NYSEG RG&E

March 1, 2013

VIA ELECTRONIC SERVICE

Honorable Jeffrey Cohen
Acting Secretary
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 Cohen:

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

2012

Annual Capital Expenditures Report

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

March 1, 2013

This report is in response to the requirements set forth on page 20 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 2012:

- 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. It also includes projects which experience a plus or minus 10% cost variance for 2012 as listed in Appendix L

- Schedule B provides a detailed status report for each Electric and Gas project listed on Schedule A;

- Schedule C is the December 2012 Variance Report with capital expenditures during 2012 and showing Electric project variances as well as listing Electric projects that were added to or removed from those listed on 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, 2013

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

Electric projects with actual investment greater than $1M or plus or minus 10% cost variance for 2012 as listed in Appendix L

RG&E:

1 - CableCure Program
2 - Replace DC Pilot Wire System
3 - East Ridge Road, Electric Facilities Relocation
4 - Line 727 – 34.5 kV Gas Filled Replacement
5 - Rochester Area Reliability Project (345 kV Source and 115kV Transmission Line)
6 - RTU Program
7 - RTU Communication Projects
8 - Sectionalize 115kV Circuit 917 (Station 7 - Station 418)
9 - Electric System Security
10 - SPCC Oil Containment Compliance
11 - Station 5 – Plant Electric Distribution
12 - Station 5 - Powerhouse Undermining
13 - Station 5 - Substation Modernization
14 - Station 5 - Tunnel Relining
15 - Station 5 – Units 1, 2 and 3 Upgrade (Wicket Gate Upgrades)
16 - Station 23 – New Downtown 115kV Source
17 - Station 23 - Transformer & 11kV Switchgear
18 - Station 26 - Unit 1 Major Overhaul
19 - Station 38 - Substation Modernization
20 - Station 42 - Replace 115-11kV 4T Transformer
21 - Station 42 - Replace 34.5-11.5kV 3T Transformer - New 12T
22 - Station 56 - Replace (2) 115/34.5kV Transformer
23 - Station 56 - Additional 12kV Source
24 - Station 67 to 418 New 115kV Transmission Line
25 - Station 80 - #5 Transformer
26 - Station 80 - Replace 1T & 3T Transformers
27 - Station 91 - Substation Automation
28 - Station 124 - New Phase Shifter Transformer
29 - Station 124 - Static VAR Compensator
30 - Station 136 - Add Transformer & 12kV Circuit
31 - Station 218 to Clyde New 34.5kV Transmission Line
32 - Station 262 - New 115/34.5 kV Substation
33 - Substation Modernization
34 - Webster East New 12 kV Source
35 - Westfall Road, Electric Facilities Relocation

NYSEG:

36 - Binghamton Transmission Line 32-36 Split
37 - Biogas 34.5kV Collection System
38 - Brewster RTU Substation Automation
39 - Coddington LTC Capacity 115-34.5kV Transformer
40 - Columbia County Transmission Project (Klinekill-Valkin (NMPC) New 115kV Transmission Line)
41 - DOE Stimulus Program-Capacitor Banks
42 - Eelpot New Transformer
43 - Flat Street Substation New Transformer
44 - Circuit 426 Upgrade Conductor
45 - Line #807 115kV Conversion
46 - Meyer Substation New Transformer
47 - Mobile Radio Project
48 - NERC Alert Program
49 - New Bulk Spare Power Transformer – 2012
50 - New Mobile Substation (#22)
51 - Electric System Security
52 - Substation Automation (RTU Program)
53 - Perry Center Area Install New 34.5kV Substation
54 - Transmission Pole Replacement Program
55 - Richfield Springs Substation New Transformer
56 - Stephentown Substation New Transformer
57 - South Park Sub - Bank Installation
58 - South Perry New 115kV Transformer
59 - South Perry New 230kV Transformer
60 - Substation Modernization
61 - The Mechanicville Reinforcement Project
62 - Tom Miller Rd New Substation
63 - Walden 69kV Transmission Line Upgrade
64 - Watercure Rd Substation-Install 2nd 345kV Transformer
65 - Wehrle Dr, Replace Cable, Terminations & Switch Gear
66 - Westover Substation New 115kV Transformer & Binghamton Division Capacitors
67 - Willet Substation New Transformer
68 - Windham Substation 115kV Capacitor Addition

NYSEG / RG&E

69 - Energy Control Center
70 - APPS-Mobile Initiative MAU Replacement

Gas projects with actual investment greater than $500,000.

RG&E:

71 - Transmission Casing Replacement Program
72 - Ridge Road East, Relocate Gas Mains
73 - Westfall Road, Relocate Gas Mains
74 - Gas Regulator Station Upgrade Program
75 - Washington Street, Extend Gas Mains & Replace Regulator Station

NYSEG:

76 - Seneca West Pipeline Interconnect to Elmira
77 - Gas Regulator Station Program
78 - Binghamton Gas SCADA System Migration

NYSEG / RG&E

79 - 2012 Leak Prone and Services Mains Replacement Programs

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

March 1, 2013

1 – CableCure Program

As of December 31, 2012

Project Overview

This work involves injecting an insulating fluid into the stranding of aged XLP URD primary distribution cables that permeates into the insulation. These cables were installed between 1970 and 1985 and have since experienced a high frequency of premature insulation failures. All cables identified for treatment reside within the RG&E Central District (predominately in the Monroe County NY area).

The objective of this project is to extend the useful life of the XLP cables at least 20 years. The most tangible benefit derived from this program is the 20 year life extension. An added benefit contained within the time extension is it allows for the planning of a systematic XLP cable replacement program and spreading the related cable replacement costs over time. A further benefit is to reduce the frequency of cable faults in the treated cable, thereby improving reliability.

Project Activities / Key Accomplishments in 2012

- From January 1, 2012 thru December 31, 2012, UtilX evaluated 307,150 ft. of XLP URD cable and successfully treated 260,520 ft. of XLP URD cable.
- Capital investment was $2.4 million.

Project Activities Planned for 2013

- Continue work on priority XLP URD cable.
- Successfully treat approx 150,000 ft of XLP URD cable.

2 – Replace DC Pilot Wire System

As of December 31, 2012

Project Overview

The purpose of this project is to begin implementation of a prioritized, sequential, multi-year replacement of the pilot wire cables. State of the art fiber optic cable and associated multiplexing equipment will be substituted for the copper pilot wire equipment. The traditional electromechanical pilot wire relays (HCB and CPD) will be replaced with fiber optic interface compatible equivalents. The fiber optic cable installations will also facilitate further communications enhancements for inter-substation communications purposes.

RG&E's pilot wire system is 60-70 years old, and consists of approximately 100 separate pilot wire routes which interconnect many critical substations. The City of Rochester's entire downtown electrical network depends upon the pilot wires to provide safe and reliable service. The main purpose of the pilot wire system is to provide reliable, high speed communications paths to activate pilot wire relays in order to rapidly clear faults. The existing paper insulated copper cables have been steadily deteriorating to the point where several of the pilot wire loops have been placed out of service. These pilot wire relays are electromechanical and do not contain event recording that modern microprocessor have so RG&E has no downloadable information from these relays to assist in system event analysis. These relays are also obsolete so spare parts are not available.

Project Activities / Key Accomplishments in 2012

- Conceptual Engineering packages were fully developed including Detailed Engineering request for proposal packages.
- Relays were ordered and delivered in 2012, ~$400K.
- Overlap in scope for some other projects was resolved, and effectively split and clarified.
- Connectivity scope, Fiber Optic or Telephone, for 5 stations is still in conceptual engineering. This is a parallel effort for engineering and is part of this project.
- Detailed Engineering was bid.
- Capital investment was $1.6 million.

Project Activities Planned for 2013

- No activities planned.

3 – East Ridge Road, Electric Facilities Relocation

As of December 31, 2012

Project Overview

The Monroe county and the Town of Irondequoit are planning on improving Ridge Road East between Culver Road and East City Line (Seneca Road) by full reconstruction of the highway and intersections.

RG&E's underground and overhead electric facilities are in conflict with the improvements. RG&E must relocate approximately 30 poles affecting six 4kV circuits with equipment, transfer and install new overhead primary and secondary conductors, transfer duct system with cables to new poles. Install new duct, rebuild six manholes, handholes, install a 12 way, nine way and six way 5" duct systems, remove abandon duct, replacing head end cables while installing 40,000 feet of distribution and 11,000 feet of transmission cables with equipment. Relocate and remove street lighting facilities.

Project Activities / Key Accomplishments in 2012

- Installed 2/3rds of the 2.5 mile duct system and manhole work.
- Installed underground cables for: two 34kV, one 11kV & eight 4kV circuits in new duct system from Station 103.
- Completed pole line rebuild and transfer of circuit conductors.
- Capital investment was $3.9 million.

Project Activities Planned for 2013

- Complete the circuit replacements for Station 103
- Complete the 17 additional circuits at Stations 81 & 40.
- RG&E subway plans to complete their work by January of 2013 and removals by March of 2013.
- RG&E underground plans to have all circuits in and running as well as removals from all three stations in the limits of the project by July 2013.
- There are seven cable pole transfers that will be coordinated with this phase of construction.

4 - Line 727 – 34.5 kV Gas Filled Replacement

As of December 31, 2012

Project Overview

System reliability within the City of Rochester requires this project be completed. These cables have experienced numerous failures.

The project requires the rebuild and re-conduction segments of the 34.5kV 726 and 727 overhead gas filled cable in Rochester, replacing the 726 and 727 in a single circuit and double circuit configuration between station circuit 42 and Station 91. Additionally, Line 727 will be replaced between Station 91 and 56. The project also includes the installation of ADSS and optical ground wire between all three stations.

Project Activities / Key Accomplishments in 2012

- Line completed/energized 6/2012.
- Capital investment was $1.4 million.

Project Activities Planned for 2013

- None.

5 – Rochester Area Reliability Project
(345kV Source and 115kV Transmission Line)

As of December 31, 2012

Project Overview

Add new 345kV breaker and a half substation with two 400MVA 345/115kV transformers with LTC, one 115kV 300/350MVA line from new station to Station 418, and one 115kV 300/350MVA line to Station 3 115kV.

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 #34, 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.

Project Activities / Key Accomplishments in 2012

- 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 $7.0 million
- Joint Proposal for settlement filed for the Article VII

Project Activities Planned for 2013

- Support efforts to allow for PSC Approval of the Article VII
- Finalize Facilities Study and negotiate Interconnection Agreement with NYPA
- Progress detailed design sufficient to file EM&CP's segments in 2nd and 3rd quarters
- Purchase options on needed property rights
- Procurement of long lead time equipment
- Contract Construction companies

6 – RTU Program

As of December 31, 2012

Project Overview

The RG&E RTU Upgrade Program project is a Remote Terminal Units (RTU) replacement for 12 substations. The installation of twelve new RTUs will reduce maintenance costs as well as the requirements to have 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 twelve 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 2012

- Start the detail engineering for the ST142, 149 and 428.
- All the material already purchased for the ST142.
- Switchgears for ST144, 148, 149 and 155 purchased and in manufacturing process.
- Material procurement for relays and other communication equipment completed.
- Capital investment was $1.6 million.

Project Activities Planned for 2013

- Finish the engineering for ST142, 428, 125 and 111.
- Install the new Telvent RTU and SEL RTAC system in the stations.
- Finish installation and Commissioning for the stations 142 and 428.

7- RTU Communication Project

As of December 31, 2012

Project Overview

Fiber optic connectivity to substations in support of the RTU Program for automation

Project Activities / Key Accomplishments in 2012

- Engineering and construction of All Dielectric Self Supporting (ADSS) to specified substations.
- RTU connectivity prepared for substations 118, 110, 106, 111, 125, 120, 142, 144, 148, 149, 155 and 428.
- Capital investment was $1.0 million.

Project Activities Planned for 2013

- None. Project was concluded.

8 - Sectionalize 115kV Circuit 917 (Station 7 - Station 418)

As of December 31, 2012

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 station 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 station 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 2012

- Conceptual engineering was approved.
- Detailed engineering in process (in ground, above ground, SP&C and fiber optic communications)
- St's 70 and 71 control buildings purchased and stored
- St 69 control building purchased.
- St's 69 and 70 circuit breakers purchased and stored
- Protection relays purchased and stored
- Fiber optic cable purchased
- Disconnect switches purchased
- Batteries purchased
- St 71 hybrid breakers in procurement process
- RTU's in procurement process
- CVT's in procurement process
- Working closely with St 69 capacitors bank project engineering
- Capital investment was $1.5 million.

Project Activities Planned for 2013

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

9 – Electric System Security

As of December 31, 2012

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 2012

- Install perimeter protection, fencing, video, and other security measures at various locations.
- Capital investment was $3 million.

Project Activities Planned for 2013

- Replacement of access control security systems providing standardization between NYSEG and RG&E.
- Upgrade of video alarming equipment.
- Upgraded cameras to include thermal capability at bulk power substations and other key critical infrastructure locations.
- Security system installation at Hydro Generating Facilities.
- Continued upgrades and replacement of physical barriers and fencing at key critical facilities.

10 - SPCC Oil Containment Compliance

As of December 31, 2012

Project Overview

The scope of the RG&E Oil Containment Program requires installation of transformer oil containment devices such as but not limited to crushed gravel, earthen berms, drainage pipe, buried storage tanks, sump pumps, etc. at various RG&E substations.

The program's primary driver is regulatory-based (40 CFR 112) under the Spill Prevention Countermeasure and Control Program (SPCC).

Project Activities / Key Accomplishments in 2012

- Containment systems/upgrades incorporated at 13 substations.
- Construction delayed to 2013 at several sites due to allocation of construction resources to storm duty in 4Q 2012.
- Capital investment was $1.3 million.

Project Activities Planned for 2013

- Redesign and construction of an oil containment system at Station 65 due to the deteriorated condition of existing transformer foundation.
- Completion of remaining substations rescheduled from 2012.

11 – Station 5 – Plant Electric Distribution

As of December 31, 2012

Project Overview

The project was initiated in 2010, substantial construction in 2011 and 2012 and placed into service in December 2012. A few minor and project closeout / punch list activities are planned for 1Q2013.

Background: The majority of the Station 5 Powerhouse electric distribution system was obsolete and at end of life (1916-17 vintage), did not fully comply with current industry standards such as NFPA 70, power quality, National Electric safety Code of OSHA electrical standards 1910.269, and posed safety and environmental hazards, power quality and reliability concerns.
For example, the 4kV-440V oil filled house service transformers were shared with customer distribution circuits, the 440V switchgear and plant distribution panels had exposed live busses with fused disconnect switches (no circuit breakers), the switchgear did not provide arc flash protection for workers, many of the conductor jackets contained asbestos material and were dry, thus not providing adequate insulation to ground. Additionally, the plant electric distribution system was not adequate to provide the power requirements for new systems such as turbine lube oil, cooling water, and air compressors.

