there? Or is this being used as a way to conduct DPAs without going through the process described above?

How will the Company demonstrate that they are doing this work? What are the Company's goals for identification of opportunities? How many opportunities does the Company hope to begin research on?

Commented [FB(E17R2]: Added some language

Residential ~~Wx~~ weatherization solutions are relatively standardized, with similar solutions applicable at a broad range of facilities while ~~.~~ ~~L~~large commercial buildings incorporate a more complex and varied range of construction techniques and heating, ventilation, and air conditioning (HVAC) systems. This complexity makes it more difficult to apply standardized techniques for site identification and savings calculation. Thereforeus, this C&I Weatherization ~~aAssessment~~demonstration is designed to test the feasibility of this offering for inclusion in existing C&I programs. ~~to investigate strategies to identify candidate projects and potentially streamline savings calculations.~~

Target Customer and Program Fit

Potential commercial buildings for presenting standardized opportunities may include:

- "Butler buildings," which ares pre-fabricated steel structures with limited insulation (usually fiberglass).
- Wood frame buildings, ~~which are~~ similar to residential buildings ~~homes~~ and can apply residential energy-savings techniques.
- Customers with portfolios of standardized buildings, such as chain restaurants.

Prior Efforts

During the ~~In~~ 2021 and ~~-~~2022 program years, RI Energy ~~in~~ collaboratedion with the Office of Energy Resources (OER) ~~, the Company~~ and ~~its~~ the Company's Small Business Direct Install Program vendor to undertakeook a ~~Wx~~ weatherization expansion effort, which leveraged Regional Greenhouse Gas Initiative (RGGI) funds to support additional ~~weatherization~~ weatherization measures at small businesses. The focus of this effort was on wood frame buildings. The Company captured significant cost data from this effort. In 2023, The Company completed weatherization training with vendors, and gathered feedback and research that will be incorporated for demonstration deployment.

~~Assessment~~ Demonstration Delivery

The Company ~~anticipates seeking~~plans to use a third-party vendor to assist in developing and implementing the C&I Weatherization ~~in this~~Assessment demonstration. This effort ~~. The effort~~ will begin with a characterization of likely target facilities and~~.~~ ~~P~~potential solutions may include but are not limited to:

- Training for facility auditors and engineers.
- Identification of swathes of buildings with standardized opportunities (e.g., construction techniques and poor insulation).
- Integration of ~~Wx~~ weatherization into other pathways (~~such as thee~~.g., Equipment and Systems Performance Optimization ~~i~~Initiative).
- Program-approved savings calculator.

- Integration with statewide electrification efforts (provided that measures are cost effective under the Company's current energy efficiency program regulations and practices).
- Bundled incentives for ~~Wx~~ weatherization at sites undergoing HVAC retrofits or replacements.

Evaluation

The C&I Weatherization ~~Assessment~~ Demonstration will be evaluated through the Company's Internal Review process (see Section 2).

3.3 2024-2026 Residential Demonstrations, Pilots and Assessments

3.3.1 – Residential Equity Outreach Assessment ~~Residential DPA~~

Demonstration Stage

The Residential Equity Outreach Assessment is a concept.

Innovation Overview

The Residential Equity Outreach Assessment will engage and incentivize non-profit organizations to provide direct energy efficiency education and outreach to landlords in one or more of the Company's five equity communities. These communities include the cities of Central Falls, East Providence, Pawtucket, Providence, and Woonsocket.

This assessment was developed to address and better understand the challenges with reaching landlords and renters in the Company's equity communities. Non-profit organizations are well-positioned within these communities to conduct creative, responsive, and community-grown energy efficiency outreach and education efforts. At the same time, the Equity Working Group (EWG) has apprised the Company of increasing demands on non-profits to provide community outreach while receiving no additional funding. To address this, The Company will provide participating non-profits with a total of $40,000 of incentives to complete outreach and education efforts.

The incentives will be distributed to a small number of non-profits through an application process that selects participants based on their impact potential. Applications will be open to non-profits that are either based in or operate in one of our equity communities, with a stated preference for organizations with multilingual staff and existing landlord relationships. Application requirements may include, but are not limited to:

- A commitment to the assessment through the plan year
- An outreach, marketing, and communication plan
- A budget of how funds will be spent
- Support from or communication with local municipality(ies)

To enable selected organizations to best perform their outreach and education efforts, The Company may provide trainings in energy efficiency offerings, support the creation of co-branded multilingual marketing materials designs, share best outreach practices, and provide local event support as necessary.

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Target Customer and Program Fit

This assessment is designed to reach both single-family and multifamily residential customers in the Company's equity communities who may experience barriers in accessing and adopting energy efficiency offerings. These communities include the cities of Central Falls, East Providence, Pawtucket, Providence, and Woonsocket. The Company is committed to ensuring customers across Rhode Island have equitable access to energy efficiency, regardless of their income, geographic location, primary language, business size, home ownership status, or other relevant barriers.

