



April 1, 2013

VIA ELECTRONIC FILING

Honorable Jeffrey C. Cohen
Acting Secretary of the Commission
New York State Public Service Commission
Three Empire State Plaza
Albany, NY 12223-1350

Re: Case 07-M-0906 – New York State Electric & Gas Corporation and Rochester Gas and Electric Corporation – Five Year Capital Expenditure Forecasts

Dear Acting Secretary Cohen:

Pursuant to Appendix 2, Paragraph 2(d) of the New York State Public Service Commission's Order Authorizing Acquisition Subject to Conditions in Case 07-M-0906, New York State Electric & Gas Corporation ("NYSEG") and Rochester Gas and Electric Corporation ("RG&E") (together the "Companies") hereby file a Five Year Capital Investment Plan ("Plan") that contains respective five-year forecasts of their planned electric system and gas systems¹. This Plan document presents a comprehensive capital investment plan for the electric transmission, distribution and generation and the gas transmission and distribution businesses of NYSEG and RG&E for the period 2012 through 2016. This Plan positions NYSEG and RG&E to continue to provide safe and reliable service to customers.

Because the attached report provides an assessment of the Companies' transmission and distribution system, including certain contingency situations, the Companies are concurrently submitting a request to the Record Access Officer of the State of New York Department of Public Service for trade secret protection for redacted data pursuant to 16 NYCRR XX 6-1.3.

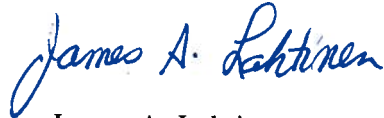
¹ The variance information requirement noted in Appendix 2, Paragraph 2(d) was fulfilled with the Companies March 1, 2012 filing in Cases 09-E-0715, 09-G-0716, 09-E-0717, 09-G-0718.

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The Companies welcome the opportunity for dialogue with Staff on the contents of this Plan.
If you have any questions concerning this filing, please contact Jeffrey McKinney at (607) 762-7469.

Respectfully submitted,



James A. Lahtinen

Enclosure

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NYSEG and RG&E Capital Investment Plan 2013-2017



**IBERDROLA
USA**

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EXECUTIVE SUMMARY

This document presents a comprehensive Capital Investment Plan for the electric transmission, distribution, generation, and gas businesses of Iberdrola USA's New York operating companies, New York State Electric & Gas ("NYSEG") and Rochester Gas and Electric ("RG&E"), for the period 2013 through 2017 (the "Plan"). This Plan positions NYSEG and RG&E (the "Companies") to continue to provide safe and reliable service to customers. This Plan is consistent with the vision expressed in the Code of Ethics of Iberdrola and its group of companies and the mission of Iberdrola USA, as adopted by NYSEG and RG&E, both shown below:

Iberdrola Code of Ethics:

"We aspire to be the preferred global energy company because of our commitment to the creation of value, quality of life, the safety of people and of supply, the protection of the environment and customer focus."

Iberdrola USA Mission:

"Iberdrola USA is a team of dedicated individuals working as one to deliver value to our customers, employees and shareholders. By providing outstanding customer service and exceptional reliability, while holding safety and the environment in high regard, we aspire to be a world-class energy company."

This Plan is a step towards meeting the Iberdrola USA mission. To that end, the Companies propose investing \$2.1 billion in the electric delivery system and generation projects and \$0.5 billion in the gas delivery system over the five year period.

The projects and programs proposed in this Plan are what the Companies have determined today is needed to deliver safe and reliable service to customers. The Companies continually reevaluate and reprioritize projects and system needs due to the continually changing environment in which the Companies operate. More specifically, IUSA is in the process of studying options for hardening the system for storms, as well as developing a Long Term Strategic Plan that will include its long term strategy for modernizing the network. IUSA will

share this work with the NYPSC later in 2013. As a result of these ongoing efforts, combined with the new FERC Bulk Electric System (BES) Brightline Order and the large projects progressing through the regulatory review process, major increases and shifts are expected to be made to the projections set forth in this Plan.

Many electric projects reduce the risk of service outages in the event of contingency situations. The gas projects continue to include replacement of leak prone mains and services. In addition, there are several projects that continue the process of bringing the electric and gas delivery systems up to current day standards by modernizing equipment, employing software and IT platforms and expanding automation of the network.