This project corrected existing electric system deficiencies before they could negatively impact unit operations. The project was undertaken at this time to take advantage of the Station 5 Tunnel Relining outage. To address these deficiencies, a new comprehensive electric distribution system was designed and constructed.

Project Activities / Key Accomplishments in 2012

The new system installed generally included the design, procurement and installation of:

- Two (2) 11kV-to-480V dry-type house service transformers;
- Concrete pads for new switchgear and standby generator;
- Arc-resistant 48V switchgear with circuit breakers and microprocessor-based control and monitoring;
- 480 volt and 120/208V three phase lighting/power distribution transformers and panels with circuit breakers,;
- 11kV, 480V and 120V branch and feeder circuits to new and existing equipment;
- lighting and power receptacles;
- Battery chargers and instrumentation inverter;
- Associated conduit and raceway systems and associated terminal end devices;
- Removal of obsolete/end of life equipment.
- Capital investment was $1.6 million.

Project Activities Planned for 2013

- Install natural gas-powered standby 480V generator;
- Final removal of abandoned circuits and equipment;
- Complete punch list type work (sys protection coordination study, IED configuration, labeling, etc);
- Final project documentation and as-built drawings.

12 – Station 5 – Powerhouse Undermining

As of December 31, 2012

Project Overview

The program was initiated in 2008 (planning/conceptual workscope), joint application permit approved in 2011, bid and construction began in late 2011 and completed by September 2012.

Background: Based on dive inspections, the powerhouse concrete foundation (constructed circa 1916) at the tailrace (hydro turbine discharge point) showed significant undermining due to hydraulic scouring. The foundation condition was compromised, thus increasing the possibility of localized failure, which would cause unit alignment problems, and depending on severity of failure, could cause lengthy outages to the three turbine-generating units, both of which would adversely impact unit reliability and availability. The original foundation did not include structural means for a cofferdam; therefore this project includes a concrete toe structure suitable for future cofferdam installation.

To address these shortcomings, a comprehensive rebuild of the powerhouse house foundation (west section) was designed and constructed.

This project scope includes the installation of a temporary sheet steel cofferdam across the western face of the Station 5 PH building to dewater and gain access to this undermined area of the foundation and to install structural reinforced concrete to rebuild the foundation.

The scope included diving services for inspections, cofferdam installation and removal of sediment to gain access to the foundation structure. The dive inspections were referenced for the detailed designs and bid specification. The scope included the removal of existing foundation structure to sound material as needed to facilitate the new installation.

This project corrected existing Station 5 foundation deficiencies before they could negatively impact unit operations. The project was undertaken at this time to take advantage of the Station 5 Tunnel Relining outage.

Project Activities / Key Accomplishments in 2012

- Completion of the following construction activities:
    - Completed cofferdam installation;
    - Removed sediment to expose foundations and scours;
    - Installed underwater fill concrete;
    - Dewatered cofferdam;
    - Installed structural reinforced concrete;
    - Rewatered and removed the cofferdam;
    - Demobilized
- Capital investment was $1.2 million.

Project Activities Planned for 2013

- Project complete. No activities are planned for 2013.

13 - Station 5 – Substation Modernization

As of December 31, 2012

Project Overview

Step-up substation from 11.5kV to 34.5kV; 3 generators injection to single split bus and one feeder for Fossil & Hydro house services from the same 11.5 kV Bus; 50 MVA Transformer 11.5/34.5kV; evacuating step up generation through midpoint tap of line 713 in 34.5 kV

Project Activities / Key Accomplishments in 2012

- 34.5kV and 11.5 kV switchgear purchase
- Electric Conceptual Engineer initiation
- Underground 34.5 kV Transmission line initiation and completion
- Underground 11.5 kV Distribution line initiation and completion
- Transformer Specification completion and procurement
- Material assessment –abatement design service
- Capital investment was $2.4 million

Project Activities Planned for 2013

- Electric conceptual Engineering completion.
- 11.5 kV remaining distribution lines completion.
- 11.5 kV protection coordination study design and completion.
- Cable trench-house design and construction procurement.
- Detailed engineering procurement.
- Material assessment-abatement kick-off.
- 4 kV distribution lines decommissioning

14 – Station 5 – Tunnel Relining

As of December 31, 2012

Project Overview

The program was initiated in 2007 and placed into service in December, 2012. Site restoration, contractor demobilization and project closeout / punch list activities will be completed in 2013 and warranty inspection in late summer 2013.

The project's general scope constructs a new steel reinforced concrete lining system inside the existing system to replace an end-of-life tunnel/water conveyance system (originally constructed in 1917), including relining the entire system along with numerous structural reinforcements to assure the long term integrity of the tunnel. The project is necessary to return the station to safe and reliable service and for providing an estimated 219,000 MWhrs/year of renewable energy for the direct benefit of RG&E customers.

Background: This project was originally planned to be completed in three phases beginning in 2007. During the initial tunnel entry in August 2007, a 125 ft long partial liner collapse was found in a section of the tunnel. As a result, the entire underground water conveyance system was inspected and made secure for safe entry and construction. The partial liner collapse area was then stabilized and prepared for tunnel relining. In addition, a series of 16 engineer/safety inspections of the tunnel system were performed which identified additional deteriorated spots in the existing liner.

Due to the construction being performed in a confined space approximately 130 feet below grade, as well as the existing contamination impacts that have been in the rock strata since the early 1900s and entering the tunnel through cracks in the existing liner, this project requires special construction techniques and safety procedures, processes and personal protective equipment (PPE) such as:

- protective clothing (Level C protection per OSHA) and other specialized PPE such as respirators;
- full time on site response/rescue personnel;
- continuous air monitoring;
- continuous water monitoring and treatment;
- limiting the number of personnel in tunnel during certain operations; and
- limiting the amount of time personnel can work in the tunnel.

Project Activities / Key Accomplishments in 2012

- The newly relined water conveyance system included the procurement and installation of the following:
  - Relined the horizontal power tunnel section (approx 1,350 ft) – complete;
  - Grouted the new power tunnel liner to the original liner and rock strata behind liner – complete;
  - Relined the Intake Shaft – complete;
  - Relined the Intake Elbow – complete;
  - Relined the TTA – complete;
  - Relined the STRS – complete;
  - Relined the PTZ – complete;
  - Relined sections of Unit 2 & 3 Penstocks – complete;
  - Collected, treated and disposed of water leakage into the tunnel system - complete
  - Maintained Site Safety and Security – currently ongoing;

    - Safety and Worker support activities – currently on-going;
    - Design support activities – complete;
    - Project Management Activities – complete;
    - Re-watered and commissioned the relined water conveyance system – complete (December 2012);
    - As-built documentation – ongoing
- Capital investment was $18.8 million

Project Activities Planned for 2013

- Maintain site safety and security through demobilization;
- Demobilize the work site;
- Restore site to a pre-construction condition;
- Punch list and project closeout items;
- Complete project documentation and close-out project;
- Review and negotiate deliverables / final payment with Construction contractor;
- Warranty inspection of the relined water conveyance system during a 4-week (estimate) outage in late summer of 2013.

15 – Station 5 – Units 1, 2 and 3 Upgrade (Wicket Gate Upgrades)

As of December 31, 2012

Project Overview

The project was initiated in 2007 and unit commissioning began in December 2012. Final commissioning and turnover to Operations and closeout / punch list activities will be complete in 1Q2013.

Background: Unit 1 and Unit 2 turbine generators at Station 5 were installed circa 1917 and Unit 3 was installed circa 1927. Except for the turbine runners that were replaced in the 1980's, the units are original plant equipment and need to be completely rebuilt to maintain expected efficiency, reliability and availability.

This project completely rebuilds the turbine-generating units. In general, each unit will be completely disassembled, all end-of-life components will be replaced with newly designed components and equipment such as wicket gates, greaseless stem bushings, turbine guide/shaft bearings, crown and curb seal rings and upper generator guide bearing that are designed, manufactured and installed according to specifications. Upon re-assembly and when the Station returns to service, the completely rebuilt turbine generator assemblies will be tested and performance verified.

This project was necessary to return the units to safe and reliable service and to provide an estimated 219,000 MWhrs/year of renewable energy for the benefit of RG&E customers.

Project Activities / Key Accomplishments in 2012

The following activities and accomplishments were achieved on Unit 1, 2 & 3 turbine-generator assemblies in 2012:

Unit 1 Turbine-Generator

- Final reassembly of miscellaneous auxiliary components – mechanical and electrical components/systems;
- Commission testing of turbine-generator systems began and commercial operation in December 2012 with turnover to Operations in 1Q2013.

Unit 2 Turbine-Generator

- Assessed turbine-generator components;
- Designed, manufactured and machined new components (bearings, bushings, wicket gates, stay vanes, embeds, components, etc) and overhauled generator field and stator windings and exciter;
- Final reassembly and alignment of turbine-generator – mechanical and electric components/systems;
- Commission testing began and prepared for commercial operation and turnover to operations in 1Q2013.

Unit 3 Turbine-Generator

- Assessed turbine-generator components;
- Designed, manufactured and machined new components (bearings, bushings, wicket gates, stay vanes, embeds, components, sole plates, etc) and overhauled exciter and stator windings;
- Begin final reassembly and alignment of turbine-generator – mechanical and electric components/systems;

- Commission testing began and prepared for commercial operation and turnover to operations in 1Q2013.

- Capital investment was $4.4 million

Project Activities Planned for 2013

- Complete unit testing, assemblies, commissioning and turnover to Operations;
- Contractor demobilization;
- Complete project documentation, as-built drawings, punch list items and project closeout.

16 - Station 23 – New Downtown 115kV Substation

As of December 31, 2012

Project Overview

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. Swap lines 901 and 902 from Station 82 to Station 33 so that the Line 901 comes out of Station 82 and Line 902 comes out of Mortimer Station. Re-conductor Line 901 to 400MVA. Add a phase-shifting transformer on Line 920 at Station 42. Relocate 11kV phase-shifting transformer from Station 23 to new Station 137.

Add two 115-34.5kV transformers at Station 23. Run a 34.5kV from each new transformer to feed the bus at new Station 137.

Project Activities / Key Accomplishments in 2012

- 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
- Capital investment was $4.8 million.

Project Activities Planned for 2013

- Complete Detailed Engineering
- Start electrical tie-in Station 42 PST
- Complete foundation work for new 34.5kV transformers
- Relocate 11kV PST from Station 23 to Station 137

17- Station 23 - Transformer & 11kV Switchgear

As of December 31, 2012

Project Overview

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 2012

- Started detailed engineering
- Progressed11.5kV GIS switchgear order
- Progressed 115/11.5kV transformer order
- Capital investment was $2.6 million

Project Activities Planned for 2013

- Complete Detailed Engineering
- Install temporary GIS
- Install 11.5kV GIS switchgear

18 – Station 26 – Unit 1 Major Overhaul

As of December 31, 2012

Project Overview

The major rebuild includes more efficient turbine blade design (Kaplan style unit) that is expected to provide an estimated incremental 3,000 MWhrs per year based on historical average water year. The project was initiated in 3Q2011 (planning/conceptual workscope), unit disassembly and preliminary inspection completed in late early 2012, design and bid specifications, competitive bidding/award, components shipped to manufacturing depot, and rebuild start in 2012. Project is currently projected to be complete with the unit returned to service by 12/31/2013.

Background: Hydroelectric turbine-generating Unit 1 (Allis-Chalmers) with nameplate capacity of 3.0 MW is original plant equipment (1952). The unit capability has gradually degraded over the past 20 years or so. Prior to the outage to implement this project, the average annual output is approximately 12,000 MWhrs. Based on the age and asset condition (60 years old), repairs are no longer effective to maintain unit efficiency, reliability and availability. This project is necessary to return the unit to safe and reliable service and for providing an estimated 15,000 MWhrs/year of renewable energy.

To achieve these objectives, the unit will be completely disassembled/rebuilt including the Kaplan runner assembly. In general, the unit will be completely disassembled to major and individual component level, all end-of-life components will be replaced with newly designed components and equipment such as wicket gates, blades, greaseless stem bushings, turbine guide/shaft bearings, crown and curb seal rings and upper generator guide bearing. Components will be designed, manufactured, machined and installed according to specifications/standards. Upon re-assembly, the completely rebuilt turbine generator assemblies will be tested and its performance verified. The work planned is similar to that completed recently at RGE's Stations 2 and 5 and NYSEG's Cadyville and High Falls plants. The major difference is that those units are Francis style runners, where Station 26 is low head unit of Kaplan runner design with hydraulically controlled blades.

The major rebuild and installation of new designed / machined components will return the unit to safe, reliable and more efficient operation. This planned work is intended to restore the unit's original capacity rating of 3 MW. Pending final post project performance testing, and based on historical river flow, the unit is projected to produce approximately 15,000 MWhrs/year of renewable energy for the benefit of RG&E customers.

Project Activities / Key Accomplishments in 2012:

- Completed T/G unit disassembly;
- Develop workscope/bid specifications;
- Competitively bid, conducted bid review and awarded contract to inspect, design, procure, manufacture, machine, ship, reassemble and align T/G components and to provide start-up and commissioning support;
- Assessed and overhauled generator field and stator windings;
- Shipped turbine components to Manufacturer's depot in York, PA;
- Manufacturer began assessment of turbine components;
- Manufacturer has completed some designs and procured some long lead items.
- Capital investment was $1.5 million

Project Activities Planned for 2013:

- Complete assessment of turbine-generator components;
- Complete, design, manufacture and machining/rebuild of components (bearings, bushings, wicket gates, Kaplan blades, embeds, draft tube, exciter, etc);
- Reassemble and align turbine-generator (all mechanical and electric components/systems);
- Commission testing of turbine-generator systems for commercial operation by December 31, 2013 with turnover to operations 1Q2014;
- Upon return to service, test and verify performance of unit;
- Begin contractor demobilization with completion 1Q2014;
- Continue with project documentation/as-built drawings and project closeout – complete 1Q2014;

19 - Station 38 - Substation Modernization

As of December 31, 2012

Project Overview

Complete installation of new 34.5 kV, 11.5 kV and 4 kV switchgear replacing all the existing switchgear with new GIS SF6 switchgear; 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 greater reliability to the down town underground network.

