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REV Demonstration Project:  
Building Efficiency Marketplace

2019 2Q Quarterly Progress & Project Closeout Report

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**Dated: July 31, 2019**

## Table of Contents

<b>1.0</b>	<b>Executive Summary .....</b>	<b>2</b>
1.1	Cybersecurity And Personally-Identifiable Information Protection .....	3
1.2	Accounting Procedure Established .....	3
1.3	Costs, Benefits, And Operational Savings .....	3
<b>2.0</b>	<b>Building Efficiency Marketplace – Quarterly Progress.....</b>	<b>4</b>
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.....	4
2.2	Work Plan & Budget Review .....	9
2.2.1	Phase Review .....	9
2.2.1.1	Phase Progress.....	9
2.2.2	Updated Budget .....	9
2.3	Conclusion.....	9
2.3.1	Lessons Learned.....	9
2.3.2	Recommendations .....	10
2.4	Included Appendices .....	10

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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 report for the second quarter of 2019 on the progress of the Building Efficiency Marketplace Demonstration Project (the “Project”) it is implementing as part of the Reforming the Energy Vision (“REV”) initiative<sup>1</sup>. In the *Order Adopting Regulatory Policy Framework and Implementation Plan* (the “Order”), issued by the New York State Public Service Commission (“Commission”) on February 26, 2015<sup>2</sup>, the Commission directed the Company to develop and file REV demonstration projects, consistent with the guidelines adopted by the Order. The Company’s REV Demonstration Project proposal dated July 1, 2015, provided an outline and overview of the Project and was assessed by the Department of Public Service Staff (“DPS Staff”). On November 10, 2015, DPS Staff approved the Project and provided a discussion of the Project Implementation Plan to be filed by the Company. Con Edison filed an implementation plan for the Project with the Commission on November 20, 2015.

The Project was designed to examine how interval meter data analytics may 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 (1) a web-based portal to engage customers with details about how their buildings consume energy today, their potential energy savings and demand reduction opportunities (the “Efficiency Project Portal”), and (2) the Energy Insights Marketplace (“Energy Insights”) to streamline connections between customers and energy efficiency market partners. Con Edison has implemented 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 Ecova, Inc. In January 2018, CLEAResult acquired Engie Insight, Ecova’s utility division, and became the Project partner for the Project.

The Project was completed as of June 30, 2019. This is the final quarterly progress report and serves as the project close-out report for the Project.

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<sup>1</sup> REV is a set of multi-year regulatory proceedings and policy initiatives launched in New York State in April 2014.

<sup>2</sup>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 and effective February 26, 2015).

## **1.1 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. This protection is critical in encouraging customers to sign up with new and innovative services offered by the Company.

## **1.2 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.<sup>3</sup> This accounting procedure establishes a standardized framework that governs how the Company categorizes and allocates the costs of the REV demonstration projects, and facilitates analyzing each project to determine the overall financial benefits of the program to customers.

## **1.3 COSTS, BENEFITS, AND OPERATIONAL SAVINGS**

Budget information, including costs incurred, 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 such 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.

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<sup>3</sup> Case 15-E-0299, *Petition of Consolidated Edison Company of New York, Inc. for Implementation of Projects and Programs that Support Reforming the Energy Vision*, General Accounting Procedure.

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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**

- The Project was completed and a closeout report was developed.

#### **2.1.2 Activities Overview**

In Q2 2019, the Project team continued to support projects that were already in the pipeline but did not seek out new leads. The Company developed a plan for project completion and ended its relationship with the Project team.

