

**APPENDIX A – NEW YORK DEMONSTRATION PROJECTS**

	Rate Design					Customer Engagement Platforms and Marketplaces			
	Demand Reduction in Clifton Park	Smart Home Rate Project*	Smart Home Rate Project*	Smart Home Rate Project*	Smart Home Rate Project*	Connected Homes	Residential Customer Marketplace	CenHub Marketplace	Energy Marketplace
<b>Utility</b>	National Grid	Con Edison and Orange & Rockland	Central Hudson	AVANGRID	National Grid	Con Edison	Orange and Rockland	Central Hudson	AVANGRID
<b>Proposal Filed Date</b>	<u>7/1/2016</u>	<u>2/1/2017</u>	<u>2/1/2017</u>	<u>2/1/2017</u>	<u>2/1/2017</u>	<u>7/1/2015</u>	<u>7/1/2015</u>	<u>7/1/2015</u>	<u>1/26/2016</u>
<b>Staff Approval Date</b>	<u>12/28/2016</u>	TBD	TBD	TBD	TBD	<u>1/8/2016</u>	<u>11/10/2015</u>	<u>11/10/2015</u>	<u>3/15/2016</u>
<b>Implementation Plan Filing Date</b>	<u>1/17/2017</u>	TBD	TBD	TBD	TBD	<u>2/1/2016</u>	<u>11/20/2015</u>	<u>12/10/2015</u>	<u>4/15/2016</u>
<b>Third-Party Partner(s)</b>	Multiple partnerships with DER, technology, and platform providers	TBD	Comverge and Simple Energy	Cornell University and Energy Smart Community Partners (SolarCity/Tesla, BMW, Distributed Sun)	Provider of voice recognition technology (TBD) and Energy Supply Company (TBD)	OPower, Bridgevine, Nest, and SunPower	Simple Energy	Cognizant and Wipro, Simple Energy, OpenText, and Itron	Simple Energy
<b>Objectives</b>	Provide residential customers in Clifton Park with price signals, tools, and information to reduce electric demand during peak times	Partner with a provider to develop price-responsive home-automation technology to test prosumer responsiveness to rate design options and different technologies (solar + storage) in order to inform future smart home rate designs and customer communications	Offer a new residential TOU rate to incentivize off-peak consumption through the use of Wi-Fi-enabled thermostats; test the impact of tips and coaching on consumption	Further the collaboration with Cornell University and the Energy Smart Community to offer a time-variable rate that includes both supply and delivery components	Leverage and expand upon the Clifton Park project to offer voice-recognition technology to control household appliances to reduce demand and energy use when prices are high	Engage customers through multiple channels to expand the DER marketplace, improve customer awareness and decision making regarding their energy usage, and inform customer acquisition strategies and future rate designs	Establish and continue to expand a network of third-party product and service partners accessible through a Customer Engagement and Marketplace Platform (CEMP) in order to increase customer awareness and education of energy consumption issues, increase penetration of DER and participation in DER programs, develop new revenue streams for O&R and its partners, and encourage third-party product and service provider participation	Drive greater customer engagement through an improved customer portal, customized messaging, an online marketplace with cross-product promotions, and gamification of interactions (points, badges, and rewards)	Engage customers through multiple channels to drive customer and DER engagement to visit the marketplace for product offerings and to purchase energy-related products and services
<b>Location/Target Population</b>	Clifton Park, NY	Residential “prosumer” customers with AMI meters, central A/C, and existing PV	Newburgh, NY for residential customers with central A/C (Note: overlaps with Coldenham NWA)	Tompkins County in the greater Ithaca region	Clifton Park demonstration project residential customers that enroll in VTOU rates	Residential customers in Brooklyn and Westchester	Four target groups split by usage, and TOU metering with electric water heaters	Digitally engaged customers, defined as current MyAccount users	Targeted locations for NWA, DR, and EE within the service territory
<b>Timing</b>	3/2016 – 9/2019	4/2017 – 2/2020	2/2017 – 2/2021	2/2017 – 6/2020	2/2017 – 9/2019	7/2015 – 6/2018	11/2015 – 5/2018	7/2015 – 12/2018	3/2016 – 9/2017
<b>Progress to Date/Results and Findings</b>	No progress reported, implementation plan filed in January 2017	No progress reported, proposal submitted in February 2017	No progress reported, proposal submitted in February 2017	No progress reported, proposal submitted in February 2017	No progress reported, proposal submitted in February 2017	Platform launched in mid-2016 to 275,000 customers who have begun receiving targeted solar offerings and usage alerts. Furthermore, the first direct small products purchases were enabled and recorded	Marketplace (My ORU Store) launched to O&R NY customers, featuring an increasing variety of products (Wi-Fi thermostats, LED lighting, air conditioning models). Products are promoted through limited time offers to increase customer traffic and engagement	CenHub launched to residential and commercial customers, including modernizing the web experience (mobile and secure registration). The project team has begun gathering requirements for later phases to enroll customers in TOU programs and integrate with other program offerings	Launched the RG&E Your Energy Savings (YES) Store and developed a marketing campaign to drive engagement
<b>Latest Update</b>	<u>1Q 2017</u>	N/A	N/A	N/A	N/A	<u>1Q 2017</u>	<u>1Q 2017</u>	<u>1Q 2017</u>	<u>1Q 2017</u>

