Karla M. Corpus
Senior Counsel
NY Regulatory

July 31, 2018

VIA ELECTRONIC DELIVERY

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

RE: Case 14-M-0101 – Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision (REV)

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID: CLIFTON PARK DEMAND REDUCTION REV DEMONSTRATION PROJECT-Q2 2018 REPORT

Dear Secretary Burgess:

Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid") hereby submits for filing its quarterly update to the Clifton Park Demand Reduction REV Demonstration Project Implementation Plan covering the period of April 1, 2018 to June 30, 2018 ("Q2 2018 Report") as required by the REV Demonstration Project Assessment Report ("Assessment Report") filed by the New York State Department of Public Service Staff ("Staff") with the Commission on December 1, 2016 in Case 14-M-0101.

Please direct any questions regarding this filing to:

Arunkumar Vedhathiri
Director, New Energy Solutions
National Grid
1125 Broadway
Albany, NY 12204
Tel.: 518-433-5013
Mobile: 518-423-5738
Email: arunkumar.vedhathiri@nationalgrid.com

National Grid looks forward to continuing to work collaboratively with Staff as it proceeds with the implementation of the Clifton Park Demand Reduction REV Demonstration Project.

Respectfully submitted,

/s/ Karla M. Corpus

Karla M. Corpus
Senior Counsel

Enc.

cc: Marco Padula, DPS Staff, w/enclosure (via electronic mail)
Christian Bonvin, DPS Staff, w/enclosure (via electronic mail)
Denise Gerbsch, DPS Staff, w/enclosure (via electronic mail)
Michael Summa, DPS Staff, w/enclosure (via electronic mail)
David Smith, BRIDGE Energy Group, w/enclosure (via electronic mail)
Melanie Littlejohn, w/enclosure (via electronic mail)
Cathy Hughto-Delzer, w/enclosure (via electronic mail)
Arunkumar Vedhathiri, w/enclosure (via electronic mail)
Carlos Nouel, w/enclosure (via electronic mail)
Janet Audunson, w/enclosure (via electronic mail)
Melissa Piper, w/enclosure (via electronic mail)
Kara Fedors, w/enclosure (via electronic mail)
Pamela I. Echenique, w/enclosure (via electronic mail)
Carol Teixeira, w/enclosure (via electronic mail)

Demand Reduction
REV Demonstration Project
in
Clifton Park

Q2 2018 Report

July 31, 2018

Table of Content

1.0 Executive Summary

On January 17, 2017 Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid" or the "Company") filed an implementation plan for the Demand Reduction REV Demonstration Project in Clifton Park (the "Project"), which is designed to provide residential customers in the Town of Clifton Park ("Clifton Park" or the "Town") with price signals, tools and information, enabled by infrastructure investments and distributed energy resources ("DER"), to reduce electric demand during peak times and inform the Reforming the Energy Vision ("REV") Proceeding.[1]

The Project aligns with the New York Public Service Commission's ("Commission") *Order Adopting a Ratemaking and Utility Revenue Model Policy* Framework ("REV Track Two Order") wherein the Commission asserts "[o]ne of the most important objectives of REV is improving overall system efficiency including the efficiency of capital investment to create value for customers. Toward that objective, electric peak reduction is among the most immediate priorities for REV implementation."[2] National Grid believes that it is possible to create more responsive relationships with customers by leveraging critical infrastructure, customer outreach and engagement, deep energy insights and actionable information, as well as price signals and DER products and services, which incentivize customers to reduce peak electric load and overall electric and gas energy use. Toward that end, the following elements are included in the Project:

- Infrastructure
  - Advanced Metering Functionality ("AMF")
  - Volt/VAR Optimization (includes Conservation Voltage Reduction) ("VVO")
- Customer Outreach & Engagement
- Deep Energy Insights & Actionable Information
- Price Signals
  - Peak Time Rewards ("PTR")
  - Voluntary Time-of-Use ("VTOU") Rate
- DER Services
- Utility supported Community Choice Aggregation ("CCA")

The premises of customers participating in the Project are contained within the town limits of Clifton Park as shown below. The total number of impacted customers is approximately 14,400.

Key activities and milestones accomplished this quarter (Q2 2018) are summarized as follows:

[1] Case 14-M-0101, *Proceeding on Motion in Regard to Reforming the Energy Vision* ("REV Proceeding"), National Grid Demand Reduction REV Demonstration Project in Clifton Park Implementation Plan (filed January 17, 2017)("Implementation Plan").
[2] REV Proceeding, Order Adopting a Ratemaking and Utility Revenue Model Policy Framework ("REV Track Two Order")(issued May 19, 2016), p. 72.

Key Item	Outcome
PTR season 2 preparation and kickoff	• PTR season 2 rewards model was revised to consist of a 2-tiered rewards approach; 100 points rewarded to applicable customers saving 0.1kWh – 1.0 kWh during an event, and 500 points to those saving > 1.0 kWh during an event. • All predictive model modifications were completed. • End-to-end system testing for file transfers and notifications completed. • Trigger for an event chosen as a forecasted temperature of 86° degrees Fahrenheit and above. • First event was called on 6/18/2018.
IS and ADA efforts	• Advanced Data Analytics (“ADA”) and Information Services (“IS”) continued in support mode.
VVO efforts	• Completed 85% installation of field devices and commissioned 52%. • All substation upgrades completed and fully commissioned.
Customer Outreach & Marketing	• Conducted Community Outreach meetings in Clifton Park. • Completed annual survey. • Embarked on outreach and testimonial campaign.
TOU Price Signal	• Alternative to VTOU rate under development. • Working with AMI team to determine future rate structure.
DER	• Sent emails targeting pool owners regarding efficient pool pump technology. • Engaged in program alignment between Clifton Park PTR and Connected Solutions Demand Response (“DR”). • Promoted New York Solar Marketplace at community meetings.

