



REV Demonstration Project:
Building Efficiency Marketplace

2017 3Q Quarterly Progress Report

Dated: October 27, 2017

Table of Contents

1.0	Executive Summary	2
1.1	Program Achievements.....	2
1.2	Cybersecurity And Personally-Identifiable Information Protection.....	2
1.3	Accounting Procedure Established.....	2
1.4	Costs, Benefits, And Operational Savings.....	2
1.5	Building Efficiency Marketplace.....	3
2.0	Building Efficiency Marketplace – Quarterly Progress	4
2.1	Demonstration Highlights.....	4
2.1.1	Since Previous Quarter - Major Task Completion.....	4
2.1.2	Activities Overview.....	4
2.1.3	Key Metrics.....	5
2.1.4	Next Quarter Forecast.....	5
2.1.5	Checkpoints/Milestone Progress.....	5
2.1.6	Planned Activities.....	6
2.1.6.1	Participating Market Partners Engaged In ECM.....	6
2.1.6.2	Customer And Market Partner Engagement.....	6
2.1.6.3	Projects Implemented.....	7
2.1.6.4	Revenue Realization.....	7
2.1.6.5	Project Impact.....	7
2.2	Changes To The Project Design.....	8
2.3	Work Plan & Budget Review.....	8
2.3.1	Phase Review.....	8
2.3.1.1	Phase Progress.....	8
2.3.2	Work Plan.....	9
2.3.2.1		
2.3.3	Updated Budget.....	9
2.4	Conclusion.....	10
2.4.1	Lessons Learned.....	10
2.4.2	Recommendations.....	10
2.5	Included Appendices.....	10

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 Q3 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 Q3 2017, the Project team continued implementation, promoting the Energy Insights Portal (“Portal”) and Energy Insights Marketplace to a targeted group of large commercial customers. 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 projects. 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

- Customer Engagement
 - Continued high-touch outreach to Phase 1 customers
 - Worked with customers to populate Action Plans
 - Gathered insight, feedback and perspective from customers
- The Energy Insights Marketplace
 - The Project team has worked with customers to scope potential energy efficiency projects
 - Conducted multiple site visits with customers and Market Partners
 - Customers received proposals from potential partners
 - Restructured Marketplace process by measure type
- Phase 2 Expansion
 - Expanded customer data feed to Ecova
 - Analyzed expanded customer data for assessment potential
 - Grouped customer accounts to Parent Accounts
 - Mined data resources for customer contact information
 - Identified Phase 2 customer population

2.1.2 Activities Overview

During Q3 2017, the Project team was able to focus on specific customer projects. The Project team continues to use the energy data analytics to identify opportunities, develop project scopes, and put the tools in the customers' hands to receive project proposals from Market Partners. After managing the bid process, the Project team is able to leverage the Energy Insights Marketplace to present relevant project documentation to the customers, allowing for side by side comparisons.

The Project team has completed an expansion of our customer population for Phase 2 of the Project. Included in this is the secure transmission of additional customer data to our partner, Ecova. This process began in the second quarter and has been completed in the third quarter. From this process, the Project team has identified additional customer buildings which will receive Virtual Energy Assessments. The customer population has expanded from 300 customers to 1400 customers.

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. The checkpoint goal for this stage of the Project is six Action Plans and there are currently 11. 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 which will inform a strategy for Utility Consulting Services. The Project team will revisit this Metric in Phase 2, year 1 midpoint.

2.1.4 Next Quarter Forecast

In Q4 2017, the Project team will continue to work with customers to develop projects in the Energy Insights Marketplace. The Project team will track insights gathered through the Energy Insights Marketplace in order to inform new ways of interacting with our customers in the Demonstration Project.

Marketing to the expanded Phase 2 customer population will occur in Q4 2017. The Project team has leveraged internal resources for email marketing. Unlike Phase 1, the Project team will leave an allotment of assessments available for customers that could be included past the go live date for Phase 2.

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: 65 market partners engaged

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: 9 Customers

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 percent under contract

Actual by Phase 1 Midpoint: This will be revisited Phase 2, Year 1 Midpoint

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: Yellow

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: Yellow

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

No major changes to the project design occurred in the third quarter.

2.3 WORK PLAN & BUDGET REVIEW

2.3.1 Phase Review

2.3.1.1 Phase Progress

The Project 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 concluded in Q3 2017. Phase 1 tasks included Project Management, Customer and Market Engagement, Customer Portal Configuration, Building Analysis and Reporting, and Marketplace Portal Configuration. Phase 2 (Market Launch) tasks began 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 has sought to bridge the gap between energy efficiency opportunities presented by the Virtual Energy Assessments, in the Energy Insights portal, to having Market Partners provide proposals directly to the customer. Through our first few projects in the Marketplace, the Project team found some technologies can be scoped on behalf of customers, while more complicated projects may require complex design work. The Project team has produced examples of working directly with the customer to scope a project. This approach puts fewer burdens on both the customer and the Market Partner.

2.4.2 Recommendations

The Project team recommends maintaining a focus on the Energy Insights Marketplace as it expands into Phase 2. Every project in the Marketplace can present new and unique challenges for the Project team. Continuing to test new methods within the Marketplace will allow the Project team to better understand the appropriate role for the utility in driving new energy efficiency projects.

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?

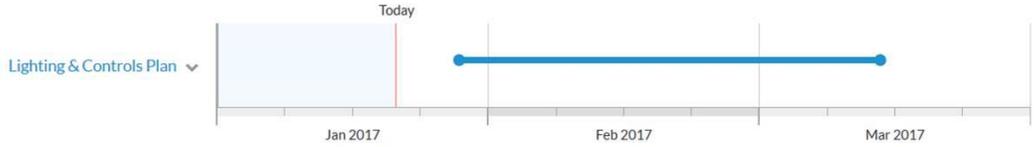
Appendix B: Energy Insights Portal – Action Plan Page


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 +			Plan Cost	Plan Timeline	✕
Lighting & Controls Plan <i>Planned</i>	Lighting & Controls Pl...	Actions Completed 0 out of 5	\$45,000	1/27/17 - 3/15/17	
My Actions					
	Upgrade Existing Lighting Fixtures to High...	Planned	\$30,0...	\$15,000	✎ ^
	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.		Start Date 1/27/17	Completion Date 2/28/17	
	Optimize/Install Lighting Control System	Planned	\$10,0...	\$2,000	✎ ^
	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.		Start Date 1/31/17	Completion Date 2/28/17	

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