



February 27, 2015

#### VIA ELECTRONIC SERVICE

Honorable Kathleen Burgess Secretary Burgess New York State Public Service Commission Three Empire State Plaza Albany, NY 12223-1350

Re: Cases 09-E-0715, 09-G-0716, 09-E-0717 and 09-G-0718 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of New York State Electric & Gas Corporation and Rochester Gas and Electric Corporation for Electric and Gas Service

#### Dear Secretary Burgess:

Pursuant to Section X.B of the Joint Proposal approved by the New York State Public Service Commission's Order Establishing Rate Plan, issued and effective September 21, 2010, in the above-referenced proceeding, New York State Electric & Gas Corporation and Rochester Gas and Electric Corporation respectfully submit the attached Annual Capital Expenditures Report.

If you have any questions, please contact me at 585.724.8003.

Respectfully submitted,

Joseph J. Syta

Attachment



# New York State Electric & Gas Corporation Rochester Gas and Electric Corporation

# 2014

**Annual Capital Expenditures Report** 

Cases 09-E-0715, 09-G-0716, 09-E-0717, and 09-G-0718

This report is in response to the requirements set forth in Section X, Paragraph B of the Joint Proposal ("JP") in Cases 09-E-0715, 09-G-0716, 09-E-0717, and 09-G-0718. The requirement stated in the JP is as follows:

"The Companies will provide to Staff and interested parties, on an annual basis, a report on total electric, gas and common expenditures, a detailed status report for each electric capital project over \$1 million and each gas capital project over \$500,000, and for each such project that experiences a plus or minus 10% cost variation an explanation of the variation. The report will include an explanation for removing or adding capital projects from or to those listed in Appendix L. This report shall include the status of the Auburn 345kV Source project."

Attached are the following schedules that include the required information for calendar year 2014:

- Schedule A lists all Electric projects at each company that meet the stated \$1 million threshold and all Gas projects at each company that meet the stated \$500,000 threshold. This report does not include projects with a plus or minus 10% cost variance with respect to the amounts listed in Appendix L. The term of Appendix L was only through 2013; without a basis for 2014 a variance is not determinable.
- Schedule B provides a detailed status report for each Electric and Gas project listed in Schedule A;
- Schedule C is the December 2014 Variance Report with capital expenditures during 2014 and showing Electric project variances as well as listing Electric projects that were added to or removed from those listed in Appendix L.
- Schedule D is in a similar format to Schedule C and provides the variance explanations for Gas projects that meet the requested criteria.
- Schedule E provides a status for the Auburn Transmission Project (Auburn 345kV Source project in Appendix L).

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation Annual Capital Investment Report Schedule A New York State Electric & Gas Corporation Rochester Gas and Electric Corporation Annual Capital Expenditures Report Schedule A March 1, 2015

# NYSEG & RG&E Annual Capital Expenditure Report List of Projects Meeting Threshold

#### Electric projects and programs with actual investment greater than \$1M

#### RG&E:

- 1 Electric System Security
- 2 FERC Brightline BES
- 3 High Street Victor Relocate Electric Facilities
- 4 Lake Avenue Relocate Electric Facilities
- 5 Recloser Automation
- 6 Rochester Area Reliability Project
- 7 Sectionalize 115kV Circuit 917
- 8 Station 23 Add Transformer and 11kV Switchgear
- 9 Station 23 New Downtown 115kV Source
- 10 Station 38 Total Refurbishment
- 11 Station 56 Additional 12kV Source
- 12 Station 69 New 115kV Capacitor (formerly Station 71)
- 13 Station 95 Add 2nd 34.5-11.5kV Transformer
- 14 Station 136 Add 2nd Transformer
- 15 Station 178 34kV Capacitor Banks
- 16 Stations 180 and 128 Add 115kV Capacitors
- 17 Station 218 to Clyde New 34.5kV Transmission Line
- 18 Station 262 New 115/34.5kV Substation
- 19 University of Rochester New 115/34.5kV Substation 251

#### NYSEG:

- 20 Auburn Transmission Project
- 21 Brewster RTU Project
- 22 Brewster T&D Hardening Project Phase 2
- 23 Brewster Telecom Network for Automation
- 24 CCTP New 115 kV Transmission Line (Klinekill)
- 25 Coddington LTC Capacity 115-34.5kV Transformer
- 26 DOE Stimulus Prgm Capacitor Banks NYSEG
- 27 Eelpot, Add 2nd 115-34.5kV Transformer
- 28 Flat Street Substation New Transformer
- 29 Glenwood Replace Substation Transformers
- 30 Goudey Substation Separation from AES Plant
- 31 Greenidge Substation Separation from AES Plant
- 32 Hickling Substation Separation from AES Plant
- 33 Jennison Substation Separation from AES Plant

- 34 Keuka Substation Replace Bank #2 Transformer
- 35 Line #807 115kV Conversion
- 36 Marcy South Series Compensation Project
- 37 Meyer Substation New Transformer
- 38 Mobile Radio Project
- 39 NYSEG Electric System Security Projects
- 40 Oakdale to Frasier 345kV Line Upgrade
- 41 Perry Center Area Install New 34.5kV Sub
- 42 Raylinski tap to Coons Crossing RBLD Line 601
- 43 Robinson Road 230kV Transformer Project
- 44 South Perry New 230kV Transformer Project
- 45 South Perry New Add 2nd 115-34.5kV Transformer
- 46 Stephentown Substation New Transformer
- 47 Substation Automation (RTU Program)
- 48 Mechanicville Reinforcement Project
- 49 Tom Miller Road New Substation
- 50 Transit St Substation Relocate 12kV Circuits MGP
- 51 Willet Substation New Transformer

#### NYSEG / RG&E

- 52 NY Energy Control Center
- 53 IT SAP Unification

#### Gas Projects and Programs with actual investment greater than \$500,000.

#### **RG&E and NYSEG Programs:**

- 54 Gas Regulator Modernization and Automation Program
- 55 Leak Prone Main Replacement Program
- 56 Leak Prone Services Replacement Program
- 57 Minor Distribution Mains Program, Install Gas Mains
- 58 Minor New Residential Services Program, Install Gas Services
- 59 Gas Meters Program
- 60 Distribution Main Replacement Program, Replace Gas Mains
- 61 Minor Government Jobs Program, Replace Gas Mains
- 62 SmarTRAC Replacement Program

#### RG&E:

- 63 New Empire West Gate Station, Build New Gate Station
- 64 Rochester Area Steel Services Investigation
- 65 Replace Gas Mains-Ridge Rd East (St Paul to Marway)

#### NYSEG:

- 66 Rebuild Kayner and Ertman Rd. Gas Regulating Station
- 67 Horseheads Leak Prone Service Replacements
- 68 Robinson Road Gate Station Rebuild, Lockport
- 69 Elmira Horseheads Gas Service Replacements
- 70 Dunham Farms, Install Gas Mains, Lockport
- 71 County Route 32 Town of Norwich Gas Main Extension

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation Annual Capital Investment Report Schedule B

# 1 RG&E - Electric System Security

As of December 31, 2014

#### **Project Overview**

This project has multiple facets covering numerous aspects of security. Included are substation perimeter protection and fencing upgrades.

#### **Project Activities / Key Accomplishments in 2014**

- Upgrade of video alarming equipment at bulk power substations.
- Upgraded cameras to include thermal capability at bulk power substations and other key critical infrastructure locations, such as hydro electric generating facilities.
- Security system installation at Hydro Generating Facilities.
- Continued upgrades and replacement of physical barriers and fencing at key critical facilities. Capital investment was \$1.1 million in 2014

- Continued replacement of access control security systems providing standardization between NYSEG and RG&E.
- Upgrade of video alarming equipment at key critical facilities.

# 2 FERC - Brightline BES

As of December 31, 2014

#### **Project Overview**

Since 2012, Iberdrola USA has conducted a program to ensure compliance to the FERC Brightline Order. This order establishes the BES (Bulk Electric System) as including most facilities 100kV and above. The work associated with this program is being managed according to the IUSA PMO (Project Management Organization) standards. The goal of the program is to ensure compliance by the enforcement date of the Brightline Order, which is July 1, 2016.

The scope for the program was established by a NERC Reliability Standard GAP analysis conducted in 2011. The program includes the following projects:

- CIP Implementation
- Install security systems at five RG&E BES substations
- System Operations
- Have the NYSEG and RG&E Energy Control Centers (ECC's) register as Transmission Operators (TOP's) and build a NERC compliance program.
- System Protection
- Determine areas in identified parts of the BES system where protection devices limit facility ratings.
- Substation Maintenance
- Develop testing plans for BES substation equipment identified in NYSEG's and RG&E's BES substations.
- System Planning
- Conduct a planning study on NYSEG's and RG&E's BES system to determine where NERC TPL (Transmission Planning) Standards are not met.
- Facility Ratings
- Deploy a common database to store BES facility ratings information for NYSEG and RG&E

#### **Project Activities / Key Accomplishments in 2014**

- CIP Implementation
- Security system installed at one of five stations.
- System Operations
- Resources are being hired to assist internal personnel on building the NERC compliance program.
- NYSEG and RG&E working with other New York Transmission Owners and the NYISO
  to establish a matrix of roles and responsibilities for compliance with NERC Standards
  regarding transmission operations and transmission planning.
- System Protection

#### Project Activities / Key Accomplishments in 2014 (Con't)

- Resource hired to determine if relays are NYSEG and RG&E limit BES facility ratings.
- Substation Maintenance
- Testing on NYSEG and RG&E BES equipment started in 2014.
- A revised scope of BES substation equipment and maintenance plan being developed.
- System Planning
- A Needs Assessment for the NYSEG and RG&E BES facilities was completed in 2014 and solutions are being developed,
- Study work is being coordinated with other New York Transmission Owners and the NYISO.
- Facility Ratings
- A database is being acquired and tested.

- CIP Implementation
- Install security systems at four remaining RG&E BES substations.
- System Operations
- Continue working with other New York Transmission Owners and the NYISO to establish
  a matrix of roles and responsibilities for compliance with NERC standards regarding
  transmission operations and transmission planning.
- Utilize internal and external resources to establish the procedures and infrastructure to be compliant with NERC standards with regard to the NYSEG and RG&E Energy Control Centers.
- System Protection
- NYSEG and RG&E determining areas where relay settings limit BES facility ratings,
- Revised relay settings to be developed to remedy issues.
- Substation Maintenance
- Continue updating the scope of BES substation equipment,
- Finish creating a BES substation equipment testing plan for NYSEG and RG&E.
- System Planning
- Develop solutions for needs identified in the planning study and continue to work with New York Transmission Owners and the NYISO to meet this goal.
- Facility Ratings
- Upload information into the database after testing and training is complete.

# 3 High Street – Victor – Relocate Electric Facilities

As of December 31, 2014

#### **Project Overview**

The Town of Victor will be improving High Street by widening it in place, installing new curbs, storm sewer lines, sidewalks and replacing the water mains. RG&E has a three phase 12kV overhead distribution line along High Street within the road ROW that is in conflict with the proposed highway improvements. These electric facilities must be relocated as required by NYS regulation. RG&E will need to relocate 41 poles, transfer 36 spans of overhead, three phase 336.4 aluminum conductors and replace six other spans of conductors.

RG&E's schedule is to begin construction early January 2014 and complete it by August 2014.

## **Project Activities / Key Accomplishments in 2014**

• RG&E work was complete in 2014.

#### **Project Activities Planned for 2015**

None planned for 2015.

#### 4 Lake Avenue Relocate Electric Facilities

As of December 31, 2014

#### **Project Overview**

The City of Rochester is planning on improving Lake Ave between Burley Rd and Merrill St. This is a 1.2 mile project with full reconstruction of the highway and intersections. RG&E is required by regulation to relocate any overhead and underground facilities located in the highway ROW that are in conflict with the proposed highway improvements. RG&E will be relocating and rebuilding 7 poles, affecting 1 circuit with equipment, transfer secondary with service taps, transfer duct system with cables to new cable pole and tree trimming. RG&E is currently excavating test pits to locate RG&E duct systems to determine where they are in conflict with new curbing and drainage structures. RG&E will be installing a new duct system, rebuilding 7 manholes and 5 handholes, installing 6 way and 2 way 5 inch duct systems, removing abandoned encased duct system and replacing 30,000 feet of transmission cable and 1,000 feet of distribution cable with equipment, with removals.

#### Project Activities / Key Accomplishments in 2014

- Completed Subway system installation and restoration limits of project
- Completed overhead pole and wire relocations
- Completed all circuit and pilot cable installation reroutes in new subway system, received approved switching from management to cut over and remove old cables to abandon in conflict duct systems

- RG&E contractor will be completing the removal of the abandon asbestos duct system for the new drainage catch basins and inverts.
- The City of Rochester has scheduled construction in 2015 and has resubmitted revised plans. A meeting with the city and their engineer will occur in early 2015 to review the changes and possible RG&E conflicts.

#### 5 Recloser Automation

As of December 31, 2014

#### **Project Overview**

The Recloser Automation program is an on-going effort to install the equipment necessary to quickly isolate faults in the electric system while also providing as many customers with power as possible. This program will help to maintain system reliability and customer satisfaction.

#### Project Activities / Key Accomplishments in 2014

 In 2014, 55 electric reclosers on the RG&E 12kV and 35kV lines were installed and commissioned. In doing so the RG&E ECC now has indication and remote control of these 55 sites.

## **Project Activities Planned for 2015**

• In 2015, communication and control will be installed to between 20 to 50 reclosers.

# 6 Rochester Area Reliability Project

As of December 31, 2014

#### **Project Overview**

During a long term outage of the Ginna Nuclear Station at a load level of 1843MW, subsequent loss of the 345/115kV 462 MW transformer #5 at Station 80 will cause the Station 80 345/115kV transformers #1 and #3, and all the three Station 122 345/115kV transformers to be at their full capacity. Thus at peak load levels forecasted for 2014, the system will be at its full capacity under single contingency condition.

Add new 345kV breaker and a half scheme substation, Station 255, with two 440MVA 345/115kV transformers with LTC, one 115kV 300/350MVA line from Station 255 to Station 418, and one 115kV 300/350MVA line to Station 23 115kV.

#### Project Activities / Key Accomplishments in 2014

- Identified needed property rights
- Held pre-application filing meetings with the DPS and Staffs of the NYDEC and Agriculture and Markets
- Held project introductory meetings with the local government officials and open house meetings for the public in the City of Rochester and the Towns of Henrietta, Greece and Gates
- Capital investment was \$17.0 million
- Support efforts to allow for PSC Approval of Article VII
- Progress detailed design sufficient to file EM&CP II segments in April 2014.
- Purchase options on needed property rights
- Procurement of long lead time equipment

- Determine final location of Station 255
- Complete construction for Station 80

#### 7 Sectionalize 115kV Circuit 917

As of December 31, 2014

#### **Project Overview**

The RG&E owned 115kV circuit number 917 includes 6 tapped substations and over 30,000 customers. The existing 917 Line protection is provided by primary and secondary step distance electromechanical relays located at Station 418 and microprocessor based relays at Station 7.

The purpose of this project is to minimize the impacts of faults on this line by breaking up the line at various locations using breakers and possibly motor-operated switching sectionalizing schemes depending on what can be done at various substations. The solution required to sectionalize the line is to install circuit breakers and switches in each of the 115kV buses at Stations 69 and 70 and install GIS-type compact switching devices for Station 71. It is also required to equip the existing 115kV disconnect switches at Stations 69, 70, and 113 with motor operating mechanisms as well as supervisory elements for remote control. Protections and controls necessary to isolate each section of the line in the minimum time will also be provided for the project, as well as fiber optic communication.

