



REV Demonstration Project:
Connected Homes Platform

2018 Q1 Quarterly Progress Report

Dated: April , 2018

Table of Contents

1.0	EXECUTIVE SUMMARY	3
1.1	Program Achievements	3
1.2	Cybersecurity and Personally-Identifiable Information Protection	4
1.3	Accounting Procedure Established	4
1.4	Costs, Benefits and Operational Savings	4
1.5	Connected Homes Platform	4
2.0	Connected homes – quarterly progress	5
2.1	Demonstration Highlights	5
2.1.1	Since Previous Quarter – Major Tasks Completion	5
2.1.2	Activities Overview	5
2.1.3	Key Metrics.....	7
2.1.4	Next Quarter Forecast.....	9
2.1.5	Checkpoints/Milestone Progress.....	9
	On Schedule.....	10
	Delayed w/out Major Impact.....	10
	Delayed or Stopped – Project Goals Impacted.....	10
2.1.6	Planned Activities	10
2.1.6.1	DER Sales.....	10
2.1.6.2	Digital Engagement - Integrated Online Experience.....	10
2.1.6.3	Revenue Realization: New Business Models	10
2.1.6.4	Demand Side Management: Customer Co-Benefits.....	11
2.1.6.5	Referrals to Energy Efficiency Rebate Programs	11
2.1.7	Changes to Project Design	11
2.2	Work Plan & Budget Review	12
2.2.1	Phase Progress.....	12
2.2.1.1	Updated Work Plan	12
2.2.1.2	Updated Budget	13
2.3	Conclusion.....	13
2.3.1	Lessons Learned.....	13

2.3.2	Recommendations	13
2.4	INCLUDED AppendICES	13

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 Connected Homes Platform REV demonstration project (“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 January 8, 2016, DPS Staff approved the Project. Con Edison filed an implementation plan for the Project with the Commission on January 29, 2016. The Project launched in Q2 2016 to approximately 275,000 customers in Con Edison’s Brooklyn and Westchester territories. Customers have access to detailed energy insights online and have received targeted offers in their Home Energy Reports and High Usage Alerts for solar panels, Wi-Fi thermostats, Sealed home services, and the Con Edison Marketplace, as eligible.

In early 2017, the Project successfully upgraded to the second version of the Con Edison Marketplace (Marketplace 2.0), the second version of the printed Home Energy Reports (HER 2.0), and launched the second round of targeted offerings for Sealed home services, Wi-Fi thermostats, and Marketplace.

In Q2 2017, the Project team developed new modules for the SunPower and Sealed campaigns creatives, expanded marketing efforts and added two new revenue streams on the Marketplace: third-party advertising and cost-per-click referrals.

In Q3 2017, the Project team conducted successful marketing and sweepstakes campaigns resulting in significant sales of energy efficient items and revenue generation. The team also launched a new solar experience within the Marketplace designed to increase customer engagement and create a new lead generation revenue stream. Negotiations with a new distributed energy resource (“DER”) partner, Mitsubishi Electric, were also finalized in the quarter, resulting in a new targeted campaign for heat pumps.

In Q4 2017, the Project team wrapped up the 2017 targeted offer campaigns for Sealed home services, smart thermostats, Marketplace products and Mitsubishi electric heat pumps. In addition, the team’s optimization of Marketplace digital engagement campaigns resulted in a 25 percent increase in energy efficient product sales (lighting and thermostats), combined with a 9 percent increase in revenue. These transactions also resulted in a greater than 50 percent increase in lifetime electricity saved quarter-over-quarter. The team also successfully began testing email campaigns to promote the new solar program, resulting in 15 contracts executed.

In Q1 2018, the Project team expanded and optimized email and digital engagement marketing programs for lighting, thermostats, and the solar program. Despite being a normally quiet quarter for e-commerce activity, these efforts led to revenues in Q1 2018 that were comparable to the very successful Q4 2017, and a 10x year-over-year increase for the quarter. The first solar program installations were also completed in Q1, and the team executed its first sponsored email campaigns, establishing a new source of revenue.