Prior Efforts

This assessment builds upon equity outreach efforts pursued in the 2023 program year. In collaboration with the EWG, the Company gathers feedback on its efforts to continuously improve and scale impact. In 2023, the Company provided enhanced outreach, promotion, and education of all EE offerings in underserved communities. Outreach efforts included partnering with and cross training home visiting programs and community organizations/resource groups to expand the reach and impact of energy efficiency programs. The Company also promoted energy efficiency programs at community gathering places and events. Outreach efforts focused on English and Spanish languages and included additional languages where possible.

Assessment Delivery

The Company is working with the EWG to vet assessment funding structures and options to promote maximum impact. It is also collaborating with the group to develop an equitable and robust application process for non-profit organizations to participate. Beyond these items, the EWG is providing feedback on assessment metrics that are being developed to track progress, performance, and outcomes of the assessment.

Evaluation

-The RResidential Equity Outreach Assessment will be evaluated through the Company's Internal Review process (see Section 2).

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3.3.2 Multifamily Financing Assessment

Demonstration Stage

This Multifamily Financing Assessment is a concept.

Innovation Overview

BlocPower is a climate technology company based in Brooklyn, NY. They offer a financing structure for multifamily building energy efficiency and electrification projects. BlocPower structures its financing as a fifteen-year lease, with $0 money down options. The lease can be used to fund a wide variety of energy efficiency and electrification measures, from HVAC upgrades, air & ground source heat pumps, heat pump hot water heaters, appliances, smart meters, solar photovoltaic systems, battery storage, EV chargers, smart thermostats, and building air sealing and insulation work. Financing can be used to cover related remediation measures ranging from the removal of knob and tube wiring, lead, mold, or asbestos to repairs for a leaky roof.

BlocPower's financing can be paired with local, state, and federal incentives, including rebates and credits from the Inflation Reduction Act, to provide maximum savings to customers. BlocPower's lease includes twice-yearly system maintenance. At the end of the fifteen-year lease, customers can either buy the system for one dollar, or sign up for a new lease with BlocPower.

BlocPower has developed a program for building owners to easily access critical upgrades at no upfront cost. These building upgrades, which can save money, reduce energy usage, improve local health, and mitigate unsafe conditions are bundled together under a 15-year lease agreement, with the option for a full warranty for the duration. This financing structure, which builds upon the strong track record of similar agreements in the solar energy industry, has been shown to increase adoption by reducing complexity, helping manage risk, and critically, by providing ready access to the capital needed to put these important improvements in place. The structure is unique to BlocPower, having been developed over several years in partnership with Goldman Sachs, Inclusive Prosperity Capital (an outgrowth of the Connecticut Green Bank) and various public and private sector finance organizations.

BlocPower has facilitated the financing and installation of over 1,200 green retrofits, largely in low- and moderate-income communities. BlocPower's financing is part of formal city/utility programmatic offerings in New York, Massachusetts, New Hampshire, Colorado, and California. BlocPower focuses financing on single family residential, small and large multi-family properties, small commercial buildings, and community institutions. When financing, BlocPower underwrites the customer's credit risk, then organizes, manages, and pays for the construction of the project.

The financial structure BlocPower utilizes overcomes many of the challenges that currently hinder building efficiency upgrade financing. These challenges include the mixed creditworthiness of building owners and tenants,

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the multifaceted and complex nature of the financing process for building owners, and the potentially high financing rates for these upgrades. All these place limitations on who can access upgrades.

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Target Customer and Program Fit

This assessment is designed to test an alternative financing model to fund projects at residential multifamily buildings with a particular focus on smaller buildings with two to twenty units. The Non-Participant Market Barrier Study found that even with rebates, upfront costs are a barrier to program participation for both customers and landlords/property managers. The BlocPower program overcomes this barrier by offering a solution that does require an upfront monetary investment.

Prior Efforts

Financing for multifamily buildings is currently offered through the HEAT loan program. Even with the favorable interest rate available, the longest HEAT loan term available is seven years and the loan is capped at $25,000 per unit. This has not proven sufficient to incentivize project implementation in the multifamily market in Rhode Island. BlocPower offers a longer term (15 years) and does not require a lien on the underlying building and property. The lease is secured by the installed equipment.

Assessment Delivery

The Company will work with its program delivery vendor, RISE Engineering, to incorporate the BlocPower option into project proposals as well as work with BlocPower to educate contractors on the lease offering. BlocPower will provide marketing materials, including case studies from their work in other jurisdictions, to help augment existing outreach to the market in Rhode Island.

The Company will subsidize the expenses associated with BlocPower's underwriting. As with any financial instrument, the capital provider, in this case BlocPower, will assess the creditworthiness of building owners and gauge their ability to honor the obligations of the fifteen-year lease agreement. Defraying these expenses will cost approximately $39,000.

Evaluation

The Multifamily Financing Assessment will be evaluated through the Company's Internal Review process (see Section 2).