#### **2.1.3 Key Metrics**

##### ***Participating Market Partners Engaged in Energy Conservation Measures***

The efficiency and demand management project development effort sought to supply customers with the ability to engage with qualified market partners to implement projects. The metrics tracked related to these objectives are shown below:

- Expected target: 60 market partners engaged
- Actual market partner participation:
  - 87 market partners made an initial visit to the Efficiency Project Portal
  - 41 market partners made repeat visits to the Efficiency Project Portal
  - 47 projects were made available to market partners through the demonstration
  - 35 market partners submitted a bid to the Efficiency Project Portal
  - 9 market partners submitted multiple bids to the Efficiency Project Portal
  - The Efficiency Project Portal generated additional leads to the market partners' business development team: 40% of market partners invited to bid on a project submitted a bid through the Efficiency Project Portal.
  - Through the Efficiency Project Portal, the market partners were introduced to new customers: 10% of market partners submitted multiple bids through the Efficiency Project Portal
  - 63% of projects in the Efficiency Project Portal were awarded to market partners that participated in the bidding process as opposed to external contractors.
- Challenges/Strategies to overcome: Market partner coordination for site visits lengthened the bidding process to ensure attendance and requested number of bids by the customer were met. On average, 20% of market partners did not

follow through on bids or show up for walkthroughs. The number of invitations per project was increased and time limits were placed on response times to streamline the bid procurement process.

### ***Customer and Market Partner Engagement***

The Efficiency Project Portal sought to create a platform for customers to translate analytical services into Energy Conservation Measures (“ECMs”), demonstrating the value in the Project and overall customer interest/affordability in energy efficiency. The metrics tracked related to these objectives included:

- Expected target: 3% overall conversion rate
- Actual project interest / commitment from customers:
  - 24% of targeted customers expressed interest in a specific efficiency or demand management project
  - 5% of targeted customers completed a project identified through this demonstration
  - 50% of targeted customers who received analytics from the Project started or completed an EE project in 2018
  - 42% of these target customers are planning an EE project in 2019
- Challenges/Strategies to overcome: Decision maker contact information was often not readily available, resulting in increased marketing effort that could have been directed to project scoping. Print and bulk email outreach response rates were low, so a high touch in person and phone outreach was implemented to generate interest and close projects. Also, emailing the analytics report directly to the client or providing a printed copy while on site proved highly effective.

### ***Projects Contracted by Utility Consulting Services***

The Company originally envisioned providing bid support and incentive estimates for customers but determined that this could be viewed as a conflict of interest and did not pursue it. The Project team did begin providing support in the form of scope development which was then used by customers to request bids from qualified market partners. This became a regular part of project scoping in the latter stages of the project.

### ***Revenue Realization***

With respect to monetization, the demonstration sought to inform the Company about strategies and services that could result in new revenue streams. For several

reasons, the Project was not monetized, mostly due to relatively low volume of participating customers and market partners. The table below highlights that challenges to revenue realization throughout the Project:

