REV Demonstration Project:

Affordable Multifamily Heat Pump Cost Shift Prevention

AHP-CSP

Q1 2026 Quarterly Progress Report

Dated: April 30, 2026

Table of Contents

1.0 EXECUTIVE SUMMARY

Pursuant to the New York State Public Service Commission's (Commission) 2015 REV Order,[1] Consolidated Edison Company of New York, Inc. (Con Edison or the Company) submits this first quarter report for 2026 on the progress of the Affordable Multifamily Heat Pump Cost Shift Prevention (AHP-CSP) REV Demonstration Project (the Project). The Company is implementing the Project as part of the Reforming the Energy Vision (REV) proceeding. Concurrent with the filing of this report, the Company has filed confidential budget information for the Project with the Commission's Records Access Officer.

1.1 Project Background

Con Edison is partnering with L+M Development Partners (L+M) to demonstrate affordable housing decarbonization solutions that will mitigate shifting of costs from property owners to residents when electrifying affordable multifamily buildings (the "cost-shift" issue). L+M is supported by its partner organizations Steven Winter Associates (SWA), Vermont Energy Investment Corporation (VEIC), Cadence OneFive, Ice Air, and ZBF Geothermal.

The Project will investigate and deploy two technical approaches: (i) a decentralized heat pump system with a power metering switch and (ii) a centralized geothermal heat pump system with grid responsiveness. In the decentralized system, the power metering switch shifts power supply to the owner-paid utility meter when the unit is providing heating and to the apartment panel when providing cooling. In the centralized system, all heating and cooling usage will go toward the owner meter and will be offset by tariff updates and demand response revenues. Both solutions avoid shifting heating costs to residents and will utilize existing building infrastructure and minimize the cost of building and utility upgrades. L+M will identify approximately 200 affordable housing units across two or three multifamily buildings within Con Edison's service territory to retrofit with either of the two heat pump approaches, with priority given to units in Disadvantaged Communities (DACs). The majority of units within L+M's portfolio of managed assets are under active regulatory agreements and are considered income-restricted to residents under 80% Area Median Income (AMI). The demonstration project will also collect data for insights on thermal electrification in affordable multifamily buildings, such as operating costs and potential market revenues. The Project will test existing software platforms to reduce upfront costs for electrification feasibility assessments and streamline project scope development.

[1] Case 14-M-0101, *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision*, Order Adopting Regulatory Policy Framework and Implementation Plan (issued February 26, 2015) (REV Order).

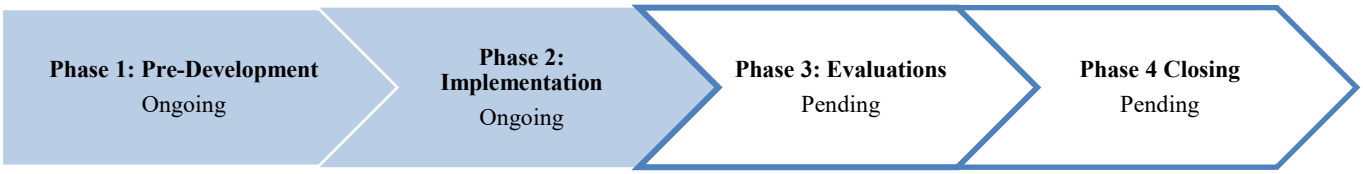
1.2 Project Overview

Affordable Multifamily Heat Pump Cost Shift Prevention Project

Table 1 - Project Overview

Project Details	
Launch Date	May 2025
End Date	July 2028
Estimated Budget	$9.2M
Budget Reporting	*Filed confidentially* Q1 2026 Spend & Cumulative Spend
Demonstration Team	Con Edison L+M Development Partners (L+M) Steven Winter Associates (SWA) Vermont Energy Investment Corporation (VEIC) Cadence OneFive (Cadence) Ice Air ZBF Geothermal

Project Phases & Status



Recent Milestones

In this quarter the project continued the pre-development and implementation phases and prepared for the evaluation phase. The primary activities this quarter included:

- Completing initial engineering assessments and recommending two sites for Level 3 assessments.
- Refining estimated project costs, subsidies, and operational impacts within the Level 3 assessments and completing electrical engineering walkthroughs for recommended demonstration sites.

- Finalizing resident engagement plan and pre-retrofit survey in preparation for project implementation.

- Drafting measurement and verification (M&V) plans that will be finalized when demonstration sites are confirmed.