Project Elements

A visual of the Project's key services and offerings are provided below. Except for VVO, customers can opt in or opt out of each Project element. A description of each Project element is included with the individual sections of this quarterly report.

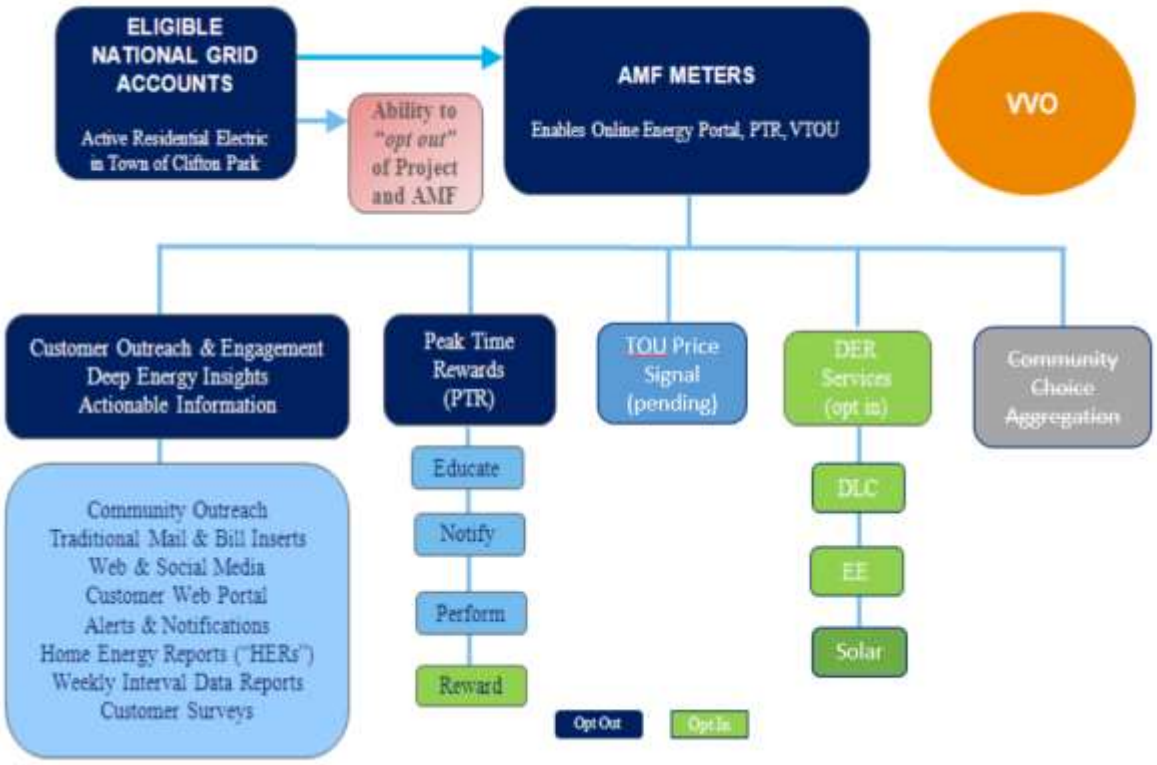

Figure 1: Project Elements

2.0 Highlights Since Previous Quarter

The following highlights key activities accomplished to date on the Project, as well as key activities planned for the next quarter.

Figure 2: Work Plan Summary

2.1 Major Task Activities

2.1.1 Advanced Metering Functionality

AMF deployment in Clifton Park has replaced existing National Grid electric and gas meter reading and billing processes for customers that have not opted out of the Project. AMF meters are read and select portions of data are transferred over the cellular network to National Grid for utility billing. Portions of data are also transferred to the Project's partners over secure networks to enable various elements of the Project, including the customer web portal. Interval data is used for deployment of PTR, all customer billing, and to support authorized Project evaluation activities.

AMF deployment commenced at the end of the first quarter of 2017. Letters introducing Clifton Park customers to Smart Energy Solutions and postcards alerting customers of the AMF installation timeframe were distributed prior to installations. This allowed for a period during which customers could opt out of the AMF metering technology, as well as certain other aspects of the Project.

Customers choosing not to have AMF installed have been directed to a specialized team at the National Grid Contact Center, which in turn directs Customer Meter Services ("CMS") not to install an AMF technology for those customers. Those customers will instead retain their existing automatic meter reading ("AMR") meter, or if they had previously elected the "AMR Opt-Out Option", retain a non-AMR meter. Additionally, during the Project term, customers have the option to have their AMF meter removed and replaced with an AMR meter at no cost to the customer.

The AMF opt-out rate remains unchanged since the previous quarter at eight-point eight percent (8.8%), or 1,256 premises. AMF meter opt-outs include customers that: 1) called into the National Grid Customer Contact Center; 2) informed CMS field workers in-person that they did not want the meter; or 3) where National Grid was unable to gain access to account premises after three (3) attempts at access were made without success.

