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August 23, 2018

Honorable Kathleen H. Burgess Secretary New York State Public Service Commission Three Empire State Plaza, 19<sup>th</sup> Floor Albany, New York 12223-1350

# RE: Smart Home Rate Demonstration Project (14-M-0101)

Dear Secretary Burgess:

Orange and Rockland Utilities, Inc. ("O&R" or the "Company") is filing with the New York Public Service Commission (the "Commission") amendments to its Schedule for Electric Service, P.S.C. No. 2 – Electricity (the "Tariff"). The amended Tariff leaves, identified in Appendix A, have a proposed effective date of January 1, 2019. The Company is filing these amendments to establish rates for the Company's proposed Smart Home Rate REV Demonstration Project ("SHR Demo").

# Smart Home Rate Demonstration Project Background

The Company filed its initial proposal on the SHR Demo with the Commission on February 1, 2017<sup>1</sup> in accordance with Ordering Clause 7 of the Commission's *Order Adopting Ratemaking and Utility Revenue Model Policy Framework* ("February 1, 2017 Filing")<sup>2</sup>. The focus of the SHR Demo is to combine the enthusiasm of technology savvy "prosumers" for proactive energy management and technology with rate designs that reward customers for managing their usage in ways that support the needs of the energy system through automated response to price signals. The SHR Demo will test a variety of research questions (as detailed in the February 1, 2017 Filing) and learn from the resulting actions and reactions of these customers.

By letter dated June 6, 2017, Commission Staff advised the Companies that it found the SHR Demo to comply with "the objectives set forth in Ordering Clause 4 of the Commission's *Order Adopting Regulatory Policy Framework and Implementation Plan,* issued February 27, 2015, as well as the Smart Home Rate objectives defined in the *Order Adopting a Ratemaking* 

<sup>&</sup>lt;sup>1</sup> The proposal for the SHR Demo was made on behalf of the Company and Consolidated Edison Company of New York, Inc. ("Con Edison") (collectively, "the Companies"). Con Edison is also making a filing today with its proposed tariff amendments to establish SHR Demo rates.

<sup>&</sup>lt;sup>2</sup> Case 14-M-0101, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision ("REV Proceeding")

<sup>(</sup>issued http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B2F247C08-2258-4C39-A84C-CEBF1F4405B7%7D)

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and Utility Revenue Model Policy Framework issued May 19, 2016, in the above referenced proceeding."<sup>3</sup>

In addition to the proposed rates filed herein, the Company is filing the Smart Home Rate Implementation Plan under separate cover. The Smart Home Rate Implementation Plan also provides more detailed information related to the development of the Company's proposed rates.

## **Demonstration Design Overview**

As outlined in the February 1, 2017 Filing, the SHR Demo will include two opt-in participant tracks. Track 1 participants will receive price-responsive automation technology, which will be used to optimize their central-air-conditioning loads. Track 1 participants will also receive a price guarantee, as detailed in the Tariff, for the first 12-months of participation. Track 2 participants will receive price-responsive storage systems, which will be used to optimize their overall usage, taking into account the output of their rooftop photovoltaic systems. According to the research design, Track 1 participants will be randomly assigned to Rate I, Rate II, and a control group, while Track 2 participants will make up one group under Rate I. Both Rate I and Rate II will be sunset at the conclusion of the SHR Demo.

# **Rate Structure and Proposed Rates**

To effectuate the SHR Demo, the Company proposes to establish a new rider in the Tariff – Rider J. Rider J would be applicable to SHR Demo participants. Because the rates include a supply component, participants must be full service customers. Additionally, because the rates include a demand charge component, participants must have a smart meter. Participants in the SHR Demo will be billed under one of two new rates, designated Rate I and Rate II, both of which are designed to be revenue neutral on a class basis. Each rate has three primary components:

1. <u>Time-variant energy supply charges</u>

SHR Demo Rates I and II will both reflect the day-ahead hourly locational based marginal prices ("LBMP") set by the New York Independent System Operator ("NYISO"). This encompasses Zone G in the Company's service territory.

