

July 31, 2017

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 2017 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, 2017 to June 30, 2017 (“Q2 2017 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:

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Hon. Kathleen H. Burgess, Secretary
National Grid: Clifton Park Demand Reduction REV Demonstration Project
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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.

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**Clifton Park Demand Reduction
REV Demonstration Project**

Q2 2017 Report

July 31, 2017

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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 (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

The 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.

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.

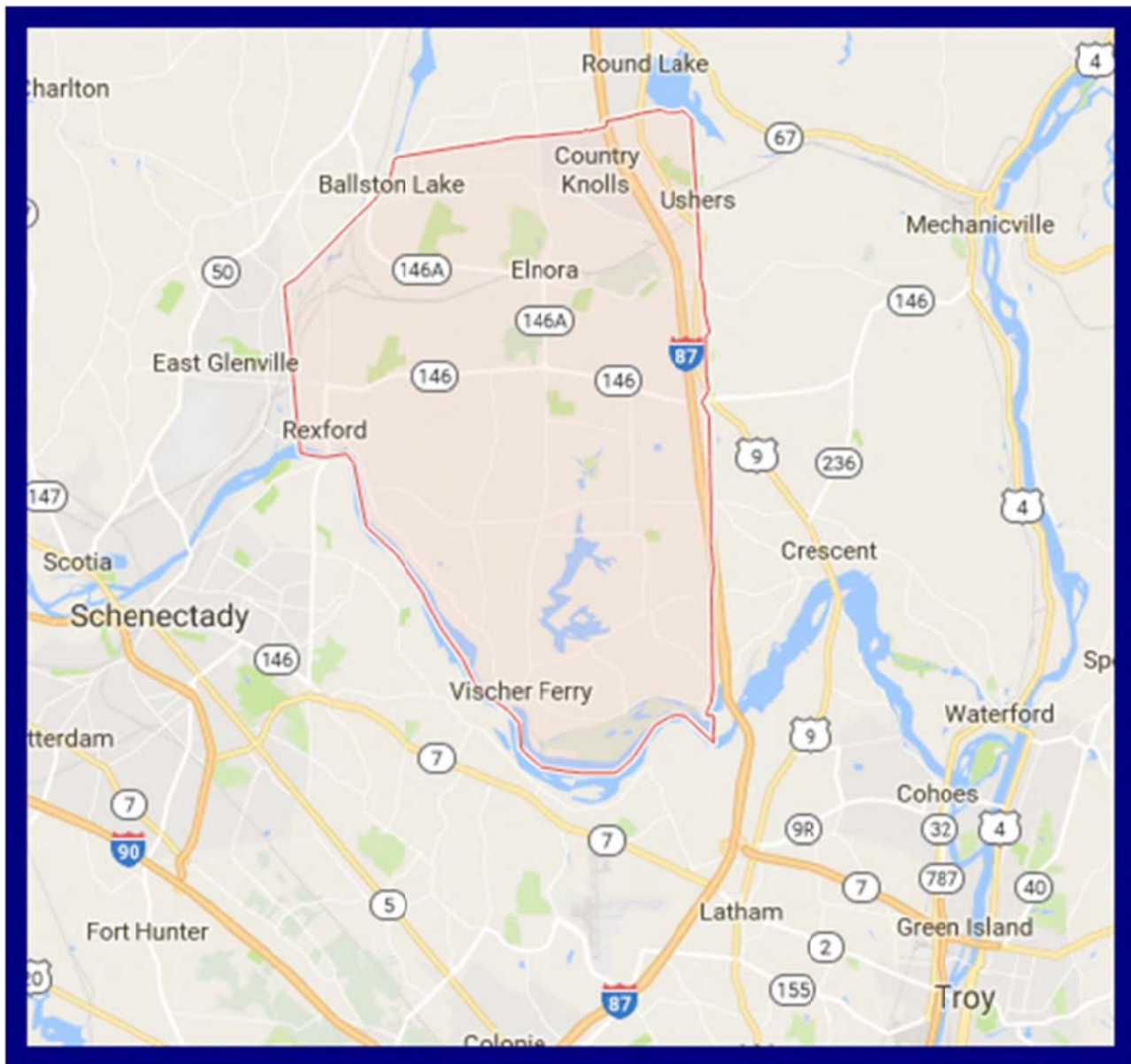


Figure 1: Town of Clifton Park

Project Elements

A summary of the Project’s key services and offerings are provided below. With the exception of 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.

