

REV Demonstration Project: Building Efficiency Marketplace

2018 4Q Quarterly Progress Report

Dated: January 31, 2019

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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 Q3 2018, 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. 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 CLEAResult, formerly Retroficiency, a leading provider of data analytics and software solutions to utilities and commercial customers. As of January 1, 2017, Retroficiency merged with and into its sole owner, Ecova, Inc. In January, 2018, CLEAResult acquired Engie Insight, Ecova's utility division, and is now the project partner for the Building Efficiency Marketplace demonstration project.

In Q4 2018, 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
 - Project mix has shifted away from lighting and is moving towards HVAC and Controls
 - Five customers returned to the marketplace to initiate new projects
- The Energy Insights Marketplace
 - Utilized the Marketplace to provide bids for engineering consulting services. Bids came in as a percentage of the ultimate incentive earned rather than an upfront cost which worked well for the customer.

2.1.2 Activities Overview

During Q4 2018, the Project team was able to focus on specific customer projects. The Project team continues to use 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.

2.1.3 Key Metrics

Project Impact

The Project team surpassed its goal of 6.45 million kWh by year end 2018, by achieving 7.41 Million kWh attributable to the project. The team's success in meeting this goal is largely attributed to the high-touch approach to acquiring new customers, and the prevalence of returning customers within the marketplace.

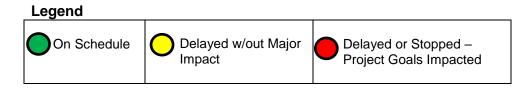
2.1.4 Next Quarter Forecast

In Q1 2019, the project's focus will shift to evaluation and determining scalability. The team will slow new outreach efforts and focus on existing projects in the pipeline. In parallel, the team will perform market research to determine the impacts of the project and the attractiveness of the proposition to other C&I customers.

2.1.5 Checkpoints/Milestone Progress

Checkpoint/Milestone	Timing*	Status
Participating Market Partners Engaged in Energy Conservation Measures	Phase 2 Initial/Midpoint / End	•00
Customer and Market Partner Engagement	Phase 1 Midpoint / End Phase 2 Midpoint / End	•00
Projects Contracted by Utility Consulting Services	Phase 1 Midpoint / End Phase 2: Midpoint Year 1 /End Year 1	000
Revenue Realization	Phase 1 End, Phase 2 End of Year 1	\circ
Project Impact	Phase 1 End, Phase 2 End of Year 1	

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



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: None so far. 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: None so far.

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 Energy Conservation Measure (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 2018 End: 6.45 Million kWh

Actual by 2018 End: 7.41 Million kWh

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 WORK PLAN & BUDGET REVIEW

2.2.1 Phase Review

2.2.1.1 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.

2.2.2 Work Plan

Activity		2015 2016			2017				2018				2019				
No.	Task/Activity Description	Lead	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
1.0	Phase 0 - Demonstration Planning																
1.1	Project Management	Con Edison & Retroficiency															
1.1.1	Complete Implementation Plan	Con Edison															
1.1.2	DPS Review	DPS															
1.1.3	Complete MSA with partner	Con Edison & Retroficiency															
1.1.4	Complete SOW with partner	Con Edison & Retroficiency															
1.1.5	Marketing Planning	Con Edison & Retroficiency															
1.1.6	Monetization Planning	Con Edison & Retroficiency															
1.1.7	Engagement Specialist Onboarding	Retroficiency															
1.2	Customer Portal Configuration	Con Edison & Retroficiency															
1.2.1	Software Development (Configuration/Testing/Launch)	Retroficiency															
1.2.2	Customer Validation and Access	Con Edison & Retroficiency															
1.2.3	Internal Stakeholder Training	Con Edison & Retroficiency															
1.3	Data Integration	Con Edison & Retroficiency															
1.3.1	Define Data Integration Requirements	Con Edison & Retroficiency															
1.3.2	Execute Systems/Data Integration	Con Edison & Retroficiency															
1.3.3	Initial Data Transfer	Con Edison															
1.4	Building Analysis and Reporting	Retroficiency															
1.4.1	Conduct/Update Virtual Energy Assessments (VEA)	Retroficiency															
1.4.2	Post VEA Results	Retroficiency															
2	Phase 1 - Demonstration Implementation																
2.1	Project Management	Con Edison & Retroficiency															
2.2	Customer and Market Engagement	Con Edison & Retroficiency															
2.2.1	Execute Marketing Plan/Customer Awareness Campaigns	Con Edison & Retroficiency															
2.2.2	Custoemer Engagement Specialist	Retroficiency															
2.2.3	Monetization Testing	Con Edison & Retroficiency															
2.3	Customer Portal Configuration	Retroficiency															
2.3.1	Continuous gathering of requirements for product enhancement	Retroficiency															
2.3.2	Continuous release of updates	Retroficiency															
2.4	Building Analysis and Reporting	Con Edison & Retroficiency															
2.4.1	Ongoing data transfers	Con Edison															
2.4.2	Ongoing data analysis (VEA)	Retroficiency															
2.4.3	Ongoing data analysis (M&V)	Retroficiency															
2.5	Efficiency Project Portal Configuration (Marketplace)	Con Edison & Retroficiency															
2.5.1	Software Development (Configuration/Testing/Launch)	Retroficiency															
2.5.2	Market Partner Validation and Access	Con Edison & Retroficiency															
2.5.3	Internal Stakeholder Training	Retroficiency															
3	Phase 1 - Demonstration Implementation																
3.1	Project Management	Con Edison & Retroficiency															
3.2	Customer and Market Engagement	Con Edison & Retroficiency															
3.2.1	Execute Marketing Plan/Customer Awareness Campaigns	Con Edison & Retroficiency															
3.2.2	Monetization Testing	Con Edison & Retroficiency															
3.3	Customer Portal Configuration	Retroficiency															
3.3.1	Continuous gathering of requirements for product enhancement	Retroficiency															
3.3.2	Continuous release of updates	Retroficiency															
3.4	Building Analysis and Reporting	Con Edison & Retroficiency															
3.4.1	Ongoing data transfers	Con Edison															
3.4.2	Ongoing data analysis (VEA)	Retroficiency															
3.4.3	Ongoing data analysis (M&V)	Retroficiency															

