



REV Demonstration Project:
Building Efficiency Marketplace

2017 1Q Quarterly Progress Report

Dated: April 28, 2017

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1.0 EXECUTIVE SUMMARY

Consolidated Edison Company of New York, Inc. (“Con Edison” or the “Company”) submits this quarterly report on the progress of the Building Efficiency Marketplace REV demonstration project (the “Project”) it is implementing as part of the Reforming the Energy Vision (“REV”) proceeding, as required by the *Order Adopting Regulatory Policy Framework and Implementation Plan*, issued by the New York State Public Service Commission (“Commission”) on February 26, 2015.

1.1 PROGRAM ACHIEVEMENTS

On July 1, 2015, Con Edison submitted the Project for approval by Department of Public Service Staff (“DPS Staff”); on November 10, 2015, DPS Staff approved the Project. Con Edison filed an implementation plan for the Project with the Commission on November 20, 2015. In Q1 2017, the Company continued the execution of the Project, focusing on customer engagement and documenting customer feedback.

1.2 CYBERSECURITY AND PERSONALLY-IDENTIFIABLE INFORMATION PROTECTION

Consistent with corporate instructions and 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. Assurance of this protection is critical in encouraging customers to sign up with new and innovative services offered by utilities.

1.3 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. 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.

1.4 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 projects. 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. Due to the early stage of implementation for the Project, there are no operational savings to report at this time.

1.5 BUILDING EFFICIENCY MARKETPLACE

The Project is designed to examine how interval meter data analytics can be leveraged to enable targeting and multi-channel engagement of commercial customers with high energy efficiency savings and demand reduction potential. The Project has developed a web-based portal to engage customers with details about how their buildings consume energy today, their potential energy savings and demand reduction opportunities, as well as the Energy Insights Marketplace to streamline connections between customers and energy efficiency market partners. Virtual, automated savings measurement and verification will be provided to customers, giving them visibility into achieved savings and maximizing the likelihood that implemented projects continue to perform over time. Con Edison is implementing the Project with its partner Retroficiency, a leading provider of data analytics and software solutions to utilities and commercial customers. As of January 1, 2017, Retroficiency has merged with and into its sole owner, Ecova, Inc.

In Q1 2017, the Project team continued implementation, bringing the Energy Insights Portal (“Portal”) to a targeted group of large commercial customers, while continuing development and ultimate launch of the Energy Insights Marketplace. The Portal allows customers to identify specific measure level recommendations and develop potential projects via the Action Plans page. After developing a project in the Portal, customers will be able to submit their project scopes to Market Partners to elicit project proposals. The Project assumes this level of connection between customers and Market Partners will drive new energy efficiency opportunities. The Project team will be gathering data throughout the life of the Project to inform this assumption.

2.0 BUILDING EFFICIENCY MARKETPLACE – QUARTERLY PROGRESS

2.1 DEMONSTRATION HIGHLIGHTS

2.1.1 Since Previous Quarter - Major Task Completion

- Continued Customer Engagement
 - Continued high-touch outreach to Phase 1 customers
 - Refined buildings assessments to develop projects scopes
 - Worked with customers to populate Action Plans
 - Gathered feedback and perspective from Phase 1 customers which will inform Phase 2 of the Project
 - Kicked off discussions regarding opportunities identified through the Portal
 - Gathered important information regarding existing building conditions
 - Applied learnings of existing conditions to refine buildings assessments
- Development and Launch of the Energy Insights Marketplace
 - Finalized and tested Portal interface
 - Finalized structure of the Energy Insights Marketplace
 - Marketplace features available in the Portal as of March, 31, 2017
- Market Partners
 - Sent validation emails to qualified Market Partners
 - Finalized criteria for initial launch of Energy Insights Marketplace

2.1.2 Activities Overview

High-touch outreach to Phase 1 customers has continued throughout the first quarter. The Project team has partnered with Con Edison's account managers to leverage existing relationships with the goal of setting a meeting or webinar to introduce the Portal. From the launch of the Project in the third quarter to the end of the first quarter, the account managers have reached out to all of their customers that were included in Phase 1 of the Project.