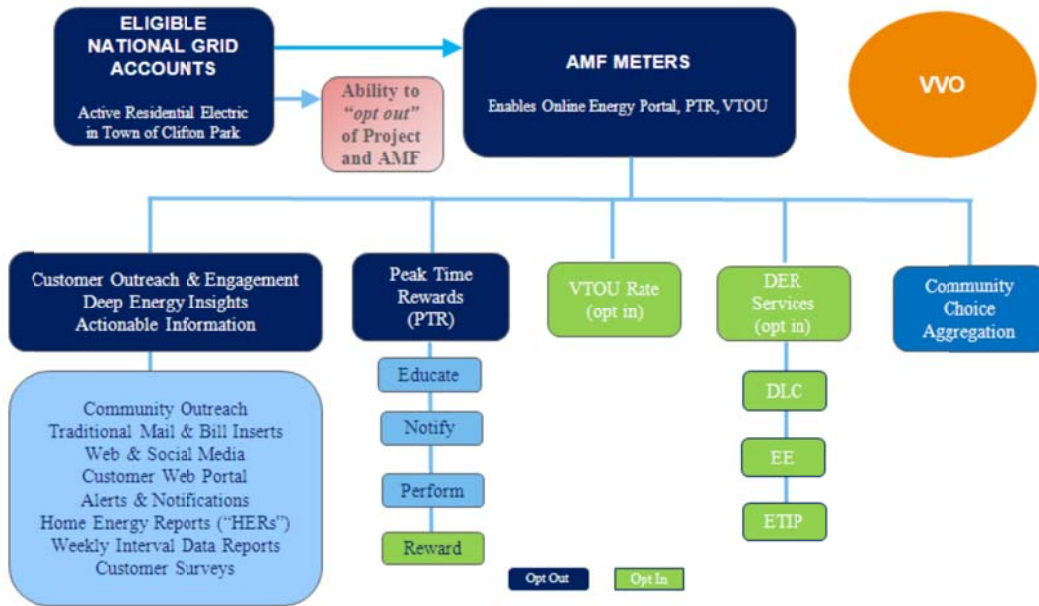


Figure 2: Project Elements

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.

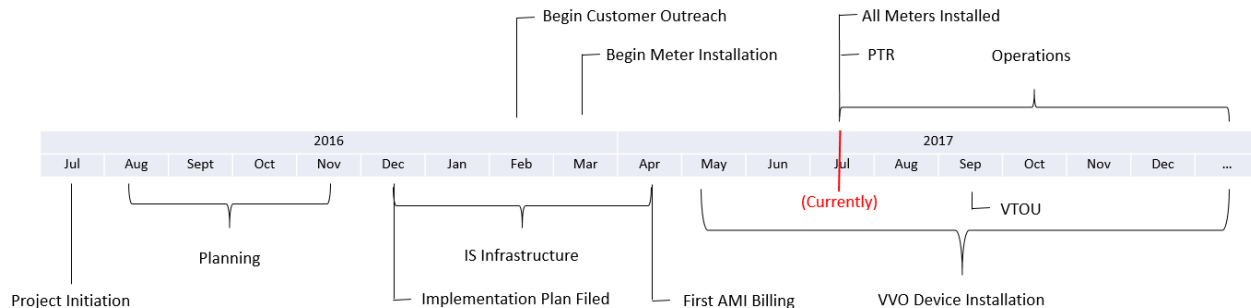


Figure 3: Work Plan Summary

2.1 Major Task Activities

2.1.1 Advanced Metering Functionality

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

AMF deployment commenced the end of the first quarter of 2017. Letters introducing customers in Clifton Park to smart energy solutions and postcards alerting customers of the AMF installation process 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.

2.1.1.1 Information Services (“IS”) Activities

Timeframe	Completed Milestones
2 nd Quarter 2017	<ul style="list-style-type: none"> Developed and tested the interface with Opower and National Grid using Verizon’s Multiprotocol Label Switching (“MPLS”) cloud.
	<ul style="list-style-type: none"> Developed and tested a new Verizon circuit at Opower’s Data Center for the MPLS communication.
	<ul style="list-style-type: none"> Developed and tested the interface between Opower and National Grid’s ADA system.
	<ul style="list-style-type: none"> Developed and tested the interface between Itron and National Grid’s ADA system.
	<ul style="list-style-type: none"> Updated Customer Service System (CSS) to handle the billing for Clifton Park customers that are on VTOU rates.
	<ul style="list-style-type: none"> Resolved metering and billing issues remaining from Phase 1.
	<ul style="list-style-type: none"> Completed end-to-end and interface testing.