2.2.3 Updated Budget

Budget information is being filed confidentially with the Commission.

2.3 CONCLUSION

2.3.1 Lessons Learned

Utilization of the marketplace continues to grow. One key finding in Q4 is that returning customers tend to self-direct through the process more than new customers (though some new customers also have shown greater levels of self-direction). Previously, customers required a significant amount of support in navigating the portal and bid process. This insight coupled with market research studies focused on both existing users and non-users will form the basis of a scaling determination.

2.3.2 Recommendations

As the project approaches its completion in mid-2019, the team will slow new outreach efforts and focus on completing projects that are currently in the pipeline while focusing on analyzing results to determine scalability.

2.4 INCLUDED APPENDICES

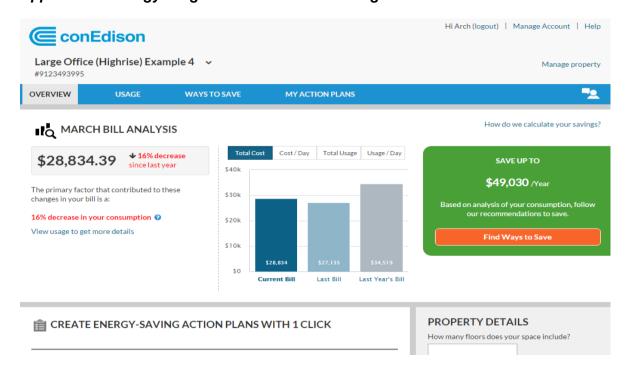
The following appendices are included at the end of this Quarterly Progress Report:

Appendix A: Energy Insights Customer Portal - Overview Page

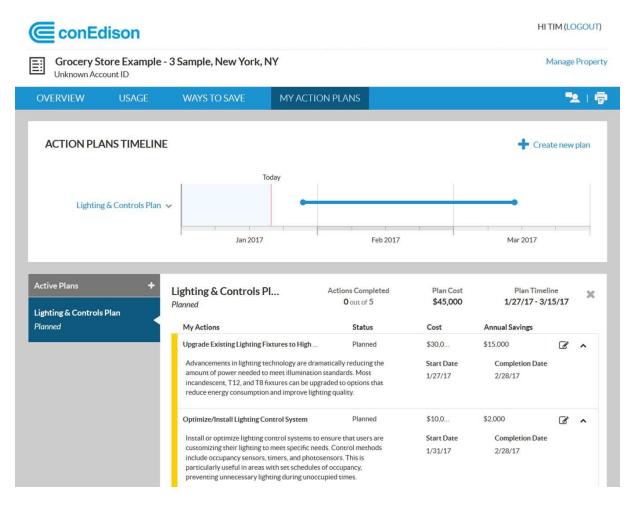
Appendix B: Energy Insights - Action Plan Page

Appendix C: Building Efficiency Marketplace Description of Phases

Appendix A: Energy Insights Portal – Overview Page



Appendix B: Energy Insights Portal - Action Plan Page



Appendix C: Building Efficiency Marketplace Description of Phases

Phase	0. Demonstration Planning	1. Demonstration Implementation	2. Market Launch
Milestone (Stage Gate to Next Phase)	Successful Platform Build Partner contracts signed DPS approval Launch Customer Facing Portal	 Platform Utilization Successful data transfer Launch of Efficiency Project Portal (Marketplace) 	Marketplace Participation Expansion of Test Population
Key Elements	 Platform partner contracted Configuration of Customer Portal Data Integration Building Analysis and Reporting 	 Develop Marketing Plan Customer and Market Engagement Configure Efficiency Project Portal (Marketplace) 	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	Energy Efficiency Measures	Energy Efficiency Measures Demand Side Management