

STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION



Reforming the Energy Vision  
Demonstration Project Assessment  
Report

RG&E:  
Energy Marketplace

March 15, 2016

## INTRODUCTION

In an order issued February 26, 2015, the New York State Public Service Commission (the Commission) directed the six large investor owned electric utilities to develop and file a set of initial demonstration projects that were consistent with the guidelines adopted by the order, on or before July 1, 2015.<sup>1</sup> These projects are intended to demonstrate the potential of various aspects of the Reforming the Energy Vision (REV), the regulatory initiative launched by the Commission as part of Governor Cuomo's comprehensive energy strategy for New York.

As the Commission noted, the projects are intended to demonstrate new business models, i.e. new revenue stream opportunities for third parties and the electric utilities. In that regard, the projects will inform decisions related to developing Distributed System Platform (DSP) functionalities, measure customer response to programs and prices associated with REV markets, and determine the most effective implementation of Distributed Energy Resources (DER). Further, as demonstration projects, they are intended to test new technology and approaches to assess value, explore variables, and innovate before committing to full scale implementation. Therefore, demonstration projects should also be designed to deliver observable results and actionable information within a reasonable timeframe. During the demonstrations, the projects will be assessed regularly. Lessons learned should be incorporated into the projects as appropriate as expeditiously as reasonable.

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<sup>1</sup> Case 14-M-0101, Reforming the Energy Vision, Order Adopting Regulatory Policy Framework and Implementation Plan (Issued February 26, 2015) (Track One Order).

## DISCUSSION

### RG&E's Proposal

In compliance with the Commission Track One Order, Iberdrola USA<sup>2</sup> filed on behalf of its subsidiary Rochester Gas and Electric Corporation (RG&E or the Company), a proposed Energy Marketplace demonstration project on July 1, 2015, and an updated filing on January 26, 2016 reflecting feedback from Department of Public Service Staff (Staff). RG&E's Energy Marketplace will be an on-line marketplace and targeted messaging platform created with Simple Energy, a firm specializing in digital customer engagement. The Energy Marketplace will provide RG&E's customers with an online destination to browse, purchase, and provide feedback on a variety of DER products and eventually DER service providers. The Energy Marketplace will engage customers through targeted messaging and customer segmentation, with the ability to geo-target<sup>3</sup> incentives in response to system needs. RG&E believes that its brand will enable them to assure customers to trust and engage with the Energy Marketplace.

RG&E's Energy Marketplace will initially be available to customers in its service territory, with the possibility of expanding the project to its parent company's New York State Electric and Gas (NYSEG) subsidiary. The Company will first target customers who have created an online account with RG&E, and customers with above average energy usage. Later customer

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<sup>2</sup> Iberdrola USA has since merged with UIL Holdings Corporation to form, AVANGRID, Inc.

<sup>3</sup> Geo-targeting is a term used to describe the method of determining the geographic location of a website visitor and delivering different content to that visitor based on his or her location, such as country, region/state, city, zip code, organization, IP address, ISP or other criteria.

engagement will include customers who previously participated in energy efficiency programs. RG&E, along with Simple Energy, will leverage their extensive communication channels with consumers, such as email, bill inserts, call-center promotions, and pay-per-click marketing, to inform them about the Energy Marketplace.

The Energy Marketplace will be financially supported through revenue generated from online product sales and referral and conversion fees from third party services providers. RG&E and Simple Energy will share the revenues generated by the Energy Marketplace, and RG&E expects that the demonstration project will break even by the end of the first full year of operation.

#### Staff Review

Staff reviewed RG&E's Energy Marketplace demonstration project filings for consistency with the Commission's REV policy objectives and the Commission's demonstration project principles. The REV policy objectives are: enhanced customer knowledge and tools that will support effective management of the total energy bill; market animation and leverage of customer contributions; system wide efficiency; fuel and resource diversity; system reliability and resiliency; and reduction of carbon emissions. As documented in the February 2, 2016 letter from Staff to RG&E, RG&E's Energy Marketplace demonstration project complies with the requirements of the Commission's Track One Order.