Upcoming Milestones

In Q2 2026, the Demonstration Team will continue pre-development phase work by completing Level 3 assessments for demonstration sites, developing and finalizing requests for proposals (RFP) and scope of work for subcontractors, and completing the Scalable Model Summary Memo, which will describe lessons learned for efficiently scaling cost shift techniques. The team will confirm demonstration sites once electrical service determinations are received. Once demonstration sites are confirmed, the team will commence resident engagement and begin the build-out phase by releasing RFPs for subcontractors. Financing Final Reports will also be completed for the confirmed demonstration sites.

2.0 QUARTERLY PROGRESS

2.1 Key Milestones and Progress

The Demonstration Team continued activities in the Pre-Development and Implementation phases, as well as preparation for Evaluation Phase activities. Activities and progress for each workstream this quarter are shown in Table 2.

Table 2 - Quarterly Progress by Workstream

Workstream	Activities
Workstream 4 **Project Scoping**	• Completed Level 2 energy assessments • Confirmed selection of sites for Level 3 assessments based on scoring matrix • Submitted load letter for electric service determination of selected decentralized site • Completed preliminary Level 3 assessment for both sites • Completed Electrical Engineering walkthrough for both sites
Workstream 5 **Secure Project Funding and Financing**	• Commenced screening of lender consent requirements • Commenced screening of incentive and subsidy eligibility • Continued financial analysis and business case development for selected demonstration sites

Workstream 6 **Resident Engagement and Evaluation**	• Finalized resident engagement plan • Developed pre-retrofit and post-retrofit resident surveys • Finalized pre-retrofit resident survey
Workstream 9 **Micro Evaluation**	• M&V Plan is drafted but requires sites to be confirmed so site specific information can be incorporated. Work will resume in Q2 2026
Workstream 10 **Macro Evaluation**	• M&V Plan is drafted but requires sites to be confirmed so site specific information can be incorporated. Work will resume in Q2 2026
Workstream 11 **Financial and Operations Evaluation**	• M&V Plan is drafted but requires sites to be confirmed so site specific information can be incorporated. Work will resume in Q2 2026

2.2 Lessons Learned and Recommendations

During this quarter, the Demonstration Team identified key takeaways that were relevant to the execution of this demonstration and larger market implications.

1. Level 2 Energy Assessment Outcomes

The team completed Level 2 energy assessments at six sites. Assessment activities included performing building surveys, building staff interviews, estimating energy savings and preliminary utility costs of proposed solutions at each site.[2] For this demonstration, the Level 2 assessment was performed on six shortlisted sites for three solution types: ground source heat pump (centralized), air to water heat pump (centralized), and packaged terminal air source heat pump (decentralized). The assessments resulted in the following insights related to each system type for these specific sites:

Centralized System

- Ground-source heat pump installations at eligible sites were expected to increase operating expenses on an annual basis. Per-dwelling unit installation costs were estimated at $74,000 per unit, well above the maximum target of $40,000 per unit.

[2] Kelsey, Jim. kW Engineering. Your Guide to Level 1, 2 & 3 Commercial Energy Audits: Differences Between Cost & Content - kW Engineering | Sustainable Buildings & Energy Efficiency Consulting. June 18, 2021.

- The air-to-water heat pump alternative was expected to increase operating expenses at five out of six sites. Analysis projected a marginal operating expense increase of less than 5% at the sixth site.

Decentralized System

- Modest to significant operating expense savings are expected at five out of six sites.

2. Site Selection Criteria

In the Q3 2025 quarterly report, the Demonstration Team presented the criteria used to select sites for Level 2 assessment from the eligible L+M managed portfolio. Table 3 shows the criteria included in the Q3 2025 report.

Table 3 - Level 2 Assessment Selection Criteria

Selection Criteria	Description
Savings	Projected energy and operating cost savings—based on existing conditions, do we expect a heating electrification project to lead to energy and operational cost savings?
Repair and Maintenance (R&M)	Does the building have high heating repair & maintenance costs?
Equipment Replacement	Does the existing heating equipment need to be replaced soon?
Business Criteria	Ownership's willingness to invest in building outside of normal capital cycle; stakeholder requirements—including regulatory agency
Physical Characteristics	Building size, available outdoor space, existing sleeves, atria, etc.
Existing Systems	What type of heating distribution does the building have? (Steam? Hydronic?) Is electrical infrastructure new?
Reasonable CapEx	Anticipated project capital costs

