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REV Demonstration Project:  
Building Efficiency Marketplace

2016 4Q Quarterly Progress Report

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**Dated: January 31, 2017**

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## **1.0 EXECUTIVE SUMMARY**

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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 Q4 2016, the Company focused on the execution of the Project.

### **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 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 Q4 2016, the Project team continued implementation, bringing the Energy Insights Portal (“Portal”) to a targeted group of large commercial customers, while continuing development of the 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 send their project scopes to Market Partners that they select. Market Partners will be able to provided proposals and pricing back to customers. 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.

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## **2.0 BUILDING EFFICIENCY MARKETPLACE – QUARTERLY PROGRESS**

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### **2.1 DEMONSTRATION HIGHLIGHTS**

#### **2.1.1 Since Previous Quarter - Major Task Completion**

- Implementation of the Marketing Plan
  - High-touch outreach, by individual account managers
  - Mined additional contact data to identify new contacts for Phase 1 buildings
  - Email campaign to all Phase 1 Customers
- Meetings with Phase 1 customers
  - Kicked off discussions with opportunities identified through the Portal
  - Gathered important information regarding existing building conditions
  - Applied learnings of existing conditions to refine buildings assessments
- Continued Customer Engagement
  - 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
- Development of the Marketplace
  - Finalized and tested Portal interface with Honest Buildings Platform
  - Finalized bid rooms and bid templates for Marketplace Projects
  - Identified opportunities for API integration
- Market Partners
  - Identified criteria for initial launch of Marketplace
  - Created pathway for Market Partners to connect with Projects
  - Met with initial Market Partners to discuss the Project and to gain feedback

#### **2.1.2 Activities Overview**

High-touch outreach to Phase 1 customers has continued throughout the fourth quarter. The Project team has partnered with Con Edison's account managers to leverage existing relationships with the goal of having a meeting or webinar to introduce the Portal. From the launch of the Project in the third quarter to the end of the fourth quarter, the account managers 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 important, as this is where customers can develop project scopes. Ultimately it is the Action Plans which will be shared with Market Partners upon the launch of the Marketplace.

The early customer meetings have been vital to gain feedback and identify value. In all of our customer meetings, we discussed the second Phase of the Project as well as the Marketplace. In almost all of our customer meetings, we found interest in the Marketplace. We informed each customer that we would schedule a follow-up meeting after the Marketplace has launched.

The development of the Marketplace continued in the fourth quarter. The Project team worked with our Partners to finalize bid templates, bid rooms, and the customer journey. The bid templates and bid rooms have been based off of the existing measure types within the current C&I program. 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**

Con Edison will begin reporting measurements of key outcomes after the midpoint of Phase 1, in the 2017 Q1 report.

### **2.1.4 Next Quarter Forecast**




In Q1 2017, the Project team will continue to work with the Partners to develop, finalize, and test the Marketplace. Launch of the Marketplace is scheduled for March 31 2017. The Project team will continue outreach with customers to discuss the Portal and will develop a concise plan 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 Implemented	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 Implemented***

**Status:** Green

**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**

The Project team has made a concentrated effort to maintain contact with stakeholders across the Company to identify new opportunities to leverage the Project. Con Edison's Demand Response program has an overlap with the commercial energy efficiency team, as they share common customers. Having collaborated with the Demand Response team on their process, we have recognized an opportunity to incorporate Demand Response into the Marketplace. This will be an exciting opportunity for our customers, who would be able to interact with Demand Response service providers through our Marketplace. The Project team will finalize the details of this incorporation in Q1 2017.