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 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.

1.4 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.

The program costs have been as planned and the program has driven increases in non-revenue generating benefits, exceeding targets for customer engagement and energy savings. Progress was made in Q1 to facilitate revenue generation from targeted offers and to increase the volume and revenue contribution of Marketplace e-commerce sales.

1.5 CONNECTED HOMES PLATFORM

The Project seeks to provide residential customers of Con Edison’s service territory a set of tools designed to proactively connect the customers with cost-effective energy efficiency products and services and distributed generation offerings that will be most relevant to them. The Project is designed to remove barriers to residential adoption of DERs and animate the DER market by using customer usage data and advanced data analytics to match customer needs with vetted DER products. Con Edison’s partner in

the Project, Enervee, is administering marketing campaigns promoting a set of products and services to participating customers to demonstrate and evaluate the proof of concept.

2.0 CONNECTED HOMES – QUARTERLY PROGRESS

2.1 DEMONSTRATION HIGHLIGHTS

2.1.1 Since Previous Quarter – Major Tasks Completion

- Optimized email and Marketplace advertising campaigns for lighting, thermostats and solar
- Established a targeted sponsored email campaign with Con Edison's existing partner Sealed, leading to increased program participation and increased revenue

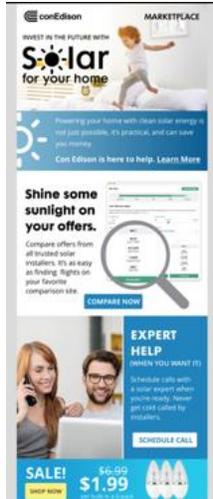
2.1.2 Activities Overview

In Q1 2018, the Project team continued to optimize Marketplace email and advertising campaigns, focusing on e-commerce promotions of lighting and solar lead generation, resulting in material increases in sales volumes and revenue generation.

Marketplace Marketing Initiatives:

Solar Email Campaigns:

Building off of the successful launch and promotion of the Marketplace solar program in Q4 2017, the Project team executed three additional email campaigns between January 22 and March 12, 2018. By adding additional third-party targeting data, the open rates increased to as high as 18 percent (vs. 15 percent for the November 2017 sends) and click through rates increased to 1.69 percent (vs. 1.24 percent for previous sends). One of the emails also included a module at the bottom, promoting the President's Day sale. Since launching the solar program and email promotions through March 2018 there have been 838 leads collected, with 170 proposals created, and 32 closed sales.



Solar promotion email

President's Day Lighting Promotion:

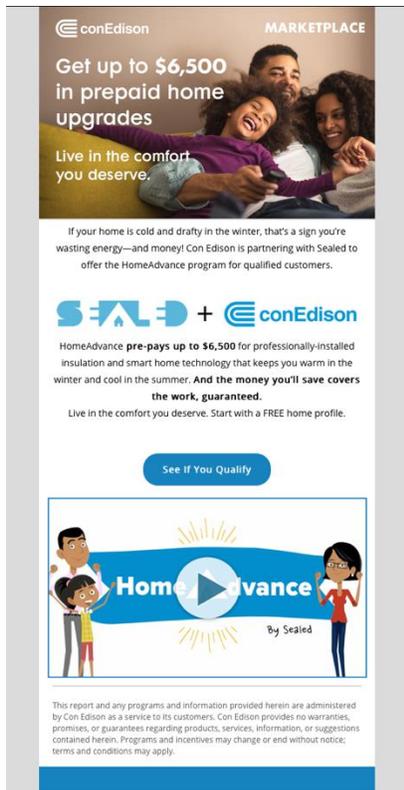
Leading up to and after President's Day the Project team ran a series of promotions featuring a TCP LED Candelabra. The promotions were run primarily by email. More than 14,000 units were sold during the promotion, delivering an estimated energy savings of 588,432 kWh. The email also included a promotion for solar at the bottom, which drove 47 new solar leads.