Project Activities / Key Accomplishments in 2012

- 3T & 4T purchase
- 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

Project Activities Planned for 2013

- Structural Mezzanine design completion
- Electric conceptual engineering completion
- Procurement of Detailed engineering
- Detailed Engineering Initiation.
- Material assessment-abatement design service initiation

20 - Station 42 - Replace 115-11kV 4T Transformer

As of December 31, 2012

Project Overview

Replace the 115/11.5kV transformer at Station 42 with a 56MVA LTC unit. Replace bus work and ancillary equipment.

Under system normal conditions, the Station 42 115/11.5kV transformer gets thermally overloaded.

Project Activities / Key Accomplishments in 2012

- New 4T Transformer and associated equipment was installed, tested and commissioned, and energized.
- Capital investment was $2.0 million.

Project Activities Planned for 2013

- None.

21 - Station 42 - Replace 34.5-11.5kV 3T Transformer - New 12T

As of December 31, 2012

Project Overview

Remove existing 34.5/11.5kV transformer (3T). Add a 56MVA 115/11.5kV transformer with LTC (New 12T). Replace bus work and ancillary equipment.

For loss of Station 42 115/11.5kV transformer under peak load, the Station 42 34.5/11.5 kV transformer will be thermally overloaded.

Project Activities / Key Accomplishments in 2012

- Completed construction, 75% of testing and commissioning for 12T and associated equipment
- Capital investment was $2.5 million

Project Activities Planned for 2013

- Complete commissioning and testing, and energize.

22 - Station 56 - Replace (2) 115/34.5kV Transformer

As of December 31, 2012

Project Overview

Station 56 has experienced overloading of the 1T and 2T 115/34.5kV 56MVA transformers during normal system conditions. Transformer 1T was replaced and in-service in July, 2009. The scope of this project included the replacement of transformer 2T and the replacement/upgrade of breakers (1T5652, 5X5652, 2T5652), switches (1T5651, 2T5651, 5X5651, 5X5653), 34.5kV bus section 1 & 2 and a new control house including new relays.

Project Activities / Key Accomplishments in 2012

- Completion of Detailed Engineering.
- In-ground construction
- Above-ground and electromechanical construction
- Commissioning of the new 2T
- Capital investment was $3.1 million

Project Activities Planned for 2013

- Complete as-built engineering

23 - Station 56 - Additional 12kV Source

As of December 31, 2012

Project Overview

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.

Project Activities / Key Accomplishments in 2012

- Conceptual Engineering
- Procurement of GIS Switchgear
- Procurement of Relays
- Procurement of Breakers
- RFP for Detailed Engineering.
- Capital investment was $3.2 million

Project Activities Planned for 2013

- National Grid communications
- Detailed Engineering
- Distribution Line Upgrades
- Complete Construction

24 – Station 67 to 418 New 115kV Transmission Line

As of December 31, 2012

Project Overview

Station 418 serves approximately 50MW of load which is approximately 9,800 customers including Kodak and Rochester Tech. Park. The project will install a new 115kV circuit between Station 67 and Station 418 with overhead and underground portions and the expansion of Station 418 to accommodate receipt of the new circuit including a new control house. All the existing equipment and control from the existing control house at Station 418 will be relocated to the new control house. The expansion of Station 67 to accommodate receipt of the new circuit, modification to the existing control house to accommodate the relay and communication requirements for the new line

During high-load periods, loss of the 910 line results in low-voltages and overloads above the Short-Term Emergency (STE) rating on the 917 line. This would result in shedding all 50MW of load at Station 418.

Project Activities / Key Accomplishments in 2012

- Started detailed engineering
- Capital investment was $754k.

Project Activities Planned for 2013

- Complete detailed engineering phase
- Complete environmental, permitting, licensing & land acquisition
- Start and complete ordering long lead items
- Start procurement of construction contractor
- Start construction phase
- Install new control house at Station 418

25 - Station 80- Replace #5 Transformer

As of December 31, 2012

Project Overview

The 345/115kV, 400MVA 5T transformer at Station 80 caught fire and required the transformer be replaced on an emergency basis.

Project Activities / Key Accomplishments in 2012

- Installed new foundation
- Installed spare 400MVA transformer
- Capital investment was $1.1 million

Project Activities Planned for 2013

- None.

26 - Station 80- Replace 1T and 3T Transformers

As of December 31, 2012

Project Overview

Replace 345/115kV transformers 1T and 3T with new 345/115kV 400MVA autotransformers with LTC.

Project Activities / Key Accomplishments in 2012

- Started detailed engineering
- Finalized transformer design with the vendor
- Started preparations for construction
- Capital investment was $1.1 million

Project Activities Planned for 2013

- Complete Detailed Engineering
- Replace 1T transformer
- Replace main bus section
- Replace 3T transformer

27 - Station 91 - Substation Automation

As of December 31, 2012

Project Overview

Install a new SIEMENS RTU using the 61850 protocol. This will be one of the first stations that will utilize the 61850 protocol.

In order to install the new RTU, it is necessary update the protection equipment (relays), AC & DC panels, Security Switches, Fire and intrusion system, access to relays, Transformer LTC and analog signals.

When the project is finished ECC will be able to receive and send commands to the station.

Project Activities / Key Accomplishments in 2012

- Engineering Completion.
- Procurement process finished.
- RTU FAT done successfully.
- Construction:
    - New AC/DC panels.
    - New Fire and intrusion System.
    - Relays wired in the new doors.
    - Installation ready for commissioning.
- Capital investment was $1 million

Project Activities Planned for 2013

- Updated relay settings in accordance with the new system and technology.
- Commissioning with SCADA and ECC.
- Close the project.

28 - Station 124 – New Phase Shifter Transformer

As of December 31, 2012

Project Overview

Install a +/-20% phase shifter on each of 115kV Circuits 911 and 932 at Station 124 to control power flow and limit the amperage on these circuits to below their capacity ratings.

Due to system source increases, such as that from increasing Ginna Station's output from 500MW to 600MW, power flow on Circuits 911 and 932 continues to increase to levels which may compromise the integrity of the underground pipe cables. The installation of the phase shifters will provide a control mechanism to force the flow of energy away from Circuits 911 and 932 and onto other circuits which have the necessary capacity margin.

Project Activities / Key Accomplishments in 2012

- Continued detailed engineering for Station 124 expansion/ phase shifting transformers installation and for remote station locations.
- Received permit approvals Army Core of Engineers (ACOE) and Department of Environmental Conservation (DEC-NY).
- Received Town of Penfield Planning and Zoning permits.
- Ordered and received all major equipment (Switches, Breakers, Control House, Underground high voltage cable).
- Received and installed the +/-20 % Phase Shifting Transformers
- Completed all civil construction work with restoration remaining.
- All Major equipment is being installed.
- Capital investment was $13.8 million.

Project Activities Planned for 2013

- Complete construction for Station 124 and remote station locations.
- Complete testing and commissioning
- Complete aS-built documentation for the project and close out project.

29 - Station 124 – Static VAR Compensator

As of December 31, 2012

Project Overview

Add a +200 -100MVAR Static VAR Compensator (SVC) on the 115kV bus.

Station 42 uses approximately 60 MVAR of reactive supply and is a low point for voltage in the Rochester area. Dynamic voltage support is required for voltage transient stability for large contingencies which includes the tripping of Ginna Nuclear Power plant.

Adding the dynamic support where it is needed (Station 124) will provide significant voltage stability to the entire Rochester area.

Project Activities / Key Accomplishments in 2012

- Continued engineering for the SVC major equipment.
- Started construction on site in June 2012
- Major equipment delivered.
- Capital investment was $10.7 million.

Project Activities Planned for 2013

- Complete engineering for SVC
- Complete construction for the SVC and associated equipment.
- Complete testing and commissioning
- Complete AS-built documentation for the project and close out project.

30 - Station 136 - Add Transformer & 12kV Circuit

As of December 31, 2012

Project Overview

Station 136 is located east of the City of Rochester, in the Town of Webster. Adding this second 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 the existing 12kV circuit; capacity to reduce the loading on #1T; as well as capacity to continue with 4 kV to 12 kV conversion in the area.

Project Activities / Key Accomplishments in 2012

- Conceptual engineering was approved.
- Detailed engineering in process
- Power transformer purchased
- GIS purchased
- Protection relays purchased and stored
- Batteries purchased
- Control and power building in procurement process
- RTU in procurement process
- Capital investment was $1.5 million.

Project Activities Planned for 2013

- Finalize detailed engineering
- Get building construction permit
- Move forward with other equipment procurement processes

31 - Station 218 to Clyde New 34.5kV Transmission Line

As of December 31, 2012

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.

New Circuit 804 and Circuit 708 modifications - install a new 34 kV line (Circuit 804). Circuit 708 originates from station 199 and serves six substations. In order to split the current load from existing circuit 708, a new circuit, 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. Replace one set and add one set of 600 Amp, 1,250 kVA of Voltage regulators.

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 is small and will not have adequate room for the modern control panels, DC system and the telecom system.

Project Activities / Key Accomplishments in 2012

- Conceptual engineering completed.
- LiDAR survey completion.
- Right of way (ROW) Easement Started.
- Critical transmission line material procurement completed.
- Detail engineering started.
- Capital investment was $1.3 million.

Project Activities Planned for 2013

- Detail engineering completion.
- Rest of 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.

32 - Station 262 - New 115/34.5 kV Substation

As of December 31, 2012

Project Overview

Infrastructure upgrade; with a new substation that taps line 901 with a new 57MVA 115/34.5kV transformer. New 34.5kV line from the new substation to existing station 26; Adding a second 37 MVA 34.5/11.5kV transformer at Station 26 (complete modernization).

Project Activities / Key Accomplishments in 2012

- Property location and acquisition initiation
- MV switchgear purchase
- 3 power transformer purchased
- Initiation of Architectural, Structural, Civil and MEP design for Station 262 and Station 26.
- 34.5 kV underground transmission line design initiation.
- Existing building demolition specification, design and service procurement
- Capital investment was $3.2 million.

Project Activities Planned for 2013

- Station 26 and Station 262 electric conceptual engineering completion
- Procurement of electrical detailed engineering
- Detailed engineering initiation
- Station 262 property closeout
- Station 26 architectural design completion
- Station 26 permit approvals
- Station 262 existing building demolition
- Station 262 construction permit approvals

33 – Substation Modernization

As of December 31, 2012

Project Overview

RG&E's electrical distribution system contains a significant amount of infrastructure that has been in service for well over 50 years. While the equipment is well-maintained and still operational, it does not meet current guidelines for operator safety. In addition, the aged infrastructure does not have the controllability and self-healing automation that would exist in a new facility.

The Substation Modernization Project will replace the aged infrastructure with modern equipment, as well as incorporate modern electronic equipment safeguards, monitoring and remote control.

The following stations are included:

Station 29	Station 34	Station 37
Station 43	Station 156	Station 210
Station 174	Station 204	Station 205

Project Activities / Key Accomplishments in 2012

- Started and completed procurement of preliminary/conceptual engineering.
- Started and completed procurement of detailed engineering.
- Started preliminary/conceptual engineering phase.
- Started environmental, permitting, licensing & land acquisition.
- Capital investment was $3.6 million.

Project Activities Planned for 2013

- Complete conceptual and in-ground packages for various Stations.

34 - Webster East New 12 kV Source

As of December 31, 2012

Project Overview

The load in eastern Webster, New York is growing and is served by Station 424. The Webster East New 12kV Source project was to provide the capacity to meet the load growth by upgrading Station 424 and converting existing customers from 4kV to 12kV.

The upgrades to Station 424 established 3 new 12kV circuits by installing a new 34.5-12.5kV transformer, 34.5kV circuit switcher, three 12.5kV distribution feeders, 2.5kV control house, and associated bus work, switches, conductors, conduit risers, new station service transformer, bus potential devices and CTs.

The distribution work to convert customers from 4kV to 12kV consisted of above ground and in-ground construction. The existing 4kV circuits 5289, 5290, and 5291 were converted to 12kV circuits 5203, 5204, and 5205.

Project Activities / Key Accomplishments in 2012

- Substation construction was completed and placed in service in September 2012.
- Distribution construction and conversion work was completed and placed in service in December 2012.
- The project was completed in December of 2012.
- Capital investment was $3.6 million.

Project Activities Planned for 2013

- None.

35 - Westfall Road, Electric Facilities Relocation

As of December 31, 2012

Project Overview

This project is a Monroe Country Highway Project. The Scope of Work includes installing new distribution poles (34kV, 4kV), anchors, wires, and transformers along Westfall Rd and E Henrietta Rd. Additionally, the project consists of installing a new underground conduit system with new manholes and new cables along Westfall Rd. as well as the removal of existing facilities within the project ROW.

Project Activities / Key Accomplishments in 2012

- All major subway, cable and overhead work completed.
- Capital investment was $1.5 million.

Project Activities Planned for 2013

- Circuit shutdowns/switchovers.
- Cable work at Metropolitan Dr. and overhead wire and pole removals.
- Project completion and close out.

36 - Binghamton Transmission Line 32-36 Split

As of December 31, 2012

Project Overview

Split line 32 off the double circuit line 36/32 tower A5 onto independent center line and reconnect line at existing line 32 structure A8. An Independent Power Producer (IPP) in the Binghamton area is ceasing operations effective February 16, 2012. The impact of the shut-down will result in exposure to a voltage collapse in the Binghamton area during certain operating conditions.

Project Activities / Key Accomplishments in 2012

- Successfully split the last two 345 kV of a previously grandfathered seven double circuit transmission line sections exiting the Oakdale Substation - specifically adding two new single circuit structures and modifying a third.
- Capital investment was $1.2 million.

Project Activities Planned for 2013

- Project is complete.

37 - Biogas 34.5kV Collection System

As of December 31, 2012

Project Overview

Connect the dairy farms in the Cayuga County area that have bio-gas digesters to the NYSEG 34.5kV transmission system. This region has been heavily penetrated with manure digesters as a result of the limitations on green house gas emissions. The most cost effective use of the manure is to use it to generate electricity.

Project Activities / Key Accomplishments in 2012

- Two dairy farm bio-gas digesters were interconnected to the NYSEG 34.5kV systems.
- Approximately a 4 mile line was designed and constructed to interconnect Sunnyside and a 0.5 mile line was designed and constructed to interconnect Willet Belltown farm.
- Capital investment was $1.6 million.

Project Activities Planned for 2013

- Currently no new applications have been received.
- Two potential farms have been provided applications.

38 – Brewster RTU Substation Automation

As of December 31, 2012

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 Centre. The project will improve technical performance, system reliability and operational control.