2.1.1.2 Meter Installation Activities

Timeframe	Completed Milestones
2 nd Quarter 2017	<ul style="list-style-type: none"> Installed meters per schedule indicated in Figure 4.
	<ul style="list-style-type: none"> Total CMS orders installed: 19,342 <ul style="list-style-type: none"> Total electric meters installed: 10,281 Total gas ERTs Installed: 9,061
	<ul style="list-style-type: none"> Completed 118 Quality Control Audits after installation.
	<ul style="list-style-type: none"> Completed 46 real-time performance audits

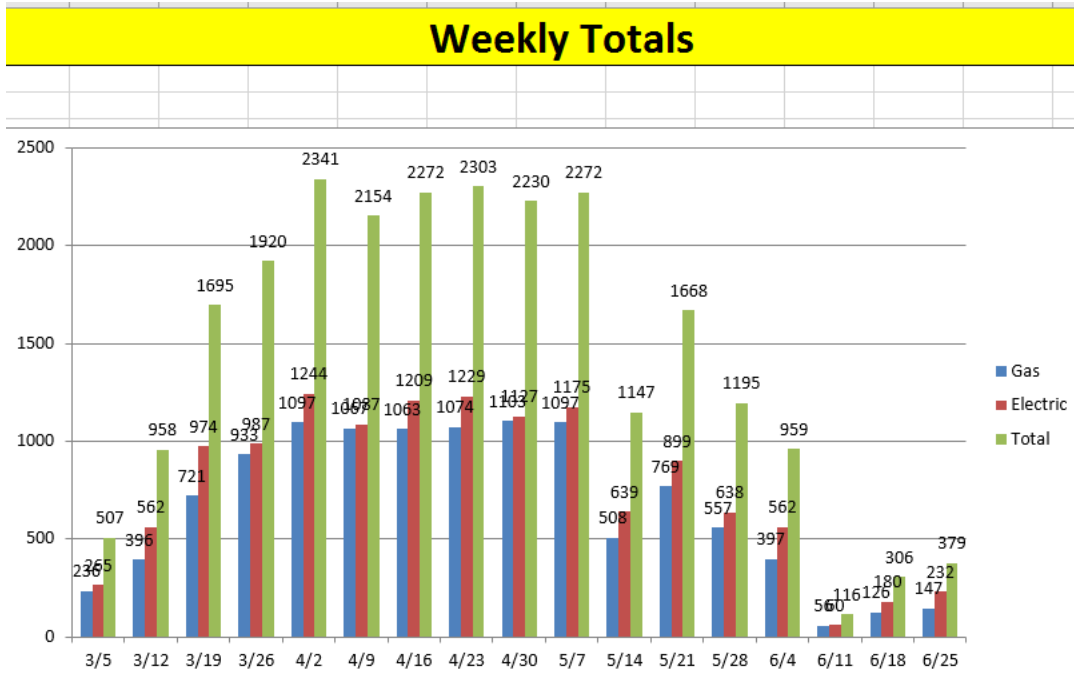


Figure 4: Meter Installation Activity

2.1.2 Volt/VAR Optimization

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 will install devices on the 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.

VVO includes:

- Three substation transformer load tap changers;
- Eleven feeders, including:
 - 11 estimated, 12 actual line voltage monitors;
 - 39 estimated, 31 actual advanced switching capacitors; and
 - 8 estimated, 6 actual 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 2017	• Completed Grooms Road substation transformer #1 controller upgrade.
	• Designed 100% of field device upgrades.
	• Resolved 300 kVAR advanced switched cap bank availability to further VVO construction.

2.1.3 Customer Outreach

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

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

Community Outreach

Prior to moving ahead with community outreach, National Grid conducted research to better understand customers' awareness of Smart Energy Solutions and to understand what would drive them to participate. Based on the research, some high-level findings include:

- 37% of the residents in Clifton Park are aware of Smart Energy Solutions;
- Saving money is a key driver for participation;
- 49% of customers were interested in Smart Energy Solutions when they learned it was “free;”
- Segmented messaging by age group allows National Grid to deliver relevant and motivating information specific to each defined age group.

To effectively engage the Town, National Grid worked to engage community leaders through coordination with the Town leadership and hosted community meetings such as those at the Clifton Park-Halfmoon Public Library.

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.

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 receive educational materials focused on the various Project elements, such as enrolling in PTR. Bill inserts will be incorporated four (4) times per year as new Project elements are rolled out and media updates will be on-going throughout the year.