National Grid will continue to monitor AMF opt-outs as the Project continues and new customers move into the Town of Clifton Park and others move out. The National Grid Customer Contact Center will continue to accept customer requests to install or remove the AMF technology and process orders.

2.1.1.1 Information Services ("IS") Activities

Timeframe	Completed Milestones
2nd Quarter 2018	• Continued Project support via National Grid's IS Support team.

2.1.1.2 Meter Installation Activities

Timeframe	Completed Milestones
2nd Quarter 2018	• Continued to support normal business practices related to move-in/out of customers.
	• Identified and resolved issues with 83 gas encoder receiver transmitters ("ERTs").

2.1.2 Volt/VAR Optimization ("VVO") Device Installations

National Grid will enhance the efficiency of the electric distribution system through the installation of software and devices that better regulate the voltage of the distribution system. These system enhancements will benefit all customers connected to those substations being upgraded. Working with the Project's VVO partner, Utilidata, National Grid started installing devices on the electric distribution system that monitor voltage along with advanced controllers for voltage regulators and reactive capacitors.

National Grid will evaluate the extent to which optimized regulation of the voltage and power factor of the electric distribution system benefits customers, ultimately reflected by improved feeder power factor, flatter voltage profiles, reduced feeder losses, reduced peak demand, and reduced energy consumption by customers. National Grid's targeted efficiency gain through the VVO portion of the Project is approximately three percent (3%).

VVO installation scope includes:

- Three (3) substation transformer load tap changers;
- Eleven (11) feeders, including:
    - Twelve (12) line voltage monitors;
    - Thirty-one (31) advanced switching capacitors; and
    - Five (5) pole top regulators
- A central controller and data concentrator installed at the National Grid Control Center in Liverpool, New York;
- Supervisory control via National Grid's Supervisory Control and Data Acquisition ("SCADA") and Energy Management System ("EMS"); and
- Cellular connectivity between all field, substation devices, and the data concentrator.

Timeframe	Completed Milestones
2nd Quarter 2018	• Installed thirty (30) of thirty-one (31) Advanced Capacitors.
	• Commissioned sixteen (16) of thirty-one (31) Advanced Capacitors.
	• Installed nine (9) of twelve (12) circuit monitoring devices.
	• Commissioned nine (9) of twelve (12) circuit monitoring devices.
	• Commissioned Elnora Substation.

2.1.3 Customer Outreach

National Grid has engaged residents of the Clifton Park community to learn about the Project and solicit input. The strategies include:

- Community outreach;
- Mail and bill inserts; and
- Web and social media.

Community Outreach

The National Grid marketing team performed studies of Clifton Park residential customers to assess areas of concern and to present recommendations. The studies were conducted by Market Probe moderators, a third-party market research group, via:

- Outreach sessions with Clifton Park residents in June 2018;
- Phone and online annual surveys completed; and
- Testimonial campaign with radio and billboard outreach prepared to launch.

Mail and Bill Inserts

Prior to the installation of AMF, National Grid delivered a set of communications via standard mailings to introduce Clifton Park customers to Smart Energy Solutions and notify them of the imminent arrival of the AMF meter technology. Customers were asked to contact National Grid if they did not want to receive a new AMF meter. Each letter spoke to the key benefits of the Project and touched upon key Project elements available immediately and in the future. These communications were sent in the form of direct mail and bill inserts.

Thereafter, National Grid also sent out a series of meter installation notifications letting customers know when their new meters would be installed. Included in these communications was an invitation to attend one of the Company's customer outreach and education meetings to learn more about the Project, ask questions, and interact with the National Grid team.

Following the installation of an AMF meter, customers received educational materials focused on the various Project elements, such as enrolling in PTR. Bill inserts will continue to be incorporated four (4) times per year as new Project elements are rolled out, and media updates will be on-going throughout the year. Additionally, video tutorials have been created and were made available on the National Grid website.

Web and Social Media

National Grid continues to expand the existing Clifton Park micro-site, a component of the Company's current http://www.nationalgrid.com website, to include information on the Project for all Clifton Park residents.

The Project website includes the following information:

- Frequently Asked Questions Video overview of the Project:
    - https://vimeo.com/209611691/bd2127692f;
- Frequently Asked Questions pdf:
    - https://www.nationalgridus.com/media/pdfs/resi-ways-to-save/cp_faqs.pdf;
- Information about PTR;
- DER product and service options available (*e.g.*, New York Solar Marketplace); and
- http://www.ngrid.com/cliftonpark will be updated throughout the year to announce the rollout of new products and services.

National Grid also proactively monitors open social media sites to join any conversations regarding the Project and to help answer questions about it.

The Project tracks customer interaction with the Opower web portal. Emails, bill inserts, direct mailings, and social media contributed to raising awareness of the information available to customers, as evidenced by increasing levels of interaction throughout the PTR season. Customer outreach activities continue outside of the PTR season to encourage ongoing customer engagement.

Areas of the portal experiencing common customer interaction include:

- My Energy Use;
- Ways to Save;
- Compare My Bills;
- Dashboard; and
- Home Energy Audit.