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 2012

- Detailed Engineering was finished.
- Most major materials were ordered (Control Buildings, Circuit Breakers, Instrument Transformers, Motor Operators and Disconnect Switches).
- Construction permits for Dover Plains, Haviland Hollow, Teakettle Spout, Peach lake, Dingle Ridge, Wassaic, and Putnam Lake have been obtained.
- Most of construction in Dover Plain, Haviland Hallow and Teakettle Spout has been already done.
- The control house foundations in Dingle Ridge and Peach Lake have been finished.
- Capital investment was $3.8M.

Project Activities Planned for 2013

- Update the engineering according the new standards.
- Order remaining materials required (structural steel and all minor materials).
- Monitor and expedite critical material deliveries.
- Award construction contract for below grade and above grade construction.
- Put in service the new communication link between the ECC and the stations
- Put in service the 11 stations.

39 - Coddington LTC Capacity 115-34.5kV Transformer

As of December 31, 2012

Project Overview

Install LTC capacity on the 115/34.5kV, 30/40/50 MVA transformer #2 at the Coddington substation and operate the #2 transformer in parallel with the #3 transformer. Work will include all associated equipment required with this transformer addition.

Project Activities / Key Accomplishments in 2012

- Detailed Engineering completed for in ground, above ground. Detailed Engineering for SPC to be completed in early 2013.
- All major equipment procured and delivered, including transformer, circuit breakers, VT and switches. All minor equipment procured with delivery in late 2012 or early 2013.
- In ground construction completed.
- Capital investment was $1.3 million.

Project Activities Planned for 2013

- Complete construction for above ground and SP&C
- Test, commission and place in service.

40 – Columbia County Transmission Project (Klinekill – Valkin (NMPC) New 115kV Transmission Line)

As of December 31, 2012

Project Overview

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.

Project Activities / Key Accomplishments in 2012

- Article VII application was submitted on May 25, 2012.
- DPS identified some application deficiencies on June 22, 2012.
- The first round of deficiencies answer was sent to DPS on November 16, 2012.
- The second round of deficiencies answers was sent to DPS on Dec 14, 2012.
- Capital investment was $1.1 million.

Project Activities Planned for 2013

- There was a teleconference with the DPS Staff on January 30th to discuss the need for certain information.
- Teleconference with DPS Staff to talk about a concern expressed by the New York State Office of Parks, Recreation and Historic Preservation pertaining to need for additional survey information.
- It is planned to review all the remaining deficiencies and respond to DPS in February/March, 2013.
- There is an expected process for the Article VII filing, with includes:
    - Public statement hearing
    - Procedural conference
    - Pre-hearing discovery
    - Filing of DPS Staff and Intervenors direct testimony
    - Filing of all parties' rebuttal testimony
    - Pre-hearing briefs
    - Cross-examination of all parties
    - Briefs to ALJ
    - Reply briefs to ALJ
    - Recommended decision by ALJ
    - Briefs on exceptions to ALJ's decision
    - Reply briefs on exceptions

41 - DOE Stimulus Program-Capacitor Banks

As of December 31, 2012

Project Overview

Install 115kV Capacitor Banks at the following stations: Ashley Rd., three 50 MVAR; Morgan Rd., two 25 MVAR; Ridge Road, two 25 MVAR; Mountaindale, two 25 MVAR; Amawalk, two 30 MVAR; and Big Tree, two 25 MVAR.

Project Activities / Key Accomplishments in 2012

- Completed all detailed engineering design packages
- Awarded all construction contracts
- Obtained all necessary building and environmental permits
- Completed the following construction activities: Morgan Road In-ground, Ridge Road In-ground, Mountaindale In-ground, Amawalk In-ground and Big Tree In-ground work.
- Capital investment was $2.7M

Project Activities Planned for 2013

- Complete all construction activities and place all equipment in-service.

42 – Eelpot New Transformer

As of December 31, 2012

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 2012

- Complete Conceptual Package.
- Complete In ground Package.
- Complete Above ground Package.
- Some major equipment has been purchased (Control Building, Circuit Breakers, CCVT, VT).
- Building Permit was obtained in October 2012.
- The In ground phase 1 construction started in December 2012.
- Capital investment was $1.6 million.

Project Activities Planned for 2013

- Complete detailed engineering.
- Order remaining materials required (Control, Protection and Communication Panels, relay protection, Structural Steel and all minor materials).
- Complete the In ground Construction.
- Award construction contract for the above ground construction, and start the equipments installation.

43 - Flat Street Substation New Transformer

As of December 31, 2012

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 2012

- Complete Conceptual Package.
- Complete In ground Package.
- Complete Above ground Package.
- Some major equipment has been purchased (Control Building, Circuit Breakers, CCVT, VT).
- Building Permit was obtained in October 2012.
- The In ground phase 1 construction started in November 2012.
- Capital investment was $1.9 million.

Project Activities Planned for 2013

- Complete detailed engineering.
- Order remaining materials required (Control, Protection and Communication Panels, relay protection, Structural Steel and all minor materials).
- Mobile Substation Installation.
- Complete the In ground Construction.
- Award construction contract for the above ground construction, and start the equipments installation.

44 - Circuit 426 Upgrade Conductor

As of December 31, 2012

Project Overview

Reconductor 3 miles of 34.5 kV Line 426 Segment Katelville Tap - CB-NG-WC with 3/0 ACSR conductor to ensure adequate capacity.

Project Activities / Key Accomplishments in 2012

- The project was completed and put into service on June 29, 2012.
- Capital investment was $2.3 million.

Project Activities Planned for 2013

- Close-out the SWPP Plan (Storm Water Protection Plan).

45 - Line #807 115kV Conversion

As of December 31, 2012

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 2012

- The project is currently under construction and is approximately 30% complete.
- Scope was completed and Conceptual & Detail Engineering was awarded.
- Above Ground construction work progressed at Katonah.
- Underground construction work progressed at Wood Street.
- POs for relay panels for Katonah and Wood Street were released.
- Capital investment was $1.6 million.

Project Activities Planned for 2013

- Complete the Conceptual & Detail Engineering for the Carmel Substation.
- Prepare RFP's for construction of Caramel, for materials and contractor.
- Complete construction at the Katonah Substation.
- Complete Line construction at Whitehall Corners
- Install relays and continue Above Ground construction at Wood St.

46 – Meyer Substation New Transformer

As of December 31, 2012

Project Overview

This 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 2012

- Started and completed procurement of preliminary /conceptual engineering
- Started and completed preliminary/conceptual engineering phase
- Started procurement of detailed engineering
- Started ordering long lead items
- Started environmental, permitting, licensing & land acquisition
- Capital investment was $199k.

Project Activities Planned for 2013

- Complete procurement of detailed engineering
- Complete procurement and delivery of transformer
- Complete environmental, permitting, licensing & land acquisition

47 - Mobile Radio Project

As of December 31, 2012

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 2012

- The FCC frequency audit was completed without issue; NYSEG has retained rights to all frequencies previously approved.
- A modified channel plan has been developed for Region 3B (Hornell, Lancaster, and Lockport Divisions) that allows for two frequencies per tower instead of the original three frequencies.
- Frequencies were approved through Canada and through the FCC for the modified Region 3B frequency plan.
- Field testing of this modified two channel plan is completed and the design is in progress.
- Construction of the Dansville transmitter was completed. This transmitter is necessary because of a coverage gap caused by the topography in the area.
- The APA Permitting was secured for the Region 4 (Plattsburgh) Shared Microwave System (shared by NYSEG, Essex County and New York State Police).
- Contracts and FCC Approval were completed for the Region 4 Plattsburgh Microwave Tower. Local permitting continues.
- Capital investment was $1.4 million (Electric Portion).

Project Activities Planned for 2013

- Convert Region 3B (Hornell, Lancaster, and Lockport Divisions) to the new radio system.
- 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.
- Continue to work with Canada on frequency applications for Region 4 (Plattsburgh).
- Continue the channel plan design for Region 4 (Plattsburgh Division).

48 – NERC Alert Program

As of December 31, 2012

Project Overview

NYSEG is under a federal mandate to inspect all bulk power system transmission lines to determine if clearance violations exist. Areas found to have substandard clearance shall be corrected. The IUSA OPCOs are undertaking simultaneous programs to address the October 7, 2010 NERC Recommendation to Industry. This project expenditure covers NYSEG's obligations to meet the federal mandate.

Project Activities / Key Accomplishments in 2012

CIRCUIT	ENGINEERING	PERMITTING	PROCUREMENT	CONSTRUCTION
30	A	A	A	A
31	A	A	A	A
32	A	A	A	A
33	A	A	A	A
37	A	A	A	A
60	A	A	A	A
64	A	A	A	A
65	A	A	A	A
66				
67	A			
68	A			
71	A			
81	A			
85	A			

- Capital investment was $5.6 million.

Project Activities Planned for 2013

CIRCUIT	ENGINEERING	PERMITTING	PROCUREMENT	CONSTRUCTION
66	P	P	P	P
67	A	P	P	P
68	A	P	P	P
71	A	P	P	P
81	A	P	P	P
85	A	P	P	P

***A - Accomplished**
***P - Planned**

49 – New Bulk Spare Power Transformer - 2012

As of December 31, 2012

Project Overview

Purchase of a Spare Transformer 345/115 kV 400 MVA. The purchase of this transformer is to replace the Bulk Spare that was originally purchased by NYSEG and Installed by RG&E at RG&E's Station 80 to replace the 5T transformer that was destroyed by fire in January 2012. A loss of a bulk transformer puts severe limitations on the power system and can result in canceling planned equipment outages, limit power transfers, limit generation, and result in significant extended load shedding. RG&E paid NYSEG for the cost of the spare transformer.

Project Activities / Key Accomplishments in 2012

- PO for transformer was released.
- Vendor drawing was reviewed.
- Capital investment was $1.5 million.

Project Activities Planned for 2013

- Procurement of Major Equipment for Transformer
- Approval of vendor drawing
- Delivery of transformer and complete installation

50 – New Mobile Substation (#22)

As of December 31, 2012

Project Overview

Purchase a new NYSEG Mobile Substation #22 - 15MVA; 34.5 to 4.8 X 12.5 kV. This new 15MVA rated mobile will be replacing the existing NYSEG mobile #3. Mobile #3 is rated 5 MVA, is 53 years old, and does not have a load tap changer. Mobile #3 is nearing end of life and there is difficulty in obtaining spare parts.

Project Activities / Key Accomplishments in 2012

- Mobile final factory test and inspection completed in February
- Mobile delivered to NYSEG in March
- Final training and mobile commissioning completed in May
- Project completed with Mobile ready for service in June
- Capital investment was $1.1 million.

Project Activities Planned for 2013

- None, project completed in 2012.

51 – Electric System Security

As of December 31, 2012

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 2012

- Install perimeter protection, fencing, video, and other security measures at various locations.
- Capital investment was $2.5 million.

Project Activities Planned for 2013

- Replacement of access control security systems providing standardization between NYSEG and RG&E.
- Upgrade of video alarming equipment.
- Upgraded cameras to include thermal capability at bulk power substations and other key critical infrastructure locations.
- Security system installation at Hydro Generating Facilities.
- Continued upgrades and replacement of physical barriers and fencing at key critical facilities.

52 – Substation Automation (RTU Program)

As of December 31, 2012

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 2012

- Completed conceptual and detailed engineering for Macedon (Geneva) and Noyes Island (Binghamton).
- All materials were ordered (Macedon and Noyes Island).
- Installed in these two (2) substations, digital relays, control cabinets, AC/DC panels with auxiliary contacts and motor operators.
- Almost finished the construction in Macedon, and started with construction in Noyes Island.
- Capital investment was $1.7 million

Project Activities Planned for 2013

- Commissioning in Macedon, and finish with the construction and commissioning in Noyes Island.
- This included put in service the RTAC.
- Award and complete 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 disconnectors, current transformers and minor materials.
- Carry out the construction and commissioning in Amawalk and Cooper Corners 115kV.

53 – Perry Center Area Install New 34.5kV Substation

As of December 31, 2012

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. 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.

Project Activities / Key Accomplishments in 2012

- Started and completed preliminary /conceptual engineering
- Started preliminary engineering phase
- Started and completed procuring detailed engineering
- Started detailed engineering phase
- Started environmental, permitting, licensing & land acquisition
- Started ordering long lead items
- Capital investment was $627k.

Project Activities Planned for 2013

- Complete preliminary / conceptual engineering phase
- Complete detailed engineering phase
- Complete environmental, permitting, licensing & land acquisition
- Complete ordering long lead items
- Start and complete procurement of construction contractor

54 –Transmission Pole Replacement Program

As of December 31, 2012

Project Overview

Replace rejected wood poles identified as a result of the Wood pole inspect and treat program (an incremental O&M program). Includes Transmission poles on selected NYSEG Transmission lines in various NYSEG Divisions statewide.

Project Activities / Key Accomplishments in 2012

- 32 replaced out of 69 identified.
- Capital investment was $1.1 million.

Project Activities Planned for 2013

- 37 scheduled to be replaced.

55 – Richfield Springs Substation New Transformer

As of December 31, 2012

Project Overview

Replace the existing 115/46kV, 30/40/50 MVA transformer at the Richfield Springs substation with a new 115/46kV 30/40/50 MVA LTC transformer. Work will include all associated equipment required with this transformer addition.

Project Activities / Key Accomplishments in 2012

- Detailed Engineering completed for in ground and above ground. Detailed Engineering for SP&C to be completed in early 2013.
- All major equipment procured and delivered, including transformer, circuit breakers, CCVT, VT and switches. All minor equipment procured with delivery in late 2012 or early 2013.
- In ground construction completed.
- Capital investment was $1.2 million.

Project Activities Planned for 2013

- Complete construction for above ground and SP&C.
- Test, commission and place in service.

56 – Stephentown Substation New Transformer

As of December 31, 2012

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 2012

- Started and completed procurement of preliminary/conceptual engineering
- Started preliminary/conceptual engineering phase
- Started and completed environmental, permitting, licensing & land acquisition
- Started and completed procurement of detailed engineering
- Started ordering of long lead items
- Capital investment was $880k.

Project Activities Planned for 2013

- Complete order of long lead items
- Start detailed engineering phase
- Start procurement of construction contractor

57 – South Park Sub - Bank Installation

As of December 31, 2012

Project Overview

Replace Transformer 1 with a new 12/16/20 MVA 34.5kV/12.5kV transformer with LTC. Upgrade transformer protection to a circuit breaker and add a new prefabricated control house and relay panels.

Project Activities / Key Accomplishments in 2012

- The project is currently under construction and is approximately 80% completed.
- Conceptual Engineering is completed & Detail Engineering was awarded.
- Detailed Engineering is approximately 90% completed.
- Below ground construction work completed.
- Above ground construction work underway and 75% Completed.
- POs major equipment and for all construction works were released.
- Capital investment was $2.5 million.