#### **Project Activities / Key Accomplishments in 2014**

- Finalize Station 69 detailed engineering
- Construct Station 69 in ground package
- Move forward with all detailed engineering
- Move forward with other equipment procurement processes

- Complete Station 69 above ground construction
- Complete SPC 3-7 for Station 70
- Begin detailed engineering for Station 71

# 8 Station 23 – Add Transformer and 11kV Switchgear

As of December 31, 2014

#### **Project Overview**

The project will replace two 115kV transformers and four sections of 11.5kV switchgear.

Transformer replacements are due to aging infrastructure. 1T and 2T transformers are leaking and are also reaching end of life. Two of the four bus sections of 11kV are over dutied and need to be upgraded for proper fault current ratings. There are six over dutied breakers on Bus 1 and six on Bus 2 (all are approximately 125% over dutied). Bus 3 and Bus 4 have all 11kV breakers at 96% of rated capacity.

## Project Activities / Key Accomplishments in 2014

- Started detailed engineering
- Progressed11.5kV GIS switchgear order
- Progressed 115/11.5kV transformer order

- Complete conceptual engineering
- Complete detailed engineering
- Complete design approvals and authorize manufacture of 11.5 kV SG
- Begin procurement of outstanding material and construction packages

#### 9 Station 23 – New Downtown 115kV Source

As of December 31, 2014

#### **Project Overview**

This project will build a new 115kV gas insulated switchgear substation at Station 23, fed by the existing lines 901 and 920 that originate from Station 82 and Station 42, respectively. Lines 901 and 902 will be swapped from Station 82 to Station 33 so that the Line 901 comes out of Station 82 and Line 902 comes out of Mortimer Station. Line 901 will be re-conductored to 400MVA. A phase-shifting transformer will be added on Line 920 at Station 42. The project will also relocate 11kV phase-shifting transformer from Station 23 to new Station 137.

Two new 115-34.5kV transformers will be added at Station 23. A 34.5kV line from each new transformer will be run to feed the bus at new Station 137.

#### Project Activities / Key Accomplishments in 2014

- Issued PO for detailed engineering
- Completed construction on Station 42 PST foundation and oil containment
- Installed and assemble new 115kV PST at Station 42
- Constructed control house expansion at Station 42
- Relocated 11kV PST from Station 23 to Station 137

- Complete Station 82 protection work
- Complete conceptual engineering
- Complete detailed engineering (except for SPC 3-7)
- Begin procurement of critical outstanding material (UG cables, steel poles, conductor, etc.) and construction packages
- Complete design approvals and authorize manufacture of 115 kV GIS, 34.5 kV SG

#### 10 Station 38 - Substation Modernization

As of December 31, 2014

#### **Project Overview**

The scope of this project is to complete installation of new 34.5 kV, 11.5 kV and 4 kV switchgear replacing all the existing switchgear with new GIS SF6 switchgear. This project includes removal and replacement of 3T and 4T which are outdated and replacements parts have become difficult to procure. The entire investment encompasses upgrading auxiliary services for the station, new electronic protection relays with IEC 61850 capabilities will be installed, adjacent to new battery banks and AC/DC control panels. The entire infrastructure will increase safety for local operators and protect the reliability of the downtown underground network.

#### **Project Activities / Key Accomplishments in 2014**

- 3T and 4T purchase
- Various survey and geotechnical studies
- 34.5 kV, 11.5 kV and 4kV switchgear purchase
- 61850 SEL relay purchase
- Electric conceptual engineering initiation
- Mezzanine structural design initiation.
- Capital investment was \$4.5 million

- Structural mezzanine design completion
- Electric conceptual engineering completion
- Detailed engineering initiation
- 3T and 4T purchase completion
- 34.5 kV, 11.5 kV, and 4kV switchgear purchase completion
- Batteries and rectifiers procurement completion
- Capacitor bank procurement completion
- Power cable procurement initiation
- Control cable procurement initiation
- Ground resistors procurement
- SP&C 3 to 7 procurement initiation

#### 11 Station 56 – Additional 12kV Source

As of December 31, 2014

#### **Project Overview**

Station 56 is a 12kV source which supplies approximately 4,500 upscale, mainly residential customers in the Towns of Pittsford and Brighton. Station 53 operates at 4kV supplying 1,400 customers in an adjacent area. The Station 56 transformer is loaded beyond 90% of its 22MVA capability at peak periods, while Station 53 is loaded at peak to its Planned Loading Beyond Nameplate rating. There are insufficient ties to supply either service area in the event of a transformer problem resulting in long outage durations. This project will eliminate Station 53 and increase the capacity at Station 56 to improve potential reliability to the entire area while allowing room for further growth. Through the application of best practice substation design, the project will upgrade the existing equipment and provide increased operational capability.

The project is to install a new source for the existing Station 56 12kV yard with installing a new 115-12kV, 12/22 MVA transformer (4T), three 115kV breakers and associated disconnect switches, 115kV bus work, 12kV GIS equipments, 12kV GIS building and new control room in the GIS building. All the site work will be contained within the fenced area of the existing substation 115/12kV yard.

#### <u>Project Activities / Key Accomplishments in 2014</u>

- National Grid communication
- Detailed engineering
- Distribution line upgrades (circuits 267, 268 and 402)
- Complete construction of phase 1

- Commissioning of phase 1
- Transformer #4 energized.
- Civil construction of phase 2

# 12 Station 69 – New 115kV Capacitor (formerly Station 71)

As of December 31, 2014

#### **Project Overview**

Station 69 serves approximately 38MW of load and 6,779 customers. During high load periods of the 917 Line, source from Station 7 results in low-voltages at Station 71 and adjacent substations. This would result in shedding approximately 20MW of load to relieve the low-voltage. The period of exposure is approximately 90 hours per year. The criteria used for this project is the single contingency criteria for the transmission system that provides of loss of any element results in the remaining elements being above the post-contingency voltage requirements.

This replaces the Station 71 Cap Bank project. The bank was relocated to Station 69 due to space constraints and other conflicts with the breaker projects along Line 917.

#### **Project Activities / Key Accomplishments in 2014**

- In ground construction is complete
- Above ground construction is 95% complete

- Complete above ground construction
- Put asset in service

## 13 Station 95 – Add 2nd 34.5kV-11.5kV Transformer

As of December 31, 2014

#### **Project Overview**

Station 95 serves approximately 15MW of load which relates to approximately 2,320 customers, one of which is Kodak. During high load periods, the loss of the existing 34.5kV/11.5kV transformer at Station 95 results in overloading the 11.5kV 676 Line. This would result in a cable failure and low-voltages to the customers supplied from Station 95, including Kodak. The customer load would then have to be transferred to Station 403 to supply the impacted customers. Load would need to be reduced by 3MW. The period of exposure is approximately 850 hour per year. The criterion used to justify this project is the single contingency criteria for the transmission system that provides for loss of any element results in the remaining elements being below their long-term emergency rating.

#### **Project Activities / Key Accomplishments in 2014**

- Conceptual engineering
- Detailed engineering
- · Procurement of all long lead items
- Transformer foundation

- Construction of firewalls
- Transformer #4 installation
- Testing and commissioning
- Transformer #4 energization

#### 14 Station 136 – Add 2nd Transformer

As of December 31, 2014

#### **Project Overview**

Station 136 is located east of the City of Rochester, in the Town of Webster. Adding this 2nd transformer at the station will complete the original plan for a dual transformer substation with 12 kV distribution to be used for converting the existing 4 kV system in the area. There had been numerous low voltage concerns on the existing 4 kV system during a period of rapid residential and commercial growth.

It has been six years since the installation of the first 34/12 kV 22.4 MVA transformer at Station 136. This single transformer, #1T, has been supporting three 12kV circuits, and the peak loading on it is quite close to the transformer nameplate rating. The addition of the second transformer will provide tie capability with existing 12kV circuit; capacity to reduce some loading on #1T; as well as capacity to continue with 4 kV to 12 kV conversion in the area.

#### **Project Activities / Key Accomplishments in 2014**

- Construct an underground oil containment and storage tank system around the existing transformer foundation
- Install a new communication system and a fully integrated automated control system which provides the ability for remote control by ECC though a fiber optic line
- One of the three 12 kV existing circuits (5295) was relocated from the existing 12 kV switchgear to the new 12 kV GIS (this included the installation of the conduits from the station to the pole outside the station, placement of the cable, installation of the terminations, adjustment of the protection and control design and testing and commissioning of the modified elements)
- An asphalt driveway was designed and constructed in order to facilitate the operation and maintenance of the equipment of the station.
- A canopy was designed and installed outside the new building control room exit in order to minimize the risk of snow falling on personnel entering and exiting the building
- Sliding links terminals were installed in the GIS cabinets to make the testing and maintenance easier and safer
- The basement access was modified so it is not considered a confined space, including a pull up ladder, handrails, a single door floor access and a hoist system
- The exterior fence was relocated to facilitate maintenance around the new building

#### **Project Activities Planned for 2015**

All work has been completed and there are no activities planned for 2015.

# 15 Station 178 – 34kV Capacitor Banks

As of December 31, 2014

#### **Project Overview**

During high load periods the Station 178 area will have low voltages. The criteria for this project is the system normal criteria for the transmission system which provides when all elements are in-service, all elements will be above the pre-contingency voltage requirement.

#### **Project Activities / Key Accomplishments in 2014**

- Completed in-ground construction
- Above ground construction 90% complete

- Complete above ground construction
- Place asset in-service

# 16 Station 180 and 128 - Add 115kV Capacitors

As of December 31, 2014

#### **Project Overview**

The Genesee region services approx 55MW of load to approximately 13,000 customers, including Angelica municipal. During high loads, and with local generation off, this Genesee region will have low voltage. The period of exposure is approximately 300 hrs per year. The criteria used for the project is the system normal criteria for the transmission system that provides when all elements are in-service all elements will be above the pre-contingency voltage requirement.

#### **Project Activities / Key Accomplishments in 2014**

- Complete in-ground construction
- Above ground construction complete

- Testing and commissioning
- Place asset in-service

## 17 Station 218 to Clyde – New 34.5kV Transmission Line

As of December 31, 2014

#### **Project Overview**

The existing Station 199 in Clyde to Station 218 line services approximately 25 MW of load which is 9,217 customers. During high load periods, the line goes above its normal rating. This would result in shedding approximately 3MW of load to relive the overload. The period of exposure is approximately 175 hours per year. The criteria used for this project is the system normal criteria for the transmission system that provides when all elements are in-service all elements will be below their normal rating.

There will be modifications to Circuit 708. Circuit 708 originates from station 199 and serves six substations. In order to split the current load from existing circuit 708, a new 34 kV line, Circuit 804, will be constructed. Circuit 804 will be installed somewhat parallel with 708 to a point near Station 218.

The northern loop of Circuit 708 will be split with half being connected to the new Circuit 804. The other half remains connected to Circuit 708. Circuit 708 will be re-constructed along portions of the route to replace aging infrastructure and improve its line conductor ratings.

This project will require the addition of an outdoor breaker bay and building expansion at Station 199. The work will include, but not limited to the bay and building development, DC Battery System evaluation and design, and SCADA. The existing station has sufficient room to add a second breaker bay.

The existing control building must be increased due to being small and will not have adequate room for the modern control panels, DC system and the telecom system.

#### **Project Activities / Key Accomplishments in 2014**

- Detail engineering completion.
- Transmission line material and substation equipments procurement completion.
- Environmental, licensing and permit approvals.
- Right of way (ROW) easement completion.
- Construction procurement process completion.
- New 10.8 mile section of transmission line and station 199 (Clyde) started.

- Complete Station 199 upgrades
- Complete Circuit 708 and put in service
- Issue PO for construction of Circuits 708 North and 804
- Finish material procurement

#### 18 Station 262 – New 115/34.5kV Substation

As of December 31, 2014

#### **Project Overview**

This project is an infrastructure upgrade. A new substation that taps Line 901 with a new 57MVA 115/34.5kV transformer will be added as well as a new 34.5kV line from the new 262 substation to existing Station 26. A second 37 MVA 34.5/11.5kV transformer will be added at Station 26 plus complete substation modernization.

#### **Project Activities / Key Accomplishments in 2014**

- Station 26 and Station 262 electric conceptual engineering completed
- Procurement of electrical detailed engineering
- Detailed engineering initiation
- Station 262 property closeout
- Station 26 permit approvals initiation
- Station 26 architectural design development
- Station 262 existing building demolition
- power transformers purchased paid 3<sup>rd</sup> milestone payments.
- Station 26 grounding grid and TRV studies
- GIS 115 kV purchased 1<sup>st</sup> milestone payment
- Capacitor bank procurement process initiated

- 34.5 kV underground transmission line design completion
- Extension of the Station 262 building permit
- Station 26 and 262 detailed engineering completion
- Station 26 building / architectural design completion
- Station 262 building / architectural design completion
- Station 26 permits finalized
- Station 26 manholes relocation and easement completion
- GIS 115 kV purchased design completion ( 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> payment milestones)
- Create RFPs and initiate procurement process for materials (conductors, control panels and equipment, batteries and etc.)
- Create RFP and initiate procurement of SP&C 3 to 7 packages and testing and commissioning portion of the project
- Capital investment is \$3.8 million.

## 19 University of Rochester - New 115/34.5kV Substation 251

As of December 31, 2014

## **Project Overview**

The University of Rochester has requested additional supply to be provided by RG&E to serve its projected load growth. Currently, Station 33 serves the University. There is no space to expand Station 33 to serve the additional load and resolve reliability issues. Station 251 will be built on the land provided by University that will be owned by RG&E. The substation will be a new 115 kV/11.5 kV breaker and a half substation with two (2) 115 kV/11.5 kV 70 MVA transformers. This substation will connect to lines 901 and 902 independently. The 11.5 kV distribution switchgear will be supplied, installed, owned and operated by U of R. This project enables RG&E to supply the University's projected load growth.

#### Project Activities / Key Accomplishments in 2014

- Engineering completed switchgear foundation design
- Permitting
- Procurement of switch gear
- Construction
- Protection and Controls
- Transmission

- Energize Substation 251
- Complete landscaping
- National Grid connection
- Project close-out

# 20 Auburn Transmission Project

As of December 31, 2014

An update on the Auburn Transmission Project is provided in Schedule E.

# 21 Brewster RTU Project

As of December 31, 2014

#### **Project Overview**

The Brewster Division has been identified as having poor equipment that is affecting system reliability and operational performance which has resulted in poor CAIDI and SAIFI results. The objective of this project is to replace or upgrade equipment and move from manual operation to automated control via the Energy Control Center. The project will improve technical performance, operational control and help to maintain system reliability.

There are 11 substations involved that will have remote control operation achieved by addition of motors to existing or new 46kV disconnect switches which will be controlled through new SMP-16 RTUs. The existing relaying of the 13.2kV and 4.8kV feeders will be upgraded to SEL-451S relays. The communication modules for the Transformer Load Tap Changers (LTC) and Capacitor Banks will be upgraded. In addition, a pre-wired Control Building will house the following equipment: SMP-16 RTU, 48VDC Battery Bank, 48VDC Battery Charger, 48VDC fused distribution panel, 240/120VAC, Power Distribution Panel, Metering Cabinet, Motor-Operated Disconnect Switch (MOD) Control Cabinets, LTC controls and a termination cabinet for field wiring.

#### Project Activities / Key Accomplishments in 2014:

- Completed above ground construction in Peach Lake Station.
- Awarded construction contracts for construction for Wassaic, West Patterson and Kent Cliffs stations.
- Communication link to ECC put in service for Dingle Ridge, Peach Lake, Wassaic, West Patterson and Kent Cliff substations.
- RTU's put in service for Dover Plain, Haviland Hallow, Teakettle Spout, Dingle Ridge, Peach Lake, Wassaic and West Patterson substations.