The Project team was able to find early success from the meetings held with the account managers' existing contacts. The account managers have strong relationships with their customers, which allowed for swift access to key decision makers. These meetings were important to begin the process of identifying new energy efficiency projects using the building assessments within the Portal.

During each meeting the outreach team gathered further information about existing conditions of each building. This level of detail was utilized within the building assessments, to further refine the efficiency recommendations for the building. Following each customer meeting, the outreach team helped the customer to populate specific opportunities in the Action Plan within the Portal. The Action Plans

are vital, as this is where customers can begin to develop project scopes. Ultimately, it will be the Action Plans which are shared with Market Partners within the Energy Insights Marketplace.

The development of the Energy Insights Marketplace continued in the first quarter. The Project team worked with our partners to finalize the structure and customer journey. The Project team used examples of historical energy efficiency projects to craft the design and use-cases for these structures. In addition, the Project team met with a handful of Market Partners to gain perspective into how these firms currently structure projects and to receive feedback on the initial bid documents.

2.1.3 Key Metrics

Customer and Market Partner Engagement:

This metric tracks how many Action Plans have been populated in the Energy Insights Portal. Currently, we have nine Action Plans populated within the Energy Insights Portal. The checkpoint goal for this stage of the Project is six Action Plans. Translating analytical services into energy efficiency projects is critical to demonstrating the value in the marketplace and overall customer interest/affordability in energy efficiency.
















Projects Contracted by Utility Consulting Service:

This metric tracks how many projects have been contracted for “Utility Consulting Service.” The Project team has not begun to test contracting with customers for Utility Consulting Service. As we continue to meet with customers and engage them with opportunities for energy efficiency, we are collecting qualitative data on the customer experience. The Project team will revisit this Metric in Phase 2, year 1 midpoint.

2.1.4 Next Quarter Forecast




In Q2 2017, the Project team will continue to work with customers to identify opportunities, gain feedback, and enable the marketplace to help develop projects. The Project team will continue to gain customer feedback regarding the Portal, the Marketplace and the Project. The Project team plans to obtain similar feedback from the Market Partners. This valuable information from our customers and Market Partners will be used to inform future phases of the Project.

2.1.5 Checkpoints/Milestone Progress

Checkpoint/Milestone	Timing*	Status
Participating Market Partners Engaged in Energy Conservation Measures	Phase 2 Initial/Midpoint / End	  
Customer and Market Partner Engagement	Phase 1 Midpoint / End Phase 2 Midpoint / End	  
Projects Contracted by Utility Consulting Services	Phase 1 Midpoint / End Phase 2: Midpoint Year 1 /End Year 1	  
Revenue Realization	Phase 1 End, Phase 2 End of Year 1	  
Project Impact	Phase 1 End, Phase 2 End of Year 1	  

*Detailed descriptions of the Phases can be found in the Appendices.

Legend

 On Schedule	 Delayed w/out Major Impact	 Delayed or Stopped – Project Goals Impacted
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2.1.6 Planned Activities

2.1.6.1 Participating Market Partners Engaged in Energy Conservation Measures

Status: Green

Expected Target by Phase 2 Start: 30 market partners engaged

Actual by Phase 2 Start: N/A

Solutions/strategies in case of results below expectations: In line with root-cause analysis, actions may include reassessing target, increasing marketing and outreach efforts, or adjusting monetization strategies to encourage market partner participation.

2.1.6.2 Customer and Market Partner Engagement

Status: Green

Expected Target by Phase 1 Midpoint: 6 Customers

Actual by Phase 1 Midpoint: N/A

Solutions/strategies in case of results below expectations: In-line with root-cause analysis, actions may include reassessing target, increasing marketing and outreach efforts, or portal redesign to increase outreach and drive portal awareness along with surveying customers to inform them of other marketing and customer engagement options.

2.1.6.3 Projects Contracted by Utility Consulting Services

Status: Yellow

Expected Target by Phase 1 Midpoint: 5% under contract

Actual by Phase 1 Midpoint: N/A

Solutions/strategies in case of results below expectations: In-line with root-cause analysis, actions may include reassessing target, increased consumer and market partners' outreach to drive portal awareness along with surveying customers to inform them of other marketing and customer engagement options.