The Plan is for a five year period and contains projects that will help achieve the following strategic objectives of NYSEG and RG&E:

- Meet the electrical and natural gas needs of our customers
- Achieve service reliability and quality targets
- Optimize replacement of obsolete equipment and facilities
- Improve system effectiveness and efficiency
- Sustain the environment
- Improve safety

This Capital Investment Plan will remain flexible to meet the needs of our customers, regulators, and other stakeholders.

1 INTRODUCTION

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This Plan contains projects and programs needed for the Companies to deliver safe and reliable service to customers. Included in this Plan are so-called Appendix L projects, with updated costs and schedules, and additional projects and programs that work toward the accomplishment of the strategic objectives. IUSA is in the process of studying options for hardening the system for storms, as well as developing a Long Term Strategic Plan that will include its long term strategy for modernizing the system. IUSA will share this work with the NYPSC later in 2013. As a result of these ongoing efforts, combined with the new FERC Bulk Electric System (BES) Brightline Order and the large projects progressing through the regulatory review process, major increases and shifts are expected to be made to the projections set forth in this Plan. Reassessing needs and reprioritizing to ensure that investments achieve the strategic objectives, cost effectively for customers, continues to be an ongoing process.

Table 1.1 Capital Investment Plan by Year (\$000)

Company	2013	2014	2015	2016	2017	TOTAL
NYSEG Electric	148,864	212,485	204,000	199,010	299,312	1,063,671
NERC Alert Project	5,831	1,991				7,822
RG&E Electric	153,326	242,141	189,965	187,457	239,000	1,011,889
Subtotal-Electric	308,021	456,617	393,965	386,467	538,312	2,083,382
Appendix L- Electric	318,407					
NERC Alert Project	5,831	1,991				
NYSEG Gas	43,062	42,947	53,086	57,989	71,304	268,388
RG&E- Gas	32,117	35,990	47,229	54,042	58,665	228,043
Subtotal- Gas	75,178	78,938	100,316	112,031	129,968	496,431
Appendix L- Gas	78,499					
TOTAL	383,199	535,555	494,281	498,498	668,280	2,579,813

The investment amount for 2013 has been approved by the Iberdrola USA Board of Directors. Over the five year period, NYSEG expects to invest approximately \$243 per customer per year in its electric system and \$206 per customer per year in its gas delivery system, while RG&E expects to invest approximately \$550 per customer per year in its electric system and \$150 per customer per year in its gas delivery system.

As previously mentioned, this Plan is driven by the Appendix L projects and programs for 2013, which for the electric system is based in large part on the 2009 NYSEG and RG&E Local

Transmission Owner Planning Process and Results that covered the bulk power and local transmission systems of NYSEG and RG&E, as well as the 11 kV network facilities in the City of Rochester. The plan is also driven by ongoing review and assessment of the electric and gas delivery systems and a determination of priority projects and programs. For periods after 2013, the amounts reflect projected capital investment needs at this time and will be adjusted appropriately based on continued review and assessment

The NERC Alert Project and the FERC Bright Line Bulk Electric System upgrades are regulatory requirements that require funding in excess of Appendix L amounts. Only a portion of the FERC Brightline Bulk Electric System upgrades are included in Table 1.1 because scopes have not been sufficiently developed and costs are not available at this time.

The Companies continue to evaluate the lessons learned from major storms and specifically from Super Storm Sandy. In concert with recommendations that may result from the Moreland Commission, the Companies will work with regulators and stakeholders regarding system hardening programs. The Companies have preliminarily identified projects totaling over \$581 million over the next five years for system hardening, of which \$534 million is for Brewster and Liberty divisions and \$47 million is for substation flooding mitigation in other areas:

(\$M)

Category	2013	2014	2015	2016	2017	TOTAL
Distribution Automation and Circuit Hardening	6.7	34.8	31.8	32.3	19.6	125.0
Transmission & Sub-Transmission & Substation Hardening	3.3	47.0	89.5	102.7	109.5	352.0
Other system hardening	-	3.0	10.0	31.0	60.0	104.0
TOTAL	10.0	84.8	131.3	166.0	189.1	581.0

Chapter 2 describes the **STRATEGIC OBJECTIVES OF THE PLAN** which are to meet the electric and gas needs of our customers, to achieve reliability and service quality targets, to replace obsolete and end of life equipment and facilities, to improve the effectiveness and efficiency of the electric and gas systems through modernization, to sustain the environment, and to have a safe system.

