

2025 Demonstrations, Pilots, and Assessments

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Section One: Introduction

Rhode Island Energy (RI Energy or the Company) invests in demonstrations, pilots and assessments (DPAs) that support the development of new offerings and, more generally, expand energy efficiency choices for customers. For the 2025 program year, the Company investigated several potential projects while simultaneously constructing a process for more effective future research.

To cost effectively assess the marketplace for new technologies and program models, the Company leverages two PPL (RI Energy's parent company) memberships: Electric Power Research Institute (EPRI) and E Source. Company staff also stays up to date on offerings from other jurisdictions, emerging ideas from conventions and conferences, and general industry trends.

[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 was the EPRI Board Chair for 2024. Power Delivery and Utilization, one of EPRI's research areas, has an Electrification and Customer Solutions focus area with some of the following programs:

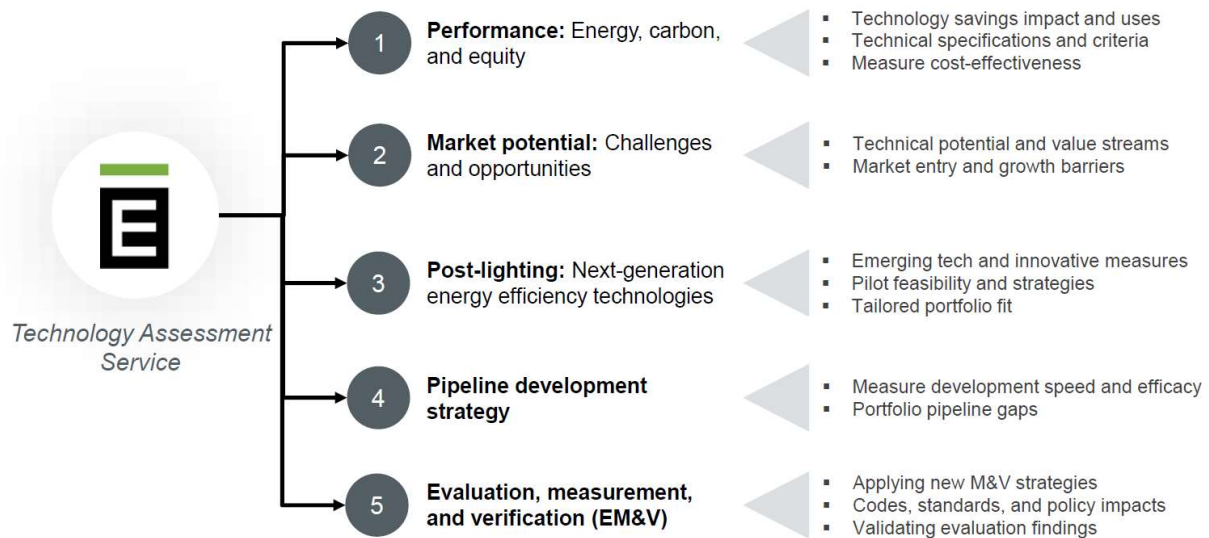
- Grid-edge customer technologies
- Customer insights
- Electrification
- Advanced buildings and communities

In 2024, RI Energy joined PPL's EPRI membership and conducted an analysis of its research for relevant opportunities to add to its energy efficiency program portfolio. The Company performed an assessment of past reports to determine if there are demonstrations, pilots and assessments it should pursue. The Company has initiated a quarterly process to review new studies and engage with EPRI as much as possible to influence future topic areas that may be of interest to Rhode Island consumers. The results of these reviews may be included in future quarterly and annual reports.

[E Source](#)

PPL also has a corporate membership with E Source, a utility member organization providing deep market research on energy efficiency and distributed energy programs, policy and technology. One of E Source's research areas is its Technology Assessment Service, which advises utilities on the performance characteristics, technical aspects, and feasibility of new demand-side management, distributed energy resources, and electrification technologies and

measures. The Technology Assessment Service can help inform the Company’s strategic technology and innovation efforts for end-use technologies and measure development and assess end-use performance characteristics, energy impacts, and costs to help determine potential demonstration, pilot, and assessment projects. E Source’s Technology Assessment Services are detailed below.