Table 4 - Detailed Site Scoring Criteria

	Criteria	1. Utility Savings	2a. R&M	2b. Equip. Replacement	3. Bus. Criteria	4. Reasonable CapEx	5. Physical Char.	6. Existing Sys.	7. Affordability
	Criteria Definition	Projected change in utility costs post-retrofit	Projected costs associated with routine HVAC system repair & maintenance	Expected remaining useful life of existing HVAC equipment	Financial and agency stakeholder acceptance of retrofit project due to building's position in three areas: financial standing, disposition planning, and agency/lender consent requirements.	Projected retrofit construction costs (1)	Building typologies conducive to demonstration solutions (i.e. presence of wall sleeves). For centralized solution, existing space for bore field access and heat pumps.	Existing electrical and/or heating distribution conducive to electrification (i.e. apartment electric panel capacity, hydronic lines)	% of units with income restrictions
	Criteria Type	Quantitative	Qualitative	Quantitative	Qualitative	Quantitative	Qualitative	Qualitative	Quantitative
Score	**3**	OpEx savings (over 15%)	Significant R&M cost avoidance expected	Existing equipment requires immediate replacement	Significant stakeholder enthusiasm for project due to positive results on all three areas	Retrofit costs are under or equal to $20-30k/DU	Building has sufficient existing space and characteristics for the retrofit	No major modifications to existing infrastructure expected	100% units reserved for residents at or under 80% AMI and/or supportive housing
	2	Minimal OpEx savings (5-15%)	Some R&M cost avoidance expected	Existing equipment requires replacement in next 5-10 years	Moderate stakeholder enthusiasm for project due to mixed results across areas	Retrofit costs are $30-40k/DU	Building has some existing space and most characteristics for the retrofit	Minor modifications to existing infrastructure expected	Over 50% units reserved for residents at or under 80% AMI
	1	Neutral OpEx impact (+/- 5%)	No R&M cost avoidance expected	Existing equipment requires replacement in next 10-20 years	Stakeholder concern due to issues in one or more areas	Retrofit costs are $40-75k/DU	Building has minimal existing space and most characteristics for the retrofit	Major modifications to existing infrastructure expected	50-25% units reserved for residents at or under 80% AMI
	0	Increases OpEx (>5%)	R&M cost increase expected	Existing equipment requires replacement in next 20+ years (new equipment)	Stakeholder rejection of project due to critical issues in one or more areas	Retrofit costs are over $75k/DU	Building has no existing space or characteristics for the retrofit	Existing infrastructure is not compatible with retrofit approach	25% units or fewer reserved for residents at or under 80% AMI

Footnotes

1. Projected retrofit construction costs are compared to industry standard assumptions, which are reflected in HCR's Stand-Alone Clean Energy Initiative Program and others. https://hcr.ny.gov/climate-friendly-homes-fund
2. A zero in any category disqualifies a site from consideration

Following the conclusion of the Level 2 assessments, the Demonstration team updated the evaluation and criteria scoring matrix to inform the decision-making process and narrow down site selection to the goal of two to three viable sites for Level 3 analysis. Table 4 outlines the updated scoring criteria, adding quantifying characteristics for each score.

Sites with predominantly high rankings were identified as the most promising candidates for the demonstration and therefore advanced to Level 3 assessment. Each site was assigned a score from zero to three for each criterion listed in Table 4. Each criteria category was equally weighted and aggregated to provide a building with a final score. Sites that scored a zero in any criteria were eliminated from consideration. Sites with higher evaluation totals were deemed better candidates for the demonstration and were advanced to Level 3 assessments.

Table 5 and Table 6 outline the results for both the decentralized and centralized solutions, respectively.

Table 5 - Decentralized Solution Scoring Evaluation

Property Name	1. Savings	2a. R&M	2b. Equip. Replace-ment	3. Bus. Criteria	4. Reasonable CapEx	5. Physical Char.	6. Existing Sys.	7. Affordab-ility	Total
Site 1	3	3	3	3	3	3	3	0	0
Site 2	0	2	2	0	0	3	3	3	0
Site 3	2	3	2	3	3	3	3	3	22
Site 4	2	3	2	3	3	3	3	3	22
Site 5	2	3	2	2	3	3	3	3	21
Site 6	2	2	3	2	1	3	3	3	19

Table 6 - Centralized Solution Scoring Evaluation

Property Name	1. Savings	2a. R&M	2b. Equip. Replace ment	3. Bus. Criteria	4. Reasona ble CapEx	5. Physical Char.	6. Existing Sys.	7. Affordabi lity	Total
Site 1	2	3	3	3	2	3	3	0	0
Site 2	0	2	2	0	1	1	3	3	0
Site 3	1	3	2	3	2	3	3	3	20
Site 4	0	3	2	3	2	1	3	3	0
Site 5	1	3	2	2	2	3	3	3	19
Site 6	0	2	3	2	0	3	3	3	0

The Demonstration Team selected Site 4 as the primary candidate for demonstrating the decentralized solution. Site 4 will advance to Level 3 assessment. This site had one of the top evaluation scores for decentralized solutions and received a score of 0 for the centralized solution due to projected operating cost increases, meaning a decentralized approach was the most viable pathway for this building to electrify heating while addressing the cost-shift issue.

