



REV Demonstration Project: Smart Home Rate

Q3 2020 Quarterly Progress Report

Dated: October 31, 2020

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1.0 EXECUTIVE SUMMARY

Consolidated Edison Company of New York, Inc. ("Con Edison") and Orange and Rockland Utilities, Inc. ("O&R"), (together the "Companies"), submit this third quarterly report for 2020 on the progress of the Smart Home Rate REV Demonstration Project (the "Project") being implemented 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. Budget information is being filed confidentially with the Commission.

1.1. Project Background

On February 1, 2017, the Companies submitted the Project for review by Department of Public Service Staff ("DPS Staff"). On July 5, 2018, Staff issued a Demonstration Project Assessment Report. The Companies subsequently filed an implementation plan for the Project with the Commission on August 24, 2018.² On February 7, 2019, the Commission issued an Order Approving Tariff Amendments with Modifications.³

The Project is designed to demonstrate how alternative rate structures can provide price signals to customers to optimize value for the customer and the system. The Project recruits residential customers with Advanced Metering Infrastructure ("AMI") meters to participate in a new electric rate and provides them with home energy management technologies to help them maximize savings on the new rate.

The Companies are implementing the Project with ICF and will deploy price-responsive home energy management platforms from Uplight and Sunverge. In Track 1, Uplight's Orchestrated Energy platform will be deployed to automate central air conditioning ("AC") loads in participants' homes. In Track 2, Sunverge's platform will be deployed to automate home battery systems coupled with rooftop photovoltaic ("PV") systems.

The ongoing COVID-19 pandemic has resulted in delays in both Track 1 and Track 2, as activities paused in Q2 2020 for the Project team to adjust plans and approaches.

¹ 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 February 26, 2015).

² Case 14-M-0101, Smart Home Rate Demonstration Project Implementation Plan (August 27, 2018).

³ Case 18-E-0548 (Tariff Filing by Consolidated Edison Company of New York, Inc. to Modify Its Electric Tariff Schedule, P.S.C. No. 10, to Establish Rider AB-Smart Home Rate) and Case 18-E-0549 (Tariff Filing by Orange and Rockland Utilities, Inc. to Modify Its Electric Tariff Schedule, P.S.C. No. 3, to Establish Rider J-Smart Home Rate), Order Approving Tariff Amendments with Modifications (issued February 7, 2019).

1.2. Project Overview





Smart Home Rate REV Demo Project

The Smart Home Rate Demo Project ("Project") will test how alternative rate structures can provide price signals to customers to optimize value for the customer and the system. The Project seeks to recruit residential customers with AMI meters to participate in a new electric rate and provide them with home energy management technologies to help them maximize savings on the new rate.

The Companies are implementing the Project with ICF and are deploying price-responsive home energy management platforms from Uplight and Sunverge. In Track 1, Uplight's platform will be deployed to automate central air conditioning ("AC") loads in participants' homes. In Track 2, Sunverge's platform will be deployed to automate home battery systems coupled with rooftop photovoltaic ("PV") systems.

Project Inception: February 2017

Market Launch: Track 1
November 2019: Track 2 -Not

started.

Project End Date: December 2023

Budget: \$14.5M [revisions in

progress]

Q2 2020 Spend: Filed

Confidentially

Cumulative Spend: Filed confidentially (on budget)

Phase 0: Demonstration Planning In progress (T2)

Phase 1: Demonstration
Project Development & Testing
In progress

Phase 2: Market Launch In progress (T1) Phase 3: Evaluation Not yet started

Lessons Learned: Customers

For Track 1, the availability of strong technical support via a virtual installation channel will be key to the success of the self-installation model.

Lessons Learned: Market

- Rapid evolution of smart home device business models presents risk during the program development phase.
- Environmental, health, and safety issues may cause delays during implementation of installation work in the field.
- Contracting for a unique business model among multiple stakeholders is complex and requires significant time to develop. Contracts with multiple vendors and subcontractors must be coordinated. Lead times when engaging internal resources have had significant impacts on timelines.

Application of Customer Lessons Learned: During the Beta group pilot, the Project team discovered that employee participants were encountering more installation obstacles than originally anticipated and therefore required more virtual installation sessions than planned. As the program moves into the customer installation phase, the Project team plans to offer more virtual assistance, including evening and weekend appointments, to improve the customer experience.

Issues Identified: Relying on self-installation of thermostats in Track 1 is expected to increase the risk of stranded smart thermostats and missed enrollment targets.

Solutions Identified: In order to encourage enrollees to complete thermostat installations, the project plans now include a revised incentive structure; increased communications with participants, including installation email reminders; and an option to receive virtual installation support.

Recent Milestones: Track 1 Beta group testing completed in September. Program recruitment relaunched in mid-September.

Upcoming Milestones: Track 1 recruitment will continue through Q4 2020.