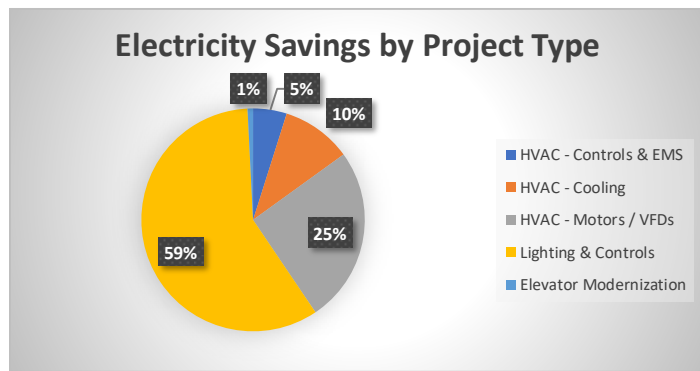
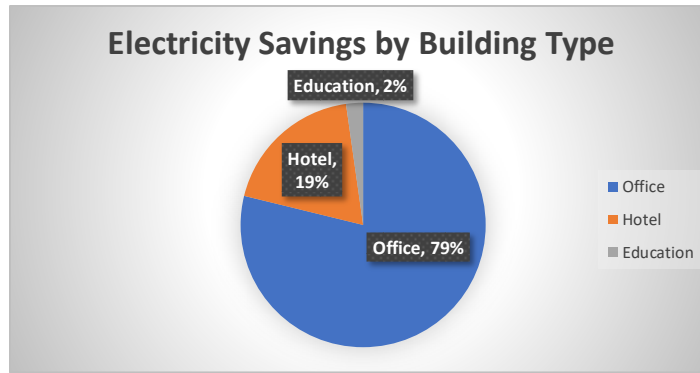
<b><i>Customer Project Phase</i></b>	<b><i>Potential Revenue Stream</i></b>	<b><i>Hypothesis Being Tested</i></b>	<b><i>Conclusions</i></b>
<i>Project Identification</i>	Market Partner Advertising on Customer Portal	Market partners are willing to pay to advertise their products/services on the customer portal. The ads displayed would align with the savings opportunities that have been identified in the building.	Volume of traffic to the Customer Portal was not enough to sufficiently test this hypothesis.
	Potential Opportunity Leads	(1) Customers are willing to allow Con Edison to share results of a virtual energy assessment with qualified market partners, and (2) Market partners are willing to pay for leads based on analytically derived Energy Conservation Indicators (ECIs).	The majority of market partners invited to participate in the demonstration favored direct relationships with clients and declined to bid without additional measure details. As a result, this was not seen as a viable source of revenue.
<i>Project Definition</i>	Project Leads	(1) Customers are willing to allow Con Edison to share scoped ECMs with qualified market partners, and (2) Market partners are willing to pay to access customers with scoped projects.	The majority of market partners invited to participate in the demonstration were not willing to pay for competitive leads. As a result, this was not seen as a viable source of revenue.
<i>Project Connection</i>	Efficiency Project Portal	Customers and market partners are willing to engage and transact energy efficiency business through a web-based platform built to facilitate connecting customers with energy efficiency projects with qualified vendors. Specifically, market partners are willing to pay a percentage of total costs of projects sourced through the portal to Con Edison as compensation for sourcing the project.	Engagements with the Energy Insights Marketplace provided new levels of insight into customer behavior as well as Market Partner activity. Based on the volume of projects, it was decided the focus of the project should be interacting with customers and Market Partners, through the Building Efficiency Marketplace, to gather more project level feedback.

	Subscription Access to Project Database	Customers are willing to post project details to, and market partners are willing to pay to subscribe to, an online database of identified projects, which could potentially be transacted on without going through a formal procurement process.	The majority of market partners invited to participate in the demonstration favored direct relationships with clients and declined to bid. As a result, this was not seen as a viable source of revenue.
	Project Finance	Lenders looking to invest capital in energy efficiency and demand management projects will be willing to offer a “finders fee” to Con Edison for connecting them to customers with the need to finance upgrades to their building.	All customers engaged declined offers around project financing, and indicated they had sufficient sources to fund projects. As a result, this was not explored during the demonstration.
<i>Savings Validation</i>	Virtual Measurement & Verification Services	Whole building virtual measurement & verification can (1) accurately determine achieved energy and demand savings at a lower cost than traditional pre- and post-implementation metering, (2) increase customer confidence in energy efficiency savings which will increase customer willingness to implement additional ECMs over time, and (3) increase persistence of savings over time.	Based on a sample of completed projects, it was determined there were too many variables with uncertainty to produce accurate virtual M&V for customer use.

### ***Project Impact***

- Expected target by end of 2018: 6.45 million kWh
- Actual Realized Savings and Satisfaction:
  - Realized energy savings (kWh) from implemented projects identified through this demonstration: 4,554,836
  - Pipeline of identified energy savings (kWh) to be implemented in 2019-2020: 2,601,923
  - The savings by building and project types are shown in the graphs below:





- Challenges/Strategies to overcome: The reduced number of target customers due to restrictions from overlapping programs and engagement efforts significantly limited the potential impact of the Project. This resulted in the need for higher touch engagement with the remaining targeted customers.

Facilities with irregular consumption patterns or analyzed to show low or no energy savings in their Virtual Energy Assessments were not initially included in marketing efforts until meter analytics provided an alternative format that could be used for all building types and consumption patterns.

Customers required significant support from the customer engagement team to set up bid rooms and solicit bids from market partners. Bid support services were limited to assisting with the bid template development and providing access to the bids received to avoid potential risk of market partners perceiving one vendor to be favored over another. To help overcome this challenge, a deeper effort was focused on developing bid templates that produced bids that were easier for customers to compare on their own.