The following key performance indicators ("KPIs") have been created to track and measure success of Customer Outreach:

- Customer Acceptance of AMF Technology;
- Awareness;
- Customer Control of Energy Usage;
- Customer Satisfaction with National Grid; and
- Portal Engagement, such as:
    - Login Creation;
    - Enrollment in Points and Rewards; and
    - Profile Completion.

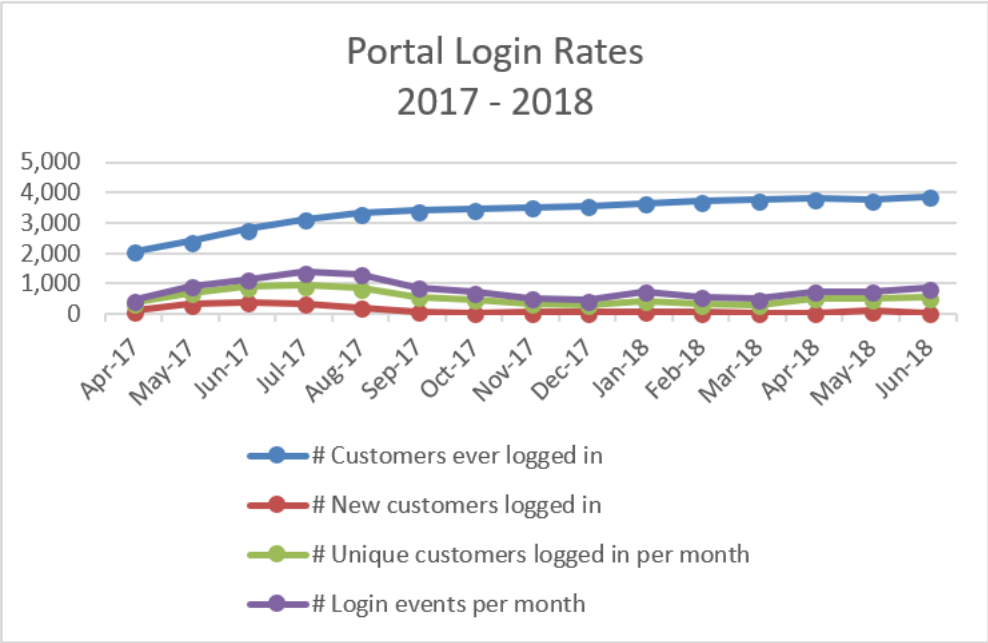

Figure 3: Portal Activity

Timeframe	Completed Milestones
2nd Quarter 2018	• Completed survey on awareness and customer satisfaction May 2018. Findings meeting scheduled for July 13th, 2018.
	• October 2018 customer survey planning underway.
	• Hosted Town Hall meeting June 19th in Clifton Park.
	• Customer testimonial video and photoshoot completed in May with new branding prepared for launch.
	• Continued customer engagement outreached with display ads, email, and social media.
	• Enrolled forty-two (42) new customers in Points and Rewards.
	• Sent educational emails targeting pool owners regarding efficient pool pump technology.

2.1.4 Peak Time Rewards ("PTR")

National Grid seeks to incentivize Clifton Park customers to reduce electric use during specified peak times. Participating customers are rewarded for curtailing electric load through behavioral actions such as turning off lights and adjusting their thermostats or utilizing customer-controlled technology.

Key elements of PTR include:

- Event performance analytics performed on all customers with AMF;
- No penalties for failure to reduce load during PTR events;
- Pre-event and post-event email notifications;
- Rewards earned by those enrolled in "Points and Rewards"; and
- Rewards awarded based on participation in up to twenty (20) PTR events per year.

National Grid reviews load forecasts for the New York Independent System Operator ("NYISO") system and Zone F (which includes Clifton Park), as well as local Clifton Park weather forecasts, to determine whether to call a PTR (a/k/a "Conservation Day") event.

PTR events are entered into two (2) systems; one triggers customer event notifications to Clifton Park customers and the other sets in motion the energy use predictive model, which will compare predicted values to actual AMF metered usage, to determine curtailment participation. Over 8,000 pre-event emails notifying that a conservation event is scheduled are sent out to Clifton Park customers for each event.

Upon determination of whether each account has curtailed, each customer electric service account is assigned a value of 'true' or 'false' for each event, based on its curtailment determination. Those accounts enrolled in the Points-and-Rewards program which are assigned a value of 'true', are then awarded points.

National Grid tracks customer enrollments in PTR as a measure of customer engagement. Enrollment in Point-and-Rewards has increased each month as the Project has progressed. PTR enrollment enables customers participating in PTR events/Conservation Days to earn rewards.