2.0 QUARTERLY PROGRESS

2.1 Activities Overview and Updates

Track 1 program recruitment officially relaunched on September 10, 2020 via an email and postcard mailing campaign. As of September 30, there were 228 newly enrolled customers. The Project team has been closely monitoring the enrollment rates and will continue to do so throughout the recruitment period during Q4 2020 and Q1 2021. As discussed in the Q2 Quarterly Report, efforts will be made to fully enroll the Rate A group and then move to enrollment in Rate B, if participation is sufficient.

During August and September, the Companies recruited a small group of employees to participate in a beta group pilot to assess thermostat installation processes and Uplight's software platform performance. Participants received thermostats as well as self-installation instructions and program literature. Several participants also received technical support via the virtual assistance channel.

Contracting for Track 2 remains on hold during Q3 2020 due to the COVID-19 pandemic. The Project team continues to assess the feasibility of resuming Track 2 activities based on the State's COVID-19 safety guidelines and continues to evaluate the timeline for bringing installers on board.⁴

2.2 Key Metrics

Track 1 total customer enrollments (new & historic): 396 customers enrolled in the program, excluding the Control group customers; with 280 Con Edison customers and 116 O&R customers.

Track 1 thermostats installed: 0.

2.3 Lessons Learned and Recommendations

The availability of strong technical support via a virtual installation channel will be key to the success of the self-installation model. During the Beta group pilot, the Project team discovered that employee participants were encountering more installation obstacles than originally anticipated and therefore required more virtual support sessions than planned. Common questions arose regarding c-wire requirements. As the program moves into the customer installation phase, the Project team plans to offer more virtual assistance, including evening and weekend appointments. The intent is

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⁴ https://www.nyserda.ny.gov/ny/COVID-19-Response/Resources

to offer experien	flexible	appointment	scheduling	to improve	their se	elf-installation

3.0 NEXT QUARTER FORECAST

3.1 Planned Activities

For Track 1, recruitment will continue during Q4 2020 with additional customer outreach planned in October and November. The Project team will begin shipping welcome kits and thermostats to customers in October. Virtual assistance appointments will be scheduled based on customer need. In addition, the Project team will contact customers who had previously enrolled in the program under the direct installation option to find out if they are still interested in participating and converting to self-installation. Control Group customers will also be contacted to determine their interest in continued participation in the program.

For Track 2, the Project team plans to resume contracting and establish a new Project timeline.

4.0 APPENDICES

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

Appendix A: Work Plan

Appendix B: Checkpoints and Milestone Progress

Appendix C: Procedures and Policies

Appendix A: Work Plan

Track 1:

				20	018		T	20	019	,		20	20			202	1	T	20	22			202	23	
Act no	Activity Description	Lead	Q:	1 Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2 (Q3 Q4	Q1	Q2	Q3 Q	Q 4	Q1	Q2	Q3 Q	4
1	Phase 0: Demonstration Planning	Con Edison																							
1.1	Partnership Agreement	Con Edison																							
1.2	Project Plan	Con Edison/ ICF																							
2	Phase 1: Project Development & Testing	ICF	П																						
2.1	Recruitment, Marketing and Communications Plan	ICF																							
2.2	Target Identification and Propensity Analysis	ICF																							
2.3	Sightline Setup/ Configuration	ICF																							
2.4	Enrollment Portal	ICF																							
3	Phase 2: Market Launch	ICF/ Uplight																							
3.1	Software	Uplight																							
3.2	Enrollment	ICF																							
3.3	Technology Installation	ICF																							
3.4	Customer Engagement	ICF																							
4	Phase 3: Evaluation	ICF/Nexant																							
4.1	Data Monitoring & Reporting	ICF/Nexant																							

Track 2: Timeline from Q4 2020 and beyond is TBD.

				20	018			20)19			20	20			20	21			20	22			20	23	
Act no	Activity Description	Lead	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Phase 0: Demonstration Planning	Con Edison																								
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2.2	Target Identification and Propensity Analysis	ICF																								
2.3	Sightline Setup/ Configuration	ICF																								
2.4	Enrollment Portal	ICF																								
3	Phase 2: Market Launch	ICF/ Sunverge	Ш																							
3.1	Operator Training	Sunverge																								
3.2	Hardware	Sunverge																								
3.3	Software	Sunverge																								
3.4	Enrollment	ICF																								
3.4	Technology Installation	ICF																								
3.6	Customer Engagement	ICF/Sunverge																VIII		XIII						
4	Phase 3: Evaluation	ICF/Nexant																VIII								
4.1	Data Monitoring & Reporting	ICF/Nexant																								