Chapter 3 of the Plan presents the electric and gas **TRANSMISSION AND DISTRIBUTION SYSTEMS AND HYDRO GENERATION FACILITIES**. It contains information about the Companies' infrastructure.

Chapter 4 presents the **ELECTRIC CAPITAL INVESTMENT PLAN** – the projects and programs necessary to achieve the strategic objectives. There are a number of significant projects that the Companies have undertaken or will undertake during the Plan term. These projects are high priority projects that result from a prioritization approach that considers the number of customers, load, and hours of exposure as metrics. In addition, the Companies plan to invest in modernization of its delivery systems and in network automation, in order to operate more effectively and efficiently, provide added benefits to customers and promote the safe operation of the network. The modernization investments include:

- New standards in equipment and substation schemes.
- Improvements in network infrastructure to reduce the exposure of outages, in the event of failures in transformers at substations and circuits, (N-1).
- Replacement of obsolete and end of life equipment in substations and poor condition poles, wires, and other line devices.

Chapter 5 presents the **GAS CAPITAL INVESTMENT PLAN** – the projects and programs necessary to achieve the strategic objectives. There are a number of significant projects that the Companies have undertaken or will undertake during the Plan term. The Companies key gas business strategies are:

- Safely operate the delivery system
- Achieve all New York Public Service Commission gas service quality performance measures
- Minimize leaks through corrosion control, leak repair, and replacement of leak prone mains and services, including an enhanced replacement effort
- Provide innovative, cost-effective, and timely planning, engineering and design services that meet or exceed customer expectations

1.1 OPPORTUNITIES AND CHALLENGES

The Companies face the following opportunities and challenges as they implement this Plan:

1. Enhanced asset management capabilities: The Companies continue to develop enhanced competencies in asset management including recommendations made in the Companies' Management Audit. Improvements are being made to both the way in which the Companies determine asset replacements and the methods used to optimize the portfolio of projects and programs. A capital investment prioritization strategy has been completed and implemented with this Plan. As this Plan proceeds, the Companies will reassess needs and reprioritize projects using these improved asset management approaches.
2. In 2011 the Companies reorganized its engineering function into two groups: Asset Management and Planning and Engineering and Project Delivery. This reorganization has improved the planning and delivery of capital investment projects and programs. Asset Management and Planning continues to be responsible for developing the capital investment plan, recommendations for replacing assets near end of life based upon the new asset management competencies described above, and the asset maintenance programs. The Companies are continually improving the capital investment planning approach and processes. One such way is through participating in a global asset management effort to determine best practices in the Iberdrola family.

Engineering and Project Delivery continues to be responsible for the project management, engineering, and effective delivery of all of the larger capital investment projects. The groups have developed enhanced project and program tracking processes that enable more effective prioritization of projects and are developing a more structured Project Management Office that provides a more consistent approach to the management of capital investment projects. The Companies continue to use owners' engineer project management services to help execute this Plan.
3. The Companies have undertaken a focused review of the worst performing distribution circuits. These circuits were reviewed for betterments and opportunities to better isolate faults in order to lessen the number of customers out during an outage event. The Companies expect to continue this process and undertake priority betterments during the term of this Plan as a result of this focused review.
4. FERC Brightline: Under FERC's Order No. 773, issued December 20, 2012, there is a change in the definition of Bulk Electric System. The Companies need to meet more stringent reliability criteria, thus requiring mitigation and upgrades in facilities, particularly 115 kV facilities, not currently considered part of the Bulk Electric System. The projects for such upgrades, which scopes will be developed, are not included in this Plan.

5. NERC Clearances: Under the NERC Alert Project, NYSEG must determine that all bulk power system transmission lines meet clearances. Areas found to have substandard clearances will be corrected. This is expected to be completed in 2013.
6. Technological advancements: The Companies are making technological changes and innovations, including standardization, modernization and automation of the Companies facilities.
 - Standardization of design and equipment will result in:
 - Cost reduction in project design and construction. For instance, the implementation of the IEC 61850 protocol in new substations and substation renovations will lessen the hours needed for wiring the protection systems of the equipment.
 - Use of advanced technology, quality, and standardized equipment will improve service quality and reduce the need for spares. For example, new breakers, with SF6 as insulating medium will require less maintenance than that needed for conventional oil-filled breakers.
 - As a result, the number of hours to construct green field substations potentially can be reduced by up to 14%. The number of hours to construct brown field substations potentially can be reduced by up to 6%.
 - Improvements to system control: The Companies have included system control, and substation and other system automation projects to provide operational benefits by bringing the Companies' electric system up to modern day standards. These include:
 - A new Energy Control Center at NYSEG and RG&E. Each one will backup the other and the new Energy Control Center will address expected additional NERC and FERC requirements.
 - New and increased numbers of remote terminal units (RTUs).
 - Increasing telecommunications capability for remote control of devices on the system, particularly the distribution system.