## **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 Updated Budget**

As set forth in Section 1.3, budget information is being filed confidentially with the Commission.

## **2.3 CONCLUSION**

### **2.3.1 Lessons Learned**

In addition to tracking its metrics during the project, the Company performed market research to determine the levels of customer satisfaction with the platform. Highlights of the results include:

- Energy Insights was an effective platform in supporting Quartile 1<sup>4</sup> commercial and industrial (“C&I”) customers as they consider commercial energy efficiency (“EE”) upgrade projects.
- 75% of customers using analytics and 89% of customers using marketplace said their experience was excellent or very good.
- Although several of these C&I customers have other systems and partnerships in place for assessing energy usage and bidding out EE projects, they value their partnership with Con Edison as a component of this platform.
- Energy Insights provides C&I customers with the analytics needed to move forward with EE upgrades:
  - 50% C&I customers who received analytics from Energy Insights started or completed an EE project in 2018.
  - 42% of these C&I customers are planning an EE project in 2019.
- Tracking energy savings to validate return on investment (“ROI”) and energy usage trends for buildings are key for Energy Insights: these are the

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<sup>4</sup> Quartile 1 refers to the top 25% of energy consuming customers by kWh at a portfolio level.

two features C&I customers consider most useful in considering future EE upgrade projects. Half are “very likely to recommend” the Energy Insights platform to another colleague, associate or peer.

- The analytics are useful in their consideration of EE upgrades for commercial buildings: 75% rate the analytics platform excellent/very good in providing an in-depth view of their commercial buildings to calculate potential energy savings and identify where the greatest ROI's are.
- The Project virtual RFP bidding platform has been useful particularly for comparing bids, sharing information across project teams, and soliciting bids from Con Edison participating contractors or contractors of their choice.
- The Energy Insights team: The team has been invaluable in partnering with these C&I customers to identify potential energy savings and support with the implementation. The C&I customers appreciate having a dedicated contact who is professional, knowledgeable, and responsive throughout the process.

The market research clearly showed high levels of satisfaction with the platform and services from customers surveyed. However, the increased need for high-touch engagement make the Project unsustainable as constructed. The insurmountable challenges around monetization coupled with the high-touch service necessary to allow customers to complete ECMs make long-term operation of the Project both cost- and effort-prohibitive. The Project is not without positive lessons learned.

The level of customer satisfaction with Energy Insights provides a strong avenue for encouraging future execution of ECMs. To that end, the Company has begun offering building analytics and insights to all of its C&I customers through the My Account experience. The strong results among customers that did ultimately engage, in large part due to continuous engagement with the Project team has been informative. The Company will work closely with customers that have engaged to help them execute ECMs going forward.

### **2.3.2 Recommendations**

The Company has already begun offering building analytics and insights to all C&I customers that have smart meters installed as well as offering high-touch white glove service to customers through its Strategic Energy Partners program.

