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REV Demonstration Project:  
Smart Home Rate

2018 4Q Quarterly Progress Report

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**Dated: January 31, 2019**

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## **1.0 EXECUTIVE SUMMARY**

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Consolidated Edison Company of New York, Inc. (“Con Edison”) and Orange and Rockland Utilities, Inc. (“O&R”), (together the “Companies”), submit this quarterly report 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.

### **1.1 PROGRAM ACHIEVEMENTS**

On February 1, 2017, the Companies submitted the Project for approval by Department of Public Service Staff (“DPS Staff”); on June 6, 2017, DPS Staff approved the Project. Thereafter, 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. In Q4 2018, the Companies focused on contract execution and modified the project timeline.

### **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. O&R filed an accounting procedure on September 1, 2016. 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 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.

## **1.5 SMART HOME RATE**

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 will 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 Tendril and Sunverge. In Track 1, Tendril'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.

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## 2.0 SMART HOME RATE – QUARTERLY PROGRESS

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### 2.1 DEMONSTRATION HIGHLIGHTS

#### 2.1.1 Q4 2018 Report - Major Task Completion

- Finalized Track 1 transaction agreements
- Adjusted project timelines

#### 2.1.2 Activities Overview

Phase 0, Demonstration Planning: The Project team finalized transaction agreements for Track 1. Transaction agreements for Track 2 progressed with a goal to finalize them by Q2 2019. In addition, the Project team adjusted project timelines to account for the broader AMI IT system schedule.

Phase 1, Demonstration Project Development and Testing: Due to the project timeline update, this phase was paused as the Project team focused on finalizing transaction agreements.

Phase 2, Market Launch: This phase has not yet started.

Phase 3, Demonstration Project Evaluation: This phase has not yet started.

#### 2.1.3 Key Metrics

Con Edison will begin reporting measurements of key outcomes after the start of Phase 2.

#### 2.1.4 Next Quarter Forecast

In Q1 2019, the Project team will continue work on the Track 2 transaction agreements and resume Phase 1 activities for Track 1.

#### 2.1.5 Checkpoints/Milestone Progress

##### Track 1

Checkpoint/Milestone	Timing*	Status
Bill impacts	T1 Phase 2 Midpoint	

Checkpoint/Milestone	Timing*	Status
Technology installation	T1 Phase 2 Start	  
Technology performance	T1 Phase 2 Midpoint	  
Recruiting and enrollment	T1 Phase 2 Start	  
Customer satisfaction	T1 Phase 2 Midpoint	  

\*Details on the phases can be found in section 2.3.1.

**Track 2**

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

\* Details on the phases can be found in section 2.3.1.

**Legend**

 <i>On Schedule</i>	 <i>Delayed w/out Major Impact</i>	 <i>Delayed or Stopped – Project Goals Impacted</i>
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**2.1.6 Planned Activities**

**2.1.6.1 Bill impacts**

**Status:** Green

**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.

#### **2.1.6.2 Technology installation**

**Status:** Green

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

**Actual by Phase 2 Start:** Not started.

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

#### **2.1.6.3 Technology performance**

**Status:** Green

**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.

#### **2.1.6.4 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:** Not started.

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

#### **2.1.6.5 Customer satisfaction**

**Status:** Green

**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.

## **2.2 CHANGES TO THE PROJECT DESIGN**

The Project team developed a new project timeline to align with the broader AMI IT system schedule. As a result, Phase 2 (Market Launch) will be delayed from the originally planned start date of Q4 2018 and Phase 1 (Demonstration Project Development & Testing) will be extended accordingly.

For Track 2, recruitment will begin in Q2 2019, enrollment into the rates will begin in Q4 2019, and the pilot will be active until Q4 2021. In contrast, for Track 1, recruitment will begin in Q3 2019 and enrollment in the rates will begin just prior to the summer of 2020 to align more closely with the cooling season, as the price-responsive technology component of Track 1 is activated with central A/C use. The active pilot period for Track 1 will run from Q2 2020 to Q2 2022.

The overall project design has not changed due to the timeline changes.

## **2.3 WORK PLAN & BUDGET REVIEW**

### **2.3.1 Phase Review**

#### **2.3.1.1 Phase Progress**

The Project team made progress on Phase 0 (Demonstration Planning). The updated project timeline has resulted in Phase 1 (Demonstration Project Development & Testing) occurring over a longer period and delayed the start of Phase 2 (Market Launch).

### **2.3.2 Work Plan**

## Track 1

Act no	Activity Description	Lead	2017				2018				2019				2020				2021				2022	
			Q1	Q2	Q3	Q4	Q1	Q2																
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																						
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/ Tendril																						
3.1	Software	Tendril																						
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

Act no	Activity Description	Lead	2017				2018				2019				2020				2021				2022	
			Q1	Q2	Q3	Q4	Q1	Q2																
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																						
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/ Sunverge																						
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																						
4	Phase 3: Evaluation	ICF/Nexant																						
4.1	Data Monitoring & Reporting	ICF/Nexant																						

### 2.3.3 Updated Budget

Budget information is being filed confidentially with the Commission.

## 2.4 CONCLUSION

### 2.4.1 Lessons Learned

There are no significant lessons learned at this early phase of the Project.

### 2.4.2 Recommendations

The Company recommends maintaining focus on transaction agreement execution for Track 2 and continuing to advance project development and testing in preparation for market launch.