Lighting promotional email

Sealed Email Promotion:

The project team worked with Con Edison partner Sealed to create a highly targeted sponsored email campaign to promote prepaid home upgrades. The first email on February 22 was very successful, with an open rate of 20 percent and a 3.52 percent click through rate, suggesting that well targeted sponsored emails are appreciated by Con Edison customers. After the initial success, a second email was sent on March 27. In addition to boosting participation in the prepaid home upgrade program, the sponsorship drove additional revenue for the project.



Sealed Email Promotion

2.1.3 Key Metrics

In Q1, the Project continued to see significant e-commerce Storefront sales. For additional details on program results to date, see Appendix A: List of Metrics and Results.

- Marketplace Storefront Sales:
 - In Q1, the team recorded 1,511 Storefront orders consisting of 15,633 light bulbs, 536 thermostats and 5 power strips. The continued use of targeted

Storefront campaigns, combined with the optimized product and pricing mix, led to a 9 percent increase in revenue quarter-over-quarter.

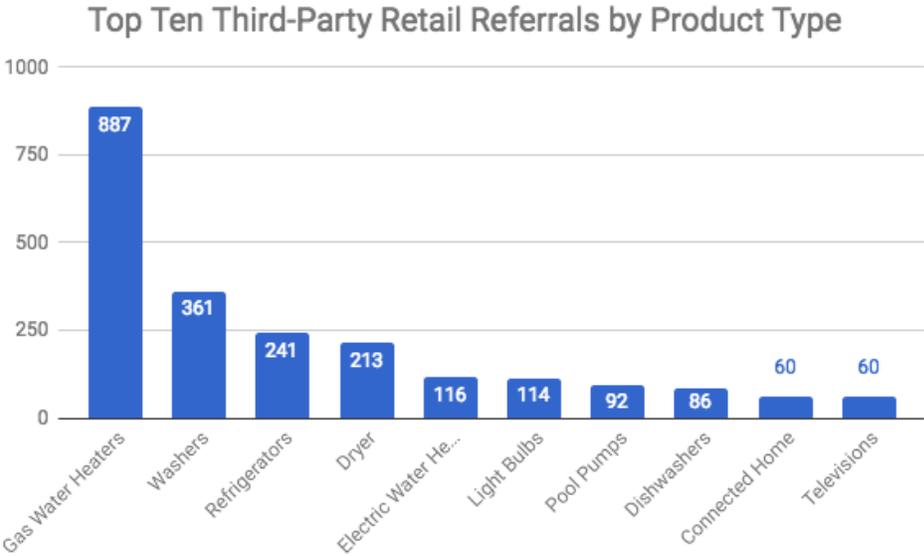
Digital Customer Engagement:

In Q1, Con Edison’s Marketplace attracted 110,229 unique visitors and 164,789 sessions, resulting in 356,122 corresponding page views.

The Marketplace was also effective at raising awareness of other Con Edison programs and tracking actions taken by visitors. Since inception through Q1 2018, 9,187 Marketplace visitors have clicked through to Con Edison’s large appliance rebate offers, and 2,976 smart thermostat shoppers on Con Edison’s Marketplace Storefront sought out information on the Smart Thermostat program.

DER Market Activation:

During Q1, Marketplace customers were directed to third-party appliance retail websites 2,962 times. The most popular Marketplace categories were gas water heaters and washers.



Energy Savings:

Estimated energy savings associated with Marketplace Storefront sales in Q1 were 13,084 MWh and 212,058 Therms on a lifetime basis. These results have already significantly exceeded the program end point goals.

Greenhouse Gas Emissions Reductions:

The Marketplace Storefront contributed savings of an estimated 16,635,434 pounds of carbon dioxide, 294.4 pounds of methane and 30.4 pounds of nitrous oxide emissions.