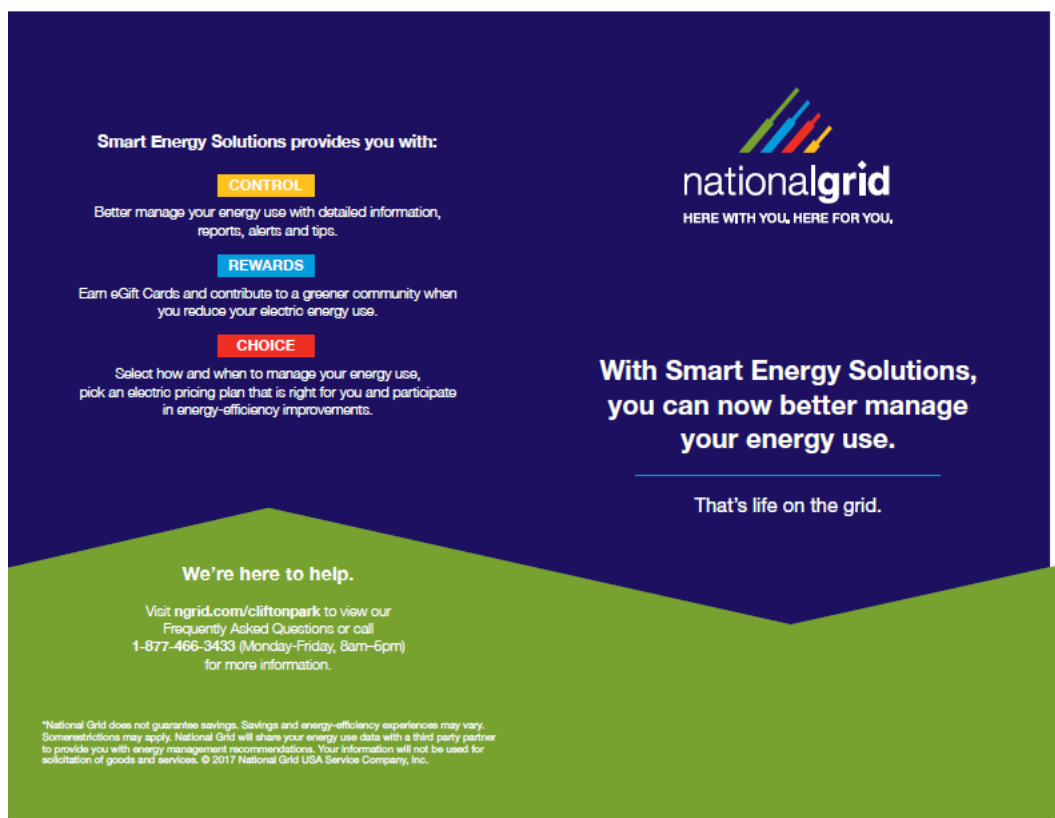
Web and Social Media

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.

As the Project progresses, the Project website will include the following information:

- Frequently Asked Questions Video overview of the Project
<https://vimeo.com/209611691/bd2127692f>
- Information about PTR and the VTOU rate as the Project elements are rolled out
- Energy services information and sign-up options for DER products and services will be available once AMF is installed (e.g., PTR)
- <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.



Smart Energy Solutions provides you with:

CONTROL
Better manage your energy use with detailed information, reports, alerts and tips.

REWARDS
Earn eGift Cards and contribute to a greener community when you reduce your electric energy use.

CHOICE
Select how and when to manage your energy use, pick an electric pricing plan that is right for you and participate in energy-efficiency improvements.

nationalgrid
HERE WITH YOU, HERE FOR YOU.

With Smart Energy Solutions, you can now better manage your energy use.

That's life on the grid.

We're here to help.
Visit ngrid.com/cliftonpark to view our Frequently Asked Questions or call 1-877-466-3433 (Monday-Friday, 8am-5pm) for more information.

*National Grid does not guarantee savings. Savings and energy-efficiency experiences may vary. Some restrictions may apply. National Grid will share your energy use data with a third party partner to provide you with energy management recommendations. Your information will not be used for solicitation of goods and services. © 2017 National Grid USA Service Company, Inc.

Today, we have so many ways to better manage our lives. Like mobile phones – where you can track your use and make informed choices. Or, online banking, where you instantly know how and where you are spending your money. **With Smart Energy Solutions, you get that and so much more. You'll be able to make informed choices, take control of your energy use and earn rewards.**

It's easy to get started!

Create an online profile
To access Smart Energy Solutions, you will need to have a National Grid online profile.

- 1 Go to ngrid.com/cliftonpark
- 2 Click on **Join/Sign In** located at the top of the screen
- 3 Click on **Join Now**
- 4 Fill out the form and click on **Continue**
- 5 Verify the information and click on **Add an account to my profile**
- 6 Fill out the form and click on **Add this account**
- 7 Confirm the information and click on **Continue**

Note: you will need your National Grid account number to create your online profile.

Log in
After you have created an online profile, it's simple to access your account.


- 1 Go to ngrid.com/cliftonpark
- 2 Click on **Join/Sign In** located at the top of the screen
- 3 Enter username and password then click **Sign In**

"I am very satisfied with the program and I have saved a lot of money." – *Smart Energy Solutions Customer in Worcester, MA*

Smart Energy Solutions has helped customers in Worcester, MA collectively save a total of 2,300 megawatt-hours – enough to power a local library in Worcester, MA for nearly a year.