Project Activities Planned for 2013

- Finalizing remaining Detailed Engineering.
- Finalizing remaining of above ground construction.
- Complete terminations, testing and commissioning.

58 – South Perry New 115kV Transformer

As of December 31, 2012

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 2012

- Started and completed procurement preliminary conceptual engineering
- Started and completed preliminary conceptual engineering
- Started and completed procurement of detailed engineering
- Started detailed engineering
- Started procurement of long lead items
- Capital investment was $687k.

Project Activities Planned for 2013

- Start and complete environmental, permitting, licensing & land acquisition
- Complete detailed engineering
- Start and complete delivery of long lead items
- Start and complete procurement construction contractor
- Complete ordering long lead items
- Start construction phase

59 – South Perry New 230kV Transformer

As of December 31, 2012

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 2012

- Started and completed procurement of preliminary /conceptual engineering
- Started and completed preliminary /conceptual engineering phase
- Started and completed procurement of detailed engineering
- Started ordering long lead items
- Started detailed engineering phase
- Capital investment was $820k.

Project Activities Planned for 2013

- Start and complete environmental, permitting, licensing & land acquisition
- Complete detailed engineering phase
- Start and complete procurement of long lead items
- Complete procurement construction contractor
- Start construction phase

60– Substation Modernization

As of December 31, 2012

Project Overview

NYSEG's electrical distribution system contains a significant amount of infrastructure that has been in service for well over 50 years. While the equipment is still operational, it does not meet current guidelines for operator safety. In addition, the aged infrastructure does not have the controllability and self-healing automation that would exist in a new facility. The Substation Modernization Program will replace the aged infrastructure with modern equipment, as well as incorporate modern electronic equipment safeguards, monitoring, and remote control. Currently, the Modernization Program includes 20 substations throughout the NYSEG territory:

Burdett**
Chatham
Cincinnatus**
Clintonville
Colliers**
Concord**
Federal Street
Genoa**
Gorham
Hill Street**
Monticello
Norton**
Raquette Lake****
Sampson**
South Owego
Swift Street
Tuttle Place
Valois
West Hill
Wynantskill****

Phase 1 - no *
Phase 2 - ** or ****

Project Activities / Key Accomplishments in 2012

- Started Phase 1 conceptual design.
- Phase 2 RFP packages issued and bids received.
- Capital investment was $1.0 million.

Project Activities Planned for 2013

- Complete Phase 1 conceptual design.
- Complete Phase 1 final engineering.
- Complete Phase 2 conceptual design.
- Complete Phase 2 final engineering.

61 – The Mechanicville Reinforcement Project

As of December 31, 2012

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 2012

- Project schedule was revised to initially install only 1 of 2 transformers, 50% of the substation bus work, and 2 of 4 34.5kV distribution lines pending future load growth within LFTC (Luther Forest Technology Campus)
- In-Ground Construction at the new Luther Forest substation was completed
- Installation of 80% of the first 2 34.5kV distribution lines
- Two new 115-34.5kV transformers and a new Control House were delivered to the Luther Forest Substation
- Above-Ground Construction was started at the Luther Forest substation
- Capital investment was $7.4 million.

Project Activities Planned for 2013

- 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 the 115kV transmission power feed and associated metering from the adjacent National Grid 115kV Switchyard to the NYSEG Luther Forest Substation
- Installation of the Protection & Control equipment at the Luther Forest Substation
- Testing and Commissioning and placing 50% of the Luther Forest Substation In Service (one 115-34.5KV transformer energized)

62 – Tom Miller Rd New Substation

As of December 31, 2012

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 2012

- Started and completed procurement of preliminary/conceptual engineering
- Started and completed procurement of detailed engineering
- Started preliminary/conceptual engineering phase
- Started environmental, permitting, licensing & land acquisition
- Started detailed engineering phase
- Started ordering long lead items
- Capital investment was $978k.

Project Activities Planned for 2013

- Complete preliminary/conceptual engineering phase
- Complete environmental, permitting, licensing & land acquisition
- Complete detailed engineering phase
- Start and complete procurement of construction contractor

63 – Walden 69kV Transmission Line Upgrade

As of December 31, 2012

Project Overview

Rebuild .86 miles of single pole double circuit 69kV transmission with two separate single circuit overhead lines. Approximately 1,600 feet of the new lines will be underground construction. Central Hudson is upgrading the 69kV transmission due to system growth in the Central Hudson, Orange and Rockland, and NYSEG service territories.

Project Activities / Key Accomplishments in 2012

- Completed Below Ground construction.
- Completed a majority of the Above Ground construction.
- Capital investment was $5 million.

Project Activities Planned for 2013

- Completed Above Ground construction.
- Complete terminations, testing and commissioning.
- Complete final connections with Central Hudson and enter the project into service.

64 - Watercure Road Substation - Install 2nd 345kV Transformer

As of December 31, 2012

Project Overview

Install a second 400 MVA 360/240/36.2 kV, LTC transformer at Watercure Substation. Install three each 345kV circuit breakers and four each 230kV circuit breaker to connect the new transformer in parallel with the existing bank #1.

Project Activities / Key Accomplishments in 2012

- Completed Conceptual Engineering and Transformer Foundation Design.
- Installed the permanent foundation and oil containment system for the new transformer.
- Transformer procurement was completed and placed on the permanent foundation.
- Capital investment was $1.7 million.

Project Activities Planned for 2013

- Prepare technical specification for circuit breakers and motor operated switches.
- Finalize conceptual engineering.
- Issue and award detailed engineering.

65 – Wehrle Dr, Replace Cable, Terminations & Switch Gear

As of December 31, 2012

Project Overview

Complete the remaining sections of the Eastern Hills Mall cable, termination and switch gear replacement. Eastern Hills Mall is a major customer in the Lancaster Division. They have experienced 7 significant failures in the recent past.

Project Activities / Key Accomplishments in 2012

- Engineering completed in August 2012 to replace all underground cable and switchgear.
- Phase I construction completed March 2012
- Phase II construction completed October 2012
- Phase III construction completed November 2012
- Capital Investment was $1.4 million

Project Activities Planned for 2013

- Phase IV represents the final 15% of the project.
- Phase IV planned to be constructed by April 2013.

66 – Westover Substation New 115kV Transformer & Binghamton Division Capacitors

As of December 31, 2012

Project Overview

This project includes the installation of new Westover (Goudey) 115/34.5 kV, 30/40/50 MVA, LTC transformer bank. Install 102 MVAR, 2-step, switched capacitor bank, at the Westover (Goudey) Substation 115 kV bus. Install 12.6 MVAR switched capacitor bank at the Robble Ave Substation 115 kV bus. Install 13.2 MVAR switched capacitor bank at the Noyes Island Substation 34.5 kV bus. Install 7.2 MVAR switched capacitor bank at the Oakdale Substation 34.5 kV bus. Install 2.4 MVAR switched capacitor bank at the Whitney Ave. Substation 34.5 kV bus. Install 2.4 MVAR switched capacitor bank along the 34.5 kV transmission line #431 in the vicinity of the Conklin Substation. Install 1.2 MVAR switched capacitor bank along the 34.5 kV transmission line #453 in the vicinity of the Bevier Street Substation.

Sub-marginal voltages appear in the area(s) served from the Morgan, Langdon, Fuller Hollow, Jones, and Conklin Substations, and the Long Term Emergency (LTE) rating is exceeded at the Westover #7 115/13.8 kV and 34.5/13.8 kV transformers upon the simultaneous loss of the Oakdale 345/115/34.5 kV transformer # 3 and the Oakdale 345/115 kV transformer #2, in summer 2009. The exposure to either sub-marginal voltages or thermal overload, given the contingency, is 25 hours/day. This contingency causes 1,750 customers (with 4.6 MW of summer load and 2.8 MW of winter load) to be dropped. The installation of a new 115/34.5 kV LTC 30/40/50 MVA transformer, operating in parallel with the 115/34.5 kV banks #5 and #6, will allow all of the 115/34.5 kV transformer banks (and windings) at the Westover (Goudey) Substation to safely transport present and future thermal flows.

Installation of switched capacitor banks will provide local sources of reactive power and voltage support during this contingency.

Project Activities / Key Accomplishments in 2012

- Started and completed procurement of preliminary/conceptual engineering
- Started preliminary/conceptual engineering phase
- Capital investment was $895k.
-

Project Activities Planned for 2013

- Complete preliminary/conceptual engineering phase
- Start and complete procure detailed engineering
- Start and complete environmental, permitting, licensing & land acquisition
- Start and complete order long lead items
- Start detailed engineering phase
- Start procurement for construction contractor

67 – Willet Substation New Transformer

As of December 31, 2012

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, Katelville, 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 2012

- Started and completed procurement of conceptual and detailed engineering
- Started and completed procurement of detailed design
- Capital investment was $748k.

Project Activities Planned for 2013

- Start and complete ordering long lead items
- Start and complete detailed engineering phase
- Start environmental, permitting, licensing & land acquisition
- Start procurement of construction contractor
- Start construction phase

68 – Windham Substation 115kV Capacitor Addition

As of December 31, 2012

Project Overview

Install a new 115kV, 6 MVAR switched capacitor bank at Windham Substation

The installation of a 115kV, 5.4 MVAR switched capacitor bank at Windham Substation will allow for adequate voltages and thermal conditions to be maintained in the area for an outage of the Fraser 345/115 kV transformer.

Project Activities / Key Accomplishments in 2012

- Started and completed procurement of preliminary/conceptual engineering
- Started and completed procurement of detailed engineering
- Completed preliminary (scope) engineering
- Capital investment was $53k.

Project Activities Planned for 2013

- Start and complete conceptual engineering phase
- Start and complete detailed engineering phase

69 - Energy Control Center

As of lDecember 31, 2012

Project Overview

The design and installation of a fully integrated EMS/SCADA/DMS/OMS system that replaces the existing EMS/SCADA systems and combines the NYSEG and RG&E Control Centers into a single transmission center. A new distribution dispatch center will also resolve trouble and outage calls for both utilities. Install new infrastructure that facilitates increased automation on the transmission and distribution system while providing a robust foundation for additional automation of the system.

Project Activities / Key Accomplishments in 2012

- RG&E's Legacy Siemens 3.9 Energy Control System Database was converted using a project developed tool that automates the conversion process.
- Three Siemens 4.7 Development systems ("Dev Systems") were installed at Iberdrola USA and commissioned for work on the project.
- The connectivity model for NYSEG and RGE Transmission system were loaded on the Dev Systems and connected together to form one continuous model.
- The Esri GIS was designed and engineered for both Distribution and Transmission facilities.
- The Hardware was designed and delivered for the Factory Acceptance Testing System. It was installed at Siemens in Minnesota.
- The first iteration of data from the Distribution GIS, the Transmission GIS, and the SCADA Point databases was incorporated on the Dev System.
- The SCADA point database from Spain was installed on a development system and networked with the Siemens Dev System.
- Overall capital spend in 2012 was $9.5 million (NYSEG - $5.6M, RGE - $3.9M)

Project Activities Planned for 2013

- Pre Factory Acceptance Testing of the software and hardware will be completed in 2013.
- The Interface program that does daily updates to the Energy Control System database from the Corporate GIS Database will be complete an ready for acceptance testing.
- The Transmission Network Applications will be solving the power flow model and generating reasonable State Estimator values on the FAT System in Minnesota.
- The substation schematics will be re-drawn and linked in the Corporate GIS Database.
- Construction of the new Alternate Energy Control Center at our Kirkwood General Office will make ready for the new Energy Control System installation.

70 – APPS-Mobile Initiative MAU Replacement

As of December 31, 2012

Project Overview

The project will implement ClickSoftware for NYSEG and RG&E replacing SAP MAU (Mobile Assets Utilities). The solution includes three Click modules: ClickSchedule, ClickMobile, and ClickAnalyze. The scope of work is SAP CCS notifications for Move In/Move Out, Collections, Meter Work, Meter Maintenance, Electric trouble, Electric outage, and Gas trouble.

Project Activities / Key Accomplishments in 2012

- Completed phase 1 design
- Completed phase 2 development and testing
- Capital investment was $4.7 million.

Project Activities Planned for 2013

- Complete implementation for RG&E and NYSEG

71 - Transmission Casing Replacement Program

As of December 31, 2012

Program Overview

The objectives for this RG&E program in 2012 was to complete the replacement of cased crossings within the RG&E service area classified as High Consequence Areas (HCAs) as defined by the Transmission Integrity Management Program (IMP). Replacement piping was designed to eliminate the HCA designation. Federal and New York State IMP regulations require that cased crossings within HCAs are inspected to assess their condition. There are no reliable inspection tools available to accurately assess the condition of these cased pipelines other than digging and inspecting.

Project Activities / Key Accomplishments in 2012

A total of eight (8) projects were completed in 2012, for a total cost of $3.6 million.

Project Activities Planned for 2013

None. All projects classified under the HCA were completed in 2012.

72 – Ridge Road East, Relocate Gas Mains

As of December 31, 2012

Program Overview

This project is in conjunction with a Monroe County Department of Transportation highway project to reconstruct East Ridge Road from Seneca Ave to Culver Rd in the City of Rochester and Town of Irondequoit starting in April, 2012. RG&E scope of work includes installation of approximately 4,500 feet of 12" wrapped steel main, 1,400 feet of 8" wrapped steel main and 2,500 feet of 2", 4" and 6" PE and wrapped steel main. The installations are necessary to replace mains that are in poor condition or in conflict with highway reconstruction.

Regulations and terms of highway access permits allow RG&E facilities to be located within right-of-ways, but mandates relocation of those facilities when in conflict with street reconstruction projects. The proposed scope of work would include relocation of all gas facilities in conflict with proposed highway reconstruction. Relocation of facilities prior to the start of construction will reduce the potential for damage to facilities and prevent unscheduled interruption of service to customers in the surrounding area.

Project Activities / Key Accomplishments in 2012

RG&E construction will begin in December of 2011 and commenced through 2012. When the original budget was developed, the project design had not yet been completed. Additional interferences found during the highway reconstruction project caused delays in completion. A total of $1.8 million was spent in 2012.

Project Activities Planned for 2013

The project is scheduled to be completed by June 30, 2013.

73 – Westfall Road, Relocate Gas Mains

As of December 31, 2012

Program Overview

This project is in conjunction with a Monroe County Department of Transportation highway project to reconstruct Westfall Road from East Henrietta Road to Lac De Ville Blvd. in the Town of Brighton. RG&E scope of work includes replacement of 7054 LF of 12" wrapped steel gas main in areas of conflict with street reconstruction. RG&E will also excavate, remove, and dispose of the abandoned gas main which has asbestos wrapping only where in conflict with proposed highway improvements.