The Energy Marketplace is designed to increase customers' knowledge of various DER products and services available to them, and engage these customers to purchase DER through targeted messaging. Staff believes that RG&E's Energy Marketplace will significantly aid RG&E in evolving from a

monopoly provider of distribution services to a market facilitator by demonstrating the effectiveness of an online DER marketplace that brings together a variety of third party providers and residential customers in a targeted fashion.

Staff also evaluated the extent to which the demonstration project maintains a reasonable relationship between costs and estimated benefits and believes the Energy Marketplace is a demonstration project with the potential to add significant value to all customers and the Commission's REV proceeding. For the Company, benefits include not only the potential revenues generated by Energy Marketplace, but also the learning aspect of the demonstration. Staff's approach included examination of both qualitative and quantitative benefits, including how, to the extent possible, the project would leverage third party capital. While RG&E's Energy Marketplace demonstration project does not utilize third party capital in this way, it does have third party participation through Simple Energy, as well as a number of DER providers. As Staff compared each of the electronic marketplace demonstration projects submitted by the utilities, Staff found that the assumptions related to both costs and revenues varied, and therefore concluded each should be examined on its own merits. Staff found RG&E's assumptions to be reasonable and the cost of the project is appropriate for the quantitative and qualitative benefits the project is expected to provide.

The Energy Marketplace will add value for consumers by maintaining a set of trusted DER products. Simple Energy has engaged multiple manufacturing and fulfillment partners to provide a comprehensive product offering to customers, which RG&E will be able to customize as the project evolves to meet market demands. The initial set of products will include LED light bulbs, refrigerators, thermostats, washing machines, and

surge protectors. The Energy Marketplace will also offer the ability for product reviews, allowing customers to communicate their experiences with various vendors to each other, further animating the market.

Staff also found that the Energy Marketplace will add value for DER vendors through the reduction of customer acquisition costs. The Energy Marketplace will offer a centralized place where DER vendors can offer their products and services to engaged and motivated consumers. Targeted messaging enabled through Simple Energy's data analytics will further help to match consumers with DER that will be beneficial to them, driving DER adoption and decreasing customer acquisition costs.

In the Track One Order, the Commission states that "...utilities acting in concert will constitute a statewide platform that will provide uniform market access to customers and DER providers." Staff finds that marketplace REV demonstration projects such as the RG&E Energy Marketplace will provide crucial insight into the optimal design and pricing of these marketplaces. The lessons learned from this demonstration project will be utilized in the consideration of the statewide platform.

RG&E's Energy Marketplace will be the fourth marketplace related REV demonstration project approved for implementation, and the third to utilize Simple Energy's marketplace platform. The other three marketplace projects are Central Hudson Gas and Electric Corporation's Central-E, Consolidated Edison of New York, Inc.'s Building Efficiency Marketplace, and Orange and Rockland Utilities Inc.'s DER Residential Offering. Central Hudson Gas and Electric's Central-E and Orange and Rockland's Residential Marketplace Platform also utilize Simple Energy's technology. The four projects differ in terms of customer class, location, and the

level of data analysis and social engagement. Con Edison's Building Efficiency Marketplace is targeted towards larger commercial buildings, while Central Hudson Gas and Electric's Central-E, Orange and Rockland's DER Residential Offering, and RG&E's Energy Marketplace are targeted toward residential consumers. Central-E includes a social interaction component that O&R's and RG&E's does not. This will enable the Commission to see the impact of these social interaction features upon the development of these new marketplaces. RG&E's Energy Marketplace will also help test alternative marketing strategies and messaging, and the efficacy of geo-targeting incentives.