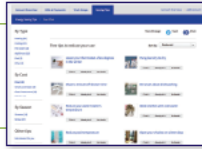
Now you can better manage your energy use.
Access Smart Energy Solutions, anywhere and any time.

Track your energy use.




You will be able to view monthly energy use data. However, in approximately one month, you will be able to view daily information.
Go to: Track Usage

Get energy-saving tips.
Receive personalized recommendations on how to reduce your energy use.
Go to: Saving Tips and Rewards



Earn rewards.
Get rewarded with points that can be redeemed for eGift Cards when you reduce your energy use during Conservation Days. These are the times when energy use in our community reaches its highest levels.
Go to: Saving Tips and Rewards




An average customer can expect to earn over \$20 per year!

Earn 150 points when you create your online profile!

Figure 5: Bi-fold Flyer

Timeframe	Completed Milestones
2 nd Quarter 2017	<ul style="list-style-type: none"> Delivered meter installation notifications to applicable customers prior to meter installations.
	<ul style="list-style-type: none"> Conducted community outreach meetings with Town residents on 4/27/2017 and 6/12/2017 at the local public library.
	<ul style="list-style-type: none"> Sent out Welcome Kits to customers upon AMF meters being installed.
	<ul style="list-style-type: none"> Enhanced the FAQ information and responses based on community feedback, which will be included on the Project website and addressed during community meetings.
	<ul style="list-style-type: none"> Emailed customers on 4/26/2017, 5/16/2017, and 6/6/2017 to remind them to enroll in PTR.
	<ul style="list-style-type: none"> Sent customers a reminder letter on 6/5/2017 to enroll in PTR.
	<ul style="list-style-type: none"> Developed materials to be handed out at Company events (e.g., Saratoga County Fair).
	<ul style="list-style-type: none"> Performed AMF opt-out monitoring (7.6% of residential customers have opted out to date); <ul style="list-style-type: none"> 799 customers requested to opt-out in Q2, totaling 1,119; 771 occurred during the course of field installations; and 348 were the result of customer notification to National Grid's Call Center.



Upstate NY

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Pay Bill

Home > Ways to Save > Energy Saving Programs > Introducing Smart Energy Solutions

Introducing Smart Energy Solutions

National Grid is committed to providing Clifton Park residents with more control over your energy use.



National Grid Smart Energy Solutions is an innovative energy management program developed specifically for our Clifton Park customers to help you manage energy use and potentially save money. Smart Energy Solutions will provide you with:

CONTROL: Better manage your energy use with near real-time information, detailed reports, alerts and tips.

REWARDS: Earn gift cards and contribute to a greener community when you reduce your electric energy usage.

Questions?

Email us for more information.

Latest News

[Clifton Park Proposal](#)

[Press Release](#)

Figure 6: Web Portal Landing Page

CURRENT BILL

DETAIL OF CURRENT CHARGES					
Delivery Services					
Electricity Delivery					
Service Period	No. of days	Current Reading	-	Previous Reading	= Total Usage
Feb 8 - Mar 10	30	79007 Actual		78336 Actual	671 kWh
METER NUMBER 1234567		NEXT SCHEDULED READ DATE ON OR ABOUT Apr 12			

BILL ONCE NEW METERS ARE INSTALLED

DETAIL OF CURRENT CHARGES	
Delivery Services	
Electricity Delivery	
	Energy-kWh
Metered Usage	670 kWh
Billed Usage	671 kWh
METER NUMBER 1234567	NEXT SCHEDULED READ DATE ON OR ABOUT Apr 12
SERVICE PERIOD Feb 9 - Mar 10	NUMBER OF DAYS IN PERIOD 29

Figure 7: Example of Bill with AMF Meter

2.1.4 Peak Time Rewards (“PTR”)

Through a single marketing message, “Reduce Your Energy Usage and Earn a Gift Card Reward,” National Grid will seek to incentivize Clifton Park customers to reduce electric use during specified peak times. Participating customers will be rewarded for curtailing electric load through behavioral actions such as turning off lights and adjusting their thermostats.

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 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.

Timeframe	Completed Milestones
2nd Quarter 2017	<ul style="list-style-type: none"> • Designed peak event model and determined criteria through examination of NYISO load forecasts and weather data to trigger an event call.
	<ul style="list-style-type: none"> • Created and tested event call model.
	<ul style="list-style-type: none"> • Conducted testing of web portal.
	<ul style="list-style-type: none"> • Completed end-to-end testing of event call, communications, and analysis.
	<ul style="list-style-type: none"> • Participated in community outreach meetings with Town residents.

To ensure customer privacy is protected, vendor contracting took longer than anticipated, which resulted in a delay of the PTR launch date.