#### **Project Activities Planned for 2015**:

Install and put in service Kent Cliffs and Putnam Lake RTU's.

# 22 Brewster T&D Hardening Project – Phase 2

As of December 31, 2014

#### **Project Overview**

The Brewster Division has been identified as having poor equipment that is affecting system reliability and operational performance which has resulted in poor CAIDI and SAIFI results. The objective of this project is to replace or upgrade equipment to provide improved reliability for selected Substation, Distribution and Transmission facilities.

#### **Project Activities / Key Accomplishments in 2014**:

- Four substations were commissioned and placed in production in 2014:
  - o Macedon (Geneva)
  - Noyes Island (Binghamton)
  - Peach Lake (Brewster)
  - Dingle Ridge (Brewster)
- Twenty-five line reclosers were placed in production in Brewster in 2014
- Electric T+D Accomplishments are grouped as follows:
  - 1) Substation Improvements (RTU installations)
  - o 2) Transmission Structure replacements including reconductoring
  - O 3) Distribution Pole Replacements on many circuits, and circuit rebuilds including reconductoring.
- Electric T+D: 13 additional orders advanced to construction in 2014.
  - 12 Distribution, 1 Transmission.
- Electric T+D: Work was completed on orders begun in 2013 and continued into 2014.
   Bringing the two year total of orders completed to 265.
  - o Transmission 2 orders completed.
  - Distribution 261 orders completed.
  - Substation 2 orders completed.
- Electric T+D: Capital Investments completed on project were \$2.178 million (2014) for two year total of \$7.489 million.

- Seven projects are planned in 2015:
  - West Patterson (Brewster)
  - Wassiac (Brewster)
  - Cantitoe (Brewster)
  - Putnam Lake (Brewster)
  - Kent Cliffs (Brewster)
  - Amawalk (Brewster)
  - Coopers Corners (Liberty)
- Automating additional reclosers in Brewster in 2015
- Electric T+D: 11 orders that were part of this project as planned were not completed during 2014. These will be completed. 2 transmission, 8 distribution, 1 substation.

#### 23 Brewster Telecom Network for Automation

As of December 31, 2014

#### **Project Overview**

The objective of the project is to prepare Brewster substations for future substation automation readiness using WiMAX and Cellular technologies.

#### **Project Activities / Key Accomplishments in 2014**

- Coordinate and obtain WiMAX licensing in Putnam, Westchester, Dutchess Counties –
   Received concurrence from existing FSS, and ES licensed incumbents
- Planning, modeling, field testing, validation, and documentation of WiMAX area and ptp coverage was done
- Install & made operational (4) WiMAX tower Base station sectors at Marvin Mtn
- Design, prepare, and procure RSA 26" cabinet configurations for WiMAX and Cellular components
- WiMAX Make Ready -Mount Cabinets at 16 substations and service center locations in preparation of field operations operational connectivity
- Design and procure substation com pole antenna mounts
- Dingle Ridge and Peach Lake had interim cell solutions implemented for SCADA testing and scan point monitoring

#### **Project Activities Planned for 2015**

No activities planned.

# 24 CCTP New 115kV Transmission Line (Klinekill)

As of December 31, 2014

#### **Project Overview**

Original scope of the project was to build a new 115kV line from National Grid Trunk #15 to NYSEG Klinekill substation, a new 115kV terminal at Klinekill substation, and a 3-breaker ring bus connecting to the 115kV National Grid line.

An Article VII application was filed and during the Article VII proceeding a 34.5kV option was suggested by the Department of Public Service. Currently the proceeding participants are engaged in confidential settlement discussions concerning the 34.5kV alternative.

#### **Project Activities / Key Accomplishments in 2014**

- Continued Article VII proceeding focusing on alternative proposals
- Conducted series of Open Houses presenting the project alternatives to the public
- Engaged into settlement talks with Article VII proceeding parties to explore the low voltage alternative

- Further analysis of the low voltage proposal
- Conceptual engineers for the transmission line and substation
- Routing and design of the distribution feeders

# 25 Coddington LTC Capacity 115-34.5kV Transformer

As of December 31, 2014

#### **Project Overview**

The project is to replace the existing (3 single phase banks) 115/34.5kV, 30 MVA transformer with a new 115/34.5 kV, 30/40/50 MVA, LTC transformer #2 at Coddington Substation. The scope includes the installation of two new high side 115 kV bank breakers B2 12 and B3 12. A new 115 kV motor operator will be installed on B3 14 and a new 115 kV motor operated switch will be installed on B2 14.

#### Project Activities / Key Accomplishments in 2014

- Completed SP&C Engineering
- Completed Construction
- Completed testing and commissioning
- Energization of assets

#### **Project Activities Planned for 2015**

None – project is completed

## 26 DOE Stimulus Program - Capacitor Banks - NYSEG

As of December 31, 2014

#### **Project Overview**

The Smart Grid Capacitor Bank Program comprises the installation of 13 new 115KV switched capacitor banks, 13-115KV Independent Pole Operated circuit breakers, associated motor operated disconnect switches, relay protection equipment and several new control houses or control house additions at six existing NYSEG substations. Total reactive capability of the NYSEG system will increase by approximately 410 MVars. NYSEG is a sub-award recipient of the New York Independent System Operator (NYISO) Smart Grid Investment Grant (SGIG) awarded by the United States Department of Energy (DOE). Under this arrangement, the NYISO applied for DOE Smart Grid matching grants for the deployment of switched capacitor technology throughout the NYISO electric system to be implemented and owned by the individual NYISO member transmission owners. The NYSEG Smart Grid Projects improve the reactive capability and voltage profile of the system with switched capacitors. The DOE reimbursed NYSEG at 50 percent of the Appendix L project costs.

#### **Project Activities / Key Accomplishments in 2014**

- TRV studies and a transient voltage investigation were completed, and corrective actions (including installation of additional grounding and shielding) were installed.
- Testing and commissioning was completed and all cap banks were placed fully in service.

- Two of the Cap Banks were energized with hard-wired communications back to the ECC, while they are fully functional this will be changed in 2015 to allow for remote control from the ECC.
- Close-out activities, including updating as-built drawings and close-out/lessons learned report.

# 27 Eelpot, Add 2nd 115-34.5kV Transformer

As of December 31, 2014

#### **Project Overview**

Install a second 115/34.5kV, 30/40/56 MVA LTC transformer at the Eelpot Road substation. Work will include all associated equipment required with this transformer addition.

#### **Project Activities / Key Accomplishments in 2014**

- Procured remaining materials (Control, Protection and Communication Panels, Protection Relays, Structural Steel and all minor materials).
- Award of In-ground construction package
- Completed Phase A of In-ground construction.

- Award of construction contract for the above ground construction
- Begin installation of the substation equipment
- Phase B of In-ground construction
- · Finish relay panels manufacturing
- Finish Protection and Control detail design

## 28 Flat Street Substation New Transformer

As of December 31, 2014

## **Project Overview**

Install a new Flat 115/34.5 kV, 20/26/33(36.7) MVA, LTC transformer to operate in parallel with existing one.

## **Project Activities / Key Accomplishments in 2014**

• Ordered remaining materials required (Control, Protection and Communication Panels, relay protection).

- Finish Protection and Control detailed design
- Finish manufacturing of relay panels

## 29 Glenwood – Replace Substation Transformers

As of December 31, 2014

#### **Project Overview**

Glenwood substation is located at Francis Street, Binghamton, NY. Due to loading conditions, the two (2) 3-1 ph, 34.5-4.8kV, 1666kVA (5 MVA total each) banks are being replaced with two (2) 34.5 – 5.04x12.46/7.2 kVA, 10/12.5/14 MVA LTC transformers.

The transformers will be procured with dual winding for operation at either 4.8kV or 12.5kV to accommodate future plans for converting the 4.8kV circuits to 12.5kV circuits. The existing HV side bank fuses will be replaced by circuit breakers for each of the new transformers. Oil containment will be provided for the new transformers.

All substation work will be inside the existing fence line at the Glenwood station and additional real estate will not be required.

### **Project Activities / Key Accomplishments in 2014**

- Completed preliminary / conceptual engineering phase
- Completed delivery of transformers and construction of the temporary foundations
- Completed delivery of major materials

- Complete detail engineering phase
- Procurement of construction contractor for In-ground and above ground construction

## 30 Goudey Substation – Separation from AES Plant

As of December 31, 2014

#### **Project Overview**

Goudey Substation is composed of two physically separate substation yards located near a retired power plant: a 115kV substation and a separate 34.5kV substation. At present, all protection and control (P&C) functions, AC distribution panels, the battery/charger system, and DC panels are located inside the plant (known as "AES Westover Plant"). NYSEG has been dependent upon AES for reliable operation of the NYSEG transmission grid as AES provides AC power, batteries for DC power, heat, light, security and access to the Plant Control Rooms that house NYSEG's Protection & Control and Joint Use Facilities (JUF). Due to bankruptcy proceedings by AES which will allow NYSEG sole access and control of the protection and control substation equipment, NYSEG desires separation from AES Eastern Energy plant facilities and joint access/use of station control and protection equipment. The ultimate goal of this project is to remove dependencies from AES by acquiring additional land constructing a new control house, installing necessary protection and control devices, new AC and DC station service panels, protection and control cabling and cutting over each substation transformer and line terminal to the new control house. The Phase 1 scope of the project is to construct a new control house in a new expanded area of the 115kV substation yard, install new control, protection and AC/DC system and rewire with new cables and trench all substation protection and control currently located in the retired power plant to the new control house. Under the future scope of work, it is planned to replace and install the JUF which are one 115/34.5 kV transformer, one 115 kV circuit breaker, and one 34.5 kV circuit breaker and switches.

### **Project Activities / Key Accomplishments in 2014**

- Completion of the Conceptual Engineering
- Acquired Building Permit for the Control House (No other permits were required)
- Procurement of Long Lead Items
- Procurement of Construction Services
- Procurement of Testing & Commissioning Services
- Complete Erection of the Control House
- Installation of all In-Ground trench and conduit systems
- Installation of the new Station Service Switch Gear
- Installation of the new Battery Systems
- Replacement of the Skywrap Fiber Communications from Goudey to Oakdale

- Completion of the Detailed Engineering
- Installation of all Control and Power Cables
- Installation of all Tel./Comm. Infrastructure
- Installation of all new Relay and Control Panels
- Perform all Outages and Testing & Commissioning
- Decommission the old Control House
- Complete all Remote End Work

## 31 Greenidge Substation – Separation from AES Plant

As of December 31, 2014

#### **Project Overview**

Greenidge substation is composed of two physically separate substation yards. There is a 115kV switching station including a 115/34.5kV transformer, and there is a separate 34.5kV switching station. The 34.5kV substation is directly adjacent to a retired power plant. Due to bankruptcy proceedings by AES which will allow NYSEG sole access and control of the protection and control substation equipment, NYSEG desires separation from AES Eastern Energy plant facilities and joint access/use of station control and protection equipment. The ultimate goal of this project is to remove dependencies from AES by acquiring additional land and constructing a new control house, installing necessary protection and control devices, new AC and DC station service panels, protection and control cabling and cutting over each substation transformer and line terminal to the new control house..

### **Project Activities / Key Accomplishments in 2014**

- Completion of the Conceptual Engineering
- Acquired Building Permit for the Control House (No other permits were required)
- Procurement of Long Lead Items
- Procurement of Construction Services
- Procurement of Testing & Commissioning Services
- Complete Erection of the Control House
- Installation of all In-Ground trench and conduit systems
- Installation of the new Station Service Switch Gear
- Installation of the new Battery Systems
- Completion of the Detailed Engineering
- Installation of all Control and Power Cables
- Installation of all Tel./Comm. Infrastructure
- Installation of all new Relay and Control Panels

- Perform all Outages and Testing & Commissioning
- Decommission the old Control House
- Complete all Remote End Work

## 32 Hickling Substation – Separation from AES Plant

As of December 31, 2014

#### **Project Overview**

AES filed for Chapter 11 bankruptcy protection: NYSEG is dependent upon AES for reliable operation of the NYSEG transmission grid. AES provides AC power, batteries for DC power, heat, light, security access to the plant control rooms that house NYSEG's Protection & Control, and joint use facility. The benefit is to remove the dependencies on AES Westover, Greenidge, Hickling and Jennison plants to provide reliable operation of the NYSEG Grid. Phase 1 of the project is to acquire additional land, construct a new Control House, install all necessary protection and control devices in the Control House, install new substation AC station service, re-cable the entire substation to the new Control House and cut over each substation transformer and line terminal to the new Control House.

### Project Activities / Key Accomplishments in 2014

- Completion of the Conceptual Engineering
- Acquired Building Permit for the Control House (No other permits were required)
- Procurement of Long Lead Items
- Procurement of Construction Services
- Procurement of Testing & Commissioning Services
- Complete Erection of the Control House
- Installation of all In-Ground trench and conduit systems
- Installation of the new Station Service Switch Gear
- Installation of the new Battery Systems
- Completion of the Detailed Engineering
- Installation of all Control and Power Cables
- Installation of all Tel./Comm. Infrastructure
- Installation of all new Relay and Control Panels
- Perform Outages and Testing & Commissioning

- Perform remaining Outages and Testing & Commissioning
- Decommission the old Control House
- Complete all Remote End Work

## 33 Jennison Substation – Separation from AES Plant

As of December 31, 2014

#### **Project Overview**

Jennison substation is adjacent to the retired AES power plant. NYSEG has been dependent upon AES for reliable operation of the NYSEG transmission grid. AES provides AC power, batteries for DC power, heat, light, security and access to the plant control rooms that house NYSEG's Protection & Control and Joint Use Facilities (JUF). Due to bankruptcy proceedings by AES, which will allow NYSEG sole access and control of the protection and control substation equipment, NYSEG desires separation from AES Eastern Energy plant facilities and joint access/use of station control and protection equipment. The ultimate goal of this project is to remove dependencies from AES by acquiring additional land and constructing a new control house, installing necessary protection and control devices, new AC and DC station service panels, protection and control cabling and cutting over each substation transformer and line terminal to the new control house. Under future scope of works, it is planned to replace/install one (1) new transformer bank and two (2) new breakers.

### **Project Activities / Key Accomplishments in 2014**

- Completion of the Conceptual Engineering
- Acquired Building Permit for the Control House (No other permits were required)
- Procurement of Long Lead Items
- Procurement of Construction Services
- Procurement of Testing & Commissioning Services
- Complete Erection of the Control House
- Installation of all In-Ground trench and conduit systems
- Installation of the new Station Service Switch Gear
- Installation of the new Battery Systems
- Completion of the Detailed Engineering
- Installation of all Control and Power Cables
- Installation of all Tel./Comm. Infrastructure
- Installation of all new Relay and Control Panels

- Perform all Outages and Testing & Commissioning
- Decommission the old Control House
- Complete all Remote End Work

# 34 Keuka Substation – Replace Bank #2 Transformer

As of December 31, 2014

### **Project Overview**

Replace existing 34.5-4.8kV 3-1phase 1MVA transformer with a new 5MVA- 34.4-4.8kV transformer and protected by recloser and hook stick disconnect switches. This new transformer will allow service to the higher customer demand and improve system reliability.