Regulations and terms of highway access permits allow RG&E facilities to be located within right-of-ways, but mandates relocation of those facilities when in conflict with street reconstruction projects. The proposed scope of work would include relocation of all gas facilities in conflict with proposed highway reconstruction. Relocation of facilities prior to the start of construction will reduce the potential for damage to facilities and prevent unscheduled interruption of service to customers in the surrounding area.

Project Activities / Key Accomplishments in 2012

- Project construction work was completed in October 2012.
- Total cost for project in 2012 was $1.5 million.

Project Activities Planned for 2013

No work planned for 2013, project completed in 2012.

74 - Gas Regulator Station Upgrade Program

As of December 31, 2012

Project Overview

This program scope includes improvements to regulator/gate stations within the RG&E 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.

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.

Project Activities / Key Accomplishments in 2012

- Eleven (11) projects were completed in 2012,
- Total spent in 2012 was $890k.

Project Activities Planned for 2013

For 2013, twenty-five (25) projects are planned. These projects will include automation features, as developed by System Planning-Gas Design & Capital Delivery.

75 – Washington Street, Extend Gas Mains & Replace Regulator Station

As of December 31, 2012

Program Overview

The project scope was designed to increase gas supply, improve system reliability, and provide adequate pressures due to increased growth in the western portion of Monroe County. Project scope includes installation of 4700 LF of 6-inch PE pipe on Washington Street between Colby Street and Chambers Street, upgrading this system to 60 psi and cutting dead a regulator station. The second segment includes installation of 2400 LF of 6-inch PE on Washington Street between Whittier Road and Euler Street, upgrading the system to 60 psi an cutting dead a regulator station. The third segment of this project includes a rebuild of Regulator Station #431.

Project Activities / Key Accomplishments in 2012

Project construction was completed in summer 2012, with total project cost for 2012: $584k

Project Activities Planned for 2013

No planned work, project completed in 2012.

76– Seneca West Pipeline Interconnect to Elmira

As of December 31, 2012

Project Overview

The scope of this project includes 4.9 miles of natural gas transmission pipeline that will connect to Inergy's Seneca West Lake Storage Facility West Pipeline. This is an Article VII application project. The project includes a meter and regulator station at the interconnection with Inergy that will reduce gas pressure to 1100 psi. The 4.9 miles of natural gas transmission pipeline will operate at 1100 psi. A second, downstream regulator station will connect the new 4.9 miles of NYSEG gas transmission pipeline to NYSEG's Elmira gas distribution system and reduce gas pressure to 60 psi.

Project Activities / Key Accomplishments in 2012

- The draft Article VII application was submitted to the Public Service Commission (PSC) on November 29, 2012. The PSC did not accept NYSEG's application as complete. NYSEG is responding to PSC comments and PSC identified deficiencies and questions.

- A portion of the easements were obtained and 25% of the project length may go to condemnation proceedings (approximately half of the pipeline length is located on existing NYSEG electric right-of-way). Condemnation proceedings and pubic objections to the project were not anticipated.

- Capital investment was $1.4 million

Project Activities Planned for 2013

- Complete the Article VII application process including receipt of the Certificate of Environmental Compatibility and Public Need to construct the project in early 2013 and condemnation proceedings in 1Q/2Q 2013.

- Begin construction in the 2Q of 2013 as weather permits and be substantially complete by the end of 2013.

- Expect the new facilities to be in service in the fall of 2013 with minor restoration follow-up activities in 2014.

77 – Gas Regulator Station Program

As of December 31, 2012

Program Overview

This program scope includes improvements to regulator/gate stations within the NYSEG 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.

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.

Project Activities / Key Accomplishments in 2012

- Fifteen (15) projects were completed in 2012
- Total cost in 2012 was $1.2 million.

Project Activities Planned for 2013

There are sixty (60) projects currently slated for the 2013 program. 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.

78 – Binghamton Gas SCADA System Migration

As of December 31, 2012

Project Overview

The Gas Supervisory Control and Data Acquisition (SCADA) system is a high availability control system which provides 24x7 monitoring and control of the gas transmission and distribution system. This project is to replace the current Gas SCADA System in Binghamton. The project includes replacement of servers, workstations, hardware, software and operating systems.

The system is critical to safe and reliable gas operations and needs to be replaced due to the following:

- The current system was installed in 1999. It is well beyond its expected eight-year lifespan and has been experiencing an increasing number of hardware failures.
- The current server hardware, operating systems, software and security patches are unavailable because they are no longer manufactured or supported by their respective manufacturers.

Project Activities/Key Accomplishments in 2012

- Completed baseline demonstration.
- Completed factory acceptance testing.
- System delivery and installation.
- Capital investment was $1.0 million.

Project Activities Planned for 2013

The following tasks are planned for 2013, with a completion date scheduled for 31-Mar-13:

- Complete site acceptance testing.
- Complete point to point check in.
- Complete 30-day parallel operation.
- Complete final system acceptance.
- System cut-over.

79 – 2012 Leak Prone Main and Services Replacement Programs

As of December 31, 2012

Program Overview

The scope of this program for 2012 included the replacement of a minimum of 24 miles of leak prone gas main to meet the Rate Plan requirements. The leak prone gas main works was selected based upon leak history, condition, inspection reports, and various risk factors.

In addition, a minimum of 1000 leak prone services (RG&E) and 1,200 services (NYSEG) were required to be replaced or retired to meet the Rate Plan requirements.

Project Activities / Key Accomplishments in 2012

The actual mileage completed was:

RG&E:	30.2 miles
NYSEG:	28.3 miles

- Capital investment in 2012 for leak prone mains was $10.9 million (NYSEG).
- Capital investment in 2012 for leak prone mains was $9.3 million (RG&E).

The actual number of leak prone services completed was:

RG&E:	1,270
NYSEG:	1,559

- Capital investment in 2012 for leak prone services was $5.8 million (NYSEG).
- Capital investment in 2012 for leak prone services was $2.0 million (RG&E).

The bidding and procurement process began mid-2012 for 3-year construction contracts (2013-2015), using a more effective list of unit prices for both RGE and NYEG.

Project Activities Planned for 2013

Program scope for 2013 will remain the same as last year: to retire (cut dead) a minimum of 24 miles of leak prone mains and 1000 and 1200 leak prone services for RG&E and NYSEG, respectively.

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 Actuals	YTD Plan	YTD Variance	Variance Explanation - + - 10% of Annual Plan	In Service Date
Projects in Appendix L					
Auburn Transmission Project (called Auburn 345kV Source in Appendix L)	$ 417	$ 1,000	$ (583)	Article 7 work began this year. New scope has been developed	Dec-16
Richfield Springs Substation New Transformer	1,220	1,700	(480)	Engineering awarded in late March.	May-13
Line #807 115kV Conversion	1,639	3,000	(1,361)	Line construction, Wood St. Sub, and Katonah Sub work to carryover into 2013. Carmel Detail Engineering to be completed in 2013 with construction to follow in 2014.	Dec-14
Walden 69kV Transmission line Upgrade	4,986	2,000	2,986	Project accelerated into 2012 to match up with Central Hudson's upgrade of the line feeding Walden. Project did not meet scheduled ISD will carryover into 2013.	Feb-13
Transit St Substation MGP Remediation	763	1,660	(897)	Change in project direction to stay with the original project plan without moving the entire substation to a new location occurred late 2011. Preliminary engineering & estimates began in late November and completed 3/3/12.	Aug-14
South Perry New 115kV& 230kV Transformers	1,506	6,100	(4,594)	The three South Perry transformers projects are proceeding together. Detail design will be completed in 2013 with construction beginning in May 2013.	May-14
Energy Control Center & OMS/GIS	5,634	7,683	(2,049)	Contract milestones were renegotiated because of a change in scope, which moved up the delivery of the GIS System, and pushed out the delivery of the Spectrum System causing a variance from the original plan	Dec-14
Willett Substation New Transformer	748	2,800	(2,052)	Detail design will be completed in 2013 and construction should begin in May 2013.	Jul-14
Total DOE Stimulus projects (Capacitor Banks) Ashley, Morgan, Ridge Rd., Mountaindale, Amawalk, Big Tree)	2,666	2,770	(104)		Mar-13
Mobile Radio Project	1,396	4,902	(3,505)	Delay in receiving frequency approval from Industry Canada. Anticipated completion date is Sept 2013.	Sep-13
Biogas 34.5kV Collector System	1,570	1,550	20		Dec-13
Flat Street Substation New Transformer	1,935	4,300	(2,365)	Detail Design for In Ground and Above Ground completed 7/31/12. Construction began in Oct 2012. 2012 planned work will carryover into 2013.	Apr-14
Coddington Add LTC Capability to 115kV/34.5 kV Transformer	1,321	2,400	(1,079)	Engineering awarded in late March.	Apr-13

NYSEG - Electric Capital Investment

($000s)

December Results

Project	YTD Actuals	YTD Plan	YTD Variance	Variance Explanation - + - 10% of Annual Plan	In Service Date
Westover Substation New 115kV Transformer & Binghamton Capacitors	895	1,900	(1,005)	Carryover, Detail Design to be complete Feb 2014, Procurement of Construction to begin Sept 2013.	Jan-15
Eelpot New Transformer	1,639	2,600	(961)	Detail design for In Ground and Above Ground completed Aug 2012. Award and begin construction Nov 2012. Planned 2012 work will carryover into 2013.	Apr-14
Columbia County Transmission Project (Klinekill- Valkin (NMPC) New 115 V Transmission Line)	1,091	2,360	(1,269)	Project behind schedule. Conceptual Engineering on the project identified a route that requires over 10 miles of 115 KV Transmission, which caused this project to need an Article VII filing with NYPSC. This was submitted on 5/25/12	Jul-17
Meyer Substation New Transformer	199	100	99	Detailed Engineering to be awarded in Feb 2013	Jul-14
New Mobile Substation (#22)	1,071	800	271	December Milestone Payment not made in December 2011 due to delays by vendor, resulting in carryovers into 2012.	May-12
Programs included in Appendix L					
Transmission, distribution infrastructure reliability program (TDIRP)	8,997	11,399	(2,402)	Contractors used in prior years to support the workload, no use of contractors in 2012. Local resources focused on customer demand and system reliability first and then Betterment needs.	Various
Electric System Security	2,460	2,500	(40)		Various
Fleet - Electric Portion	3,843	11,442	(7,599)	Reduced to accommodate higher priority projects.	Various
Division Projects (Schedule C-4)	61,084	23,000	38,084	Added improvement to Lines and Poles for improved reliability to customers per demand and worst performing circuits, Customer Growth up 27%, Restocking of Regulators, Capacitors, and Transformers after 2011 flood, Storm cost for July Tornado and Hurricane Sandy, and increased overhead rates.	Various
Projects/Programs Supplemental to Appendix L					
The Mechanicville Reinforcement Project	7,381	15,055	(7,674)	There has been a reduction in scope on the substation portion of the project, and some work will carryover into 2013.	Mar-13
RTU Communications Program	0	1,000	(1,000)	Funding for this project will be moved to other RTU projects.	Various

NYSEG - Electric Capital Investment

($000s)

December Results

Project	YTD Actuals	YTD Plan	YTD Variance	Variance Explanation - + - 10% of Annual Plan	In Service Date
Distribution Pole Replacement Program- TDIRP	4,970	8,000	(3,030)	Contractors used in prior years to support the workload, no use of contractors in 2012. Local resources focused on customer demand and system reliability first and then Betterment needs.	Various
Sectionalizer Replacement Program - TDIRP	886	1,500	(614)	Contractors used in prior years to support the workload, no use of contractors in 2012. Local resources focused on customer demand and system reliability first and then Betterment needs.	Various
Substation Breaker Replacement Program - TDIRP	740	1,607	(867)	Current underexpenditure is due to continued delays in the completion of contract engineering & design.	Various
Batteries Replacement Program - TDIRP	321	923	(602)	Current underexpenditure is due to continued delays in the completion of contract engineering & design and in the equipment procurement process.	Various
Transmission Pole Replacement Program	1,066	0	1,066	Replacements per inspect and treat program not in plan.	Various
NYSEG TDIRP - Electric Capital Delivery	1,250	1,571	(321)	Timing, some work will carryover.	Various
NERC Alert Program	5,582	9,206	(3,624)	Scope of work for 2012 changed from when the plan was developed.	
Circuit 426 Upgrade Conductor	2,257	1,374	883	Updated project costs reflect higher than original estimates for overhead rates, additional engineering, added ROW, SWPP, and contractor costs.	Jul-12
Brewster RTU Substation Automation	3,813	2,677	1,136	Communications work not originally planned for this year. Equipment for all stations aquired this year.	Dec-13
Wehrle Dr., Replace cable, Terminations & Switchgear	1,430	1,000	430	Additional funding in 2012 needed as original estimate was low. Some work to carryover into 2013.	Apr-13
Substation Modernization	1,033	2,500	(1,467)	Mod-I projects started in Aug, and for Mod-II the Engineering was awarded in December. Material purchase was delayed to 2013.	Various
Glenwood - Repl. Substation Transformer	176	1,678	(1,502)	Conceptual design under review	Oct-14

NYSEG - Electric Capital Investment

($000s)

December Results

Project	YTD Actuals	YTD Plan	YTD Variance	Variance Explanation - + - 10% of Annual Plan	In Service Date
Watercure Rd. - 2nd 345 kV Transformer	1,660	400	1,260	Final payment for receipt of transformer was made in June, in addition to payments for foundation construction, and oil containment. These expenditures were not planned for 2012.	Dec-14
South Park Sub - Bank Installation	2,467	400	2,067	Scope change and project accelrated for in service in 2012.	May-13
Bulk Spare Transformer Purchase - 2011	(3,202)	0	(3,202)	Carryover Payments from 2011, and credit for transfer of asset to RGE.	Dec-11
New Bulk Spare Power Transformer - 2012	1,466	0	1,466	New Bulk Spare Transformer to replace the original that was put in service at Station 80. There will be additional expenditures in 2013 of $2.1M.	Dec-13
DOE Stimulus Program - PMUs - NYSEG	773	841	(68)		Feb-13
Afton Substation - Add New 34.5kV Circuit	521	100	421	Carryover from 2011, plus scope changes to include the use of stand alone breakers and relays, and the inclusion of a new control house with all AC & DC equipment being moved into control house.	Dec-12
Binghamton Transmission Line 32-36 Split	1,158	0	1,158	Project not planned, necessary due to IPP ceasing operations in the Binghamton area on 2/16/12.	Jun-12
Substation Automation (RTU Program)	1,655	0	1,655	Carryover Project that was not included in 2012 Plan.	Various
Other Common Projects - Electric allocation (Schedule C-1)	9,865	7,518	2,347	Additional IT and facilities projects started such as capital improvements to Kirkwood facility	Various
Other Electric projects (Schedule C-2)	18,093	4,017	14,076	Includes funding or acceleration of the following projects: AES projects, Stillwater SS, Sacket Lake SS, Old Falls, SS, Line 949, Cantitote 2nd Circuit, Tom Miller SS, ITP, King Ferry 528, Old Falls Cir 288.	Various
Generation projects (Schedule C-5)	2,071	1,942	129		Various
Total	$ 174,512	$ 161,274	$ 13,238		