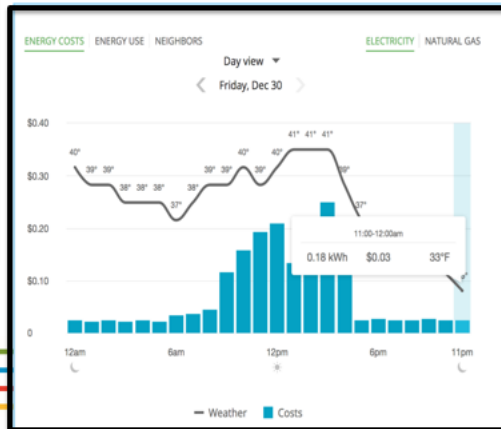
Track Energy Usage

nationalgrid
HERE WITH YOU. HERE FOR YOU.



Customers will be able to track their energy usage, compare previous bills and will receive tips on how to reduce their energy usage.

Note: Presentation of data on the track usage page will look different for customers in Clifton Park come June (see below)



This is a Mock up-not FINAL

7

Figure 8: Sample Energy Tracking Web Portal for PTR

2.1.5 Advanced Data Analytics (“ADA”)

When a PTR event is called, National Grid will monitor actual electric usage during the event. This actual usage determines the customer’s actual load shape during the event period. National Grid then utilizes the customer’s forecasted load shape using the actual conditions that occurred during the event as input to the mathematical equation that built the forecasted load shape. This enables National Grid to compare the customer’s actual usage to the customer’s forecasted usage under the same conditions. The difference between the forecasted and actual usage during the event is what will be used to determine if participation occurred or not.

National Grid’s Advanced Data Analytics Project team is responsible for evaluating residential energy use and building a baseline model for residential customers. The purpose is to monitor if each customer has reduced usage and by how much during a PTR event. The results of this analysis are used to reward customers.

Timeframe	Completed Milestones
2 nd Quarter 2017	<ul style="list-style-type: none"> Developed and tested PTR analytics which will allow National Grid to conduct post-event analysis.
	<ul style="list-style-type: none"> Completed end-to-end system testing.

2.1.6 Voluntary Time-of-Use (“VTOU”) Rate

The VTOU rate will 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.

Timeframe	Completed Milestones
2 nd Quarter 2017	<ul style="list-style-type: none"> The Commission approved the Petition for Limited Waiver regarding monthly incremental metering fee for Clifton Park customers utilizing VTOU rate.⁴

2.1.7 Distributed Energy Resource (“DER”) Service

In addition to reducing peak load through energy insights, actionable information, and price signals, National Grid seeks to animate the market by working with third-party DER providers and/or facilitating DER providers’ services as part of the Project. DER products and services will be

³ See National Grid’s Electricity Tariff, Service Classification No. 1, Special Provision L, “Residential Time of Use Delivery and Commodity Rate.”

⁴ See REV Proceeding, Order Approving Limited Waiver of Incremental Metering Charge for Voluntary Time of Use Customers in Clifton Park (issued May 19, 2017).

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.

DER providers will gain value by leveraging National Grid’s communications channels to those customers opting in to receive such communications, and in turn, DER providers will contribute toward Project revenues in the form of referral incentive fees.

National Grid is continuing to consider additional DER providers and will investigate each to determine their appropriateness for inclusion in this Project.

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. After the filing of the Implementation Plan, the Town decided to not pursue 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 Steering Committee Meetings;
- Monthly General Staff Meetings;
- Quarterly PSC Reporting;
- Issues Tracking;
- Lessons Learned Recording and Review;
- Change Log Processes; and
- Financial Reporting activities.

Timeframe	Completed Milestones
2nd Quarter 2017	<ul style="list-style-type: none"> • Conducted weekly status reviews with core team leads, monitoring progress, providing corrective measure, and escalating issues as needed.
	<ul style="list-style-type: none"> • Provided weekly updates to National Grid’s Finance Department regarding the Project for management review.
	<ul style="list-style-type: none"> • Conducted monthly status updates for broader National Grid audience to raise level of awareness.

2.1.10 Challenges, Changes, and Lessons Learned






Qtr	Issue or Change	Resulting Change to Project Scope/Timeline?	Strategies to Resolve	Lessons Learned
Q2.17'	Meter installation progress became challenged when contract crews moved off the Project.	Meter installations have taken longer than anticipated.	None.	Contractor work period should be of sufficient length to allow required effort to be completed and should include schedule contingency.
Q2.17'	Additional contracting issues with Opower resulted in delay of PTR launch.	Beginning of event season ultimately moved from 6/3/2017 to 7/17/2017.	None.	Contract resolution with some vendors takes longer than anticipated. "Showstopper" issues need to be identified early and/or allow contingency time.