#### Project Activities / Key Accomplishments in 2014

- Completed Detailed Design for Substation In & Above Ground packages
- Started Protection & Control Detailed Design
- Mobile Sub setup at substation
- Completed In Ground Construction
- Started Above Ground Construction,
- Procurement and delivery of the Recloser

- Complete Protection & Control Detailed Design
- Complete Construction (Above Ground, Protection & Control)
- Test and Commission new Transformer
- Energize the assets

## 35 Line #807 115kV Conversion

As of December 31, 2014

#### **Project Overview**

Convert the existing Carmel to Wood Street to Katonah Line 807 from 46kV to 115kV operation. This line is already constructed to 115kV standards; therefore, the project is primarily substation modifications. A new 115kV line terminal and two new 115kV breakers will be added at Carmel Substation, two new 115kV line terminals and two new 115kV breakers will be added at Wood Street Substation, and a new 115kV line terminal and three new 115kV breakers will be added at Katonah Substation.

## **Project Activities / Key Accomplishments in 2014**

- Conceptual Engineering for the Carmel Substation.
- Prepare RFP's for construction of Wood St, for materials and contractor.
- Completed installation of two of the three breakers at the Katonah Substation.
- Complete Line construction at Whitehall Corners

- Complete Detailed Engineering for the Carmel Substation and create a construction spec for construction to start 2016.
- Complete the installation of the final breaker at Katonah Substation
- Complete construction at Wood St.

## 36 Marcy South Series Compensation Project

As of December 31, 2014

### **Project Overview**

The Marcy South Series Compensation Project (MSSC) was outlined in order to support the New York Energy Highway Blueprint released by the New York Governor Andrew Cuomo to address three objectives. First, to improve power transfer capacity across the New York Station Central – East Interface and the lower Hudson Valley to allow access of upstate generation to downstate loads. Second, to address reliability concerns associated with potential downstate generation retirement, such as Indian Point Center. Each of these objectives will be achieved while accomplishing the third objective, minimizing land requirements and having a low environmental impact. Overall, The MSSC project involves the installation of three series capacity banks and associated upgrades to the involved 345kV Transmission lines. The capacitor banks will be connected to Marcy-Coopers Corners, Edic-Fraser and Fraser-Coopers Corners. The IUSA-NYSEG portion of the project involves the installation of a 240 MVAR, 25% compensation fixed series capacitor bank on this circuit near the Fraser substation. Two other capacitor banks will be installed by the New York Power Authority. The second IUSA-NYSEG portion includes reconductoring approximately 22 miles of the 47 mile 345kV circuit, FCC-33. The existing FCC-33 line is 47 miles long and was built in 1971 using H-Frame wood pole structures and is comprised of 3 sections, each with a different type of conductor. One of these sections will be reconductored.

As a whole, the two portions of the project will serve to improve network stability and allow further access to upstate power generation. In addition, the new conductor will eliminate the existing bottleneck in the FCC-33 line. The new conductor chosen for reconductoring also has greater transfer capacity and causes minimal modifications to original structures. This will minimize environmental impact in the project area that includes New York State Catskill State Park. Series compensation allows for larger power transfer capability, improvement in network stability and reduction in the losses and voltage drop seen over the line.

### **Project Activities / Key Accomplishments in 2014**

- Procurement of engineering services for the FCC-33 transmission line
- Started transmission line engineering
- Preliminary engineering studies of the needed substation upgrades
- Issued EPC (Engineering, Procurement and Construction) contract for Series Capacitor bank

- Finalize transmission line detail engineering
- Finalize series compensation detail engineering
- Procurement of high capacity low sag conductor
- Start construction of transmission line reconductoring
- Start construction of series capacitor
- Procurement of conceptual and detail engineering for substation upgrades
- Procurement of long lead items.

## 37 Meyer Substation New Transformer

As of December 31, 2014

#### **Project Overview**

The project is to add one more 30/40/50/56 MVA transformer to the 115kV bus at Meyer Substation as well as add one non-LTC transformer relocated from South Perry to operate in parallel with the existing 20/26/33 MVA 115/34.5kV transformer bank 2. Transmission line Section 933 between Meyer and South Perry have been disconnected permanently due to the requirement for this transmission line Section 944 to be rewired with optical fiber ground wire shielding. Meyer Substation is an existing 230/115/34.5kV transmission substation with distribution at 34.5/12.8/4.8kV distribution substation. The 115kV system consists of one 230/115kV transformer (bank 4) connected to 115kV bus, line 968 to Eelpot Road Substation, line 966 to Bennett, two lines 933 and 934 to South Perry Substation and a 115/34.5kV transformer (bank 2) feeding the 34.5kV bus. Additionally, the tertiary of 230/115/34.5kV (bank 4) is also connected to 34.5kV bus. Short Circuit Analysis for this station based on the latest Aspen Model has been considered for this Scope of Work.

Meyer Substation serves approximately 60MW of load and transmission flow which is 6,740 customers. During high-load periods and with the 230/115/34.5kV Meyer transformer out, loss of the existing 115/34.5kV transformer at Meyer Substation results in overloads above STE on the 542 line and low voltages in the area. This would result in shedding approximately 5MW of the load to relieve the overload. The period of exposure is approximately 875 hours per year.

#### **Project Activities / Key Accomplishments in 2014**

- Completed procurement of the transformer
- Completed procurement and delivery of the switches MODS
- Completed procurement and delivery of the surge arresters
- Completed construction of the transformer foundation

- Complete detail engineering phase
- Start procurement process for construction
- Complete ordering long lead items

## 38 Mobile Radio Project

As of December 31, 2014

### **Project Overview**

Replacement of the legacy NYSEG radio system with a new high-band digital trunked system. This project has been ongoing for several years.

## **Project Activities / Key Accomplishments in 2014**

- Installation of the Region 4 Plattsburgh Microwave Tower.
- Installation of the Region 4 (Plattsburgh) Stand Alone Microwave System.
- Installation of the Region 4 (Plattsburgh) Shared Microwave System.
- Design and perform the structural analysis and permitting for microwave installations at the Region 3b simulcast sites.
- Continue to work with Canada on the R3b Simulcast frequency applications.
- Continue to work with Canada on frequency applications for Region 4 (Plattsburgh).
- Continue the channel plan design for Region 4 (Plattsburgh Division).

- Complete the Canadian and FCC approvals for the new Region 3b simulcast plan.
- Perform the required tower retrofitting and site upgrades on the Region 3b sites to allow for microwave simulcasting.
- Complete the Region 4 microwave connectivity to the Vestal ECC.
- Install five simulcast microwave paths in Region 3b.
- Prepare for Region 3b and Region 4 for new system cutover in 2016.

# 39 NYSEG Electric System Security Projects

As of December 31, 2014

## **Project Overview**

This project had multiple facets covering numerous aspects of security. Included were substation perimeter protection and fencing upgrades

## **Project Activities / Key Accomplishments in 2014**

- Upgrade of video alarming equipment at bulk power substations.
- Upgraded cameras to include thermal capability at bulk power substations and other key critical infrastructure locations.
- Continued upgrades and replacement of physical barriers and fencing at key critical facilities.
- Capital investment was \$2.3 million

- Continued Replacement of access control security systems providing standardization between NYSEG and RG&E.
- Upgrade of video alarming equipment at bulk power substations.
- Upgraded cameras to include thermal capability at bulk power substations.

## 40 Oakdale to Frasier 345kV Line Upgrade

As of December 31, 2014

### **Project Overview**

The Oakdale-Fraser Transmission project was outlined in order to support the New York Energy Highway Blueprint by addressing the following objective: Expand and strengthen the New York Energy Highway building \$1 billion worth of electric transmission projects totaling over 1,000 MW of capacity, providing an alternative to locally constructed generation of equal capacity, and allowing energy produced at upstate power plants, including wind farms, to reach downstate consumers.

The project scope is to build the second 345 kV Oakdale-Fraser Transmission Line parallel to the existing 345 kV Transmission Line 32, sharing the existing Line 32 Right Of Way (57 miles long) as well as the associated new terminal bays at both Oakdale and Fraser substations.

#### **Project Activities / Key Accomplishments in 2014**

 Provided documents to support the AC Transmission Upgrade (Case 12-T-0502) under the New York State Public Service Commission (NYS-PSC) as needed.

- Submission of Article VII Modified Part A Filing
- Submission of Article VII Part B Filing if the project is selected by the Public Service Commission

## 41 Perry Center Area Install New 34.5kV Substation

As of December 31, 2014

### **Project Overview**

The Perry Center project is to build a four-breaker 34.5 kV switching station and bring in all three sections of the 591 line, and to close the normally open switch. The Perry Center area serves approximately 20MW of load which is 5,469 customers.

During high-load periods, loss of the 591 line in the area results in low voltages and overloads above Short Term Emergency (STE) on the 590 line. This would result in shedding all 5MW of load in the area. This project will reduce overloads and low voltage conditions in the area and improve reliability.

The following line 591structures will be modified: 128,5, 129, 130 and 198.

## Project Activities / Key Accomplishments in 2014

- Completed conceptual engineering phase
- Completed ordering long lead items
- Completed procurement of construction contractor
- Complete substation in-ground construction

- Complete detailed engineering
- Complete permitting for modification of Line 591
- Complete procurement for materials and construction contractor for modifications on Line 591
- Complete substation above ground
- Complete commissioning and energize the assets

## 42 Raylinski Tap to Coons Crossing Rebuild – Line 601

As of December 31, 2014

## **Project Overview**

This project will upgrade the last remaining section of 34.5kV transmission Line 601 to larger 477 MCM conductors. Line 601 currently feeds the Coons Crossing Substation and the Raylinski Tap, which services approximately 7,000 customers. An upgrade of the line will allow 3 MVA of additional capacity to meet future needs in this growing area. This upgrade will also be crucial in creating a 34.5kV loop from the Luther Forest Technology Park to Coons Crossing Substation, lessening the Division's dependency on the Mulberry Substation. With this transmission relocation/rebuild, there are also 4 sections of distribution facilities affected which will also be required to be rebuilt / relocated.

### **Project Activities / Key Accomplishments in 2014**

- Completed the Transmission Design for the eastern half and released the work orders and acquired the material.
- Construction began on the eastern half of the 34.5kV transmission line (relocated section) by NYSEG Mobile Work Force.
- An outage plan to facilitate cutover to the new transmission line (eastern half) and new distribution circuits.
- Completed the construction of two new sections of distribution circuits (Raylinski tap section and Underground section on golf course). These distribution circuits will be energized by NYSEG crews during the transmission line outage.

- Complete the Eastern Half construction of the transmission line and the Distribution Line on Elizabeth St.
- Complete the Western Half engineering design and release work orders and acquire material to be ready for construction in 2016.

# 43 Robinson Road 230kV Transformer Project

As of December 31, 2014

### **Project Overview**

The Robinson Road B1 transformer is a 230-115kV, 250MVA, LTC type. Replace B1 with a new 230/132.8 Grd Y- 121GrdY/69kV, 180/240/300 MVA @ 65 Degrees C Transformer. This Westinghouse 1972 vintage transformer with a Type UTH LTC is of a vintage with high failure rates. This specific unit has a very high combustible gassing rate which appears to be correlated to a transformer design flaw. Several attempts to degas the transformer and eliminate the source of the gassing have been unsuccessful.

## **Project Activities / Key Accomplishments in 2014**

- The new transformer was put in service in January 2014 using existing protection.
- Completed the Detail Engineering for the updated Protection and Control design, released drawings.
- Ordered and received the two new relay panels for the control house. Construction started for the wiring of the new protection and control circuits.

## **Project Activities Planned for 2015**

• Complete the construction of the protection and control, test and commission the new relay protection and close out the project.

## 44 South Perry New 230kV Transformer Project

As of December 31, 2014

### **Project Overview**

The original scope was for installation of second 115/34.5kV LTC transformer three phase banks with the existing non-LTC three single-phase banks. Also included was addition of another 230/115kV transformer in South Perry that calls for a complete new 230kV in and out from nearby transmission line to South Perry Substation and a ring bus arrangement. During the on-site visit for the addition of the second transformer, it was observed that the existing 115kV bus arrangement foundations and structures were not in good shape and needed to be renewed. Further, the existing oil circuit breakers needed to be replaced. Based on the condition of the existing 115kV bus arrangement, there is a need for a complete new 230/115/69/34.5kV substation between the existing substation and the 230kV transmission lines.

The actual transformer, 115-69-34.5 kV, will be removed to a new bank to feed the 69kV line. A new transformer, 115/34.5kV 56 MVA, will replace this one.

The existing 115/34.5kV 20/26/33 MVA transformer is a non-LTC three single-phase bank with a spare unit. The capacity of the transformer will not be sufficient to meet the 34.5kV loads. The substation will have to be constructed new as explained above and, as the interim arrangement, a new 115/34.5kV 30/40/50/56MVA transformer will be installed replacing the existing 20/26/33 MVA transformer.

#### **Project Activities / Key Accomplishments in 2014**

- Completed land acquisition
- Completed detailed engineering phase for In-ground and Above Ground packages
- Started protection and control detail engineering
- Completed 34.5 kV line relocation at the new 230 kV yard.
- Started procurement of long lead materials

- Long lead items delivery
- Procurement of automation and integration detail engineering
- Procurement of In-ground and above ground construction contractor

## 45 South Perry New Add 2nd 115-34.5kV Transformer

As of December 31, 2014

#### **Project Overview**

The original scope was for installation of second 115/34.5kV LTC transformer three phase banks with the existing non-LTC three single-phase banks. Also included was addition of another 230/115kV transformer in South Perry that calls for a complete new 230kV in and out from nearby transmission line to South Perry Substation and a ring bus arrangement. During the on-site visit for the addition of the second transformer, it was observed that the existing 115kV bus arrangement foundations and structures were not in good shape and needed to be renewed. Further, the existing oil circuit breakers needed to be replaced. Based on the condition of the existing 115kV bus arrangement, there is a need for a complete new 230/115/69/34.5kV substation between the existing substation and the 230kV transmission lines.

The actual transformer, 115-69-34.5 kV, will be removed to a new bank to feed the 69kV line. A new transformer, 115/34.5kV 56 MVA, will replace this one.

The existing 115/34.5kV 20/26/33 MVA transformer is a non-LTC three single-phase bank with a spare unit. The capacity of the transformer will not be sufficient to meet the 34.5kV loads. The substation will have to be constructed new as explained above and, in the interim, a new 115/34.5kV 30/40/50/56MVA transformer will be installed replacing the existing 20/26/33 MVA transformer.

#### **Project Activities / Key Accomplishments in 2014**

- Completed land acquisition
- Completed detailed engineering phase for In-ground and Above Ground packages
- Started protection and control detailed engineering
- Started procurement of long lead materials

- Long lead items delivery
- Procurement of automation and integration detail engineering
- Procurement of In-ground and above ground construction contractor

# **46 Stephentown Substation New Transformer**

As of December 31, 2014

### **Project Overview**

The Stephentown Project will install a new Stephentown 115/34.5 kV, 20/26/33(37) MVA, LTC transformer to operate in parallel with the existing transformer. Sub-marginal voltages appear in areas served from the Berlin, Stephentown, W. Lebanon, Cannan and SAW+DI substations upon loss of the Stephentown 115/34.5KV Transformer. The summer season exposure is 1750 hours/year. Presently, this contingency causes 5,333 customers (with 14.2 MW of summer load and 22.1 MW of winter load) to be dropped.

## **Project Activities / Key Accomplishments in 2014**

- Procurement of long lead items
- Started substation detailed engineering phase
- Completed conceptual package for transmission line.
- rocurement of construction contractor

- Complete detailed engineering phase
- Complete procurement of transmission line construction contractor
- Complete procurement of Protection and Control equipment
- Complete procurement of commissioning contractor.
- Start of construction

## **47 Substation Automation (RTU Program)**

As of December 31, 2014

## **Project Overview**

The NYSEG RTU Upgrade Program consists of replacement of thirty obsolete substations ECC controlled Remote Terminal Units (RTU). The program does not include the Brewster Division RTU Upgrade Project. The installation of thirty new RTUs will reduce the requirements to obtain spare parts for the obsolete units. The additional SCADA points will help identify the cause of outages and reduce restoration time. Phase one of the program began in 2010 with the purchase and installation of thirty remote terminal units. Phase Two includes engineering and design (E&D) review of existing substation facilities and application of modernization/automation standards; update substations to the new IUSA TM 3.51.01 Technical Manual in order to meet the requirements for the new ECC.