2.1.6.4 Revenue Realization

Status: Green

Expected Target by Phase 1 End: \$177,000

Actual by Phase 1 End: N/A

Solutions/strategies in case of results below expectations: In-line with root-cause analysis, actions may include assessing and analyzing the number of participants, average ECM project and projected savings, reassessing target, and engagement success. Depending on which area is identified as a limitation, coordinate with partners on best solution.

2.1.6.5 Project Impact

Status: Green

Expected Target by Phase 1 End: 4.32 Million KWh

Actual by Phase 2 Midpoint: N/A

Solutions/strategies in case of results below expectations: In-line with root-cause analysis, actions may include assessing and analyzing number of participants, average ECM project and projected savings, engagement success,

reassessing target, and model validation. In addition, review ECM projects for projected versus actual outcomes and re-validate savings potential. Depending on which area is identified as a limitation, coordinate with partners on best solution.

2.2 CHANGES TO THE PROJECT DESIGN

During the design phase of the Project, the Project team assumed that customers would be engaging with Con Edison for Utility Consulting Services by this point of the Project. Customers are just only just now becoming acclimated with the Portal and learning how the Virtual Energy Assessments can create value for their building. Throughout our engagement process, we are continuing to document the feedback from our customers. This feedback will continue to be used to inform monetization strategies developed by the Project team.

2.3 WORK PLAN & BUDGET REVIEW

2.3.1 Phase Review

2.3.1.1 Phase Progress

The team has concluded work in Phase 0 (Demonstration Planning). Phase 0 consisted of Project Management, Configuration of Customer Portal, Marketing Strategy & Planning, Data Integration, and Building Analysis. Phase 1 (Demonstration Implementation) tasks began in Q3 2016 and will conclude in Q3 2017.