3.0 Next Quarter Forecast


During the 3rd Quarter of 2017, the Project team will finalize Phase 2 efforts and begin 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; Peak Time Rewards Operations	1/2/17 – 6/16/17	1/2/17 - 7/17/17	
2 Phase 2: Volt/VAR Optimization; Voluntary Time Of Use; 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 2017

Work Stream	Future Milestones	Status
Information Systems (“IS”)	<ul style="list-style-type: none"> Correct any defects identified with metering and billing. 	
	<ul style="list-style-type: none"> Retire meter field deployment management (“FDM”) devices and switch to using MWORK tool, National Grid’s work management system for ongoing support. 	
	<ul style="list-style-type: none"> Increase the bandwidth at Itron’s data center via Verizon circuit increase to accommodate AMF data. 	
	<ul style="list-style-type: none"> Transition to support team. 	

Work Stream	Future Milestones	Status
Meter Installation	<ul style="list-style-type: none"> • Complete all remaining meter installations and verify connectivity; ~300 meters remaining. 	
	<ul style="list-style-type: none"> • Targeted quality control checks after installation: 3. 	
	<ul style="list-style-type: none"> • Targeted real-time performance audits: 3. 	
	<ul style="list-style-type: none"> • Adopt processes to support normal business practices related to move-in/out of customers. 	
Volt/VAR Optimization (“VVO”)	<ul style="list-style-type: none"> • Install 75% of VVO field equipment. 	
	<ul style="list-style-type: none"> • Design 100% of circuit monitoring device locations. 	
	<ul style="list-style-type: none"> • Complete 50% of Elnora substation transformer controller upgrade. 	
	<ul style="list-style-type: none"> • Install 50% of circuit monitoring devices. 	
	<ul style="list-style-type: none"> • Install VVO server at National Grid facility in Syracuse, New York. 	
	<ul style="list-style-type: none"> • Commission 25% of VVO field equipment. 	
Customer Outreach	<ul style="list-style-type: none"> • Conduct community outreach meeting in September 2017 at the Clifton Park - Halfmoon Public Library. 	
	<ul style="list-style-type: none"> • Perform VTOU Rollout in September 2017. 	
	<ul style="list-style-type: none"> • Send Bill Insert to customers for August 2017 and September 2017. 	
	<ul style="list-style-type: none"> • Send out email communications to customers regarding Conservation Days as events are called. 	
	<ul style="list-style-type: none"> • Launch web portal with AMF data in July 2017 so customers can see interval data. 	
	<ul style="list-style-type: none"> • Conduct focus groups to explore customer barriers to using the portal such as motivation, lack of knowledge, and understand potential barriers to utilization. 	
Peak Time Rewards (“PTR”)	<ul style="list-style-type: none"> • Officially launch PTR program (in conjunction with customer outreach). 	
	<ul style="list-style-type: none"> • Perform post-event analysis to gauge energy savings realized. 	
	<ul style="list-style-type: none"> • Monitor PTR participation by customers as well as customer feedback on the Project. 	

Work Stream	Future Milestones	Status
Advanced Data Analytics (“ADA”)	<ul style="list-style-type: none"> • Perform post-event calculations for analysis by business group. 	
	<ul style="list-style-type: none"> • Provide post-PTR go-live support. 	
Voluntary Time-of-Use (“VTOU”)	<ul style="list-style-type: none"> • Develop Q3/Q4 communication content. 	
Distributed Energy Resources (“DER”)	<ul style="list-style-type: none"> • National Grid is continuing to consider additional DER providers and will investigate each provider to determine appropriateness of including them in the Project. 	
Project Management Group	Conduct weekly and monthly project update meetings.	
	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.	
	Continue weekly status reporting.	
	Process document log (<i>i.e.</i> , how things were accomplished) for reference on an on-going basis.	