For E Source, the Company is employing a similar analysis process to what was outlined for EPRI above. Using PPL’s corporate memberships in EPRI and E Source allows RI Energy to cost share with other PPL affiliates to access world-class technology research in a very cost-efficient manner.

[DPA Selection Process](#)

The Company stood up a new process to select DPAs for 2025. Following a thorough cataloguing of EPRI and E Source research, the Company categorized all opportunities and applied a methodological, multi-step process to narrow down the most impactful options. Each potential DPA was evaluated based on its relevance to strategic objectives and more specific residential and commercial program goals. The Company established this step-by-step DPA review process with the intention of it being repeatable for future program years.

Section Two: Definitions

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

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

Ideas are vetted for fit and feasibility, commercial availability, and documented preliminary recommendations of characteristics such as target customer, market barriers, magnitude of potential savings, and delivery pathway. An idea will only be recommended as a 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 demonstration, pilot, or assessment:

- Independent Evaluation (highest rigor),
- Vendor Evaluation, or
- 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 the demonstration, pilot, or assessment. The same team will also consider the uncertainty of the savings, scope of the offering, market barriers, and whether the technology is considered as a demonstration, pilot, or assessment. The research and evaluation pathways are summarized in Table 1 and defined further below.

Table 1. Definitions: Pilots, Demonstrations and Assessments

	Pilot	Demonstration	Assessment
Defining 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 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 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 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 or program component to the Company portfolio. Savings associated with 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:

¹ Docket No. 4600-A PUC Guidance Document, Oct. 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 reasonable 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 employs three methods for conducting demonstration, pilot and assessment evaluations, described below.

2.3 Evaluations

Independent Evaluations

Independent evaluations apply the greatest level of rigor to the 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 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 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 (EM&V) framework described in Attachment 3. A vendor evaluation is conducted by one of our existing program vendors and is managed by the program implementation team (with input/review from EM&V staff), whereas the independent evaluation is conducted by an evaluation firm chosen by the EM&V team through the evaluation selection process and managed by EM&V staff.

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 assessment. The Company typically relies on external resources for pilots and demonstrations 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 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 E Source).

Section Three: Summary of Demonstrations, Pilots and Assessments

3.1 2024 Demonstrations, Pilots, and Assessments

Below is a status list of current/recent demonstrations, pilots, and assessments from the Company's Q1 2024 Energy Efficiency Quarterly Report:

DPA Name		Q1 2024 Updates
<u>Automated RTU Optimization</u> <u>- Demonstration - C&I</u>	Date	5/15/2024
	Stage	Evaluate

	Recent Activity	Evaluation report completed
	Next steps	Integrate strategies into program design and implementation
<u>Weatherization – Demonstration - C&I</u>	Date	5/15/2024
	Stage	Design
	Recent Activity	Vendor is using Weatherization Tool to identify energy efficiency opportunities
	Next Steps	Continued deployment
<u>Residential Equity Outreach Assessment – Assessment - Resi</u>	Date	5/15/2024
	Stage	Design
	Recent Activity	Identified non-profit and municipal partners and began developing collaborative landlord & renter outreach strategies, catalogued additional funding opportunities for scaling

	Next Steps	Continue developing outreach strategies and pursue action plan
<u>Multifamily Financing – Demonstration - Resi</u>	Date	5/15/24
	Stage	Design
	Recent Activity	Ongoing talks with BlocPower to determine best project structure
	Next Steps	Agree on project structure with BlocPower

3.2 2025 Demonstrations, Pilots, and Assessments

The Company will focus its 2025 efforts on expanding and continuing two existing DPAs, The Multifamily Financing Assessment and The Residential Equity Outreach Assessment. After careful review, the Company did not identify any new opportunities to pursue in 2025. The Company instead proposes to prioritize efforts and resources on its existing assessments. These existing assessments provide important and imminent opportunities to innovate and improve outcomes in the residential/multifamily programs. Beyond DPAs, each sector is focusing on improvements within the programs in 2025.