Appendix B: Checkpoints and Milestone Progress

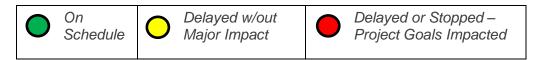
Track 1

Checkpoint/Milestone	Timing	Status
Bill impacts	T1 Phase 2 Midpoint	000
Technology installation	T1 Phase 2 Start	000
Technology performance	T1 Phase 2 Midpoint	000
Recruiting and enrollment	T1 Phase 2 Start	•00
Customer satisfaction	T1 Phase 2 Midpoint	000

Track 2

Checkpoint/Milestone	Timing	Status
Bill impacts	T2 Phase 2 Midpoint	000
Technology installation	T2 Phase 2 Start	000
Technology performance	T2 Phase 2 Midpoint	000
Recruiting and enrollment	T2 Phase 2 Start	000
Customer satisfaction	T2 Phase 2 Midpoint	000

Legend



Track 1 Planned Activities

Bill impacts

Status: Yellow

Expected Target by Phase 2 Midpoint: Calculate bill impacts from the first few months of the demo and compare average annual customer bill to what it would have been on their previously selected rate.

Actual by Phase 2 Midpoint: Not started.

Solutions/strategies in case of results below expectations: Plan to adjust messaging to enhance participants' understanding of bill impacts, such as providing them with a mid-program assessment report.

Technology installation

Status: Yellow

Expected Target by Phase 2 Start: Complete technology installations at sufficient levels to meet enrollment targets.

Actual by Phase 2 Start: Thermostat installation had been paused to develop new approaches to conduct all installations through the self-installation channel. Recruitment restarted in September 2020; thermostat installations will begin in Q4 2020.

Solutions/strategies in case of results below expectations: Use enhanced approaches to support self-installation of thermostats, such as virtual installation support and increased customer communication touchpoints.

Technology performance

Status: Yellow

Expected Target by Phase 2 Midpoint: Monitor price communication and response capability of technology platforms.

Actual by Phase 2 Midpoint: Not started.

Solutions/strategies in case of results below expectations: Plan for continuous iteration and improvements to technology platforms in response to performance tracking.

Recruiting and enrollment

Status: Green

Expected Target by Phase 2 Start: Obtain enrollment levels sufficient to answer key research questions.

Actual by Phase 2 Start: Recruitment campaign restarted in September 2020.

Solutions/strategies in case of results below expectations: Monitor recruitment levels and adjust recruitment tactics and incentives, if necessary.

Customer satisfaction

Status: Yellow

Expected Target by Phase 2 Midpoint: Assess customer satisfaction with the program and technology.

Actual by Phase 2 Midpoint: Not started.

Solutions/strategies in case of results below expectations: Develop plan for ongoing messaging to enhance the customer experience.

Track 2 Planned Activities

Bill impacts

Status: Yellow

Expected Target by Phase 2 Midpoint: Calculate bill impacts from the first few months of the project and compare average annual customer bill to what it would have been on customers' previously selected rate.

Actual by Phase 2 Midpoint: Not started.

Solutions/strategies in case of results below expectations: Plan to adjust messaging to enhance participants' understanding of bill impacts, such as providing them with a mid-program assessment report.

Technology installation

Status: Yellow

Expected Target by Phase 2 Start: Complete technology installations at sufficient levels to meet enrollment targets.

Actual by Phase 2 Start: Not started. Phase 2 start and contracting has been delayed by the impacts of COVID-19.

Solutions/strategies in case of results below expectations: Adjust installation and customer support processes as required.

Technology performance

Status: Yellow

Expected Target by Phase 2 Midpoint: Monitor price communication and response capability of technology platforms.

Actual by Phase 2 Midpoint: Not started.

Solutions/strategies in case of results below expectations: Plan for continuous iteration and improvements to technology platforms in response to performance tracking.

Recruiting and enrollment

Status: Yellow

Expected Target by Phase 2 Start: Obtain enrollment levels sufficient to answer key research questions.

Actual by Phase 2 Start: Not started. Phase 2 start and contracting has been delayed by the impacts of COVID-19.

Solutions/strategies in case of results below expectations: Adjust recruitment approaches and onboarding support as necessary, and track improvements from new approaches.

Customer satisfaction

Status: Yellow

Expected Target by Phase 2 Midpoint: Assess customer satisfaction with the program and technology.

Actual by Phase 2 Midpoint: Not started.

Solutions/strategies in case of results below expectations: Develop plan for ongoing messaging to enhance the customer experience.

Appendix C: Procedures and Policies

CYBERSECURITY AND PERSONALLY-IDENTIFIABLE INFORMATION PROTECTION

Consistent with 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 utilities.

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. O&R filed an accounting procedure on September 1, 2016. Each accounting procedure establishes a standardized framework that will govern how the Companies categorize and allocate the costs of the REV demonstration projects, and will facilitate analyzing each project to determine the overall financial benefits of the program to customers.

COSTS, BENEFITS, AND OPERATIONAL SAVINGS

Budget information for all of Con Edison and O&R'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 the Companies 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.

⁵ 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.