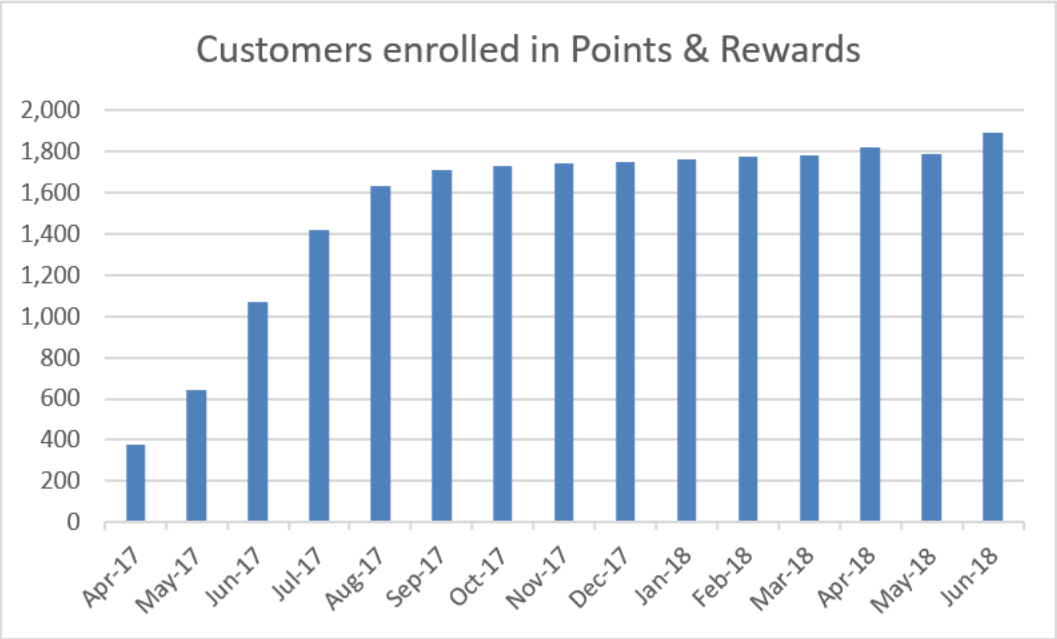

Figure 4: Points & Rewards

Timeframe	Completed Milestones
2nd Quarter 2018	• Completed PTR Season 1 result analysis and correlation studies of event data compared to feeder-level historical load results, weather conditions, and NYISO actual loads. New criteria set at 86° degrees Fahrenheit and above for calling an event.
	• Completed predictive model modifications to facilitate 2-tiered points rewards structure for PTR season 2.
	• Synced customer data across all systems prior to start of PTR season.
	• End-to-end system testing for file transfers and notifications completed.
	• First PTR event of season 2 called on 6/18/2018.

2.1.4.1 2018 Two-Tiered Rewards Structure

Upon evaluating the participation rates of customers during the event periods, it was determined the 100-point reward structure for eligible customers may be an insufficient motivator. On average 33.6% of customers curtailed 1.0 kWh or more. Accordingly, efforts were made to implement a 2-tiered rewards structure for participating customers:

- 100 points rewarded for customers saving 0.1 – 1.0 kWh (denoted by a TRUELOW indicator); and
- 500 points rewarded for customers saving > 1.0 kWh (denoted by a TRUEHIGH indicator).

The table below summarizes the rewards granted based upon the 2-tiered approach for the June 2018 event:

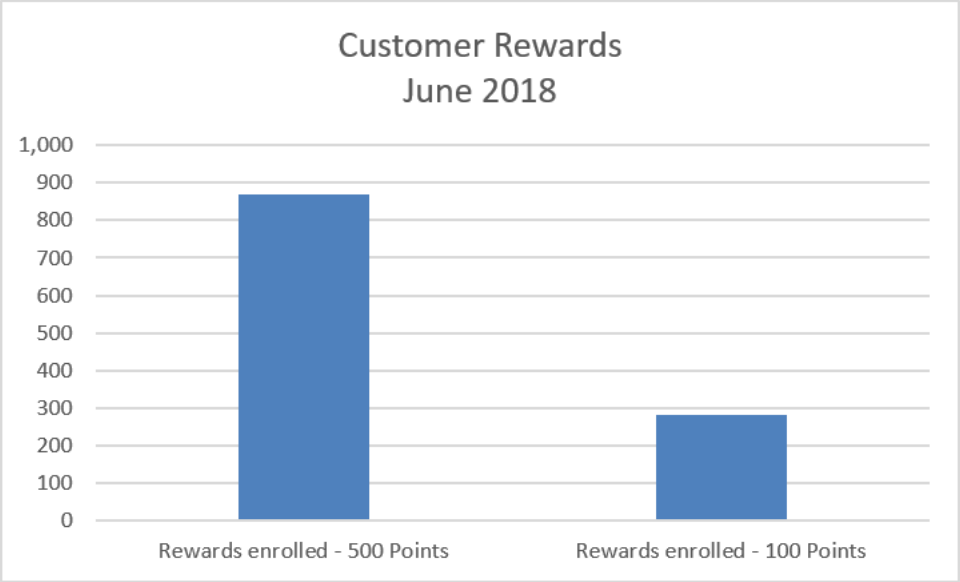

Figure 5: Points & Rewards

2.1.4.2 Data Correlation Analysis – PTR Event Criteria

As a continuation of the data analysis from the previous quarter, the methodology was refined to derive at the number of peak temperature days irrespective of the peak feeder level load. For years 2015, 2016, and 2017, the top twenty peak temperature days during the PTR season of June, July, August, and September ranged between 86°F and 93°F. Utilizing 86°F as a cut-off point towards calling conservation days prevents National Grid from exceeding the limit of twenty conservation days per season.

Additionally, emphasizing on 86°F and above facilitates easier customer communication and behavioral priming towards temperature for achieving energy conservation as opposed to complicated load metrics. Zone F Load, NYISO System Load, peak and hourly temperature, humidity, and rain-event metrics have been recorded for the first event of PTR 2018 and will be continued for the rest of the season towards operational understanding and implementation.