The Demonstration Team selected Site 3 to advance to Level 3 assessment as the leading candidate for the centralized solution. This site scored slightly higher than Site 5 and also scored high as a decentralized option, allowing it to act as a backup option to Site 4.

3.0 NEXT QUARTER FORECAST

3.1 Planned Activities

The Demonstration Team will continue pre-development phase activities by completing Level 3 assessments for demonstration sites, developing and finalizing RFP Scope of Work, and completing a Scalable Model Summary Memorandum. The Demonstration Team expects to confirm demonstration sites once service upgrade determinations are received, move forward with resident engagement activities and commence the Build Out workstream by releasing RFPs for installation subcontractors. Financing Final Reports will also be completed for the confirmed demonstration sites.

In Q2 2026, the Demonstration Team will continue project scoping activities for selected buildings by completing ASHRAE Level 3 assessments. The team will secure project financing as needed, develop an RFP for installation contractors, and evaluate the scalability of chosen project measures. For resident engagement, the team will develop content for informational sessions, educational flyers, and resident surveys. Administration of pre-retrofit surveys and educational materials is dependent on final site selection and likely to occur in Q2 2026. Within the Evaluation phase, the M&V plan will be finalized.

Milestones forecasted for completion in Q2 2026 include:

- Milestone D - Secure project financing and funding
  - Milestone was initially scheduled to be completed in Q1 2026; however, completion is dependent on Level 3 assessments expected to be completed in Q2 2026

Table 7 - Key Activities for Workstreams in Q2 2026

Workstream	Activities
Workstream 4 Project Scoping	• Complete Level 3 assessments for Site 3 and Site 4 • Submit load letter for Site 3 • Develop and finalize RFP Scope of Work for subcontractors/specialists for demonstration sites • Complete Scalable Model Summary Memo

Workstream 5 Secure Project Funding and Financing	• Complete Agency and lender consent screening • Complete incentive and subsidy eligibility screenings • Finalize business case and secure final approvals from ownership • Complete Financing Final Report for demonstration sites
Workstream 6 Resident Engagement and Evaluation	• Develop and disseminate resident engagement educational materials • Launch resident engagement pre-retrofit survey
Workstream 7 Build Out	• Begin RFP process for any required subcontractors and/or specialists
Workstream 9 Micro Evaluation	• Incorporate site specific information into M&V plan and complete draft M&V plan
Workstream 10 Macro Evaluation	• Incorporate site specific information into M&V plan and complete draft M&V plan
Workstream 11 Financial and Operations Evaluation	• Incorporate site specific information into M&V plan and complete draft M&V plan

4.0 APPENDICES

The following appendices are included at the end of this Quarterly Progress Report:

Appendix A: Description of Phases

Appendix B: Work Plan

Appendix C: Checkpoints and Milestone Progress

Appendix D: Procedures and Policies

Appendix A: Description of Phases

Phase	Pre-Development	Implementation	Evaluation	Closing
Milestone (Stage Gate to Next Phase)	*Successful building identification and project scoping* • Program launch • Site Screening Criteria • Project Scoping • Stakeholder Engagement	*Construction Completion* • Resident Engagement • Construction Completion • Other stakeholder Engagement • Secure Project Financing and Funding	*Evaluation reporting for one year post installation* • Micro Evaluation (Equipment Level) • Macro Evaluation (Building Level) • Financial and Operations Evaluation	*Project closeout* • Market Assessment • Final Report • Final Presentation
Key Elements	• Kickoff meeting • Development of site screening criteria • Screening of L+M portfolio • Stakeholder meetings and incorporation of feedback • Engineering assessments • Selection of final demo sites • RFPs for installation subcontractors	• Application for applicable incentives • Review third-party financing packages and/or bridge loans • Resident education and surveys pre- and post-installation • Contract with subcontractors • Finalize project engineering and design • Electrical service upgrades • Heat pump installation • O&M manual development	• Install M&V equipment • Gather relevant data for equipment level evaluation • Validate functionality of metering switch technology • Gather utility consumption and cost data • Operational staff surveys	• Integrate findings from all phases into market assessment tool • Compare pre- and post-installation results • Update the software Platform with capabilities to support consumer and market acceptance of project approach • Assessment of Con Edison service territory • Insight of potential energy savings impact of metering switches