2. Demand delivery charges

Rates I and II include components designed to recover embedded costs for past transmission and distribution investments. In Rate I, this is done via daily demand charges, while Rate II recovers embedded costs via a monthly demand subscription.<sup>4</sup>

Both rates use customers' 15-minute interval data to calculate demand, which, for the purpose of this project, is defined as the energy (measured in kilowatt-hours) that is used by a customer over a 60-minute period. The daily demand charge in Rate I is

http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={31C3E084-3589-4C06-AC38-336793C85DB4}

<sup>&</sup>lt;sup>3</sup> REV Proceeding, Status of Staff's review of one of Con Edison's and O&R's REV Demo projects by letter dated June 6, 2017:

<sup>&</sup>lt;sup>4</sup> A portion of the subscription charge will also be used to recover generation capacity costs.

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based on the customer's peak demand recorded during each day's designated peak period (12 PM to 8 PM, all days).

Rate II allows customers to enter into a subscription for peak demand up to a specified number of kilowatts ("kW"). Customers can choose this subscribed demand for themselves or elect a default subscription level provided by the Company, which will be based on customer load characteristics over the prior 12-month period. Rate II customers will be subject to overage charges when their actual demand exceeds the subscription level during coincident-demand events (see below).

## 3. Critical Peak Event charges

The primary purpose of the event charges included in Rate I and the overage charges included in Rate II is to encourage reductions in customer demand during specified events, thus avoiding or reducing the need for investment in future generation, transmission and distribution capacity<sup>5</sup>.

Under Rate I or II, there will be up to a total of 40 hours of generation, transmission and distribution events per year, which will reflect periods of constraint at each level of the system. Customers will be notified of these events the day before they occur, and events will last between three and eight hours. Generation, transmission and distribution events may or may not occur on the same day and may be called independently to reflect the differences in system and distribution peaks.

The event charges included in Rate I are applied to a customer's peak demand during the event period. The overage charges included in Rate II are applied to the difference between the customer's peak demand during the event period and the customer's subscribed demand.

# **Export Credits**

Export credits relevant to Track 2 participants will be provided as follows<sup>6</sup>:

- Energy supply credits: Energy-supply credits will be applied to all net kilowatt-hours ("kWh") exported by the customer. These credits will be based on the day-ahead hourly NYISO LBMP prices.
- Generation capacity event credits: Credits will be applied for sustaining a minimum level of kW export during coincident generation events, as capacity costs may be avoided or reduced through a reduction in customer demands during these times. These credits will be based on the generation capacity event rates, as reflected in the Tariff.
- *Transmission and Distribution ("T&D") event credits:* Credits will be applied for sustaining a minimum level of kW export during coincident T&D events, as T&D costs may be

<sup>&</sup>lt;sup>5</sup> Event and overage charges will also be used to recover a portion of generation capacity costs.

<sup>&</sup>lt;sup>6</sup> The Company recognizes this methodology is a departure from existing DER compensation structures. All customers who will be opting in to this rate will be made aware of the change and are able to return to their previous compensation structure upon de-enrollment or completion of the program.

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avoided or reduced through a reduction in customer demands during these times. These credits will be based on the transmission and distribution event rates.

#### **Conclusion and Notice**

The SHR Demo rates offered here are intended to demonstrate a new framework for sophisticated pricing aimed at residential "prosumers." Both Con Edison and O&R believe that the SHR Demo will provide important insights to the longer-term effort of developing new rate designs that enable efficient customer decision-making and promote system efficiency.

The Company will provide public notice of the tariff changes in this filing by means of newspaper publication once a week for four consecutive weeks prior to the effective date of the proposed tariff changes. Included is a proposed form of Notice of Proposed Rule Making for publication in the State Register pursuant to the State Administrative Procedures Act.

Very truly yours,

/s/

William A. Atzl, Jr. Director – Rate Engineering

## Orange and Rockland Utilities, Inc.

#### PSC No. 3 - Electricity: List of Revised Tariff Leaves

		Superseding
Leaf No.	Revision No.	Revision No.
4	10	9
166	3	2
167	3	2
168	3	2
169	3	2
169.1	0	
169.2	0	
251	7	6