4.0 Work Plan and Budget Review

4.1 Updated Work Plan

ID	Task Name	Start	Finish	2017												2018
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
1	Clifton Park Integrated Program Plan	1/2/2017	2/3/2020	[Gantt bar spanning from Jan 2017 to Jan 2018]												
2	IS	3/31/2017	8/4/2017	[Gantt bar from Mar to Aug 2017]												
3	ADA	4/17/2017	6/30/2017	[Gantt bar from Apr to Jun 2017]												
4	Design	5/8/2017	5/31/2017	[Gantt bar from May to May 2017]												
5	Initial Testing	5/31/2017	6/15/2017	[Gantt bar from May to Jun 2017]												
6	Development	5/30/2017	5/31/2017	[Gantt bar from May to May 2017]												
7	Testing	4/17/2017	6/15/2017	[Gantt bar from Apr to Jun 2017]												
8	Meters	3/17/2017	7/28/2017	[Gantt bar from Mar to Jul 2017]												
9	VVO	2/24/2017	1/26/2018	[Gantt bar from Feb 2017 to Jan 2018]												
10	Field Devices	7/28/2017	1/26/2018	[Gantt bar from Jul 2017 to Jan 2018]												
11	Substations	2/24/2017	12/29/2017	[Gantt bar from Feb 2017 to Dec 2017]												
12	Elnora Substation	2/24/2017	9/29/2017	[Gantt bar from Feb 2017 to Sep 2017]												
13	Grooms Substation	2/24/2017	12/29/2017	[Gantt bar from Feb 2017 to Dec 2017]												
14	Xformer 1	4/28/2017	6/30/2017	[Gantt bar from Apr to Jun 2017]												
15	Xformer 2	11/30/2017	12/29/2017	[Gantt bar from Dec 2017 to Dec 2017]												
16	Utilidata Server	8/18/2017	10/27/2017	[Gantt bar from Aug to Oct 2017]												
17	PTR	4/28/2017	10/6/2017	[Gantt bar from Apr to Oct 2017]												
18	Phase 1	4/28/2017	5/29/2017	[Gantt bar from Apr to May 2017]												
19	Phase 2	7/17/2017	10/6/2017	[Gantt bar from Jul to Oct 2017]												
20	Outreach (O&E)	1/2/2017	5/14/2018	[Gantt bar from Jan 2017 to May 2018]												
21	Phase 1 Marketing Communications	2/13/2017	10/20/2017	[Gantt bar from Feb 2017 to Oct 2017]												
22	Direct Mailings Traditional Mail and Inserts	2/2/2017	2/13/2017	[Gantt bar from Feb to Feb 2017]												
23	Points and Rewards Enrollment	5/16/2017	6/6/2017	[Gantt bar from May to Jun 2017]												
24	Conservation Day letter	6/19/2017	6/19/2017	[Gantt bar from Jun to Jun 2017]												
25	Bill Inserts	7/6/2017	7/6/2017	[Gantt bar from Jul to Jul 2017]												
26	Pricing	10/20/2017	10/20/2017	[Gantt bar from Oct to Oct 2017]												
27	Meter Installation Notifications	3/3/2017	6/2/2017	[Gantt bar from Mar to Jun 2017]												
28	Community Outreach meeting	4/27/2017	1/8/2018	[Gantt bar from Apr 2017 to Jan 2018]												
29	Contact Center Training	5/10/2017	5/10/2017	[Gantt bar from May to May 2017]												
30	Opt-out Monitoring	3/17/2017	7/28/2017	[Gantt bar from Mar to Jul 2017]												
31	AMO	2/12/2018	2/12/2018	[Gantt bar from Feb 2018 to Feb 2018]												
32	Project Management Operations	2/20/2017	9/30/2019	[Gantt bar from Feb 2017 to Sep 2019]												
33	Procurement	1/2/2017	8/21/2017	[Gantt bar from Jan 2017 to Aug 2017]												

4.2 Updated Budget

The overall Project budget remains unchanged. 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.

	Budget	Revised Forecast	Actuals
Fiscal Year 1 (2017)	\$16,693,536	\$3,630,413	\$3,630,413
Fiscal Year 2 (2018)	\$6,037,345	\$19,100,345	\$7,807,402
Fiscal Year 3 (2019)	\$4,222,477	\$4,222,477	
Total*	\$26,953,235	\$26,953,235	

*A difference between the Implementation Plan budget (\$26,819,336)⁵ and the current revised budget (\$26,953,235) exists due to an increase in actual meter costs and associated fees. The overall difference is \$133,899.

⁵ Case 14-M-0101, *supra* note 1, p. 33.

5.0 Progress Metrics

Checkpoint ⁶	Progress / Target Completion
Infrastructure	
AMF Acceptance vs. Opt Out	Continuing to monitor opt-out rates as Project progresses. On-going through life of the Project. Current opt-out rate is 7.6 percent.
VVO System Benefits	Establishing infrastructure required to enact VVO and monitor progress. Completion of equipment installation targeted for 2017 Q4.
Customer Outreach and Engagement / Deep Energy Insights and Actionable Information	
Customer Outreach and Engagement	Mailings and flyers sent to customers in 2017 Q1. Continuing engagement through life of the Project. Annual surveys tracked against initial baseline survey.
Customer Energy Portal Engagement	Portal accessible in 2017 Q1. Continued customer engagement metrics related to portal use, PTR participation, etc.
Price Signals	
Peak Time Rewards	Begin PTR in July 2017; continue evaluation through life of the Project in regard to participation rates and curtailed load.
VTOU Rate	Customer outreach was started in 2017 Q1. Fully engage customers by 2017 Q3. Monitor adoption of VTOU rate.
DER	
DER Opportunities	National Grid is continuing to consider additional DER providers and will investigate appropriateness of prospective providers during 2017 Q3.

⁶ See Implementation Plan pp. 24-26 for specific metrics.