RG&E - Electric Capital Investment
($000s)
December Results

Project	YTD Actuals	YTD Plan	YTD Variance	Variance Explanation -±10% of Annual Plan	In Service Date
Projects in Appendix L					
Station 5 Tunnel Relining	$ 18,754	$ 21,100	$ (2,346)	Lower overall project costs resulting from completion approx 1.5 months ahead of schedule	Nov-12
Station 5 Wicket Gate Upgrades	4,444	2,728	1,716	Upon disassembly and inspection of Unit 3, additional work/component replacement identified; 2012 workscope expanded;	Dec-12
Station 5 Powerhouse Undermining	1,153	676	477	2011 work delayed resulting in carryover of cost into 2012; competitive bidding results higher than estimated;	Sep-12
Station 5 Plant Electric Distribution	1,631	650	981	Plan based on preliminary estimate; more equipment/conduit/circuitry at end of useful life; 2012 workscope expanded to support new equipment/circuits/conduits installations; hazardous material abatement/removal and disposal (asbestos insulation, lead paint, OCB/xfmr oil, etc);	Nov-12
Station 26 Unit 1 Major Overhaul	1,474	950	524	Upon disassembly and inspection of the unit, additional scope identified; competitive bidding results higher than estimated;	Dec-13
Station 23 New Downtown 115kV Source	$ 4,815	11,393	(6,578)	Detailed Engineering delayed by scope definition changes	Dec-15
Station 124 New Phase Shifter Transformer	$ 13,820	12,254	1,566	Delay in project due to outage availabilities	Apr-13
Station 124 New SVC	$ 10,745	8,019	2,726	Project deliveries accelerated.	Aug-13
Station 262 New 115kV /34.5kV Substation	$ 3,177	3,320	(143)		Jun-15
Station 67 to 418 New 115 kV Transmission Line	$ 754	3,287	(2,533)	Material specifications not issued as anticipated	Dec-14
Webster East New 12 kV Source	$ 3,565	1,994	1,571	Projection now includes actual bid costs for construction, control house & relays, incremental engineering costs and construction management costs that were not included in plan	Dec-12
Rochester Area Reliability Project	$ 6,958	7,000	(42)		Dec-14
Stations 180 and 128 New Capacitors	$ 657	1,936	(1,279)	Materials received in 2011 while anticipated in 2012.	Sep-13
DOE Stimulus Program Capacitor Bank-RGE	$ 622	865	(242)	Equipment procurred in 2011; construction costs lower than estimated	Apr-13

RG&E - Electric Capital Investment
($000s)
December Results

Project	YTD Actuals	YTD Plan	YTD Variance	Variance Explanation -±10% of Annual Plan	In Service Date
U of R New 115 /34.5kV Substation	$ 476	4,464	(3,988)	Customer delay in signing the funding agreement	Aug-14
Energy Control Center	$ 3,863	5,122	(1,259)	Many of the timing issues in 2012 were because of the milestone movements. The variance explanation is Siemens milestone movement.	Oct-14
Station 56 - Additional 12kV Source	$ 3,198	5,638	(2,440)	Delay in project due delay in detailed engineering work going out for bid.	Dec-13
Station 42 New Capacitors	$ 927	948	(21)	Scope exploration of underground Schedule delay while evaluating scope change from U/G to OH, this impacted construction and construction administration	Oct-12
Station 218 to Clyde New 34.5 kV Transmission Line	$ 1,272	2,355	(1,083)	Conceptual package took longer than anticipated	Dec-13
Programs in Appendix L					
Transmission, distribution infrastructure reliability program (TDIRP)	6,177	9,116	(2,938)	Move budget to Distribution Poles Replacement Program	Various
Electric System Security	$ 3,063	3,000	63		Various
Fleet - Electric Portion	2,166	2,730	(564)	2012 Vehicles were not received as expected	Various
Division Projects (Schedule C-4)	$ 18,128	13,000	5,128	Additional funding allocated for required work	Various
Projects/Programs Supplemental to Appendix L					
Sta. 136 - Add transformer & 12kV circuits	$ 1,506	-	1,506	The addition of the 2nd Transformer and circuits will provide tie capability with existing 12kV circuit.	Dec-14
Station 42 - Replace 115-11kV 4T Transformer	$ 1,967	1,905	62		Oct-12
Station 42 - New 12T (Replace 34.5-11.5kV 3T Transformer)	$ 2,482	1,660	822	Increased costs in Construction Management costs related to delay in project caused by proposed change in scope to go underground with cabling.	Dec-12

RG&E - Electric Capital Investment
($000s)
December Results

Project	YTD Actuals	YTD Plan	YTD Variance	Variance Explanation -±10% of Annual Plan	In Service Date
Station 168 Service Area Reinforcement	$ 10	2,000	(1,990)	Project pending agreement with National Grid	
Station 56 - Replace (2) 115/34.5 kV Transformer	$ 3,095	2,370	725		Dec-12
Line 727 - 34.5 kV Gas filled cable	$ 1,426	1,530	(104)		Jun-12
Sectionalize 115kV Circuit 917 (sta. 7 - Sta. 418)	$ 1,543		1,543	New project commenced to lessen customer impact and prevent thermal overload	Dec-14
Station 80 - Replace 1T and 3T Transformers	$ 1,137	1,943	(806)	Transformer factory test results under analysis acceptance delayed	Dec-13
Sta. 23 Transformer & 11kV Switchgear	$ 2,572	2,750	(177)		Dec-14
Stations 42-124-204 Fiber Optic Cable Replacement	$ 885	-	885	New project commenced in accordance with agreement in FERC Docket #EL07-77-000	Mar-13
Line 926 - Upgrade 115kV Line - Rochester	$ 147	1,000	(853)	Engineering investigation underway to reduce cost of project by re-conductoring the line instead of replacement	Oct-14
RGE SPCC Oil Containment Compliance	$ 1,266	587	679	More accurate cost forecast based on greater detail and receipt of actual costs	Aug-13
RTU Program	$ 1,547	2,900	(1,353)		Various
RTU Communication Projects	$ 1,029	1,032	(3)		Various
Substation Modernization	3,614	3,500	114		Various
Station 5 Substation Modernization	$ 2,375	-	2,375	Substation Modernization added	Feb-15
Station 38 Substation Modernization	$ 4,470	-	4,470	Substation Modernization added	Feb-15
Distribution Pole Replacement Program -TDIRP	$ 7,263	2,000	5,263	Additional poles identified	Various
Substation Battery Replacement Program - TDIRP	$ 286	1,436	(1,150)	Materials not ordered as planned.	Various

RG&E - Electric Capital Investment
($000s)
December Results

Project	YTD Actuals	YTD Plan	YTD Variance	Variance Explanation -±10% of Annual Plan	In Service Date
Substation Breaker Replacement Program - TDIRP	$ 443	1,448	(1,005)	Project delayed while scope was refined.	Various
Sectionalizer Replacement Program - TDIRP	$ 1,149	1,000	149	Issues with material is driving up prices	Various
Replace DC Pilot Wire System	$ 1,570	2,600	(1,030)	Detailed engineering delayed by vendor clarifications and bid revision were larger than anticipated	Various
CableCure Program	$ 2,444	1,500	944	Program accelerated from 2013	Various
East Ridge Rd.Hwy Reloc	$ 3,945	3,388	557		Dec-12
Portland Ave. Highway, Relocate Electric Facilities	$ 649	499	150	Change in municipality plans - was originally planned for 2011 & 2012. Project will be completed in 2013.	Dec-13
Westfall Rd. Highway Relocation, Relocate Electric Facilities	$ 1,476	700	776	Unforeseen field conditions resulted in increase scope of work	Dec-12
Lake Ave. (Merrill St. to 600' s of Burley St.) Relocate Electric Facilities	$ -	2,750	(2,750)	Change in municipality plans.	Sep-13
Sta. 80 - #5 Transfomer	$ 1,053	-	1,053	This was an emergency for a transformer that caught fire and therefore was not budgeted.	Apr-12
Sta. 91 Substation Automation	$ 1,025	-	1,025	Project added to 2012 list	
Other Common Projects - Electric allocation (Schedule C-1)	3,773	2,726	1,047	Additional facilities projects started late in year such as East Av. Façade restoration	Various
All Other Electric Projects (Schedule C-2)	10,321	12,174	(1,853)	The Company has accelerated the funding of the following projects not included in P12: Sta. 49 and Sta 95 - replace transformers; additional RTU projects; and mobile switchgear to fill the delay in some relocations projects	Various
All Other Generation Projects (Schedule C-5)	7,243	3,896	3,347	Projects from 2011 being completed. Several projects expedited to complete in 2012 and not roll into 2013.	Various
Total	$ 185,552	$ 181,838	$ 3,713		

Schedule C-1
Electric Common

NYSEG ($000)

Project Title	2012 Actuals
NYSEG GENERAL LAND & STRUCT MAJOR PROJEC	2,343
APPS-Mobile Initiative MAU Replacement	2,304
IT Major CAPITAL PROJECTS	1,945
NYSEG GENERAL EQUIPMENT BLANKET	1,449
TLCM-TELECOM MAJOR CAPITAL PROJECTS	948
NYSEG GENERAL LAND & STRUCT BLANKET	746
NYSEG Flood Event 9/7/2011	702
NYSEG Virtual Call Platform	119
All other	242
SAP Allocation adjustment	(931)
Total NYSEG Common - Electric	**9,866**

Schedule C-1
Electric Common

RG&E ($000)

Project Title	2012 Actuals
RGE - PROPERTY MANAGEMENT MAJOR PROJECTS	1,887
APPS-Mobile Initiative MAU Replacement	905
RGE - GENERAL EQUIPT	718
West Ave IT Office Renovation	673
RGE - GENERAL LAND & STRUCT PLANNING	208
RGE Virtual Call Platform	114
All Other	395
SAP Allocation adjustment	(1,128)
Total RG&E Common - Electric	**3,772**

Schedule C-2
Other projects

NYSEG ($000)

Project Title	2012 Actuals
Tom Miller Road New Substation	978
Stephentown Substation New Transformer	880
Meyer - Add 115kV Capacitor Bank	777
South Perry - Replace 115/34.5 kV Transformer	765
King Ferry Tap 528, Reconfigure Electric distribution 4,800V to 34.5 kV - Auburn	756
NYSEG Recloser Automation Project	740
Goudey S/S - Separation from AES Plant	739
NYSEG Substation Animal Fences Program - 2012	710
Old Falls Circuit 288 - Relieve Load on Substation Transformer	683
Moraine Road Substation Breaker Addition	638
Perry Center Area Install New 34.5kV Sub	627
Jennison S/S - Separation from AES Plant	592
Hickling S/S - Separation from AES Plant	558
Replacement of Rejected Wood Distribution Poles 2012	539
Greenidge S/S - Separation from AES Plnt	533
Ithaca Reinforcement Project	509
Cantitoe - Add 2nd 13.2 kV Cir - Elec - Brewster	431
Silver Creek Substation New Transformer	399
Greenidge Gnd Bank	352
Homer City Substation 2012 Capital Projects	352
City of Corning, Replace Electric Distribution Overhead with Underground (100%	319
5376-2-NON-CMS	292
NYSEG Substation Doble Testing Equipment	281
Dansville MGP radio tower and equipment relocation	273
Harris Lake - Diesel Generator Upgrade	271
West Woodbourne 34.5kV Capacitor Bank	264
Roll Road - 4th Circuit - Electric - Lancaster	251
Haviland Hollow - Replace Bk #1 - Elec - Brewster	230
Old Fall substation - Install 2nd LTC Transformer	221
5376-1-NON-CMS	211
Sackett Lake Sub - Replace Transformer w\7.5MVA Unit & Convert Dist to 12.5kV	202
Kattleville - Replace switch	201
Coopers Corners 42 Line Relay Replacement	196
NYSEG - SPCC Oil Containment Compliance	195
IBM TCE Mitigation Project	169
I-86 Relocate Electric Facilities	156
Replacement of Transmission Deficiencies Poles	152
Route 67 Roundabout Hghwy Reloc - Mech	146
Oneonta Transmission Circuit 949 Structure Replacements	141
Swatling Falls URD, Electric Line Extension	138
Seneca Ord. DEP upgrade (7500KVA xfmt & Convert Circuit #203)	137
Spaulding Green URD - Electric - Lancaster (50% Reimbursable)	133
Trans Circ 587/588 Structure Rplc-Geneva	126
Patnode Rd Electric Line Ext - Platts	125
NYSEG ECC Map Board Replacement	122
Engineered Turbine Components - 100% Reimb - Ithaca	114
Route 12 DOT Relocation	113
Newton Road Line Extension/Convertion for two URD's	109
Stillwater Sub - Replace Transformer w\7.5MVA Unit & Convert Dist to 12.5kV	108
Spencer Hill Windfarm Proj - Remove Ends	(114)
812/813 Line Croton Falls - Peach Lake	(134)

Project Title	2012 Actuals
T & D Disposal and Salvage - NYSEG	(1,026)
Other Projects Summary	1,414
Total	**18,093**

Schedule C-2
Other projects

RG&E ($000)

Project Title	2012 Actuals
Recloser Automation	979
Recloser Automation ECC interface	787
Station 132 Substation Automation	608
Jefferson Ave (Maint ST - Plymouth) Hwy	545
Station 45 Substation Automation	527
Station 127 New 34.5kV Capacitors	502
Station 125 New 34.5kV Capacitors	395
34.5kV Load Break Swich Repl 2012	386
Station 198 New 34.5kV Capacitors	369
Station 181 New 34.5kV Capacitors	326
Station 194 New 34.5kV Capacitors	309
Broad St (Court St - Chesnut St) Hwy	263
Ridgeway Ave (Ramona - Minder) Hwy Proj	263
South Lincoln Rd Hwy Reloc.	255
Station 3 Replacement	212
Station 120 New 34.5kV Capacitors	210
Station 95 Transformer Addition	192
Station 33 2T replacement	191
Station 218 New 34.5kV Capacitors	188
Station 49 Transformer Addition	185
Station 37 - Repl Circuit Breakers	173
MCWA Basket Rd New service	163
Station 173 New 34.5kV Capacitors	139
Mobile Substation's #3 & #5	139
Station 178 New 34.5kV Capacitors	133
Circuits 612KN - Upgrade 11kV circuits S	131
Station 180 New 34.5kV Capacitors	121
Station 56 Capacitor Banks	117
Station 80 Bulk Transformer	113
SENSUS Recloser Monitoring Upgrades	104
Bershire Park Subdiv - Sect 5 URD	102
Other Distribution Projects	1,197
Total	**$ 10,321**