## **Project Activities / Key Accomplishments in 2014**

- Completed conceptual and detailed engineering for four (4) substations: Amawalk (Brewster), Coopers Corners 115kV (Liberty), Burr Ave (Binghamton) and Clark Street (Binghamton).
- For Amawalk and Coopers Corners 115kV order materials required: SCUs (System Control Unit), digital relays, control cabinets, AC/DC panels with mini circuit breakers, motor operators, auxiliary contacts for disconnects, current transformers and minor materials.

### **Project Activities Planned for 2015**

Carry out the construction and commissioning in Amawalk and Cooper Corners 115kV.

# 48 Mechanicville Reinforcement Project

As of December 31, 2014

### **Project Overview**

The Mechanicville Reinforcement Project includes constructing a new 115-34.5kV substation and four 34.5kV distribution lines to provide a second source of supply to the Mechanicville Division and to accommodate anticipated load related to the Luther Forest Industrial Park.

## Project Activities / Key Accomplishments in 2014

- Completion of Above-Ground Construction at Luther Forest substation
- Installation of the remaining 20% of the first two distribution lines (Werner Road segment)
- Installation of a majority of the Protection & Control equipment at the Luther Forest Substation

- Complete the detailed design with the 115kV service from National Grid.
- Complete the installation of the Protection and Control equipment.
- Extend the height of the communications tower at the substation.
- Test, Commission and Energize the new substation.
- Close out the project.

## 49 Tom Miller Road - New Substation

As of December 31, 2014

## **Project Overview**

The Tom Miller Road project will build a new 46-12.5 kV distribution substation on company owned property along Tom Miller Road. The substation will include a 12/16/20 MVA transformer and three distribution circuits. Hammond Lane Substation is a single bank 46-12.5 KV 12/16/20 MVA substation with three distribution feeders. The summer peak load to date was 22,021KVA or 98% of the bank's planned life beyond nameplate (PLBN) rating.

The Tom Miller Road Substation will serve the Hammond Lane distribution load eliminating the overload.

### **Project Activities / Key Accomplishments in 2014**

- Completed conceptual engineering phase
- Completed procurement long lead items
- Completed procurement of construction contractor
- Complete substation in-ground construction

- Complete detailed engineering phase
- Complete substation above ground
- Complete commissioning and energize the assets

## 50 Transit Street Substation – Relocate 12kV Circuits MGP

As of December 31, 2014

#### **Project Overview**

The Transit Street substation sits atop a site that was formerly a manufactured gas plant (MGP) site which is subject to an Order on Consent with the New York State Department of Environmental Conservation (DEC). DEC requires that the MGP site be remediated which requires that some components of the substation be relocated to allow the environmental remediation to proceed.

One bank of 12 kV equipment must be relocated and the existing control house must be demolished and replaced with a new one at a different location within the station.

The project also requires the orchestrated switching of electric circuits to allow environmental remediation work to proceed at locations throughout the station that do not require permanent electrical equipment relocation.

#### **Project Activities / Key Accomplishments in 2014**

- Completed detailed engineering for in-ground and above-ground packages
- Completed detailed engineering for SPC 1 package
- Procured electrical contractor
- Initiated construction of new control house
- Initiated construction of in-ground and above-ground electrical work
- Finalized environmental remedial design and received DEC approval to proceed
- Procured environmental remediation contractor
- Completed Phases 1-4, and 5B of environmental remedial work

- Complete SPC engineering
- Complete construction of new control house
- Complete construction of in-ground and above-ground electrical packages
- Procure Testing & Commissioning contractor
- Perform Testing & Commissioning
- Complete environmental remediation work

## 51 Willet Substation New Transformer

As of December 31, 2014

#### **Project Overview**

Purchase and install a new 115/34.5kV, 20/26/33MVA, LTC transformer to operate in parallel with the existing substation transformer and provide necessary switchyard equipment plus protection and control equipment to bring the substation up to the latest standards.

Presently, sub-marginal voltages appear in the area(s) served from the Marathon, Chenango Forks, Dorchester, Greene, Kattelville, Willet, High Street, Tarbell and Whitney Avenue Substations upon loss of the Willet 115/34.5kV transformer. Exposure to sub-marginal voltages, given the transformer loss contingency, during the winter season, is 3070 hours/year. This contingency causes 5,097 customers (with 16.3 MW of summer load and 20.7 MW of winter load) to be dropped. In summer 2011, the sub-marginal voltage problem will appear in areas served from the same set of substations upon loss of the Willet 115/34.5kV transformer. The installation of a new transformer will increase system reliability by allowing at least one transformer to remain in-service when one of the transformers is out-of-service.

### **Project Activities / Key Accomplishments in 2014**

- Started and completed procurement of conceptual engineering
- Completed conceptual engineering
- RFP preparation and initiation of procurement of detailed engineering
- Ordered long lead items transformer, control house, circuit breakers

- Deliver long lead items circuit breakers, control house, transformer storage
- Start detailed engineering phase
- Continue environmental, permitting, licensing & land acquisition
- Develop RFP and initiate procurement of construction contractor

# 52 NY Energy Control Center

As of December 31, 2014

### **Project Overview**

The Energy Control Center Project ("ECC Project") is the staged replacement of the RG&E control SCADA system, the NYSEG Energy Management System ("EMS") and the integration of the current Outage Management System ("OMS") all onto the Siemens Spectrum 4.75 System. The ECC Project has also constructed a new Transmission and Substation Geographic Information System ("GIS"), and built the interface program to update the Spectrum System with electrical models for transmission, substation, and distribution on a daily basis.

## **Project Activities / Key Accomplishments in 2014**

- New GIS was populated with all Iberdrola USA NY owned substations, transmission lines, and distribution circuits
- The Spectrum System database was constructed from this GIS model. During Site
  Acceptance Testing ("SAT") of the new system the communications front end became
  unstable. In the 4<sup>th</sup> quarter of 2014 the project team decided to postpone the project so
  the vendor could replace the communications front end with a more stable front end
  system. The new system has tested very well.

- The project is on track for to cutover the RG&E SCADA System, followed by the NYSEG EMS system
- The OMS system will require additional system wide testing to ensure the integrated OMS system can support all RG&E and NYSEG customers during a major storm. After thorough testing the integrated OMS will be cutover in the fourth quarter.
- Perform System Acceptance testing in 2015. Successful completion of this test will conclude the Energy Control Center Project.

### 53 IT SAP Unification

As of December 31, 2014

#### **Project Overview**

Implement Iberdrola group SAP model in Iberdrola USA Network and Iberdrola USA Management Corporation companies to achieve the following benefits:

- Inclusion of new functional enhancements to New York and Maine companies due to the new SAP platform, which will allow to increase quality of processes, control and information of the companies.
- Homogenization and implementation of the best practices of corporate processes of the Group, adapted to specific local legislation and regulation requirements.
- Homogenization and increase of the automation of Networks processes, and optimization of their integration with the Corporate functions, aligned with the Networks Management Model, to increase the operational efficiency.
- Increase of the current systems efficiency by implementation of same key functionalities in the systems and through the use of global infrastructures.

### **Project Activities / Key Accomplishments in 2014**

- Data migration identification, cleanse and conversion rules definition
- Custom developments and interface functional designs
- Custom develop, interface build, and unit test
- Budget planning go-live
- Unit and client acceptance testing
- Integration testing
- Training preparation and execution
- Cut-over strategy definition
- Customizing
- Data migration execution
- Main project go-live

- Post go-live support
- Project closeout

## 54 Gas Regulator Modernization and Automation Program

As of December 31, 2014

## **Project Overview**

This scope includes improvements to regulator and gate stations within the gas system. Typical upgrades included replacement of regulators, filters, chart recorder, valves, inlet and outlet piping and enclosures with standardized equipment, piping and associated fittings, including corrosion protection for equipment and piping. Replace equipment that is obsolete, corroded, or in poor operating condition such as regulators, filters, chart recorders, valves, inlet and outlet piping, enclosures, associated fittings, and corrosion protection. Program includes RTU's and other automation improvements.

These improvements enhance system reliability associated with corroded piping, fittings and aging equipment. The programs included replacement of obsolete equipment for which there are no repair parts available.

Program improves system reliability, reduces maintenance costs, reduces potential outages due equipment failures, and improves equipment standardization and safety. Appendix L: M&R/Gate Stations.

## **Project Activities / Key Accomplishments in 2014**

- RG&E
  - Eight projects were completed in 2014
  - Total invested in 2014 was \$739,532
- NYSEG
  - 16 projects were completed in 2014
  - Total invested in 2014 was \$1,011,079

## **Project Activities Planned for 2015**

#### • RG&E

- Seven projects are planned in 2015
- Projects vary in size and are in various stages of development from planning, design, and construction. Projects were selected based on collaborative prioritization between System Planning engineers and Division Engineering Supervisors.
- Total capital investment planned in 2015 is \$100,000

#### NYSEG

- Ten projects are planned in 2015
- Projects vary in size and are in various stages of development from planning, design, and construction. Projects were selected based on collaborative prioritization between System Planning engineers and Division Engineering Supervisors.
- Total capital investment planned in 2015 is \$318,280

## 55 Leak Prone Main Replacement Program

As of December 31, 2014

#### **Project Overview**

A minimum of 24 miles of leak prone mains (RG&E) and 24 miles of leak prone mains (NYSEG) were required to be retired / replaced to meet the Order requirements, including mains replaced due to condition and municipal projects. The leak prone gas main work was prioritized based upon leak history, main condition, inspection reports, and various risk factors.

This is a requirement of RG&E Order 09-G-0718 and NYSEG Order 09-G-0716.

## **Project Activities / Key Accomplishments in 2014**

- RG&E
  - Actual mileage completed: 24.7 miles
  - Capital investment in 2014 for leak prone mains was \$11,815,308
- NYSEG
  - Actual mileage completed: 25.7 miles
  - Capital investment in 2014 for leak prone mains was \$12,548,193

- RG&E
  - Retire (cut dead) a minimum of 24 miles of leak prone mains
  - Capital investment planned for 2015 is \$10,842,911
- NYSEG
  - Retire (cut dead) a minimum of 24 miles of leak prone mains
  - Capital investment planned for 2015 is \$11,486,468

## 56 Leak Prone Services Replacement Program

As of December 31, 2014

### **Project Overview**

A minimum of 1,000 leak prone services (RG&E) and 1,200 services (NYSEG) per year are required to be retired to meet the Order requirements.

Replace existing services associated with municipal projects, leak prone services program, and other projects.

As required by Regulation replace gas services in conflict with street reconstruction projects in accordance with terms and conditions to occupy public rights-of-way, RG&E Order 09-G-0718 and NYSEG Order 09-G-0716, and tariff or leaks.

### **Project Activities / Key Accomplishments in 2014**

- RG&E
  - Actual number of leak prone services completed: 1,092
  - Capital investment in 2014 for leak prone mains was \$1,385,123
- NYSEG
  - Actual number of leak prone services completed: 1,917
  - Capital investment in 2014 for leak prone mains was \$5,879,149

- RG&E
  - Retire (cut dead) a minimum of 1,000 leak prone services
  - Capital investment planned for 2015 is \$2,174,235
- NYSEG
  - Retire (cut dead) a minimum of 1,200 leak prone services
  - Capital investment planned for 2015 is \$6,853,582

## 57 Minor Distribution Mains Program, Install Gas Mains

As of December 31, 2014

### **Project Overview**

Install distribution mains for new commercial and residential customers. RG&E is required to provide 100 feet of gas main extension free of charge to new customers. Most main extensions are installed to provide gas service in new residential developments.

#### **Project Activities / Key Accomplishments in 2014**

#### RG&E

- Installation of new gas mains for system improvements or customer requests providing new service to customers.
- Capital investment in 2014 for gas mains was \$1,835,905

#### NYSEG

- Installation of new gas mains for system improvements or customer requests providing new service to customers.
- Capital investment in 2014 for gas mains was \$3,522,636

## **Project Activities Planned for 2015**

#### RG&E

- Install gas mains affected by main condition (immediate safety), conflicts, code violations, and other field conditions discovered during normal operation and maintenance of the gas distribution system.
- Capital investment planned for 2015 is \$2,032,890

#### NYSEG

- Install gas mains affected by main condition (immediate safety), conflicts, code violations, and other field conditions discovered during normal operation and maintenance of the gas distribution system.
- Capital investment planned for 2015 is \$2,536,837

## 58 Minor New Residential Services Program, Install Gas Services

As of December 31, 2014

## **Project Overview**

Install new gas services to new customers in accordance with tariff and replace gas services in conflict with street reconstruction projects in accordance with terms and conditions to occupy public rights-of-way.

#### **Project Activities / Key Accomplishments in 2014**

#### RG&E

- Installation of new residential services and renewals/ tie-ins not classified as leak prone.
- Capital investment in 2014 for gas services was \$5,267,033

#### NYSEG

- Installation of new residential services and renewals/ tie-ins not classified as leak prone.
- Capital investment in 2014 for gas services was \$5,975,066

## **Project Activities Planned for 2015**

#### RG&E

- Install new gas services to new customers in accordance with tariff, replace in conflict with street reconstruction projects, and renewals/ tie-ins not classified as leak prone.
- Capital investment planned for 2015 is \$3,143,932

#### NYSEG

- Install new gas services to new customers in accordance with tariff, replace in conflict with street reconstruction projects, and renewals/ tie-ins not classified as leak prone.
- Capital investment planned for 2015 is \$4,593,563

# 59 Gas Meters Program

As of December 31, 2014

### **Project Overview**

This is a blanket work item to purchase new gas meters for services. It is required by tariff for new meters and replacement programs.

Purchase of gas meters to replace existing, aged meters as they are removed from service as well as for new installations. Gas meters are exchanged for annual PSC required programs including Statistical Sampling and Remediation programs and for other various reasons including relocation, load increases, meter damaged, special testing, replace non-TC meters.

### **Project Activities / Key Accomplishments in 2014**

- RG&E
  - New gas meters purchased: 8,541
  - Capital investment in 2014 for gas meters was \$2,637,655
- NYSEG
  - New gas meters purchased: 6,599
  - Capital investment in 2014 for gas meters was \$3,628,322

- RG&E
  - Purchase new gas meters for services. Estimate: 8,368
  - Capital investment planned for 2015 is \$2,944,000
- NYSEG
  - Purchase new gas meters for services. Estimate: 4,274
  - Capital investment planned for 2015 is \$3,943,400

## 60 Distribution Main Replacement Program, Replace Gas Mains

As of December 31, 2014

## **Project Overview**

The scope of the program includes gas main replacements.

Replacement of gas mains is due to a number of factors including; poor conditions, conflicts with existing or proposed structures, and other miscellaneous field conditions discovered as part of normal operations or other construction and inspection activities.

### **Project Activities / Key Accomplishments in 2014**

- RG&E
  - Main extensions and replacements
  - Capital investment in 2014 for gas mains was \$159,585
- NYSEG
  - Main extensions and replacements
  - Capital investment in 2014 for gas mains was \$1,555,341

- RG&E
  - Replace or extend gas mains affected by main condition (immediate safety),
     conflicts, code violations, and other field conditions discovered as part of normal operations or other construction and inspection activities.
  - Capital investment planned for 2015 is \$350,002
- NYSEG
  - Replace or extend gas mains affected by main condition (immediate safety), conflicts, code violations, and other field conditions discovered as part of normal operations or other construction and inspection activities.
  - Capital investment planned for 2015 is \$651,322

## 61 Minor Government Jobs Program, Replace Gas Mains

As of December 31, 2014

#### **Project Overview**

Replace gas mains in conflict with street reconstruction projects in accordance with terms and conditions to occupy public rights-of-way.