	DG Interconnection and Hosting Capacity		Energy Storage Business Models			Various Community Energy Models			Other	
	Flexible Interconnect Capacity Solution	DG Interconnection	Clean Virtual Power Plant	Commercial Battery Storage	Storage on Demand	Community Energy Coordination	Resiliency Demonstration in Potsdam	Fruit Belt Neighborhood Solar	Building Efficiency Marketplace	BNMC DSP Engagement Tool
Utility	AVANGRID	National Grid	Con Edison	Con Edison	Con Edison	AVANGRID	National Grid	National Grid	Con Edison	National Grid
Proposal Filed Date	<u>7/2/2015</u>	<u>2/14/2017</u>	<u>7/1/2015</u>	<u>1/20/2017</u>	<u>2/27/2017</u>	<u>7/2/2015</u>	<u>7/1/2015</u>	<u>7/1/2015</u>	<u>7/1/2015</u>	<u>7/1/2015</u>
Staff Approval Date	<u>12/15/2015</u>	<u>4/24/2017</u>	<u>11/20/2015</u>	<u>5/18/2017</u>	<u>5/18/2017</u>	<u>1/5/2016</u>	<u>2/10/2016</u>	<u>12/2/2015</u>	<u>11/10/2015</u>	<u>7/15/2016</u>
Implementation Plan Filing Date	<u>1/11/2016</u>	TBD	<u>12/11/2015</u>	TBD	TBD	<u>2/4/2016</u>	<u>3/11/2016</u>	<u>1/4/2016</u>	<u>11/20/2015</u>	<u>8/15/2016</u>
Third-Party Partner(s)	Smarter Grid Solutions	None	SunPower	GI Energy	NRG Energy, Inc.	Taitem Engineering	Clarkson University, Undefined technology partners	Solar Liberty	Retroficiency; Honest Buildings	Opus One Solutions
Objectives	Test a new model for interconnecting large-scale controllable DERs to the grid by potentially curtailing the delivery of electricity generated by a DER to the distribution network	Test an alternative cost-allocation model for DG interconnection by making upfront utility investments to make the system "DG-ready" and allocate costs as DG units interconnect	Examine how stored DER can be aggregated and leveraged to enable (1) customer resiliency capability during periods of power outages, (2) maximization of DERs as assets for T&D systems, and (3) reduction in costly future T&D capital investments	Demonstrate a new FTM business model for energy storage, deliver the most cost-effective, beneficial, and scalable energy storage services	Utilize transportable batteries to meet local distribution needs and participate in the wholesale NYISO market	Collaborate with stakeholders to identify synergies between community-based energy initiatives, jointly identify DER solutions, market solutions directly to customers, and present aggregated customer demand to qualified suppliers to deliver those resources	Develop a community resilience microgrid, testing a hybrid utility ownership model, centralized DER procurement, microgrid control operations, and billing services	Offer bill credits to LMI customers, while delivering grid efficiency benefits by coupling concentrated PV deployment with reactive power support	Leverage interval meter data analytics to engage commercial customers with high EE savings and DR potential through web-based portals. The portals will include details about how their buildings consume energy today, potential energy savings and demand reduction opportunities, a marketplace between customers and EE market partners, and a virtual automated savings M&V process	Develop and test services based on a local, small-scale, but centralized DSP that will communicate with network-connected DERs
Location/Target Population	Eligible DG applications	Near the towns of Lenox and Rush	Targeted single-family residential customers	Priority networks with system needs	NRG's Astoria generating facility and areas of need on the distribution system	Tompkins County	Village of Potsdam	Fruit Belt (a low-mid income neighborhood in Buffalo, NY)	Between 400-2,100 commercial customers	Buffalo Niagara Medical Campus
Timing	10/2015 – 12/2017	18 months post construction	7/2015 – 12/2018	1/2017 – 6/2019	2/2017 – 3/2021	10/2015 – 12/2017	12/2015 – 6/2017	11/2015 – 7/2018	10/2015 – 3/2019	8/2016 – 10/2018
Progress to Date/Results and Findings	Two sites identified with agreements offered to the DER provider. Contract with a 2 MW solar PV farm signed and contract with a 450 kW farm waste generator pending. Building and configuration of the Active Network Management technology is complete for the PV project	No progress reported, proposal submitted in February 2017	Temporarily suspended citing permitting difficulties with FDNY	Proposal recently filed and not yet approved; no progress to date	Proposal recently filed and not yet approved; no progress to date	40+ community stakeholder meetings conducted to determine how to create value; a web platform for connecting customers with service providers has been scoped, and eligible service providers to be identified through an RFP that was released in October 2016	Conceptual draft design of the microgrid finalized with the necessary cost breakdowns to perform a BCA; developed six possible business models for microgrid ownership	Partner contracts finalized, marketing outreach conducted, PV hosts selected, bill credit process determined, and the first two of 100 PV systems interconnected	Launched the customer portal (Energy Insights) and began initial customer interactions through mailers, targeted emails, and high-touch outreach	Partner contracts signed, and the financial model to test the LMP+D value of DER to the DSP was developed. An early emergent issue is whether the DER are compliant to participate in NYISO markets (and thus deliver the value predicted by the model)
Latest Update	<u>1Q 2017</u>	N/A	Temporarily Suspended	N/A	N/A	<u>1Q 2017</u>	<u>1Q 2017</u>	<u>1Q 2017</u>	<u>1Q 2017</u>	<u>1Q 2017</u>