REV OBJECTIVES AND DEMONSTRATION PROJECT ELEMENTS ADDRESSED

Market animation and leverage of customer contributions

Like the other marketplace REV Demonstration Projects, the RG&E Energy Marketplace, by facilitating transactions between DER providers and customers, will help animate the market for DER. This will also increase the adoption of DER without direct utility investment. The benefit of this leverage of customer contributions should grow as the marketplace develops and larger-scale DER is added to the Energy Marketplace.

While Staff finds that RG&E's Energy Marketplace effectively leverages customer contributions to facilitate DER adoption, Staff has concerns regarding the limited number of product and service offerings. The Company proposes to launch the Energy Marketplace with an initial set of products and to later expand the offerings as well as expand the marketing channels. As a consequence, a third party provider must already be in Simple Energy's network to be allowed onto the marketplace, with the Energy Marketplace initially only offering a small subset of this network. In order for the development of

a reasonably fair and animated market, there must be no significant barriers of entry for reputable parties, even when this is at the expense of existing third parties. Therefore, the implementation plan shall include a standardized procedure for fair evaluation and inclusion of third party providers of DER and other services that wish to participate.

#### New utility business models

In the Track One Order, the Commission notes that utility earnings should depend on creating value for customers and achieving policy objectives, and thus "...[can] find earning opportunities in enhanced performance and in transactional revenues."<sup>4</sup> Consequently, utilities have been directed to find alternative revenue sources that are consistent with the REV vision and policy objectives.

The RG&E Energy Marketplace embodies a new business model for RG&E, representing an opportunity to earn revenues by creating a marketplace that is valuable to its customers and third party DER providers. Instead of being a uni-directional network delivering electricity to end-users, RG&E is developing and testing its ability to be a transaction platform provider. This platform is designed to provide information to consumers through targeted messaging, while facilitating the exchange of information between customers through product reviews, allowing consumers to learn about the various DER providers in the market. RG&E will receive a share of the revenue on all sales, referrals, and advertising fees generated from the Energy Marketplace, with the rest being shared with Simple Energy. These revenue streams represent new business opportunities for the utility.

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<sup>4</sup> Track One Order at 12.



### Identification of economic value

The Commission expects that each REV Demonstration Project will create value for a number of stakeholders, including the utility, the utility's third party partner(s), and consumers/ratepayers. Not only is it important for demonstration projects to create this value, it is also important that the beneficiaries of this value are also identified.

As discussed above, this project creates value through the facilitation of transactions between consumers and DER providers. RG&E and Simple Energy provide access to customers who are particularly well-suited and interested in DER, while surfacing appropriate DER products and services to consumers. RG&E and Simple Energy will each earn a portion of the revenue on each product sold, and ratepayers will benefit from any reductions in traditional investments allowed by increased DER penetration and energy efficiency in RG&E's New York service territory. Consumers will benefit from the increased ease at which they can find information regarding the various DER products available to them, as well as the energy savings from DER.

### Scalability

The RG&E Energy Marketplace has the potential to grow past the initial demonstration project filing in both scale and scope. RG&E has stated that if the Marketplace is successful, it will expand the project to include its NYSEG affiliate. As described above, RG&E and Simple Energy also intend to expand the number of DER providers and the number of product categories offered on the Energy Marketplace, including services such as storage, generation, and electric vehicle infrastructure. RG&E's filing also indicates that the Energy Marketplace could

be used as a distribution channel for products and services that support the Company's non-wires alternative initiatives and distribution level demand response programs.

### Timeframe

Staff has determined that RG&E's Energy Marketplace will be implemented in a way that will provide valuable information with respect to online DER marketplaces within a reasonable timeframe. RG&E proposes rolling out the Energy Marketplace fairly quickly, with initial rollout within three months after a finalized agreement is signed with Simple Energy. The RG&E Energy Marketplace will be implemented in three phases, phases 0, 1 and 2. Phase 0, which is expected to last two months, includes planning workshops, iterative site build out and configuration, marketplace data integration, marketing content creation and user acceptance testing. Phase 1 will then begin with the initial set of products and incentivized marketing campaigns. Phase 2, which will begin approximately two months after phase 1 begins, will add segmented marketing to different customers by demographics, usage patterns, and will include geo-targeting customers in system constrained areas. The total expected time for Phases 0, 1 and 2 is six months.