2.1.4 Next Quarter Forecast

In Q2 2018, the team will focus its efforts on channels that maximize energy savings while generating revenue.

Planned Q2 2018 activities for Marketplace include:

- Continued execution of price drop and flash sales, holiday promotions and cross promotions of products.
- Cross promotion of campaigns, such as the ones described above, to maximize results.
- Email campaigns promoting the solar program on Marketplace using lessons learned and optimized targeting.
- Continued optimization of paid search and display campaigns to drive rebates and energy savings, in addition to sales of appliances, products and services.
- Based on the success of the Sealed sponsorship, adding sponsorship opportunities to editorial and educational emails to provide a new revenue stream and ways to save money and energy for customers.

2.1.5 Checkpoints/Milestone Progress

Checkpoint/Milestone	Timing*	Status
DER Sales	Phase 2 Midpoint / End	
Digital Engagement: <i>Integrated Online Experience</i>	Phase 3 start + 6 months	

Checkpoint/Milestone	Timing*	Status
Revenue Realization: <i>New Business Models</i>	Phase 2 Midpoint / End	○ ● ○
Demand Side Management: <i>Customer Co-Benefits</i>	Phase 2 Midpoint / End	● ○ ○
Referrals to Energy Efficiency Rebate Programs	Phase 2 Midpoint / End	○ ● ○

*Detailed descriptions of the Phases can be found in Appendix B: Description of Phases.

Legend

 On Schedule	 Delayed w/out Major Impact	 Delayed or Stopped – Project Goals Impacted
---	--	---

2.1.6 Planned Activities

2.1.6.1 DER Sales

Status: Green

Expected Target by Phase 2 End: 43,500 purchases

As of Q1: DER sales are *above expectations*.

2.1.6.2 Digital Engagement - Integrated Online Experience

Status: Green

Expected Target by Phase 2 End: 70,000 unique visitors each six-month period

As of Q1: Digital engagement is *above expectations*.

2.1.6.3 Revenue Realization: New Business Models

Status: Yellow

Expected Target by Phase 2 End: \$360,200

As of Q1: Revenue realization is *slightly below expectations*.

While Marketplace-generated revenue will expand in Q2 2018 with new sponsorship opportunities and the solar program, new restrictions on the number of thermostat rebates per customer are expected to result in a 30-40 percent decrease in the number of thermostat units sold. Additionally, at the beginning of 2018, a budget cap on the total amount of Energy Efficient instant rebates for LEDs and thermostats that can be claimed through the Marketplace will decrease forecasted revenue goals from the Storefront channel. Bad weather also resulted in moratoriums on email sends to certain areas, as well as slowed solar installations.

2.1.6.4 Demand Side Management: Customer Co-Benefits

Status: Green

Expected Target by Phase 2 End: 8,700 MWh (Marketplace Storefront);

As of Q1: Electricity savings are *above expectations*.

2.1.6.5 Referrals to Energy Efficiency Rebate Programs

Status: Yellow

Expected Target by Phase 2 End: 26,000 click-throughs from Marketplace to large appliance rebate applications

As of Q1: Referrals to energy efficiency rebate programs are *below expectations*.

For the majority of the project to date, marketing initiatives were dedicated to driving customers towards e-commerce sales (LEDs and smart thermostats). The team will continue to optimize a mix of marketing campaigns and allocate resources towards energy efficiency appliance rebates.

2.1.7 Changes to Project Design

Based on learnings and revenue results from previous quarters the project team adjusted the program design to focus on Marketplace product purchases and referrals to retailers.

2.2 WORK PLAN & BUDGET REVIEW

2.2.1 Phase Progress

The team successfully worked through Phase 0 (Project Development) and Phase 1 (Project Launch) and is now working through Phase 2 (Demonstration Implementation) and Phase 3 (Project Optimization).