Government agencies complete various highway improvement projects which require the relocation of existing gas mains. Regulations and terms of highway access permits allow NYSEG facilities to be located within municipal rights-of-way, but mandate relocation of those facilities when it conflicts with street or highway reconstruction projects.

Relocation of our facilities prior to the start of construction reduces the potential for damage to company facilities and prevents unscheduled interruption of service to our customers in the affected surrounding area. This is an Appendix L item – Highway relocations

#### **Project Activities / Key Accomplishments in 2014**

- RG&E
  - Relocation of existing gas mains
  - Capital investment in 2014 for gas mains was \$335,329
- NYSEG
  - Relocation of existing gas mains
  - Capital investment in 2014 for gas mains was \$1,383,877

- RG&E
  - Replace gas mains in conflict with street reconstruction projects in accordance with terms and conditions to occupy public rights-of-way.
  - Capital investment planned for 2015 is \$666,878
- NYSEG
  - Replace gas mains in conflict with street reconstruction projects in accordance with terms and conditions to occupy public rights-of-way.
  - Capital investment planned for 2015 is \$761,889

## **62 SmarTRAC Replacement Program**

As of December 31, 2014

#### **Project Overview**

This project replaces outdated and unsupported software that is used for NYSEG and RG&E's Electronic Bulletin Board that is used to monitor third party gas supplies coming to the utilities city gates.

The project will support improvements in system performance.

#### **Project Activities / Key Accomplishments in 2014**

- RG&E
  - Completed Technical Design.
  - Began Build phase of the project
  - Capital investment in 2014 for SmartTRAC was \$749,098
- NYSEG
  - Completed Technical Design.
  - Began Build phase of the project
  - Capital investment in 2014 for SmartTRAC was \$712,085

- RG&E
  - Complete Gas Tracking System interface with Unified SAP
  - Go-live date December 2015
  - Capital investment planned for 2015 is \$125,000
- NYSEG
  - Complete Gas Tracking System interface with Unified SAP
  - Go-live date December 2015
  - Capital investment planned for 2015 is \$125,000

## 63 New Empire West Gate Station, Build New Gate Station

As of December 31, 2014

#### **Project Overview**

Install a new gate station near Humphrey Rd. and NYS Rte 386 in the Town of Chili. Rebuild regulator stations 424 and 425. Replace inlet piping to regulator stations: 214, 295, 358, 460, 461, and Buffalo Rd.

This project when completed will improve system operations and safety by reducing operating pressure to a portion of CM-1 to less than 20% of SMYS (reclassification from transmission to distribution) and increases system capacity for long term growth and reduce operating constraints. The new gate station will provide load growth capabilities and improve system reliability. The project is intended to improve service capabilities to the following major commercial customers in the Rochester area: Eastman Business Park, the City of Rochester (compressed natural gas fueling station), Waste Management (compressed natural gas fueling station), and Flow City Tissue Paper (conversion of coal generation to natural gas).

#### **Project Activities / Key Accomplishments in 2014**

- Procurement and Purchasing of materials and equipment started (Heaters, monitors, valves and pipes, 4 Regulators)
- Preliminary engineering.
- 3 regulator stations were cut dead and installed September through December 2014.
- The project management plan was approved by the Steering Committee.
- Rough Site grading was completed
- Construction of foundations for setting of two indirect fired water bath heaters was completed
- A total of \$3,239,121 was invested in 2014.

- Procurement and purchasing continues.
- Project construction work will start in May 2014.
- Foundation layout, site work, install driveway, mount the heater, regulator station replacements.
- Project is scheduled to be in service by November 1, 2015.
- Capital investment planned for 2015 is \$5,895,435

## 64 Rochester Area Steel Services Investigation

As of December 31, 2014

#### **Project Overview**

RG&E performed this exploratory work for safety, reliability and proactive upkeep of the services throughout the RG&E service territory in the Rochester area. RG&E and their consultants, Lucius Pitkin, assessed the condition of medium-pressure steel gas services. The purpose was to look for unreported 3<sup>rd</sup>-party damage to the gas lines. Locations were identified based on proximity to other utilities (i.e. sewer, water). The area was excavated, pipe inspected, section removed and replaced, and area restored. A total of 103 services were completed.

#### **Project Activities / Key Accomplishments in 2014**

A total of \$1,793,275 was investment in 2014.

#### **Project Activities Planned for 2015**

• No planned work, project completed in 2014

## 65 Replace Gas Mains – Ridge Rd East (St Paul to Marway)

As of December 31, 2014

#### **Project Overview**

Replace existing gas mains with 2600 feet of 12" WRST pipe and 1600 feet of 2" PE pipe along Ridge Road East (St Paul St east to Marburger St, within the City of Rochester). Work to be performed ahead of City highway reconstruction project.

#### **Project Activities / Key Accomplishments in 2014**

- Eliminated 2,400 feet of leak prone main.
- Replacing leak prone main with new main reduces the possibility of future maintenance in newly constructed highway.
- A total of \$956,447 was investment in 2014.

- No planned work, project completed in 2014.
- No capital investment planned in 2015.

## 66 Rebuild – Kayner and Ertman Rd. Regulating Station

As of December 31, 2014

#### **Project Overview**

Rebuild Kayner and Ertman Road Stations to accommodate larger capacity of 2,300 MCFH in order to negotiate the price with Tennessee Gas Pipeline. Replace existing regulators, relief valve, relief assembly and by-pass piping to increase capacity of the station.

#### **Project Activities / Key Accomplishments in 2014**

- Project was constructed and in-service by October 29, 2014
- A total of \$2,482,867 was invested in 2014

- Project Closure activities
- No capital investment planned in 2015.

## 67 Horseheads Leak Prone Service Replacements

As of December 31, 2014

#### **Project Overview**

This project focuses on the recommendations from our consultant, Lucius Pitkin that assessed the effects of third party damage on our gas services adjacent to other utility services in the Horseheads area. The investigation was conducted during the first quarter of 2014. Recommendations were made to replace approximately 800 (1" and 1-1/4" steel) medium pressure gas services located in the Horseheads municipality.

Following a gas incident in the Horseheads area, NYSEG employed Lucius Pitkin to conduct a condition assessment of the gas services in the surrounding area. For Phase 1, the consultant's recommended the replacement of approximately 150 services that were deemed high priority prior December 1, 2014 to avoid potential degradation due to frost and cold weather concerns.

Phase 2 of the project will focus on Lucius Pitkin's further recommendation to work on about 650 additional services. Phase 2 of the project will be carried out in 2014.

### **Project Activities / Key Accomplishments in 2014**

- Approximately 650 services were completed in Phase 2 during 2014.
- A total of \$1,243,237 was invested in 2014

#### **Project Activities Planned for 2015**

There is no capital investment planned for 2015.

## 68 Robinson Road Gate Station Rebuild, Lockport

As of December 31, 2014

#### **Project Overview**

Rebuild Robinson Road gate station including new regulators and monitors, heaters, odorizers and control lines, SCADA, RTU's, phone and electric lines, relief valves and buildings. The existing gate station cannot supply the required demand, the equipment is outdated, and the heater is failing. The reconstruction of this station will increase personnel safety and system reliability.

#### **Project Activities / Key Accomplishments in 2014**

- Preliminary and final engineering.
- Procurement and Purchasing of materials and equipment started (Control valves, Heater, purchased).
- Rerouting of stormwater line, construction of foundations for heaters, setting of two Bruest catalytic heaters
- A total of \$1,628,460 was invested in 2014.

- Full construction of Gate Station 34 and Regulator Station 35 including 5 tie-ins to the distribution systems fed by the station.
- Demolition of existing buildings and removal of regulated material
- Cut dead and demolition of existing station piping and removal of regulated material
- Site development including grading and fencing
- Capital investment planned for 2015 is approximately \$2,800,000.

## 69 Elmira – Horseheads Gas Service Replacements

As of December 31, 2014

## **Project Overview**

Replace 150 high priority medium pressure leak prone residential gas services.

## Project Activities / Key Accomplishments in 2014

• A total of \$3,272,521 was invested in 2014

## **Project Activities Planned for 2015**

• There is no capital investment planned in 2015.

## 70 Dunham Farms, Install Gas Mains, Lockport

As of December 31, 2014

#### **Project Overview**

Install 11,100 LF of 4-inch, 124 psi HDPE main to serve new grain dryer on Knowlesville Road

#### **Project Activities / Key Accomplishments in 2014**

- A total of \$611,402 was invested in 2014
- Design complete late winter
- Materials utilized from another division that were about to be discarded and expensed to O&M, remainder of materials ordered through convention procurement process
- Pipeline installation May through July
- Project placed in-service July 31, 2014

- Project closeout documentation
- No capital investment planned in 2015.

## 71 County Route 32 – Town of Norwich – Gas Main Extension

As of December 31, 2014

#### **Project Overview**

This proposed project will install 5,900 feet of 8 inch MDPE natural gas main along County Route 32 in the Town of Norwich to provide greater pressure to the north side of the City of Norwich and eliminate two regulator stations.

#### Project Activities / Key Accomplishments in 2014

- Installed 5,900 feet of 8 inch MDPE gas main.
- Eliminated two regulator stations.
- A total of \$541,479 was invested in 2014.

#### **Project Activities Planned for 2015**

No capital investment planned in 2015.

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation Annual Capital Investment Report Schedule C

## NYSEG - Electric Capital Investment (\$000s) December Results

Project			YTD Plan	YTD Variance		Variance Explanation - + - 10% of Annual Plan	In Service Date
Projects in Appendix L							
Line #807 115kV Conversion	\$ 2,646	\$	2,862	\$	(216)		Apr-16
CCTP New 115 kV Transmission Line (Klinekill)	\$ 2,609	\$	1,234	\$	1,375	The variance is due to additional work over what was planned for 2014.	Apr-17
Stephentown Substation New Transformer	\$ 1,733	\$	1,559	\$	174	The variance is due to additional work over what was planned for 2014.	May-15
Tom Miller Road New Substation	\$ 4,331	\$	2,058	\$	2,273	Variance due to accelerating the construction schedule as a result of moved up In Service Date	Jun-15
Harris Lake - Diesel Generator Upgrade	\$ 874	\$	3,392	\$	(2,519)	Construction activities have been moved into 2015 due to delays in project schedule	Nov-15
Windham Capacitor Bank Project	\$ 376	\$	1,262	\$	(886)	Less work was done vs. planned due to other priorities.	Dec-15
Silver Creek Substation New Transformer	\$ 765	\$	2,317	\$	(1,552)	Less work was done vs. planned due to other priorities.	Dec-15
Transit St Sub - Relocate 12kV Ckts MGP	\$ 2,237	\$	2,286	\$	(49)		Dec-15
Flat Street Substation New Transformer	\$ 1,251	\$	2,634	\$	(1,383)	Construction activities have been moved into 2015 due to delays in project schedule	Dec-15
Auburn Transmission Project	\$ 3,916	\$	3,018	\$	898	The variance is due to additional work over what was planned for 2014.	Jun-16
Eelpot, Add 2nd 115-34.5kV Transformer	\$ 2,633	\$	2,938	\$	(305)	Less work was done vs. planned due to other priorities.	Nov-15
Meyer Substation New Transformer	\$ 1,380	\$	1,953	\$	(572)	Less work was done vs. planned due to other priorities.	Dec-15
S. Perry New Add 2nd 115-34.5kV Transformer	\$ 1,869	\$	1,387	\$	482	The variance is due to additional work over what was planned for 2014.	Nov-15
S. Perry New 230kV Transformer Project	\$ 1,760	\$	3,739	\$	(1,979)	Less work was done vs. planned due to other priorities.	Nov-15
Perry Center Area Install New 34.5kV Sub	\$ 3,621	\$	2,187	\$	1,433	Variance due to accelerating the construction schedule as a result of moved up In Service Date	Jun-15

## NYSEG - Electric Capital Investment (\$000s)

Project	ļ	YTD Actuals	YTD Plan	YTD	) Variance	Variance Explanation - + - 10% of Annual Plan	In Service Date
Westover (Goudey) New Xfmer Bank	\$	965	\$ 2,341	\$	(1,376)	Less work was done vs. planned due to other priorities.	Aug-16
Willet Substation New Transformer	\$	1,307	\$ 3,102	\$	(1,795)	Construction activities have been moved into 2015 due to delays in project schedule.	Dec-15
Mobile Radios Project - Electric Portion	\$	1,280	\$ 1,277	\$	4		Dec-16
DOE Stimulus Prgm-Capacitor Banks-NYSEG	\$	1,441	\$ -	\$	1,441	Variance was due to additional transient voltage studies and grounding requirements that were not anticipated.	4 - Jun-14 1 - Aug-14 1 - Nov-14
Energy Control Center	\$	7,260	\$ 4,893	\$	2,367	Construction advanced ahead of original plan. Added scope of work.	Staged 14-15
Programs included in Appendix L							
Transmission Distribution Infrastructure Reliability Program (TDIRP)	\$	7,071	\$ 14,850	\$	(7,779)	More budget allocated to Worst Performer Circuit TDIRP work, a separate line item, and to complete carryover hardening projects from 2013.	Various
NYSEG Security Projects - Electric Portion	\$	3,188	\$ 1,477	\$	1,711	Additional work to be done over plan to comply with new NERC standards, including CIP-014.	Various
Fleet - Electric Portion	\$	4,865	\$ 3,993	\$	872	Replaced more Vehicles than Planned.	Various
Division Projects - Minors (See Schedule C-4)	\$	54,525	\$ 50,709	\$	3,816		Various
Projects/Programs Supplemental to Appendix L							
Brewster RTU Project	\$	2,806	\$ 1,000	\$	1,806	Additional work over original plan to complete 3 stations this year.	Dec-15
Brewster T&D Hardening Project - Phase 2	\$	2,178	\$ -	\$	2,178	Carryover work from 2013, that wasn't planned.	Dec-14
Brewster Telcom Network for Automation	\$	1,238	\$ 1,750	\$	(512)	Due to delays in schedule, some planned work shifted to 2015	Dec-15
Raylinski Tap to Coons Crossing Rbld - Line 601	\$	1,820	\$ 780	\$	1,040	Variance due to acceleration of transmission line work.	Jul-16
The Mechanicville Reinforcement Project	\$	1,135	\$ 1,415	\$	(279)	Some work will have to occur after National Grid supplies power to substation	Jul-15