After phase 2, RG&E plans to perform a complete evaluation with specific recommendations that identify enhancements to the Energy Marketplace, including lessons learned as well as recommendations based on the market research and campaign analysis conducted during the demonstration project. Once the evaluation is complete, RG&E envisions developing a strategy for future expansion of the marketplace. The implementation plan shall include a detailed schedule of the proposed phases through completion of the evaluation phase.

### Cost Effectiveness

It is important that demonstration projects provide value to the REV proceeding and maintain a reasonable relationship between the costs and the qualitative and quantitative benefits of the demonstration. The Company has determined that, based on forecasted costs and revenue streams, the Energy Marketplace will be cost effective and financially self-sustaining after a reasonable startup period. Staff finds that the assumptions made by RG&E and Simple Energy in developing these forecasts were reasonable.

### System Benefits

The RG&E Energy Marketplace has the potential to provide system benefits in a number of ways. At the most basic level, the Marketplace can help promote distribution-level Demand Response through the sale of "smart" products such as wifi-enabled thermostats. The Marketplace also has the ability to segment consumers by segments relevant to operation of the utility's system including energy usage and location. RG&E's filing indicates that the utility intends to use the Energy Marketplace to help alleviate system constraints through the geo-targeting of marketing messages at the circuit level to consumers in constrained areas. These messages may include incentives to purchase more efficient appliances, or promote other energy efficiency programs. In this way, the RG&E Energy Marketplace will provide system benefits that may help avoid future traditional investment.

### AREAS FOR FURTHER DEVELOPMENT

#### Third Party Participation

Demonstration projects should strive to balance risk between the utility, ratepayers, and third party partners.

Mobilization of third party partner capital is one way to reduce ratepayer risk. RG&E notes that the majority of the development costs were borne by Simple Energy, and they will also be taking on some marketing costs and responsibility. Simple Energy's funding of the majority of the development costs could be viewed as the use of third party capital since, as is usually the case, such software development and platform engineering expenses are typically capitalized.

### Price and Rate Design

One important component of REV that can benefit from comprehensive real-world testing are alternative rate designs that better align customers' incentive to be reactive to system conditions. While the Energy Marketplace as proposed does not include a rate design component, RG&E does note there is the potential for alternative rate design offerings to evolve as the project matures, through non-wires alternatives and/or through its Energy Smart Community project.<sup>5</sup> The quarterly reports and meetings with Staff shall include follow-up on the progress made to consider alternate rate design offerings.

### Milestones and Check Points

Closely following project progress to evaluate effectiveness and identify potential improvements is crucial to the success of REV demonstration projects. RG&E has defined a

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<sup>5</sup> The Energy Smart Community will serve as a test-bed for a variety of REV initiatives, including the Integrated Plan concept, testing of alternative customer engagement and service delivery models, and the ability of the project to enhance existing community energy and sustainability plans. The project will also support other program elements that prepare the Company to serve as Distributed System Platform.

number of metrics that it will report quarterly including: status on project milestones, project spend actual to budget, and success metrics (specifically, take rates and awareness metrics). The project proposal does not include projections for these metrics, and does not identify thresholds that indicate when changes to the project may be necessary. However, Staff in collaboration with the major electric distribution utilities have developed a standard set of marketplace project metrics, the results of such shall be reflected in the implementation plans of all marketplace demonstration projects.

These metrics will be used to test the effectiveness of RG&E and Simple Energy's communications with customers and the viability of this project to provide a self-sustaining revenue stream. Given that this and the other marketplace demonstration projects are breaking new ground for utilities in New York, it is expected some metrics will indicate changes that will need to be made during the phased implementation to ensure the success of the projects.