## **2.4 INCLUDED APPENDICES**

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

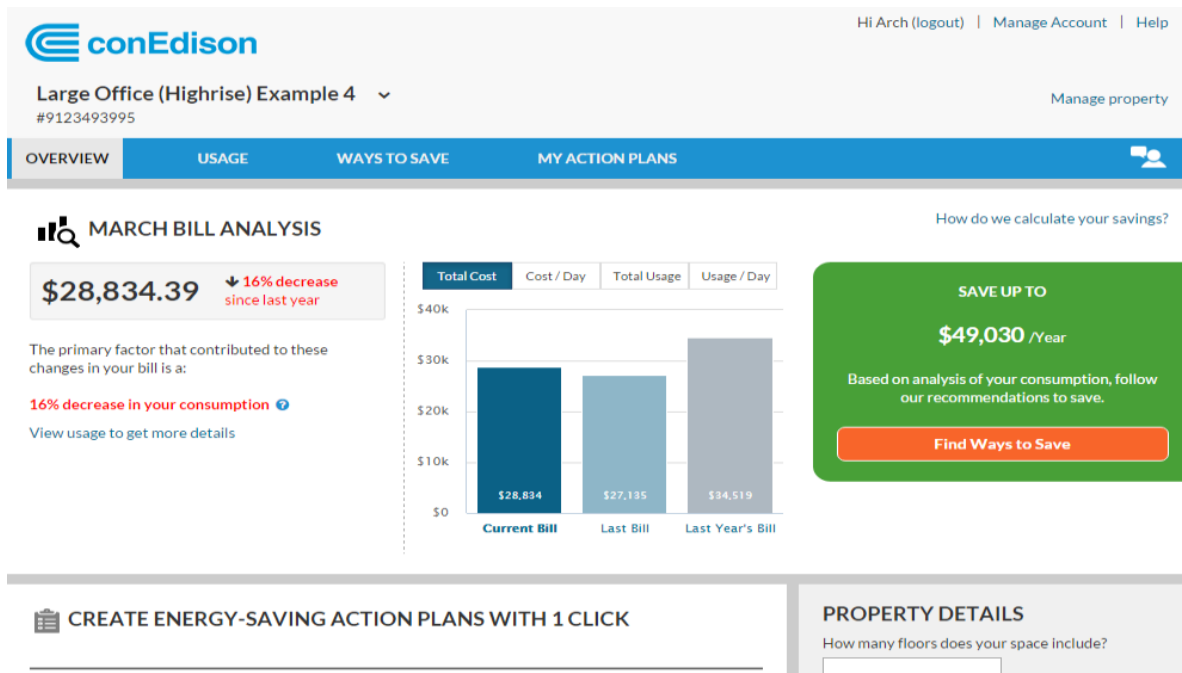
Appendix A: Energy Insights Customer Portal – Overview Page

Appendix B: Energy Insights – Action Plan Page

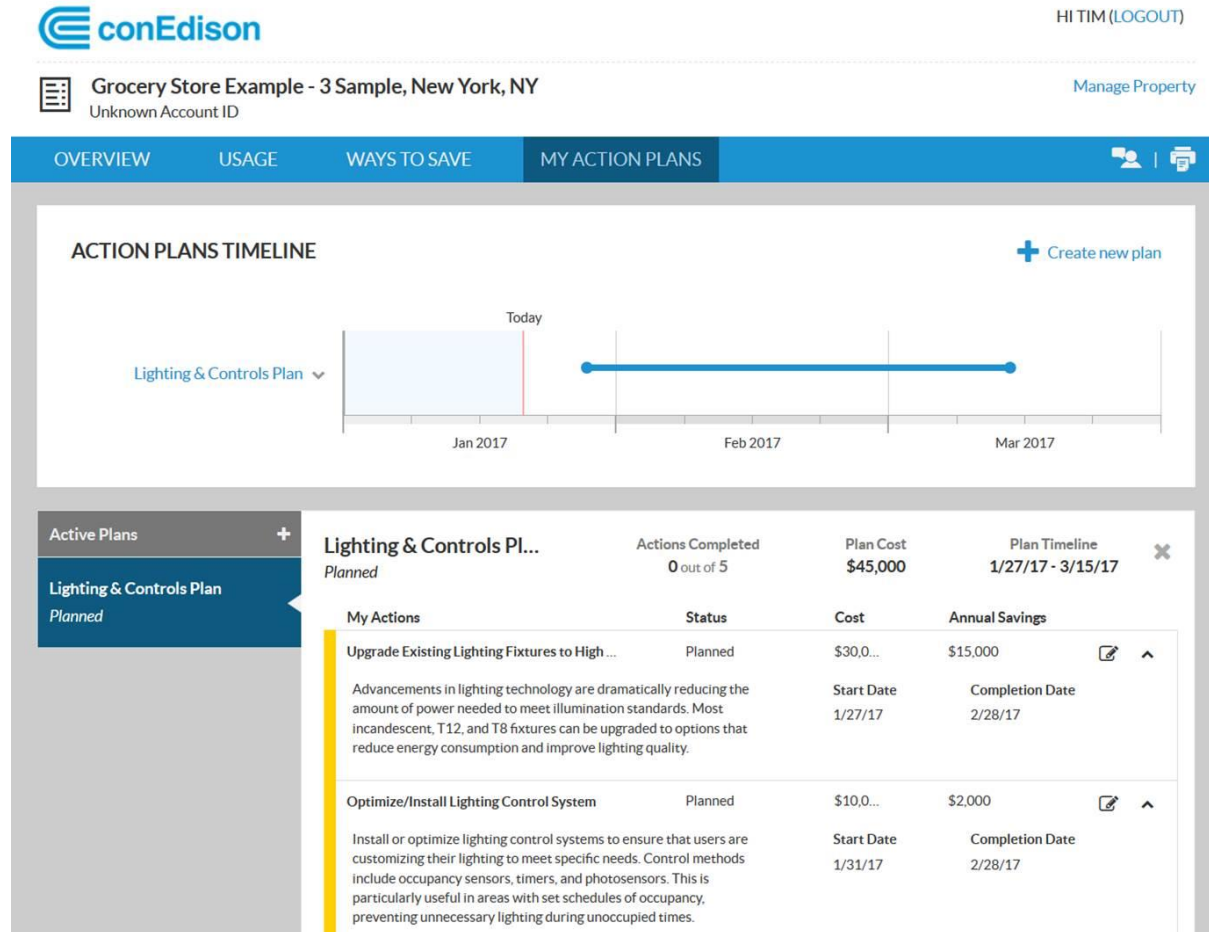
Appendix C: Building Efficiency Marketplace Description of Phases