## **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.

## 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			
<b>1.0 Phase 0 - Demonstration Planning</b>																			
1.1	<b>Project Management</b>	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	<b>Customer Portal Configuration</b>	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	<b>Data Integration</b>	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	<b>Building Analysis and Reporting</b>	COMPLETE	Retroficiency																
1.4.1	Conduct/Update Virtual Energy Assessments (VEA)	COMPLETE	Retroficiency																
1.4.2	Post VEA results	COMPLETE	Retroficiency																
<b>2.0 Phase 1 - Demonstration Implementation</b>																			
2.1	<b>Project Management</b>	IN PROGRESS	Con Edison & Retroficiency																
2.2	<b>Customer and Market Engagement</b>	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	<b>Customer Portal Configuration</b>	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	<b>Building Analysis and Reporting</b>	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	<b>Efficiency Project Portal Configuration (Marketplace)</b>	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																
<b>3.0 Phase 2 - Market Launch</b>																			
3.1	<b>Project Management</b>	NOT STARTED	Con Edison & Retroficiency																
3.2	<b>Customer and Market Engagement</b>	NOT STARTED	Con Edison & Retroficiency																
3.2.1	Execute Marketing Plan/Customer Awareness Campaigns	NOT STARTED	Con Edison & Retroficiency																
3.2.3	Monetization Testing	NOT STARTED	Con Edison & Retroficiency																
3.3	<b>Customer Portal Configuration</b>	NOT STARTED	Retroficiency																
3.3.1	Continuous gathering of requirements for product enhancements	NOT STARTED	Retroficiency																
3.3.2	Continuous release of updates (every 2 weeks)	NOT STARTED	Retroficiency																
3.4	<b>Building Analysis and Reporting</b>	NOT STARTED	Con Edison & Retroficiency																
3.4.1	Ongoing Data Transfers to Retroficiency	NOT STARTED	Con Edison																
3.4.2	Ongoing Data Analysis (VEA)	NOT STARTED	Retroficiency																
3.4.3	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 recorded initial feedback from customers regarding their use of the Portal. In general, customers have had an overall positive experience with the Portal, while some have identified additional features that they believe be useful to addressing their energy needs. The additional features include: portfolio customer views, close to real-time updates to usage data, allowing access for third parties, more frequent updates to the building assessments, accelerated availability of the Marketplace, and allowing any project to participate in the Marketplace, regardless of its access to the Portal. These features would be not easy to implement in the short term. However, this feedback will be useful to inform future phases of the Project and increase customer satisfaction with the Portal.

### **2.4.2 Recommendations**

The Company recommends that a high value be placed on the feedback we receive from our customers regarding the Portal. Initial responses from our customers have been positive, but there have been consistent messages that customers want more. The rollout of Phase 2 needs to be informed by the information we receive from our Phase 1 customers, so the Project team can evaluate feasibility, timeline, and costs of delivering additional features and functionality. All outreach going forward will be structured to continue to listen to the customer, document feedback, and share it with the appropriate stakeholders.

## **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 Manage property  
#9123493995

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](#)


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**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

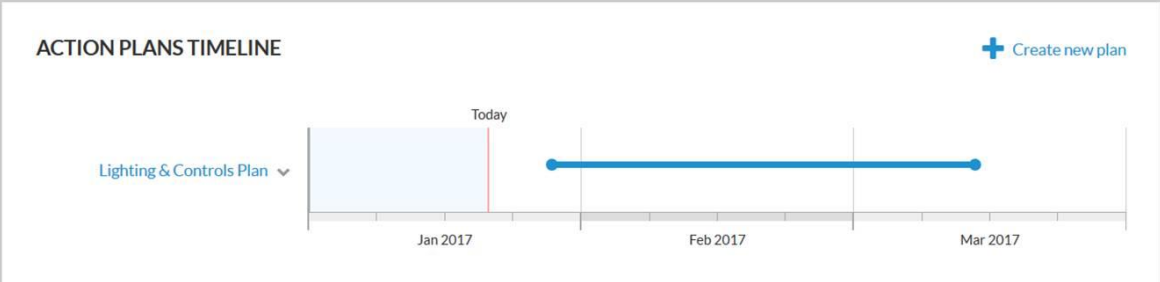
Manage Property

OVERVIEW
USAGE
WAYS TO SAVE
MY ACTION PLANS

### ACTION PLANS TIMELINE

+ Create new plan



Active Plans +

Lighting & Controls Plan  
*Planned*

#### Lighting & Controls Pl...

*Planned*

Actions Completed

0 out of 5





Plan Cost

**\$45,000**

Plan Timeline

1/27/17 - 3/15/17

✕

My Actions	Status	Cost	Annual Savings	
<p><b>Upgrade Existing Lighting Fixtures to High...</b></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	 
<p><b>Optimize/Install Lighting Control System</b></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	 

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**Appendix C: Building Efficiency Marketplace Description of Phases**

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