2.3.2 Work Plan

Demonstration Project - Building Efficiency Marketplace				2015				2016				2017				2018			
Activity No.	Activity Description	Status	Lead	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
1.0	Phase 0 - Demonstration Planning																		
1.1	Project Management	COMPLETE	Con Edison & Retroficiency																
1.1.1	Complete Implementation Plan	COMPLETE	Con Edison																
1.1.2	DPS Review	COMPLETE	DPS																
1.1.3	Complete MSA with partner	COMPLETE	Con Edison & Retroficiency																
1.1.4	Complete SOW with partner	COMPLETE	Con Edison & Retroficiency																
1.1.5	Marketing Planning	COMPLETE	Con Edison & Retroficiency																
1.1.6	Monetization Planning	COMPLETE	Con Edison & Retroficiency																
1.1.7	Engagement Specialist Onboarding	COMPLETE	Retroficiency																
1.2	Customer Portal Configuration	COMPLETE	Con Edison & Retroficiency																
1.2.1	Software Development (Configuration/Testing/Launch)	COMPLETE	Retroficiency																
1.2.1.1	Requirements Gathering	COMPLETE	Retroficiency																
1.2.1.2	Design Spec / Development	COMPLETE	Retroficiency																
1.2.1.3	Software Configuration/Testing	COMPLETE	Retroficiency																
1.2.1.4	Software/Launch	COMPLETE	Con Edison & Retroficiency																
1.2.2	Customer Validation and Access	COMPLETE	Con Edison & Retroficiency																
1.2.3	Internal Stakeholder Training	COMPLETE	Retroficiency																
1.3	Data Integration	COMPLETE	Con Edison & Retroficiency																
1.3.1	Define Data Integration Requirements	COMPLETE	Con Edison & Retroficiency																
1.3.2	Execute Systems/Data Integration	COMPLETE	Con Edison & Retroficiency																
1.3.3	Initial Data Transfer to Retroficiency	COMPLETE	Con Edison																
1.4	Building Analysis and Reporting	COMPLETE	Retroficiency																
1.4.1	Conduct/Update Virtual Energy Assessments (VEA)	COMPLETE	Retroficiency																
1.4.2	Post VEA results	COMPLETE	Retroficiency																
2.0	Phase 1 - Demonstration Implementation																		
2.1	Project Management	IN PROGRESS	Con Edison & Retroficiency																
2.2	Customer and Market Engagement	IN PROGRESS	Con Edison & Retroficiency																
2.2.1	Execute Marketing Plan/Customer Awareness Campaigns	IN PROGRESS	Con Edison & Retroficiency																
2.2.2	Customer Engagement Specialist	IN PROGRESS	Retroficiency																
2.2.3	Monetization Testing	IN PROGRESS	Con Edison & Retroficiency																
2.3	Customer Portal Configuration	IN PROGRESS	Retroficiency																
2.3.1	Continuous gathering of requirements for product enhancements	IN PROGRESS	Retroficiency																
2.3.2	Continuous release of updates (every 2 weeks)	IN PROGRESS	Retroficiency																
2.4	Building Analysis and Reporting	IN PROGRESS	Con Edison & Retroficiency																
2.4.1	Ongoing Data Transfers to Retroficiency	IN PROGRESS	Con Edison																
2.4.2	Ongoing Data Analysis (VEA)	IN PROGRESS	Retroficiency																
2.4.3	Ongoing Data Analysis (M&V)	IN PROGRESS	Retroficiency																
2.5	Efficiency Project Portal Configuration (Marketplace)	IN PROGRESS	Con Edison & Retroficiency																
2.5.1	Software Development (Configuration/Testing/Launch)	IN PROGRESS	Retroficiency																
2.5.2	Market Partner Validation and Access	IN PROGRESS	Con Edison & Retroficiency																
2.5.3	Internal Stakeholder Training	IN PROGRESS	Retroficiency																
3.0	Phase 2 - Market Launch																		
3.1	Project Management	NOT STARTED	Con Edison & Retroficiency																
3.2	Customer and Market Engagement	NOT STARTED	Con Edison & Retroficiency																
3.2.1	Execute Marketing Plan/Customer Awareness Campaigns	NOT STARTED	Con Edison & Retroficiency																
2.2.3	Monetization Testing	NOT STARTED	Con Edison & Retroficiency																
2.3	Customer Portal Configuration	NOT STARTED	Retroficiency																
2.3.1	Continuous gathering of requirements for product enhancements	NOT STARTED	Retroficiency																
2.3.2	Continuous release of updates (every 2 weeks)	NOT STARTED	Retroficiency																
2.4	Building Analysis and Reporting	NOT STARTED	Con Edison & Retroficiency																
2.4.1	Ongoing Data Transfers to Retroficiency	NOT STARTED	Con Edison																
2.4.2	Ongoing Data Analysis (VEA)	NOT STARTED	Retroficiency																
2.4.3	Ongoing Data Analysis (M&V)	NOT STARTED	Retroficiency																

= Completed Task
 = In Progress Task
 = Not Started Task
 = New/Modified Task

2.3.3 Updated Budget

Budget information is being filed confidentially with the Commission.

2.4 CONCLUSION

2.4.1 Lessons Learned

The Project team has continued to gather feedback from customers regarding their use of the Portal. The content of the feedback and intelligence we are accumulating is richer than the team had envisioned during the design phase. We are learning how the opportunities identified by the data analytics translate to existing building conditions, how our customers value the level of insight provided by the building assessments, and how individual customers can leverage this level of insight to develop projects on their end. The customer intelligence we are gathering will be extremely valuable for the Project team.

2.4.2 Recommendations

The Company recommends documenting this customer intelligence and storing it in our customer relationship management system. This qualitative feedback is not only vital for the Project, but could be used to inform how the Company engages with commercial customers in the future.

2.5 INCLUDED APPENDICES

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

Appendix A: Energy Insights Customer Portal Overview Page

Appendix B: Energy Insights Action Plan Page

Appendix C: Building Efficiency Marketplace Description of Phases

Appendix A: Energy Insights Portal – Overview Page

conEdison

Hi Arch (logout) | Manage Account | Help

Large Office (Highrise) Example 4 ▼
#9123493995 Manage property

OVERVIEW | USAGE | WAYS TO SAVE | MY ACTION PLANS

MARCH BILL ANALYSIS

\$28,834.39 ↓ 16% decrease since last year

The primary factor that contributed to these changes in your bill is a:

16% decrease in your consumption ⓘ
[View usage to get more details](#)

How do we calculate your savings?