New York State Electric & Gas Corporation
Rochester Gas and Electric Corporation
2012 TDIRP Investments
Schedule C-3

March 1, 2013

2012 TDIRP Investments
NYSEG Electric
($000)

NYSEG Distribution

Category	Description	Actuals
Small conductor and aged poles	Replace outdated pole and small conductor	$9,926
Recloser Installations	Install or replace reclosers	886
Electric Services	Replace open wire services	460
Subtotal		**$11,272**

NYSEG Substation

Category	Description	Actuals
Circuit Breaker Replacements	Replace obsolete and unmaintainable substation breakers.	$740
Transformer Replacements	Replace unmaintainable substation transformer.	28
Insulator & Switch Replacements	Replace obsolete and unmaintainable insulators, surge arresters and switches.	1,182
Digital Monitoring Equipment Replacements	Replace obsolete and unmaintainable substation digital and analog monitoring equipment	568
Battery System Replacements	Replace obsolete and unmaintainable substation battery systems.	321
NYSEG TDIRP - Substation	Replace various obsolete and unmaintainable substation equipment.	1,113
NYSEG TDIRP – ECD Substation	Replace various obsolete and unmaintainable substation circuit breakers (115kV & above) and transformers. This project includes the Robinson Road 230kV transformer progress payment and engineering and design.	974
Subtotal		**$4,926**

NYSEG Transmission

Project	Description	Actuals
NYSEG TDIRP – ECD Transmission - Goudey River Crossing Replacement (ckts. 441/442/511/512)	Replacement of deteriorated steel Towers (materials purchased, construction not complete) Binghamton division.	$276
Switch Replacements (ckts. 905 & 921)	Replacement of defective 115kv switches (materials purchased, construction not complete) Lancaster division.	183
Naples Ckt. 589 Partial line relocation to avoid structure washout	Relocation of a portion of the 589 34.5kv transmission line. Hornell division	195
Continuation of Gowanda Transmission Pole Replacements	Replacement of deteriorated poles on the 501 34.5kv circuit in Lancaster Division	140
Other fixes to issues identified by division line inspections (switch, pole and insulator replacements)	Replacement of deteriorated poles, broken insulators and inoperable switches.	173
Subtotal		**$967**

NYSEG TDIRP TOTAL		**$17,164**

2012 TDIRP Investments
RG&E Electric
($000)

RG&E Distribution

Category	Description	Actuals
Small conductor and aged poles	Replace outdated pole and small conductor	$10,589
Recloser Installation	Install or replace reclosers	1,149
Arc Series Lighting	Convert remaining Arc Series lights located in Brighton and Pittsford	161
Underground Distribution Lines	Replace Lead cable and miscellaneous equipment	20
Circuit 7703	Provide 3 phase back-up source for circuit 7703	314
Subtotal		**$12,233**

RG&E Substation

Category	Description	Actuals
Circuit Breaker Replacements	Replace obsolete and unmaintainable substation breakers.	$443
Insulator & Switch Replacements	Reliability Improvement- Replace obsolete and unmaintainable substation insulators, surge arresters and switches.	61
Battery System Replacements	Replace obsolete and unmaintainable substation battery systems.	286
RGE TDIRP - Substation	Replace various obsolete and unmaintainable substation equipment.	949
RGW TDIRP – ECD Substation	Replace various obsolete and unmaintainable substation circuit breakers (115kV & above) and transformers.	454
Subtotal		**$2,193**

RG&E Transmission

Project	Description	Actuals
34.5kV Gas Filled Cable Replacement Circuit 712	Replace gas filled cable	$1,417
34.5kV Gas Filled Cable Replacement Circuit 759	Replace gas filled cable (Cable purchased in 2011 and transferred to higher priority non-TDIRP project in 2012)	-196
34.5kV Gas Filled Cable Replacement Circuit 722	Accounting adjustment for overstatement of prior year accruals, plus applicable overheads.	-483
Other fixes to issues identified by line inspections (switch, pole and insulator replacements) and miscellaneous projects	Replacement of deteriorated poles, broken insulators and inoperable switches	156
Subtotal		**$894**

RG&E TDIRP TOTAL		**$15,319**

New York State Electric & Gas Corporation
Rochester Gas and Electric Corporation
2012 Division Projects
Schedule C-4

March 1, 2012

2012 Division Projects
NYSEG Electric
($000)

NYSEG	2012 Actual	2012 Plan
Substations	$859	$900
Transmission Line	$1,869	$1,000
Distribution Line	$17,566	$4,300
Government Highway Minor	$1,906	$600
Industrial/Commercial	$1,111	$1,000
Residential Line Extensions	$3,032	$1,500
Service Connects	$2,646	$1,000
Street Lighting	$1,056	$1,000
Transformers, Meters, Regulators, Capacitors and Protection	$21,440	$11,200
Storm	$9,601	$500
TOTAL	**$61,084**	**$23,000**

2012 Division Projects
RG&E Electric
($000)

RGE	2012 Actual	2012 Plan
Substations	$482	$700
Transmission Line/Government Highway Major Projects	$583	$600
Distribution Line	$5,882	$3,400
Government Highway Minor	$380	$200
Industrial/Commercial	$1,195	$200
Residential Line Extensions	$1,952	$500
Service Connects	$807	$250
Street Lighting	$423	$250
Transformers, Meters, Regulators, Capacitors and Protection	$5,773	$6,500
Storm	$654	$400
TOTAL	**$18,128**	**$13,000**

Schedule C-5
Generation
projects

NYSEG ($000)

Project Title	2012 Actuals
Rainbow Falls Restoration - Hurricane Irene Storm Related	505
Rainbow Falls Intake Retaining Wall	277
Cadyville Major Unit 2 Thrust Bearing Major OH	217
Rainbow Falls Fish Bypass	191
Rainbow Falls Intake Gate upgrade	122
All Other	760
Total	**2,071**

Schedule C-5
Generation
projects

RG&E ($000)

Project Title	2012 Actuals
Station 5 Unit 3 Draft Tube Stop Log	764
Station 5 PH Windows Upgrade	743
RGE Generation Minors	573
Station 5 Unit 1 Draft Tube Stop Log	506
Station 5 Unit 2 Draft Tube Stop Log	502
Station 5 Cooling Water System	455
Station 5 Unit 1 Penstock Butterfly Valve upgrade	419
Station 5 Unit 2 Butterfly Valve Upgrade	387
Station 2 11kV and DC controls	319
Station 5 Air Compressor System	263
Station 2 CAD Electric Power Data System	248
Station 2 Unit 1 Butterfly Valve	239
Station 5 Crest Gate Operating Cylinder Replacement	213
DOE Requirements	204
Station 5 Unit 1 Lube Oil System	199
Station 5 Unit 3 Lube Oil System	157
Station 5 Unit 2 Lube Oil System	154
Station 5 Unit 1 Governor Oil Tank	135
Station 5 Trashchute Upgrade	123
Station 2 Unit 1 New Roof/Improvements	105
All Other	534
Total	**7,243**

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

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

Projects/Programs in Appendix L

Project	YTD Actuals	YTD Plan	YTD Variance	Variance Explanation - + - 10% of Plan	In Service Date
Seneca West-Pipeline Interconnect to Elmira	1,414	4,860	$ (3,446)	Timeframe to process NYS DEC and Article VII permits is greater than anticipated.	Dec-13
Minor Distribution Mains	1,917	625	1,292	Customer driven work greater than expected.	Various
Minor Services	6,311	3,700	2,611	Customer driven, more than anticipated.	Various
Leak Prone Main Replacement	10,921	9,800	1,121	Additional miles, incremental to the 24 miles required, were replaced in 2012.	Various
Minor Leak Prone Service Renewals	5,772	5,744	28		Various
Meters	2,879	2,805	74		Various
Regulator Station Upgrade Program	1,203	1,792	(589)	Fewer projects initiated in 2012 than planned.	Various
Robinson Road Gate Station Rebuild	88	815	(727)	Equipment order occurred later than originally planned, due to resolution of terms and conditions with manufacturer.	Dec-13
Binghamton Gas SCADA System Migration	1,013	1,626	(613)	Project has experienced vendor delays. Project completion will occur in 2013.	Jul-13
Transmission Casing Replacement Program	344	1,026	(682)	Projects currently in the program require railroad permit approvals which are requiring more time to acquire than anticipated.	Various
Fleet	1,015	3,023	(2,008)	Vehicles were not received as expected, and reduced to accommodate some higher priority projects	Various
Common Projects (Schedule D-1)	4,274	3,282	992	Additional IT and facilities projects started such as capital improvements to Kirkwood facility	Various
Other projects (Schedule D-2)	6,401	1,248	5,154	Main Replacements and Government Highway minors ahead of plan due to warmer weather. Other various changes to project scopes, schedules and estimated costs	Various
Total	$ 43,553	$ 40,346	$ 3,207		

RG&E - Gas Capital Investment
($000s)
December Results

Projects/Programs in Appendix L

Project	YTD Actuals	YTD Plan	YTD Variance	Variance Explanation - + - 10% of Plan	In Service Date
New Empire West Gate Station	$ 352	$ 1,650	$ (1,298)	Project requires supply interconnection agreement, major equipment procurement underway.	Dec-13
Minor Distribution Mains	1,142	750	392	Customer driven work greater than expected.	Various
Minor Distribution Services	7,358	5,308	2,050	Customer driven work greater than expected.	Various
Leak Prone Main Replacement Program	9,254	8,981	273	Additional miles, incremental to the 24 miles required, were replaced in 2012.	Various
Meters	2,332	2,535	(203)		Various
Transmission Casing Replacement Program	3,625	1,750	1,875	Program costs are higher than anticipated due to material costs and the addition of one project.	Various
Ridgeway Ave - Ramona to Minder Relocate Gas Mains	158	500	(342)	Project scope was reduced. Project completed	Jun-12
Buffalo Rd Relocate Gas Mains	-	1,600	(1,600)	Project was delayed due to inability to secure adequate easements.	Dec-14
Ridge Rd East Relocate Gas Mains	1,779	900	879	Work scope increased to accommodate additional conflicts discovered when the highway reconstruction started.	Jul-13
Westfall Rd Relocate Gas Mains	1,505	1,920	(415)	Project costs lower than planned. Construction and restoration completed.	Dec-12
Gas Regulator Station Upgrade Program	890	743	147	Additional projects were added to the 2012 program.	Various
Fleet	1,166	1,470	(304)	Vehicles were not received as expected	Various
Common Projects (Schedule D-1)	3,766	1,467	2,299	Additional facilities projects started such as East Av. Façade restoration	Various
Other Projects (Schedule D-2)	3,606	3,686	(80)	Various changes to project scopes, schedules and estimated costs	Various
Total	$ 36,934	$ 33,260	$ 3,674		

Schedule D-1
Gas Common

NYSEG ($000)

Project Title	2012 Actuals
APPS-Mobile Initiative MAU Replacement	987
NYSEG GENERAL LAND & STRUCT MAJOR PROJEC	619
NYSEG GENERAL EQUIPMENT BLANKET	383
Mobile Radio Project	369
September 8, 2011 Flood Event - Gas	275
TLCM-TELECOM MAJOR CAPITAL PROJECTS	250
NYSEG GENERAL LAND & STRUCT BLANKET	197
IT MINOR CAPITAL PROJECTS	136
All Other	127
SAP Allocation adjustment	931
Total NYSEG Common - Gas	**4,274**

Schedule D-1
Gas Common

RG&E ($000)

Project Title	2012 Actuals
RGE - PROPERTY MANAGEMENT MAJOR PROJECTS	1,016
APPS-Mobile Initiative MAU Replacement	487
IT MINOR CAPITAL PROJECTS	416
RGE - GENERAL EQUIPT	387
RGE - GENERAL LAND & STRUCT PLANNING	112
All Other	221
SAP Allocation adjustment	1,128
Total RG&E Common - Gas	**3,766**

Schedule D-2
Other projects

NYSEG ($000)

Project Title	2012 Actuals
Minor Government Jobs, Replace Gas Mains	1,895
Distribution Mains Replacement, Replace Gas Mains	1,238
Bare Steel Service Renewal	669
Rushville to Canandaigua System Reinforcement	464
Chenango River, Replace Exposed Gas Mains	330
Horseheads, Leak Prone	327
SmarTRAC Replacement	309
NYSEG - Gas Regulators	259
Great Brook, T of New Berlin, Transmission Line Replacement	219
Front Street, Replace 124 psi Gas Main, Binghamton	186
Holly Business Park Reinforcement	168
Royalton Pipeline Launcher Receiver	150
Rushville Heater	115
Border City Heater - Geneva	105
All Other	(34)
Total	**6,401**

Schedule D-2
Other projects

RG&E ($000)

Project Title	2012 Actuals
Washington St, Extend Gas Mains & Rpl Reg Stations	584
Minor Government Jobs, Replace Gas Mains	546
Southwest 60 System Improvements, Install Pipe & Regulator Station	429
Distribution Main Replacement, Replace Gas Mains	329
SmarTRAC Replacement	310
Jane and Kirk Rds, Replace Gas Mains	287
E River Rd @ Kendirck Rd, I-390 (PH 1) Gas main Rel - HGWY	202
Lincoln Rd S East Roch, Reloc Gas Mains	180
Portland Ave Gas Main Rel HGWY	178
Rochester System RTU Replacement Program	176
Gas Regulators	131
All Other	257
Total	**3,607**

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

STATUS OF THE AUBURN TRANSMISSION PROJECT

NYSEG plans to file 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 March 2013, after completing consultations with National Grid.

Taking into consideration Article VII results, NYSEG estimates that detailed engineering for the Project could begin in March 2014.

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 March 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 in-service date of August 31, 2016.

NYSEG continues to work with DPS Staff, NYISO Planning, and National Grid to analyze and review long-term transmission options and non-transmission alternatives ("NTA") 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 and/or NTA associated with the Cayuga Generation Mothball issue may increase the cost and scope of the initial Article VII application.