Phase 0 consisted of submitting the Implementation Plan and completing partner negotiations. Phase 1 consisted of all the activities required to launch the Project: data acquisition, program design and configuration, implementation of the web/Marketplace and call center tools, quality assurance testing and go-live, as well as initial customer community outreach efforts.

Phase 2 (Demonstration Implementation) tasks focus on overall maintenance and reporting for the Project. In lieu of the Request for Information (“RFI”) process included in the Phase 3 Work Plan tasks, Con Edison supported NYSERDA’s development of the REV Connect online platform. This platform allows DER developers to read about and express interest in becoming involved with New York’s demonstration projects. The team believes that at this stage in the project, this level of effort in the DER recruitment process is suitable for potential third-party engagement. A full description of the major Project phases is set forth in Appendix B: Description of Phases.

2.2.1.1 Updated Work Plan

Demonstration Project - Connected Homes Platform					2017				2018	
Activity No.	Activity Description	Status	Lead	Q1	Q2	Q3	Q4	Q1	Q2	
3.0	Phase 2 - Demonstration Implementation									
3.1	Project Management	IN PROGRESS	Con Edison							
3.1.1	Track program metrics	IN PROGRESS	Con Edison/partners							
3.1.1.1	Track digital and outbound engagement metrics	IN PROGRESS	Opower/Enervee							
3.1.1.2	Track energy efficiency savings	IN PROGRESS	Opower/Enervee							
3.1.1.3	Report on DER sales	IN PROGRESS	DER Partners							
3.1.1.4	Conduct customer survey	COMPLETE	Opower							
3.1.2	Reporting and Evaluation	IN PROGRESS	Con Edison							
3.1.2.1	Deliver Quarterly Reports	IN PROGRESS	All							
3.1.2.2	Annual workshop with stakeholders	IN PROGRESS	All							
3.2	Delivery	IN PROGRESS	Con Edison/Partners							
3.2.1	Deliver core content to customers	IN PROGRESS	Con Edison/Partners							
3.2.1.1	Maintain Marketplace and Web Portal	IN PROGRESS	Opower/Enervee							
3.2.1.2	Maintain contact center solutions	IN PROGRESS	Con Edison							
3.2.1.3	Deliver outbound content	COMPLETE	Opower							
3.2.2	Phase in additional web functionality	COMPLETE	Con Edison/partners							
3.2.2.1	Additional appliance categories integration for Marketplace	COMPLETE	Enervee							
3.2.2.2	Marketplace launch Storefront and retailer API functionalities	COMPLETE	Enervee							
3.2.2.3	Implement Single-Sign-On	COMPLETE	Opower							
3.2.3	Launch DER targeted promotional messaging	COMPLETE	Con Edison/Partners							
3.2.3.1	DER program design and configuration	COMPLETE	DER Partners/Opower							
3.2.3.2	Deploy web, print and email-based promotions	COMPLETE	Opower							
3.2.3.3	Maintain contact center solutions for new customers	COMPLETE	Con Edison							
3.3	Ongoing Customer & Community Outreach	IN PROGRESS	Con Edison							
4.0	Phase 3 - Project Optimization									
4.1	Project Management	IN PROGRESS	Con Edison							
4.1.1	Evaluate project rollout	IN PROGRESS	Con Edison							
4.2	REV CONNECT PLATFORM - DER Online Resource	IN PROGRESS	Con Edison/NYSERDA							
4.3	Optimize Program	NOT STARTED	Con Edison/Partners							
4.3.1	Refine Program Design	NOT STARTED	Con Edison/Partners							
4.3.1.1	Refine DER Categories and Pricing	NOT STARTED	All							
4.3.1.2	Optimize Revenue/Benefit Opportunity	NOT STARTED	All							

= Completed Task
 = In Progress Task
 = Not Started Task

2.2.1.2 Updated Budget

Budget information is being filed confidentially with the Commission.

2.3 CONCLUSION

2.3.1 Lessons Learned

Based on learnings from multiple campaigns in Q1, the Project team determined that cross-promotions of different programs (e.g., a light bulb promotion that included a banner for solar) yielded significant additional engagement and lead generation.