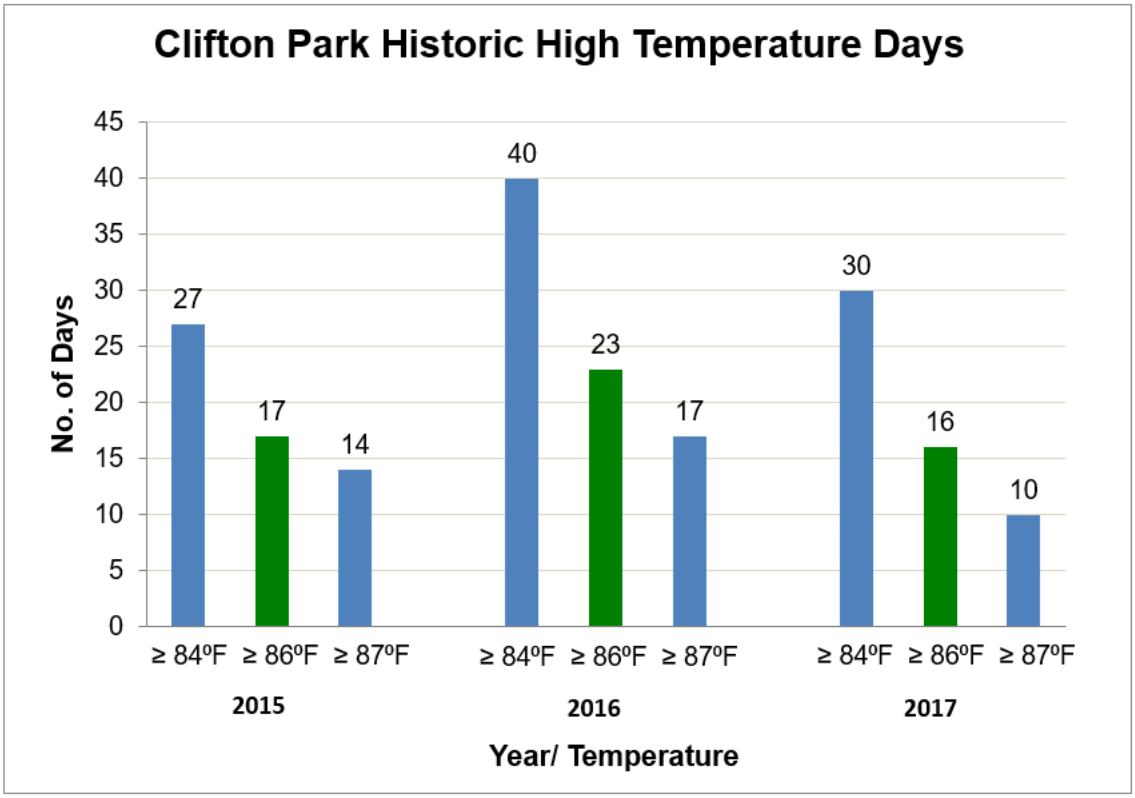

Figure 6: High Temperature Days

2.1.5 Advanced Data Analytics ("ADA")

National Grid's Advanced Data Analytics Project team developed the residential energy use predictive model to determine the expected energy use during a PTR event. The predictive model uses prior customer level energy consumption data and event weather conditions to predict customers' energy consumption during events. The predicted values are compared to the actual AMF data to determine whether curtailment has occurred and to ascertain which customers are to be awarded points. The results of these analyses will be used to determine if the aggregated community load meets certain threshold requirements for bidding into the NYISO wholesale electricity market.

Timeframe	Completed Milestones
2nd Quarter 2018	• Provided predictive model updates to facilitate 2-tiered PTR rewards scheme.
	• Conducted curtailment evaluation for first PTR event of season 2.

2.1.6 Time-of-Use ("TOU") Price Signals

The Voluntary Time of Use ("VTOU") rate was intended to be tested in Clifton Park on an opt-in basis. The VTOU rate, which became effective December 1, 2016,[3] includes three (3) rate periods for supply; on-peak, off-peak and super-peak, as well as an on-peak and off-peak period for delivery. National Grid is exploring alignment between its AMI proposal[4] and Project price signals.

Timeframe	Completed Milestones
2nd Quarter 2018	• Internal discussions held on alignment of price signal to be tested in Clifton Park regarding REV Demo, AMI Proceeding, and Smart Home Rate.

2.1.7 Distributed Energy Resource ("DER") Opportunities

National Grid seeks to animate the market by facilitating DER provider opportunities as part of the Project. DER products and services will be opt-in offerings to customers, publicized via the customer engagement channels outlined above, as well as community outreach. DER services may include energy efficiency, demand response, or renewable distributed generation opportunities.

[3] *See* National Grid's Electricity Tariff, PSC No. 220, Service Classification No. 1, Special Provision L, "Residential Time of Use Delivery and Commodity Rate."
[4] Case 17-E-0238, *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Niagara Mohawk Power Corporation d/b/a for Electric Service,* Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plans, (issued March 15, 2018), Attachment 1, Joint Proposal, Section 15.4.

National Grid is continuing to consider additional DER opportunities spanning renewable energy, energy efficiency, and PEVs. Such opportunities include the development of a solar marketplace to help customers evaluate solar energy options, as well as a website that promotes the purchase of energy efficient appliances utilizing rebates.