## NYSEG - Electric Capital Investment (\$000s)

Project	Α	YTD actuals	YTD Plan	YTD	) Variance	Variance Explanation - + - 10% of Annual Plan	In Service Date
Jennison S/S - Separation from AES Plant	\$	7,607	\$ 2,502	\$	5,105	The complexity of the project caused tasks to take longer than originally planned. In addition to the complexity, the outage coordination requirements are contributing to schedule extensions and subsequently increased costs.	Mar-15
Robinson Road 230kV Transf Replacement	\$	1,374	\$ 575	\$	798	Variance is due to change in scope of work by adding an interim energization step.	Nov-14
Greenidge S/S - Separation from AES PInt	\$	4,088	\$ 1,820	\$	2,268	The complexity of the project caused tasks to take longer than originally planned. In addition to the complexity, the outage coordination requirements are contributing to schedule extensions and subsequently increased costs.	May-15
DolomiteVanBuren/606 Transm Underbld	\$	-	\$ 1,400	\$	(1,400)	Customer delayed the start of this project.	N/A
Watercure Rd Sub-Install 2nd 345kV Xfmr	\$	852	\$ 3,186	\$	(2,334)	Further analysis and review of the system need associated with this project allowed us to move the In Service date out to 2016 and utilize funding for higher priority projects.	Dec-16
Hickling S/S - Separation from AES Plant	\$	7,691	\$ 1,926	\$	5,766	The complexity of the project caused tasks to take longer than originally planned. In addition to the complexity, the outage coordination requirements are contributing to schedule extensions and subsequently increased costs.	Feb-15
South Perry - Replace 115/34.5 kV Transformer	\$	200	\$ 1,434	\$	(1,234)	Project in-service date accelerated to 2013, only restoration and closeout work was done in 2014.	Dec-13
Glenwood - Replace Substation Transformers	\$	1,871	\$ 1,693	\$	178	The variance is due to additional work over what was planned for 2014.	May-15
Goudey S/S - Separation from AES Plant	\$	9,460	\$ 3,768	\$	5,693	The complexity of the project caused tasks to take longer than originally planned. In addition to the complexity, the outage coordination requirements are contributing to schedule extensions and subsequently increased costs.	Sep-15
Coopers Corners - Add 3rd 115/34.5 kV Transformer	\$	13	\$ 1,000	\$	(987)	Less work was done vs. planned due to other priorities.	Dec-16

## NYSEG - Electric Capital Investment (\$000s)

Project	YTD Actuals	YTD Plan	YTE	) Variance	Variance Explanation - + - 10% of Annual Plan	In Service Date
NYSEG - WPC Red Circuit Projects - TDIRP	\$ 4,735	\$ 2,400	\$	2,335	Additional WPC projects identified.	Various
Substation Automation (RTU Program)	\$ 1,179	\$ 2,500	\$	(1,321)	Less work was completed vs. Original Plan.	Various
NYSEG Recloser Automation Program	\$ 287	\$ 1,000	\$	(713)	Less work was completed vs. Original Plan.	Various
Oakdale to Frasier 345kV Line Upgrade	\$ 1,602	\$ 4,200	\$	(2,598)	PSC Alternating Current Transmission Upgrades proceeding (Case 12-T-0502) approval taking longer than planned. Less work to be completed in 2014.	Jun-18
Marcy South Series Compensation Project	\$ 2,885	\$ -	\$	2,885	Project approved by PSC as part of Indian Point Contingency Plan. Preliminary Engineering charges incurred in 2013, and 2014 CWIP charges were charged 2014, this was not in the 2014 Plan.	Jun-16
IEC 61850 Servers - NYSEG	\$ 939	\$ -	\$	939	Cyber Infrastructure project not originally planned for in 2014.	Jul-15
NY SPCC PROGRAM - 2014 - NYSEG	\$ 723	\$ -	\$	723	Environmental Infrastructure program to comply with SPCC Rule 40 CFR 112, not originally planned for in 2014.	Various
Distributed Outage Mngmt and Rpt System	\$ 348	\$ 1,147	\$	(799)	The variance is due to delays in project schedule.	Various
NYSEG Battery Replacement Program - TDIRP	\$ 1,412	\$ 758	\$	654	Additional Battery Replacements over Plan.	Various
NYSEG Circuit Breaker Replacement Program - TDIRP	\$ 1,332	\$ 2,000	\$	(668)	Less work was done vs. planned due to other priorities.	Various
Common - IT SAP Unification	\$ 10,823	\$ 10,550	\$	273		Mar-15
Other Common Projects - Electric allocation (See Schedule C-1)	\$ 8,693	\$ 10,697	\$	(2,004)	Less work done in IT and Customer Service vs. plan.	Various
Other Electric projects (See Schedule C-2)	\$ 11,615	\$ 12,904	\$	(1,288)		Various
Generation projects (See Schedule C-5)	\$ 1,399	\$ 1,553	\$	(154)		Various
Miscellaneous Adjustment in Plan	\$ -	\$ 137	\$	(137)		
Total	\$ 204,210	\$ 191,561	\$	12,648		

## RG&E - Electric Capital Investment (\$000s)

Project	YTD Actuals	YTD Plan Y	TD Variance	Variance Explanation - ±10% of Annual Plan	In Service Date
Projects in Appendix L					
Station 23 New Downtown 115kV Source	\$8,290 \$	13,462 \$	(5,172)	Delays in project design have moved construction originally planned for 2014 into 2015.	Jan-17
Station 180-128 Add 2-0115kV Cap Banks	1,756	424	1,331	Civil and Site construction costs higher than estimated, construction taking longer than planned.	Mar-16
Station 218 to Clyde New 34.5kV Transmission Line	3,220	4,809	(1,589)	Construction started later than originally planned.	Mar-16
Station 262 New 115kV /34.5kV Substation	2,771	3,440	(669)	Delays in engineering design causing delays in materials acquisistion.	Jun-15
Station 67 to 418 New 115 kV Transmission Line	791	5,382	(4,592)	Delays due to permitting and engineering.	Dec-15
Rochester Area Reliability Project	19,528	25,735	(6,207)	Delays in final substation siting	Apr-16
U of R New 115 /34.5kV Substation	12,807	7,897	4,910	Some work from 2013 was delayed and was done in 2014	Feb-15
Energy Control Center	2,708	1,693	1,015	Construction advanced ahead of original plan. Added scope of work.	Staged 14- 15
Station 56 - Additional 12kV Source	5,765	7,137	(1,372)	Delay in construction and material procurement for Circuit 268.	Mar-15
<u>Programs in Appendix L</u>					
Transmission, distribution infrastructure reliability program (TDIRP)	8,472	7,700	772	Relay projects costs are higher than planned.	Various
Electric System Security	889	1,382	(493)	Fire and Security systems framework agreements with vendors took longer than anticipated.	Various

## **RG&E - Electric Capital Investment**

(\$000s)
December Results

Project Fleet - Electric Portion	YTD Actuals 3,054	YTD Plan 2,787	YTD Variance 267	Variance Explanation - ±10% of Annual Plan Purchased equipment ahead of plan and purchasing additional equipment	In Service Date Various
Division Projects (See Schedule C-4)	22,170	22,460	(290)		Various
Projects/Programs Supplemental to Appendix L					
Station 168 Service Area Reinforcement	617	9	608	Additional scope added in 2014	Dec-16
Station 23 - Transformer and 11kV Switchgear	2,082	5,430	(3,348)	Delays in project design have moved construction originally planned for 2014 into 2015.	Dec-16
Station 136 - Add Transformer & 12kV Circuit	1,401	362	1,039	Construction not associated with energization was moved into 2014.	Dec-13
Station 40 - Circuit 550 Cable Replacement	513	1,405	(891)	Construction bids lower than plan.	Apr-14
IEC 61850 Servers	800	40	760	Increased the amount of software and hardware to be purchased in 2014 relative to plan.	Jul-15
Rochester - Sectionalize and Reconductor 115kV Circuit 917 (S7 - S418)	2,751	1,015	1,736	Material procurement and construction at Station 70 have been moved from 2015 into 2014.	Mar-15
FERC 'Brightline' Compliance	1,403	1,010	393	Additional scope in 2014 to begin installation of physical security systems at several substations	Various
RTU Program	2,868	2,750	118		Various
Recloser Automation	1,474	1,000	474	Additional work accomplished in 2014	Various
Lake Ave. (Merrill St. to 600's of Burley St.) Relocate Electric Facilities	1,532	1,000	532	Construction progressing ahead of schedule and costs higher than planned.	Nov-14
High St - Victor - Relocate Electric Facilities	1,379	599	780	Construction cost higher than planned	Nov-14

## RG&E - Electric Capital Investment (\$000s)

Project	YTD Actuals	YTD Plan	YTD Variance	Variance Explanation - ±10% of Annual Plan	In Service Date
RG&E - WPC Red Circuit Program	1,051	1,800	(749)	Construction starting later than planned on several SCADA projects	Various
Substation Battery Replacement Program - TDIRP	1,295	1,500	(205)		Various
Substation Breaker Replacement Program - TDIRP	1,624	1,462	162	Construction progressed ahead of original plan.	Various
SAP Unification - Electric Allocation	4,035	3,912	122		Mar-15
Other Common Projects - Electric allocation (See Schedule C-1)	6,230	7,329	(1,098)	Delays in IT projects (other than SAP Unification) and in Facilities projects.	Various
All Other Electric Projects (See Schedule C-2)	18,847	11,267	7,580	Line 745 Aerial Cable (not originally in plan) progression, investments in NYS Barge Canal Lighting, Russell and Elton Streets - Relocate Electric Facilities, Port of Rochester, Rte 33 Road Widening and The Reserve projects higher than plan, several Capacitor Bank projects costs higher than planned.	Various
Generation Projects (See Schedule C-3)	(1,406)	2,235	(3,641)	DOE Grant received for Station 2 Improvements and favorable settlement on claims with vendor on Station 5 Tunnel Relining Project	Various
Miscellaneous	0	(18)	18		
Total	\$ 140,717	\$ 148,415	\$ (7,698)		

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation 2014 Common Investments Schedule C-1

## 2014 Electric Common NYSEG Electric (\$000)

Project	2014 Actuals	2014 Plan
NYSEG GENERAL LAND & STRUCT BLANKET	\$2,159	\$666
NYSEG GENERAL LAND & STRUCT MAJOR PROJEC	\$1,273	\$1,886
IT Major Projects	\$1,270	\$1,813
IT Minor Projects	\$1,860	\$940
Telecom Projects	\$1,022	\$593
NYSEG GENERAL EQUIPMENT BLANKET	\$187	\$0
PBX Replacement (VoIP)	\$152	\$0
Laboratory Equipment	\$122	\$127
Ergonomic Furniture	\$108	\$79
All Other Common Projects Less Than \$100K	\$539	\$4,592
Total	\$8,693	\$10,697

## 2014 Electric Common RG&E Electric (\$000)

Project	2014 Actuals	2014 Plan
IT MAJOR CAPITAL PROJECTS	\$1,063	\$1,457
IT MINOR CAPITAL PROJECTS	\$792	\$569
PROPERTY MANAGEMENT MAJOR PROJECTS	\$2,462	\$1,747
GENERAL LAND & STRUCT PLANNING	\$796	\$1,199
TELECOM MAJOR CAPITAL PROJECTS	\$478	\$488
Other Common Projects Less Than \$100K	\$640	\$1,869
Total	\$6,230	\$7,329

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation 2014 Other Electric Project Investments Schedule C-2

#### 2014 Other Electric Projects NYSEG Electric (\$000)

Project	2014 Actuals	2014 Plan
Coddington LTCCapacity 115-34.5kV Xfmr	\$1,144	\$15
Keuka Substation - Replace Bank #2 Transformer	\$1,071	\$200
New Bulk Spare Power Transformer - 2012	\$919	\$751
New 13.2 kV Circuit Cantitoe Substation	\$769	\$0
Alternate Control Center - NYSEG	\$730	\$0
Liberty T&D Hardening Project - Phase 2	\$661	\$0
Silicon Carbide Change out Progm - 2013	\$608	\$300
Spectrum Securitry Wrapper	\$559	\$420
NYSEG Communications for Automation Initiatives	\$545	\$527
Richfield Springs Substa New Transformer	\$535	\$11
South Park Sub - Bank Installation	\$521	\$0
Spectrum Based Back Office Solution	\$483	\$497
	\$405	\$100
Meyer - Add 115kV Capacitor Bank	\$318	\$100
Warren Road Voltage Conversion / Dutch Mill UG  New Gardenville 230 kV Sub Install DME	\$304	\$500
	\$294	\$500
Pershing Ave Step Transformer Replacemnt	-	· · · · · · · · · · · · · · · · · · ·
Waste Disposal - PCB	\$286	\$0
Yahoo Substation Connection 2014 - 100% Reimb	\$267	\$0
Replace Rejected Wood Trans Poles 2013	\$262	\$315
FERC 'Bright Line' Compliance Project	\$233	\$600
Pleasant Meadows Townhomes - URD - Phs 1	\$225	\$0
Replacement of Rejected Wood Transmission Poles 2012	\$215	\$0
Summerfield Farms URD - Phase 5	\$213	\$0
Marsh Hill Windfarm 34.5 KV - 100% Reimb	\$212	\$0
Replace Static Line on L594 Transmission Line	\$206	\$0
General Equipment - NYSEG Elect T&D Ops	\$200	\$206
Upgrade - Spencer 712 Tap	\$189	\$0
Line-813 Transmission Structure Replacement	\$173	\$0
VanBuren Bank #2 Transformer Replacement	\$163	\$428
Reconductoring Line 941 Cir Cantitoe 283	\$159	\$0
Stillwater Landings URD	\$159	\$0
Line 879 - 46KV Transmission Structure Replacement	\$158	\$0
Knoche Farms URD - Phase 1	\$153	\$0
Line 527 Transmission Structure Relocation	\$150	\$0
NERC Alert Program - NYSEG	\$143	\$0
Forest Park Estates URD	\$125	\$0
Losson Rd 402 and 403 Reliability Improvement	\$119	\$0
Park Lane Apartments URD	\$116	\$0
Essex Greens URD - Phase 1	\$116	\$0
Silver Creek Reconfigure 12.5kv Conver	\$115	\$400
General Equipment - NYSEG System Ops SS	\$102	\$148
Collegetown Terrace Apts URD Ph 2&3	\$101	\$150
T & D Disposal and Salvage - NYSEG	(\$106)	(\$1)
IBM TCE Mitigation Project	(\$147)	\$0
Walden 69kV Transmission Line Upgrade	(\$208)	\$0
Waste Disposal - Non PCB	(\$258)	\$0
Laser NE Gathering 35kV 3Ph Conv & Serv	(\$455)	\$0
Amphenol Facility Interconnection - 100% Reimb.	(\$608)	\$0
NYCDEP Cross River Shaft 13 Sub	(\$617)	\$0
Agro-Farma, 46kV Trans Line & Sub - 100% Reimb	(\$1,881)	\$0
Other Electric Projects Less Than \$100K	\$1,469	\$6,838
Total	\$11,615	\$12,904