Total Cost	Cost / Day	Total Usage	Usage / Day
\$28,834			
\$27,195			
\$34,519			

SAVE UP TO \$49,030 /Year


Based on analysis of your consumption, follow our recommendations to save.


[Find Ways to Save](#)

CREATE ENERGY-SAVING ACTION PLANS WITH 1 CLICK

PROPERTY DETAILS
How many floors does your space include?



Appendix B: Energy Insights Portal – Action Plan Page


HI TIM (LOGOUT)

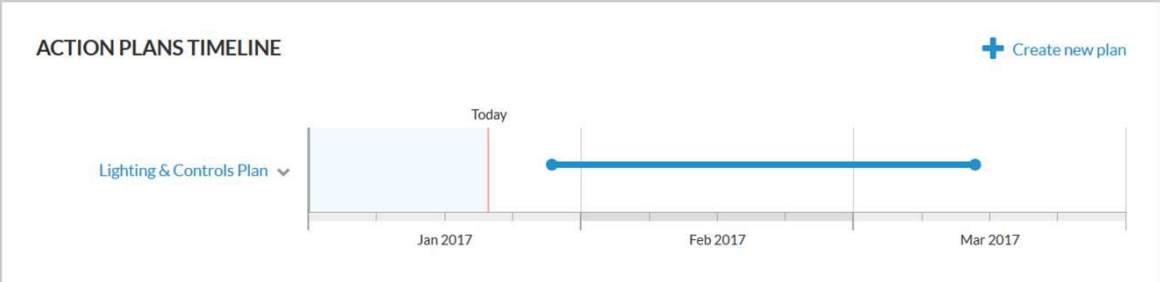

Grocery Store Example - 3 Sample, New York, NY
Unknown Account ID

Manage Property

OVERVIEW
USAGE
WAYS TO SAVE
MY ACTION PLANS

ACTION PLANS TIMELINE + Create new plan



Active Plans +

Lighting & Controls Plan
Planned

My Actions	Status	Cost	Annual Savings
<p>Upgrade Existing Lighting Fixtures to High...</p> <p>Advancements in lighting technology are dramatically reducing the amount of power needed to meet illumination standards. Most incandescent, T12, and T8 fixtures can be upgraded to options that reduce energy consumption and improve lighting quality.</p>	Planned	\$30,0...	\$15,000
		Start Date 1/27/17	Completion Date 2/28/17
<p>Optimize/Install Lighting Control System</p> <p>Install or optimize lighting control systems to ensure that users are customizing their lighting to meet specific needs. Control methods include occupancy sensors, timers, and photosensors. This is particularly useful in areas with set schedules of occupancy, preventing unnecessary lighting during unoccupied times.</p>	Planned	\$10,0...	\$2,000
		Start Date 1/31/17	Completion Date 2/28/17

0 out of 5 Actions Completed

Plan Cost: \$45,000

Plan Timeline: 1/27/17 - 3/15/17

Appendix C: Building Efficiency Marketplace Description of Phases

Phase	0. Demonstration Planning	1. Demonstration Implementation	2. Market Launch
Milestone (Stage Gate to Next Phase)	<p><i>Successful Platform Build</i></p> <ul style="list-style-type: none"> • Partner contracts signed • DPS approval • Launch Customer Facing Portal 	<p><i>Platform Utilization</i></p> <ul style="list-style-type: none"> • Successful data transfer • Launch of Efficiency Project Portal (Marketplace) 	<p><i>Marketplace Participation</i></p> <ul style="list-style-type: none"> • Expansion of Test Population
Key Elements	<ul style="list-style-type: none"> • Platform partner contracted • Configuration of Customer Portal • Data Integration • Building Analysis and Reporting 	<ul style="list-style-type: none"> • Develop Marketing Plan • Customer and Market Engagement • Configure Efficiency Project Portal (Marketplace) 	<ul style="list-style-type: none"> • Test the Customer and Market Responses to Monetization Strategies • Further Configure Efficiency Project Portal to meet the needs of the Customers and Market Partners
DER Categories	N/A	<ul style="list-style-type: none"> • Energy Efficiency Measures 	<ul style="list-style-type: none"> • Energy Efficiency Measures • Demand Side Management