The system automation will be compatible with the future implementation of a smart grid.

 - All the new substations, or renovations in substations, will be done according to the new standards. These standards include voltage monitoring, measures of power quality and oil containment.

7. Rochester 11kV system: Today the 11 kV system in Downtown Rochester is operated as a transmission system. With current technology, it is possible to operate the system as a distribution system with the same reliability. We plan to install new digital relays, integrated system controls and new software applications that will enable RG&E to operate the network more efficiently. An assessment of the system is being done to evaluate the different possibilities.
8. The Companies are putting in place new framework agreements with different Iberdrola-wide manufacturers. With these multi-year agreements, the Companies expect to improve the cost of purchasing equipment.
9. Generator Retirement: The Companies continue to address the numerous reliability concerns associated with past and current generation retirement and mothball notices. Cooperation continues with the NYISO and other neighboring utilities in studying and determining the most efficient and effective reinforcements needed to address the generation reductions.

1.2 SUMMARIES

This section contains various summaries of the Capital Investment Plan. In addition, a detailed list of projects and programs is included in Attachment 1. Attachment 2 contains a reconciliation of electric Appendix L Projects and Programs contained in this Plan to those contained in Appendix L to the Rate Order.

The following table and chart provide a summary of the Plan by Type of Investment for the period 2013-2017.

Table 1.2 Summary of Capital Investment Plan by Type of Investment 2013-2017

(\$000)

Company	Transmission	Distribution	Gas	Generation	Common	TOTAL
NYSEG	335,730	578,544	232,947	23,084	169,576	1,339,881
RG&E	556,607	354,033	197,625	44,758	86,909	1,239,932
TOTAL	892,337	932,577	430,572	67,842	256,485	2,579,813

Below is a chart depicting the above categorization.

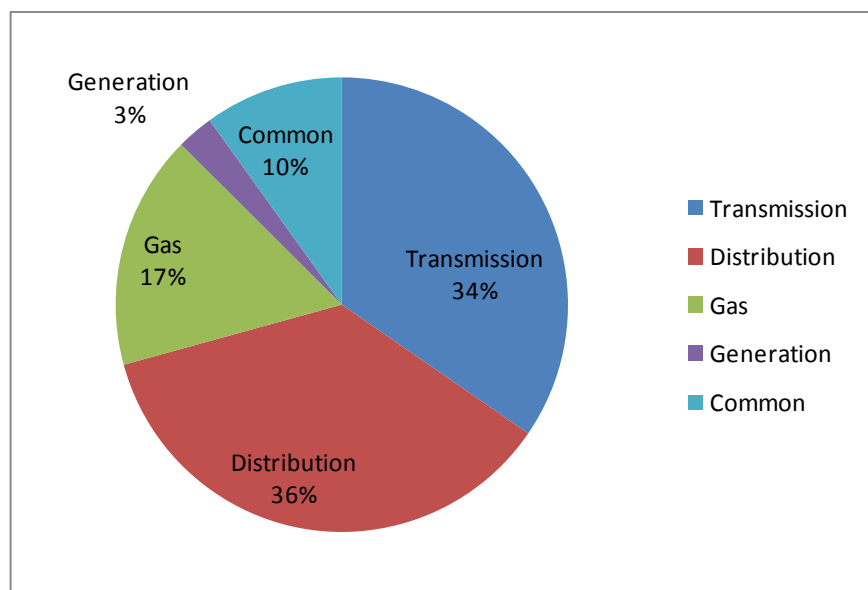


Figure 1.1 Summary of Capital Investment Plan by Type of Investment 2013-2017

1.2.1 Electric Summary

This section contains various summaries of the electric portion of the Capital Investment Plan. Transmission projects are indicated with a “T” and distribution projects with a “D.”