Timeframe	Completed Milestones
2nd Quarter 2018	• Sent emails targeting pool owners regarding efficient pool pump technology.
	• Engaged in program alignment between Clifton Park PTR and Connected Solutions DR.
	• Promoted New York Solar Marketplace at community meetings.

2.1.8 Community Choice Aggregation ("CCA")

National Grid engaged with Clifton Park officials and community members on the potential for adoption of a utility-supported CCA in early 2017. After the filing of the Project's Implementation Plan, the Town decided to not pursue a CCA.

2.1.9 Project Management Group

The National Grid Project Management Group is a construct of individuals who strive to keep the Project on track regarding scope, schedule and budget, while lending visibility into processes, accomplishments, and financial tracking. This group regularly engages in, and promotes, the following:

- Weekly Core Team Status Reporting;
- Monthly General Staff Meetings;
- Quarterly New York PSC Reporting;
- Issues Tracking;
- Lessons Learned Recording and Review;
- Change Log Processes; and
- Financial Reporting activities.

Timeframe	Completed Milestones
2nd Quarter 2018	• Conducted weekly status reviews with core team leads, monitoring progress, providing corrective measure(s), and escalating issues, as needed.
	• Provided weekly updates to National Grid's Finance Department and Performance Excellence Team regarding the Project for management review.
	• Evaluated PTR event weather and feeder data analysis to develop event call criteria of 86° degrees Fahrenheit and above for 2018 season.
	• Conducted first monthly lunch-and-learn session for broader internal audience to raise awareness of project progress.

2.2 Challenges, Changes, and Lessons Learned

Qtr	Issue or Change	Resulting Change to Project Scope/Timeline?	Strategies to Resolve	Lessons Learned
Q2.18	Low attendance experienced in Outreach sessions.	Lack of attendance by customers could mean lower than expected enrollment in Points and Rewards and participation in PTR events.	Consider alternative marketing approaches and evaluate what similar projects have done previously.	It takes considerable effort to engage customers in programs such as this Project.
Q2.18	Mergers and acquisitions can impact partner relationships.	Potential delays in contract progression could result.	Engage the contracting process early and follow-up regularly.	Monitor changes within partner companies and be prepared to adjust business processes.
Q2.18	Field resource deployment is dependent on normal business operations and resource availability.	Potential for delays in Project due to prolonged installation of devices.	Incorporate contingency plans into the Project schedule.	Contingency plans should be developed and incorporated into the Project schedule ahead of time.
Q2.18	The elements of Project implementation evolve over time.	Project operations and communications to customers is impacted over the long term as Project elements evolve.	Maintain open communications and involvement with Commission Staff.	Flexibility is required in Project structure and processes.
Q2.18	End-to-end testing requires participation by all involved parties.	Potential for delays in the Project timeline due to additional testing being required.	Engage all parties well ahead of the testing period to ensure all are prepared to complete their assigned activities.	It is necessary to fully communicate all test plans to responsible parties and make everyone aware of the intended schedule of events.
Q2.18	Ongoing system changes can impact a seasonal operational system.	Potential delays to launch of PTR season due to unforeseen system changes.	Monitor system changes throughout the off season to maintain awareness of additional testing needs.	System changes can occur during the off season that may impact pre-season testing and overall functionality unexpectedly.

3.0 Next Quarter Forecast

During the 3rd Quarter of 2018, the Project team will continue Phase 2 of the Project.

3.1 Check Points/Milestone Progress

3.1.1 Summary

	Checkpoint/Milestone	Anticipated Start-End Date	Revised Start-End Date	Status
1	Phase I: Network Configuration and Meter Deployment; PTR Operations	1/2/17 – 6/16/17	1/2/17 - 7/17/17	Complete
2	Phase 2: VVO; REV Operations and Evaluation	6/19/17 – 9/30/19	6/19/17 – 9/30/19	

Key

- On-Track
- Delayed start, at risk of on-time completion, or over-budget
- Terminated/abandoned checkpoint

3.1.2 Work Stream – 3rd Quarter 2018

Work Stream	Future Milestones	Status
Information Systems ("IS")	• Support Project via National Grid's IS Support team.	
Meter Installation	• Support normal business practices related to move-in/out of customers.	
VVO	• Install one-hundred percent (100%) of VVO field equipment; thirty-one (31) capacitors and six (6) three-phase regulators.	
	• Commission one-hundred percent (100%) of VVO field equipment.	

Work Stream	Future Milestones	Status
	• Install one-hundred percent (100%) of circuit monitoring devices.	
	• Commission one-hundred percent (100%) of circuit monitoring devices.	
	• Commission overall VVO system.	
	• Begin study to evaluate overall system performance, leveraging AMI data for additional efficiencies.	
Customer Outreach	• Perform internal review of annual survey results.	
	• Plan Fall 2018 customer survey.	
	• Revisit community outreach strategy.	
	• Roll out new marketing materials featuring voice of the customer and customer testimonials.	
	• Conduct monthly dashboard meetings to keep team on track to reach goals.	
PTR	• Utilize and monitor 2-tiered rewards structure.	
	• Conduct PTR Season 2 from June through September 2018.	
	• Collect data regarding forecasted and actual load and weather conditions.	
	• Monitor customer participation in events.	
ADA	• Provide PTR Season 2 support to Project team.	
TOU Price Signal	• Work with AMI team to evaluate for future rate structure plans.	
DER	• Promote Connected Solutions DR and related technologies.	
	• Promote forthcoming National Grid New York Solar marketplace.	
	• Design promotion materials for energy efficient pool pumps and pool pump timers, including education, partnerships, and points-for purchase.	
	• Leverage AMI data for target marketing.	
Project Management Group	• Conduct weekly and monthly Project update meetings.	