Phase	Pre-Development	Implementation	Evaluation	Closing
		• Additional stakeholder engagement		• Identify recommended utility incentives

Appendix B: Work Plan

Phase	Workstream	Q2'25	Q3'25	Q4'25	Q1'26	Q2'26	Q3'26	Q4'26	Q1'27	Q2'27	Q3'27	Q4'27	Q1'28	Q2'28	Q3'28
1. Pre-Development			A				B								
	1. Program Launch														
	2. Site Screening Criteria														
	3. Stakeholder Engagement														
	4. Project Scoping														
2. Implementation					E	D	F	G	H	J					
	5. Secure Project Financing and Funding														
	6. Resident Engagement and Evaluation														
	7. Build Out														
	8. Stakeholder Engagement														
3. Evaluations				C					I					K	
	9. Micro Evaluation														
	10. Macro Evaluation														
	11. Financial and Operations Evaluation														
4. Closing												L			M
	12. Market Analysis														
	13. Final Report and Summary Presentation														

Milestone	Description	Milestone	Description
A	Program Launch, Site Screening Criteria	G	Construction Quarterly Payments
B	Pre-Development Phase Closeout	H	Construction Quarterly Payments
C	Evaluation Launch	I	Micro & Macro Evaluation Midterm
D	Secure Project Financing & Funding,	J	Implementation Phase Closeout
E	Resident Engagement Launch	K	Evaluations Phase Closeout
F	Construction Quarterly Payments	L	Closing Phase Closeout

Appendix C: Checkpoints and Milestone Progress

Timing	Checkpoint/Milestone	Status
Phase 1 End	Suitability of sites for further project scoping	
Phase 1 End	Engineering studies resulting in accurate assessment of the technical and financial viability of projects	
Phase 2 End	Funding for the project based on initial project budgeting has been secured	

Legend

 On Schedule/Completed	 Delayed without Major Impact	 Delayed or Stopped – Project Goals Impacted

Planned Activities

Phase 1: Pre-Development

Site Screening

Status: Green

Expected Target by Pre-Development Phase End: At least 10 buildings have been identified as suitable Project participants.

Actual by Pre-Development End: N/A

Solutions/strategies in case of results below expectations: The Partners will review the inputs to the characterization assessment.

Project Scoping

Status: Green

Expected Target by Pre-Development End: At least two sites (one for each test scenario) will be identified as viable sites with initial project budgeting in line with Demonstration Team's expectations for implementation and financial viability.

Actual by Pre-Development Phase End: N/A

Solutions/strategies in case of results below expectations: The Partners will re-evaluate the scopes of work to determine if alternative approaches to the Project are required to test the Project's hypothesis.

Phase 2: Implementation

Secure Project Financing and Funding

Status: Green

Expected Target by Implementation Phase End: At least two sites will secure the required funding to move forward in the Implementation Phase of the Project.

Actual by Implementation Phase End: N/A

Solutions/strategies in case of results below expectations: N/A

Appendix D: Procedures and Policies

Cybersecurity and Personally-Identifiable Information Protection

Consistent with Commission policy related to cybersecurity and the protection of personally-identifiable information ("PII"), each partner agreement executed for the implementation of the Project includes specific protections related to cybersecurity and PII. This protection is critical in encouraging customers to sign up with new and innovative services offered by utilities.

Accounting Procedure Established

On February 16, 2016, in Case 15-E-0229, Con Edison filed an accounting procedure for the accounting and recovery of all REV demonstration project costs.[3] This accounting procedure establishes a standardized framework that will govern how the Company categorizes and allocates the costs of the REV demonstration projects, and will facilitate analyzing each project to determine the overall financial benefits of the program to customers.

Costs, Benefits, and Operational Savings

Budget information for all of the Company's REV demonstration projects is being filed confidentially with the Commission, concurrently with the filing of this document. All costs filed are incremental costs needed to implement the project. To date, no tax credits or grants have been available to reduce the net costs of the projects, but Con Edison will take advantage of such offsetting benefits when they are available. There are no operational savings to report at this time.

[3] Case 15-E-0229, *Petition of Consolidated Edison Company of New York, Inc. for Implementation of Projects and Programs that Support Reforming the Energy Vision*, REV Demonstration Projects General Accounting Procedure (filed February 16, 2016).