The Residential sector has applied a major focus for 2025 on resolving energy audit deferrals stemming from pre-weatherization barriers (PWBs). Although introducing PWB resolution on a small scale as a DPA was considered, the Company believes that the PWB effort fits more naturally into the existing structure of the EnergyWise Single Family and Income Eligible Single Family programs. Therefore, the Company decided that the time and energy of the Residential sector was better spent working through the PWB issue and leveraging additional funding to that end.

On the Commercial & Industrial side, the Company has implemented several demonstrations, pilots and assessments in recent years (e.g. Building Analytics, weatherization measures, SwarmStat), and the Company's

priority for 2025 is to grow and expand these initiatives and offerings within the programs, rather than embarking upon new DPA processes. The Company will, however, continue to seek out and screen new and cutting-edge measures (e.g. replacement of GHG refrigeration systems with refrigeration systems using natural refrigerants) in 2025 through its custom application process.

3.2.1 Multifamily Financing Assessment

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,

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.

Target Customer and Program Fit

This assessment is testing 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.^(OBJ) The BlocPower program overcomes this barrier by offering a solution that does not 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 is subsidizing the expenses associated with BlocPower's underwriting. As with any financial instrument, the capital provider, in this case BlocPower, assesses the creditworthiness of building owners and gauges their ability to honor the obligations of the fifteen-year lease agreement. Defraying these expenses will cost approximately \$39,000.

The Company finalized a contract with BlocPower in June. The Company, BlocPower, and their multifamily implementation contractor are collaborating to launch the BlocPower offering by the Fall of 2024. Our discussions with BlocPower have centered around defining the specific roles and responsibilities of the Company, our contractor, and BlocPower. All parties are working together on a comprehensive outreach and marketing strategy to ensure the program's success. Our contractor is also reviewing their list of potential program participants to identify good candidates for the financing offered by BlocPower.

3.2.2 Residential Equity Outreach Assessment

Innovation Overview

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, in 2024 the Company provided an incentive of \$40,000 to be split between the City of Central Falls and Progreso Latino, a local non-profit organization.

The Residential Equity Outreach Assessment has successfully engaged and incentivized Progreso Latino to provide direct energy efficiency education and outreach to landlords in Central Falls, one of the Company's identified equity communities. One innovative strategy that Progreso Latino is pursuing is holding landlord listening sessions in the Fall. During these sessions, the Company and its partners will hear from landlords around the city about the barriers they face to participating in Rhode Island's energy efficiency programs, and if appropriate, will discuss ways to alleviate these barriers. Progreso Latino is hosting and conducting the outreach for these sessions.

In 2025, the Company is looking to build upon and expand this Assessment to Providence. In addition to seeking out the participation of non-profits based in Providence, the Company tentatively plans to partner with a local health system network on this effort.

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 are currently defined to 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 and 2024 program years. In collaboration with the EWG, the Company gathers feedback on its efforts to continuously improve and scale impact. For more information on the Company's 2025 equity initiatives, please refer to Section 2.6.1 of the 2025 Annual Plan Main Text.

Assessment Delivery

Central Falls city officials partnered with Progreso Latino in May of 2024 to send out educational materials about Rhode Island Energy energy efficiency programs to every resident in Central Falls. The letters listed Progreso Latino as a trusted contact point for customers who are looking for more information. This outreach effort will be followed by multiple live listening sessions held jointly by Progreso Latino and the Company in the Fall, in which residents will have the opportunity to ask questions as well as express their barriers to participation in efficiency programs.

The Company will pursue similar strategies in Providence in 2025 based on their success in encouraging program participation in Central Falls.

Evaluation

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