Also, the success of the Sealed sponsorship in terms of conversions and open rates has led to additional effort being applied to add new sponsorship opportunities to editorial and educational emails. This approach will provide a new revenue stream and an additional channel to encourage energy savings by Con Edison customers.

2.3.2 Recommendations

Throughout 2018, the Project team will continue to optimize marketing efforts through a mix of emails, sweepstakes and other digital channels to take advantage of seasonal events. The mix will be adjusted dynamically to meet site traffic, sales volume, and revenue targets.

The Project team is targeting a Q2 launch of the Community Solar project, which will complement the existing Solar initiative, and will expand the marketplace to offer Solar service to multi-family residents (owners and renters).

The Project team is exploring a range of new revenue opportunities for later in 2018, leveraging the Marketplace platform, including: instant rebates for additional products and appliances, product warranties, and contractor services. These Marketplace offerings are being evaluated based on their ability to improve the customer experience, increase energy efficiency savings, and generate revenue to offset program costs.

2.4 INCLUDED APPENDICES

Appendix A: List of Metrics and Results

Appendix B: Description of Phases

Appendix A: List of Metrics and Results

Checkpoint	Category	Metric	Definition	Reporting Cadence	Results for Q1 2018 (not cumulative)
DER Sales: Market Animation and Customer Choice & Digital Engagement: Integrated Online Experience	Leads and Acquisitions	Qualified solar leads generated	Number of qualified leads from Marketplace	Cumulative	884 solar leads
		Solar sales reported	Number of solar systems sold	Cumulative	26 solar sales
		Solar installations	Number of solar systems installed	Cumulative	7 solar installations
Revenue Realization	Total Revenue	Total revenue to Con Edison	Revenue gained	Annually	Actual revenue through Q1 2018 is roughly 40 percent of the projected total Marketplace revenue through the Phase 2 endpoint (July 2018)
Demand Side Management: Customer Co-Benefits	Energy / Demand / Benefits	Energy savings (Marketplace Storefront sales)	Total kWh savings from product sales from the Marketplace Storefront	Quarterly	Electric savings: 13,084 MWh, Gas savings: 212,058 Therms
		Reduction in greenhouse gas emissions	Greenhouse gas emissions reduction from product sales from Marketplace Storefront	Quarterly	16,635,434 lbs CO ₂ ; 294.4 lbs CH ₄ ; 30.4 lbs N ₂ O.

Appendix B: Description of Phases

Phase	0. Product Management	1. Project Launch	2. Demonstration Implementation	3. Project Optimization
Milestone (Stage Gate to Next Phase)	<i>Negotiations Complete</i> <ul style="list-style-type: none"> • Partner contracts signed • DPS approval 	<i>Successful Platform Build</i> <ul style="list-style-type: none"> • Attract vendors in key categories • Successful data transfer 	<i>Platform Utilization</i> <ul style="list-style-type: none"> • Click through rates • Qualified leads • Contact center volume • Vendor retention • Customer satisfaction 	<i>Revenue Realization</i> <ul style="list-style-type: none"> • Revenue per source • Customer satisfaction • Vendor retention
Key Elements	<ul style="list-style-type: none"> • Platform provider contracted • DER providers signed-on 	<ul style="list-style-type: none"> • Develop platform • End-to-end testing • Contact center training • Program go-live 	Evaluate response of specific audiences to <ul style="list-style-type: none"> • DER combinations • Channels • Messages 	<ul style="list-style-type: none"> • Learn how to leverage more granular customer data • Optimize profit by refining categories and pricing • Optimize for energy efficiency gains
DER Categories	N/A	N/A	<ul style="list-style-type: none"> • Rooftop solar • Home energy efficiency audits • Smart thermostats 	<ul style="list-style-type: none"> • Further expansion of DER products and providers • Expand to ESCOs