## 2014 Other Electric Projects RG&E Electric (\$000)

Project	2014 Actuals	2014 Plan
Station 38 Substation Modernization	\$1,806	\$844
Station 95 - Add 2nd 34.5-11.5kV Transformer	\$1,453	\$635
Statation 69 Capacitor Bank	\$1,419	\$311
Station 178 New 34.5kV Capacitors	\$1,042	\$167
Station 5 Substation Modernization	\$850	\$375
Station 49 Transformer Addition	\$835	\$627
Sta 173 New 34.5kV Capacitors	\$807	\$316
Cir 419- Add new 12kv circuit	\$784	\$500
Sta 180 New 34.5kV Capacitors	\$649	\$247
Line 745 Aerial Cable Replacement	\$627	\$0
Route 33 Widening and Rehab from I490 to Marway Circle, Relocate Electric Facilities	\$549	\$350
Recloser Automation - ECC Intergace Communications	\$524	\$500
Rochester New Underground Residential (The Reserve at the Erie Canal)	\$510	\$400
Replace DC Pilot Wire System	\$504	\$36
Russell and Elton Streets Reconstruction - Relocate Electric Facilities	\$486	\$0
NYS Barge Canal Brighton - Inst. St Lgt	\$415	\$100
Long Pond Rd. Hwy Relocate Electric Facilities	\$394	\$600
Sta. 37 Substation Modernization	\$361	\$40
Midtown Relocate Electric Facilities	\$321	\$300
Mobile Substation #3 115/34.5kV	\$316	\$17
STATION 33 - SPARE TRANSFORMER	\$298	\$760
Station 80 Replace P&C Relays for Cap Banks Panel 1	\$282	\$0
Station 210 Substation Modernization	\$269	\$5
Sta 80 Repl 1T & 3T Transformers	\$258	\$71
Mobile Switchgear #1 34.5/12kV	\$257	\$7
University Avenue (Union -Goodman) Hwy Reloc, Elec	\$253	\$0
Replace of Reject Wood Trans Poles 2013	\$253	\$605
Alternate Control Center - RG&E	\$247	\$0
Broad Street (Court St - Chestnut St) - Relocate Electric Facilties - Rochester	\$207	\$0
NYSDOT Central Ave Girder Repair	\$188	\$0
RG&E Spectrum Security Wrapper	\$182	\$130
NY SPCC PROGRAM - RG&E	\$180	\$0
Fawn Meadow Subdivision - XLP Cable Replacement	\$179	\$0
Port of Rochester Marina Development	\$173	\$0
RG&E Spectrum Based Back Office Solution	\$138	\$153
RTU- Communications Projects	\$127	\$0
Circuit 924 - Replace Transmission Poles	\$127	\$0
Station 65 Foundation Repair	\$123	\$0
RGE SPCC Oil Containment Compliance	\$120	\$128
Distributed Outage Management and Reporting System (DOMRS)	\$120	\$370
Empire Blvd (Southpointe Cove), Hwy Relocate Electric Facilities	\$102	\$0
East Ridge Rd.Hwy, Relocate Electric Facilities	\$101	\$0
Non-PCB Equipment Disposal	(\$156)	\$0
CableCure Program	(\$360)	\$0
Other Electric Projects Less Than \$100K	\$528	\$2,672
Total	\$18,847	\$11,267

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation 2014 TDIRP Investments Schedule C-3

## 2014 TDIRP Program RG&E Electric (\$000)

Project	2014 Actual	2014 Plan
Betterments	\$6,994	\$7,700
Substation Battery Replacement	\$1,295	\$1,500
Substation Breaker Replacement	\$1,624	\$1,462
RG&E - WPC Red Circuit Program	\$1,051	\$1,800
Sectionalizer Replacement Program	\$2	\$0
TDIRP - Electric Capital Delivery	\$1,475	\$0
Total	\$12,441	\$12,462

## 2014 TDIRP Program RG&E Electric (\$000)

Project	2014 Actual	2014 Plan
Betterments	\$6,994	\$7,700
Substation Battery Replacement	\$1,295	\$1,500
Substation Breaker Replacement	\$1,624	\$1,462
RG&E - WPC Red Circuit Program	\$1,051	\$1,800
Sectionalizer Replacement Program	\$2	-
TDIRP - Electric Capital Delivery	\$1,475	\$0
Total	\$12,441	\$12,462

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation 2014 Division Minor Investments Schedule C-4

## 2014 Divison Projects NYSEG Electric (\$000)

Projects	2014 Actual	2014 Plan
Distribution Line	\$16,065	\$12,356
Distribution Line Inspection	\$7,013	\$5,000
Government Highway Minor	\$2,078	\$1,250
Industrial/Commercial	\$1,198	\$1,140
Residential Line Extensions	\$3,900	\$4,520
Service Connects	\$2,731	\$2,795
Storm	\$1,345	\$1,545
Street Lighting	\$1,053	\$1,030
Substations	\$1,734	\$1,250
Transformer, Meters, Regulators and Capacitors	\$15,035	\$14,823
Transmission Line	\$2,372	\$5,000
Total	\$54,525	\$50,709

## 2014 Divison Projects RG&E Electric (\$000)

Project	2014 Actual	2014 Plan
Distribution Line	\$7,116	\$4,680
Distribution Line Inspection	\$221	\$1,500
Government Highway Minor	\$557	\$530
Government Highway Major	\$0	\$3,623
Industrial/Commercial	\$2,231	\$1,130
Residential Line Extensions	\$2,164	\$1,745
Service Connects	\$1,418	\$1,000
Storm	\$280	\$300
Street Lighting	\$680	\$500
Substations	\$867	\$1,000
Transformer, Meters, Regulators and Capacitors	\$6,020	\$5,952
Transmission Line	\$615	\$500
Total	\$22,170	\$22,460

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation 2014 Hydro-Generation Investments Schedule C-5

## 2014 Hydro-Generation Projects NYSEG Electric (\$000)

Project	2014 Actuals	2014 Plan
Hydro Restoration -Hurricane Irene Storm	\$725	\$250
NYSEG PRODUCTION HYDRO BLANKET	\$396	\$386
High Falls Road to Powerhouse	\$115	\$0
Other Generation Proejcts less than \$100K	\$162	\$917
Total	\$1,399	\$1,553

## 2014 Hydro-Generation Projects RG&E Electric (\$000)

Project	2014 Actuals	2014 Plan
Sta 5 Spillgate #5 Rock Stabilization	\$390	\$745
Sta 5 U2 New Generator Field Pole Proj	\$352	\$0
Station 26 Unit 1 Major Overhaul	\$294	\$130
Station 2 - New 6.3 MW Unit	\$249	\$0
Sta 5 Units, 1,2,3 Upgrades	\$121	\$0
Central Ave Dam Gate 4 Replacement*	(\$212)	\$0
Sta 2 Central Ave Dam Gate 3 Repl*	(\$230)	\$0
Sta 2 Central Ave Dam Gate 6 Repl*	(\$235)	\$0
Sta 5 Tunnel - New Lining**	(\$534)	\$0
Station 2 Unit 1 11kV DC Controls*	(\$662)	\$0
Sta 2 - Generator Rewind & Runner Upgr*	(\$1,303)	\$0
Other Generation Proejcts less than \$100K	\$365	\$1,360
Total	(\$1,406)	\$2,235

<sup>\*</sup>Includes allocation of \$2.77M DOE Grant

<sup>\*\*</sup>Includes settlement receipt of \$965K

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation Annual Capital Investment Report Schedule D

# NYSEG - Gas Capital Investment (\$000s) December Results

Project	YTD	Actuals YTD	Plan	YTD Vari	ance	Variance Explanation - ±10% of Annual Plan	In Service Date
Projects/Programs in Appendix L							
Leak Prone Main Replacement Program	\$	12,548 \$	12,589	\$	(40)		Various
Gas Regulator Modernization & Automation Program, Replace Regulator Stations, NYSEG		1,011	797		214	Additional funds added to perform work on a high priority unplanned regulating station (Willow St).	Various
Minor Leak Prone Service Renewals, Replace Gas Service, NYSEG		5,879	4,810	1	,069	Additional services have been added to the scope of this program.	<sup>S</sup> Various
Minor Government Jobs, Replace Gas Mains, NYSEG		1,384	1,111		273	Municipal driven work higher than planned.	Various
Minor Distribution Mains, Install Gas Mains, NYSEG		3,523	1,755	1	,768	Demand is higher than planned	Various
Distribution Main Replacement, Replace Gas Mains, NYSEG		1,555	1,082		474	Municipal driven work higher than budgeted.	Various
Minor Services, Install Gas Service, NYSEG		5,975	4,986		989	Demand for new services is higher than budgeted.	Various
County Route 32 Town of Norwich Gas Main Ext		541	522		20		Dec-14
Dunham Farms, Install Gas Mains, Lockport		611	701		(90)	Construction complete. Project under budget.	Aug-14
Kayner and Ertman Rd Stations, Lockport		2,483	2,756		(273)		Oct-14
Robinson Road Gate Station Rebuild, Lockport		1,628	1,439		189	Additional scope of work has been added	Dec-15
Lansing / Freeville Gas Reinforcement Project (Ithaca/Dryden Gas Distribution)		171	1,651	(1	,480)	Delay due to the development of the community outreach program.	Dec-15
Horseheads Leak Prone Service Replacements		1,243	41	1	,202	Additional funding needed for unplanned investigative services used on this project	Aug-14

## NYSEG - Gas Capital Investment (\$000s) December Results

Project	YTD	Actuals YTD	Plan YT	D Variance	Variance Explanation - ±10% of Annual Plan	In Service Date
Elmira - Horsehead Gas Service Replacements		3,273	2,307	966	Spending higher than anticipated due to a shortened project duration to meet PSC requirements	Aug-14
SmarTRAC Replacement, NYSEG		712	1,072	(360)	Lower labor costs than budgeted.	Oct-14
NYSEG - Gas Meters		3,628	3,442	186		Various
Fleet		1,285	1,055	230	Additional equipment purchased over what was planne	d Various
Common - IT SAP Unification		2,545	2,475	70		Mar-15
Other Common Projects - Gas Allocation (See Schedule D-1)		3,581	3,866	(285)	Delays in IT projects (other than SAP Unification project	ct) Various
Other projects (See Schedule D-2)		1,634	1,305	329	Work performed on unplanned projects like the Plattsburgh Gas Franchise Expansion.	Various
Miscellaneous		-	(630)	630		
Total	\$	55,212 \$	49,131 \$	6,081		

## RG&E - Gas Capital Investment

(\$000s)
December Results

Project	YTD Actuals	YTD	Plan	YTD Variance	Variance Explanation - ±10% of Annual Plan	In Service Date
Projects/Programs in Appendix L						
Leak Prone Main Replacement Program	\$ 11,815	\$	10,607	\$ 1,209	The Monroe Ave bid project award higher than expected. Low bidder could not meet schedule requirements. A few projects have encountered rock.	Various
Gas Regulator Modernization & Automation Program, Replace Regulate	740		633	107	Additional regulator station added to the program which increased costs	Various
Leak Prone Services Replacement Program - RG&E	1,385		2,326	(941)	Lower than anticipated construction costs.	Various
Minor Government Jobs, Replace Gas Mains, Roch	335		647	(312)	Amount of municipal driven jobs lower than initially budgeted.	Various
Minor Distribution Mains, Install Gas Mains, Roch	1,836		1,049	787	Customer driven work higher than budgeted.	Various
Minor New Res Services, Install Gas Service, Roch	5,267		4,295	972	Customer demand greater than budgeted.	Various
Ridge Rd East, Replace Gas Mains, (St Paul to Marburger)	956		898	58		Dec-14
New Empire West Gate Station, Build New Gate Station, Roch	3,239		2,074	1,165	Contractual payment to National Fuel was advanced to 2014 from 2015	Nov-15
Roch Area Exploratory Investigation of Gas Bare Steel Srvces by LP	1,793		811	982	Unplanned investigative services used on this project	Dec-14
Northeast 60 - Penfield, Install Gas Mains - RG&E	397		277	121	Additional work was needed to reinstall pipe that was damaged during installation due to rock.	Dec-14
MF42 Henrietta Jefferson Rd Improvement, Install Gas Mains, Roch	489	ı	413	75	Higher material and contractor bid results.	Dec-14
SmarTRAC Replacement, RG&E	749	l	856	(107)	Lower actual internal labor costs than budgeted.	Oct-14
RG&E - Gas Meters	2,638		2,500	137		Various

## RG&E - Gas Capital Investment (\$000s)

Project	YTD Actuals YT	D Plan	YTD Variance	Variance Explanation - ±10% of Annual Plan	In Service Date
Fleet	1,644	1,500	144		Dec-14
Common - IT SAP Unification	2,173	2,107	66		Mar-15
Other Common Projects - Gas Allocation (See Schedule D-1)	3,498	4,690	(1,192)	Delays in IT projects (other than SAP Unification), Facilities and Fire and Security framework agreement	Various
Other Gas projects (See Schedule D-2)	1,515	3,490	(1,975)	Reflects accrual reversal in January and postponement of some projects to future years	Various
Miscellaneous	<u>-</u>	448	(448)		
Total	\$ 40,470 \$	39,622	\$ 848		

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation 2014 Common Investments - Gas Schedule D-1

## 2014 Gas Common NYSEG Gas (\$000)

Project	2014 Actuals	2014 Plan
NYSEG GENERAL LAND & STRUCT BLANKET	\$571	\$176
NYSEG GENERAL LAND & STRUCT MAJOR PROJEC	\$336	\$498
IT Major Projects	\$650	\$792
IT Minor Projects	\$492	\$248
Security Projects	\$842	\$390
Mobile Radio Project	\$338	\$337
All Other Common Projects Less Than \$100K	\$352	\$1,424
Total	\$3,581	\$3,866

## 2014 Gas Common RG&E Gas (\$000)

Project	2014 Actuals	2014 Plan
IT MAJOR CAPITAL PROJECTS	\$572	\$784
IT MINOR CAPITAL PROJECTS	\$426	\$307
PROPERTY MANAGEMENT MAJOR PROJECTS	\$1,326	\$941
GENERAL LAND & STRUCT PLANNING	\$429	\$646
TELECOM MAJOR CAPITAL PROJECTS	\$257	\$263
Security Projects	\$479	\$744
Other Common Projects Less Than \$100K	\$9	\$1,006
Total	\$3,498	\$4,690

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation 2014 Other Gas Project Investments Schedule D-2

## 2014 Other Gas Projects NYSEG Gas (\$000)

Project	2014 Actuals	2014 Plan
Mechanicville Compressed Natural Gas	\$115	\$0
Gas Regulators	\$239	\$237
General Equipment	\$323	\$326
Plattsburgh Gas Franchise Expansion	\$205	\$0
Royalton Pipeline Launcher Receiver Installation	\$151	\$106
Seneca East Odorizers, Elmira	\$373	\$0
Seneca West - Extend Gas Mains and New Station	\$133	\$81
Other Gas Projects under \$100K	\$95	\$555
Total	\$1,634	\$1,305

## 2014 Other Gas Projects RG&E Gas (\$000)

Project	2014 Actuals	2014 Plan
MF42 Henrietta Jefferson Rd Improvement, Install Gas Mains, Roch	\$489	\$413
Northeast 60 - Penfield, Install Gas Mains - RG&E	\$397	\$277
Install new and relocate RTU Endpoints	\$331	\$265
Buffalo Rd, Rebuild Gas Regulator Stations	\$251	\$261
Gas Regulators	\$230	\$147
Distribution Mains Replacement Planning	\$160	\$339
Install Gas Mains to Remove Regulator Station 238	\$109	\$88
West Henrietta @ Canal, 1-390 Highway Improvement Phase	(\$757)	(\$21)
Other Gas Projects Less than \$100K	\$305	\$1,720
Total	\$1,515	\$3,490

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation Annual Capital Investment Report Schedule E

New York State Electric & Gas Corporation Rochester Gas and Electric Corporation Annual Capital Expenditures Report Schedule E

#### STATUS OF THE AUBURN TRANSMISSION PROJECT

NYSEG, in collaboration with National Grid (NGRID), has jointly filed a supplemental application for an Article VII Certificate of Environmental Compatibility and Public Need for the Auburn Transmission Project (the "Project") - a new 14 mile, 115kV line from Elbridge Substation (National Grid) to State Street Substation (NYSEG) - in November 2013.

Conceptual engineering packages have been completed. Currently detailed engineering is being developed for transmission line and substations. This will be completed by July 2015.

NYSEG plans to procure materials and supplies for the Project that will allow for construction to begin in compliance with an Article VII Certificate in November 2015.

NYSEG and National Grid have determined that the NYISO requirements for a System Impact Study do not apply to the Project due to its low impact on power transfers. The Project will be included in NYSEG's Local Transmission Plan for any studies that include the proposed inservice date of June 2016.

NYSEG continues to work with DPS Staff, NYISO Planning, and National Grid to analyze and review long-term transmission options that resolve the on-going Cayuga Generation Mothball issues, over and above the original scope for the Project. Additional NYSEG and/or National Grid transmission option scope associated with the Cayuga Generation Mothball issue may increase the cost and scope of the supplemental Article VII application.