## Appendix D: One-page Summary

## 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
<b>Milestone (Stage Gate to Next Phase)</b>	<i>Successful Platform Build</i> <ul style="list-style-type: none"> <li>• Partner contracts signed</li> <li>• DPS approval</li> <li>• Launch Customer Facing Portal</li> </ul>	<i>Platform Utilization</i> <ul style="list-style-type: none"> <li>• Successful data transfer</li> <li>• Launch of Efficiency Project Portal (Marketplace)</li> </ul>	<i>Marketplace Participation</i> <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>

## Building Efficiency Marketplace REV Demo Project – Q2 2019

The **Building Efficiency Marketplace** demonstration project was designed to increase awareness and participation by interval-metered customers. It is intended to illustrate how interval meter data analytics can be leveraged to enable: Targeting and multi-channel engagement of commercial customers with high energy efficiency and demand reduction potential; Web-based portals to engage customers with details on how their building consumers energy today as well as their potential savings and demand reduction opportunities; A marketplace to streamline connections between customers and market partners.

Project Inception: July 2015  
Project Launch: January 2016  
Project End Date: June 2019  
Budget: \$8.0M  
Q2 2019 Spend: *Filed Confidentially*  
Cumulative Spend: *Filed confidentially (on budget)*

**Phase 0: Demonstration Planning**  
Completed

**Phase I: Demonstration Implementation**  
Completed

**Phase II: Market Launch**  
Completed

### Lessons Learned: Customers

- Customers are interested in deeper engagement and savings opportunities
- Marketplace is a trusted source for market partner connections and bids
- Engagement requires high touch which can be costly and time-consuming
- Customers like the service but are unwilling to pay for it

### Lessons Learned: Market Partner

- Market partners have expressed a reticence to pay for access to customer projects
- Bulk marketing is an inefficient means of reaching building decision makers

### Lessons Learned: Utility

- Customer relationships are needed to leverage the potential of platforms
- Insights can be utilized through established channels of engagement as well
- Revenue generation is not likely
- EE/DM/DR savings and improved customer experience are the main benefits

**Application of Lessons Learned:** *Customer satisfaction is high and leveraging that to provide subsequent opportunities to customers has yielded good results. Program marketing efforts have been joined with other high-touch efforts the Company has undertaken. Market Partners have been aligned to the approved Market Partner list through the Company's Manage Energy site.*

**Issues Identified:** *Market partners and customers have seemed unwilling to pay for these services despite reporting satisfaction with the experience. Bulk marketing has yielded minimal results.*

**Solutions Identified:** *Continue to test the platforms as a means of achieving EE/DR savings. Pivot to high-touch relationship-based marketing and leverage insights through existing sales channels.*

**Recent Milestones:** *Project Ended.*

**Upcoming Milestones:** *n/a*