#### Customer Access to Data

Staff expects that RG&E Energy Marketplace as proposed will add significant value to DER providers and RG&E's customers. Staff believes that the demonstration project would create more value if it allowed them to download their own usage information in a user friendly format directly from the utility's secure website. This would allow customers to share the data with additional third parties not on the Energy Marketplace if they desired, thereby expanding customer options and the overall utility of the information. Based on discussions with the Company, Green Button functionality will not be included in the initial version of Energy Marketplace. RG&E states that since Green Button technology is more

applicable and meaningful with more frequent and granular usage information, it may explore the process as part of its Energy Smart Community demonstration project with the deployment of advanced meter infrastructure (AMI). RG&E does offer its customers online access to their usage data from scheduled meter reads through creation of an online account. Staff finds that the Company should include Green Button functionality in its deployment of AMI.

#### Cross Company Collaboration

At the request of Staff, Orange and Rockland Utilities, Inc., Central Hudson Gas and Electric Corporation, Consolidated Edison of New York, Inc., New York State Electric and Gas Corporation, and Rochester Gas and Electric Corporation have agreed to coordinate the review and assessment of their marketplace demonstration projects. They have developed a formalized quarterly reporting template, standardization of key metrics, and sharing of lessons learned. The unified metrics to be tracked include: marketing channels and messaging type, product offerings and revenue per sale, place of purchase, and program pricing. The marketplace coordination efforts also include quarterly in-person meetings among the group. Staff finds that this cross company collaboration will allow REV to move effectively to a statewide marketplace and provide the opportunity for full statewide collaboration and access to the lessons learned.

#### POTENTIAL LEGAL BARRIERS AND/OR AREAS OF COMMISSION ACTION Protection of Customer Information

The Commission's existing customer data policy is that electric utilities and third parties must protect customer privacy when proposing projects that involve the collection and

use of granular customer data. Staff believes that RG&E's Energy Marketplace project appropriately balances existing policy and the exploration of a new business model.

With respect to the sharing of customer data with core third parties providing analytics functions for RG&E, the proposed demonstration project must comply with the December 3, 2010 Order, where the Commission considered earlier Opower projects with Central Hudson Gas and Electric and Niagara Mohawk and stated:

Opower is prohibited from using the information for any purpose other than to perform the utility function of administering this program and may not contact customers in any fashion beyond what it was specifically contracted to do; provide usage analysis reports.<sup>6</sup>

RG&E will not be required to obtain affirmative customer consent before sharing customer information with a third party partner (Simple Energy) who is performing the analytics function (i.e., inducing customers to manage their energy usage by providing them with specific information about their usage and how it compares to that of other similarly situated customers) and where sharing such information is necessary to perform that function. The agreements between RG&E and Simple Energy will detail the protections afforded to customer information and the restrictions placed on those partners regarding the use of that information. RG&E will be required to file with the Secretary any contract between RG&E and a third party partner in order for

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<sup>6</sup> Case 07-M-0548, Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, Order on Rehearing Granting Petition for Rehearing, p. 19 (Issued December 3, 2010).

Staff to ensure that sufficient consumer protections are offered in conformance with the December 3, 2010 Order.

Third party providers selling products and services on the Energy Marketplace will not gain open access to customer data. Instead, only the third party partner, Simple Energy, addressed above will have access to such data as they will be the entity providing the analytics service to RG&E. Customers willing to share their data with third party providers, will first need to affirmatively consent to the release of their data to that provider.

#### CONCLUSION

Staff has determined that the proposed demonstration project complies with the objectives set forth in Ordering Clause 4 of the Track One Order. Staff will continue working with RG&E to develop a detailed implementation plan, which will include a detailed schedule, budget, projected milestones and checkpoints, and reporting requirements. Staff will also continue to discuss the areas of further development with RG&E and identify any issues that may require Commission action. The implementation plan will incorporate the results of these discussions, and will be updated quarterly, incorporating lessons learned and new developments within the scope of the project. The implementation plan will be filed with the Secretary of the Commission within thirty days.