Work Stream	Future Milestones	Status
	• Monitor and report Project success Key Performance Initiatives.	
	• Continue tracking, monitoring and controlling the Project schedule, tracking on a weekly basis.	
	• Continue tracking, monitoring and controlling the Project financials, tracking on month-by-month basis.	
	• Continue to identify, monitor and manage risks and issues as they arise.	
	• Work with AMI team on future rate structure strategies.	
Project Evaluation	• Develop Project evaluation plan and evaluate potential contractors.	
	• Evaluate additional AMI data analytics to capitalize on availability of meter data.	

4.0 Work Plan and Budget Review

4.1 Updated Work Plan

ID	Task Name	Start	Finish
1	Clifton Park Integrated Program	1/2/2017	9/30/2019
2	IS	3/31/2017	8/4/2017
3	ADA	4/17/2017	6/30/2017
4	Design	5/8/2017	5/31/2017
5	Initial Testing	5/31/2017	6/15/2017
6	Development	5/30/2017	5/31/2017
7	Testing	4/17/2017	6/15/2017
8	Meters	3/17/2017	7/28/2017
9	VVO	2/24/2017	8/3/2018
10	Field Devices	10/13/2017	7/27/2018
11	Substations	2/24/2017	6/15/2018
12	Elnora Substation	12/1/2017	6/15/2018
13	Grooms Substation	2/24/2017	2/2/2018
14	Xformer 1	4/28/2017	6/30/2017
15	Xformer 2	2/2/2018	2/2/2018
16	Utilidata Server	8/18/2017	8/3/2018
17	PTR	4/28/2017	9/30/2019
18	Phase 1	4/28/2017	5/29/2017
19	Phase 2	7/17/2017	9/30/2019
20	Outreach (O&E)	1/2/2017	9/30/2019
21	Phase 1 Marketing Communications	2/13/2017	10/20/2017
22	Direct Mailings Traditional Mail and Inserts	2/2/2017	2/13/2017
23	Points and Rewards Enrollment	5/16/2017	6/6/2017
24	Conservation Day letter	6/19/2017	6/19/2017
25	Bill Inserts	7/6/2017	7/6/2017
26	Pricing	5/25/2018	5/25/2018
27	Meter Installation Notifications	3/3/2017	6/2/2017
28	Community Outreach meeting	4/27/2017	1/8/2018
29	Contact Center Training	5/10/2017	5/10/2017
30	Opt-out Monitoring	6/30/2017	9/29/2017
31	AMO	6/5/2017	9/30/2019
32	Project Management Operations	2/20/2017	9/30/2019
33	Procurement	1/2/2017	8/21/2017

4.2 Updated Budget

The overall Project budget remains unchanged from that reported in previous quarterly reports. However, $13,063,123 has been shifted from fiscal year 1 (2017) to fiscal year 2 (2018), given additional time needed to set up the network and configure meters prior to commencement of the installation process[5].

Project Task	2nd Quarter Actual Spend	Project Total Spend to Date	Project Budget[6]	Remaining Balance
CapEx				
	$ 108,356	$ 8,128,390	$ 12,516,057	$ 4,387,667
OpEx				
	$ 730,210	$ 8,044,878	$ 14,437,176	$ 6,392,298
Total	**$ 838,566**	**$ 16,173,268**	**$ 26,953,233**	**$ 10,779,965**

A difference between the Implementation Plan budget ($26,819,336)[7] and the current revised budget ($26,953,233) exists due to an increase in actual meter costs and associated fees. The overall difference is $133,897.

[5] Fiscal year 1 consists of April 1, 2016 through March 31, 2017; fiscal year 2 consists of April 1, 2017 through March 31, 2018.
[6] The Company updated the Project budget to reflect incremental costs, and to illustrate costs that are capital or operating expenses.
[7] Case 14-M-0101, *supra* note 1, p. 33.

5.0 Progress Metrics

Checkpoint[8]	Progress / Target Completion
Infrastructure	
AMF Acceptance vs. Opt Out	Continuing to monitor opt-out rates as Project progresses, and through the life of the Project. Current opt-out rate is eight and eight tenths percent (8.8%).
VVO System Benefits	Establishing infrastructure required to enact VVO and monitor progress. Completion of equipment installation targeted for 2018 Q3.
Customer Outreach and Engagement / Deep Energy Insights and Actionable Information	
Customer Outreach and Engagement	Continuing engagement through life of the Project. Annual surveys tracked against initial baseline survey.
Customer Energy Portal Engagement	Continue customer engagement metrics related to portal use, PTR participation, etc.
Price Signals	
PTR	Began PTR in July 2017; continue evaluation through life of the Project regarding participation rates and curtailed load.
TOU Price Signal	Project team conferring with AMI team.
DER	
DER Opportunities	Promotion of Connected Solutions DR and related technologies, National Grid's New York Solar marketplace, and energy efficient pool pumps and pool pump timers.

[8] *See* Implementation Plan, pp. 24-26, for specific metrics.