Table 1.3 Summary of Electric Capital Investment Plan by Category (dollars in 000s)

NY Electric	2013	2014	2015	2016	2017	TOTAL
Network Reinforcement - T	83,820	204,829	123,495	110,763	116,081	638,987
Network Reinforcement - D	10,564	20,166	27,488	27,004	51,893	137,115
Total Network Reinforcement - Category 1	94,383	224,995	150,983	137,766	167,974	776,102
Customer & Statutory - T	21,193	33,967	6,904	3,279	3,250	68,594
Customer & Statutory -D	54,167	51,919	51,556	51,675	57,013	266,330
Total Customer & Statutory - Category 2	75,361	85,886	58,460	54,954	60,263	334,924
Modernization & Renovation -T	14,069	15,497	18,539	20,256	59,997	128,358
Modernization & Renovation -D	71,942	66,395	75,608	79,307	103,509	396,762
Total Modernization & Renovation - Category 3	86,011	81,892	94,147	99,563	163,507	525,119
Automation - T	7,157	8,837	9,773	13,625	17,007	56,399
Automation -D	11,133	15,226	25,038	27,591	53,383	132,371
Automation - Category 4	18,290	24,063	34,812	41,216	70,390	188,770
Generation - Category 5	6,882	5,386	16,324	18,050	21,200	67,842
Common - Category 6	27,094	34,395	39,240	34,918	54,978	190,625
TOTAL	308,021	456,617	393,965	386,467	538,312	2,083,382

Below is a chart depicting the above categorization.

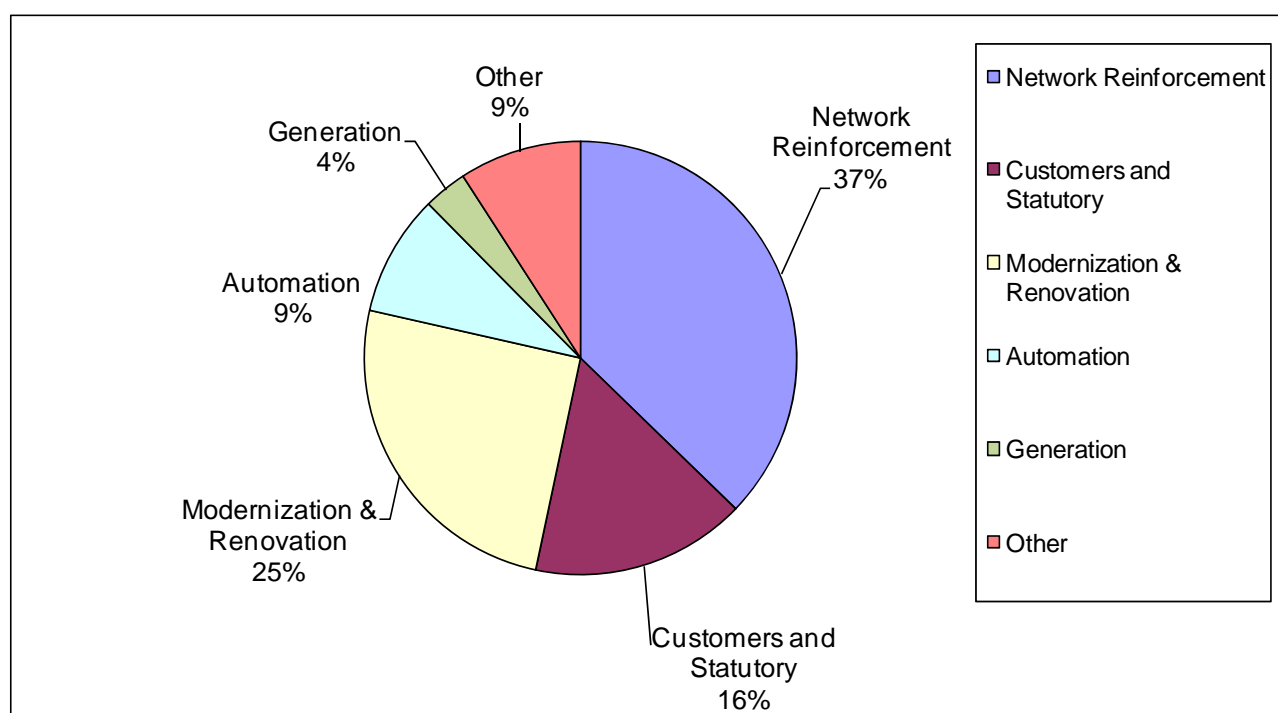


Figure 1.2 Summary of Electric Capital Investment by Category

The following assets will be added to the electric network over the 2013 through 2017 period:

Table 1.4 Major Electric Projects: New Facilities, Capacity and Miles Installed

	TOTAL	2013	2014	2015	2016	2017
<i>New Substations #</i>	9	1	3	3	1	1
<i>MVA</i>	1131	40	170	907	14	
<i>Upgrade/Extend Substations #</i>	6		6	3		
<i>MVA</i>	467		467			
<i>New Transformers #</i>	49	13	20	10	5	1
<i>MVA</i>	5686.3	1,539	1,629.8	1602.5	635	280
<i>Transmission Lines</i>	17	3	6	5	1	1
<i>miles</i>	104.5	18.8	29.7	32	14	10
<i>Capacitor Banks #</i>	58	29	4	10	7	8
<i>MVAr</i>	906.8	626.8	31	159	40	50
<i>Breakers</i>	269	44	142	76	2	5

The following table and chart provide a summary of the Electric Capital Investment Plan by investment reason for the period 2013-2017.

Table 1.5 Summary of the Electric Capital Investment Plan by Investment Reason 2013-2017

	\$000	%
Power Quality	95,509	5%
System Capacity	680,593	33%
Growth	217,186	10%
Statutory	117,737	6%
Asset Condition	512,262	25%
Damage	12,858	1%
Automation	188,770	9%
Generation	67,842	3%
Other	190,625	9%
TOTAL	2,083,382	100%

Below is a chart depicting the above categorization.

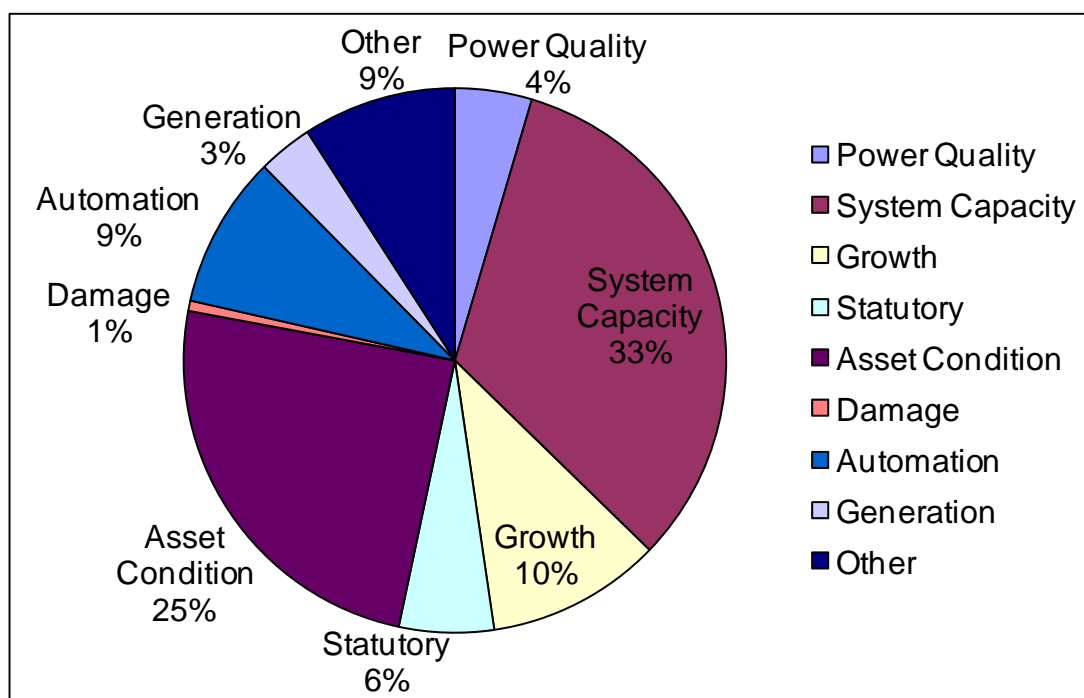


Figure 1.3 Summary of Electric Capital Investment by Investment Reason 2013-2017

1.2.2 Gas Summary

This section contains various summaries of the natural gas portion of the Capital Investment Plan. In addition, a detailed list of projects and programs is included in Attachment 1.

Table 1.6 Summary of Gas Capital Investment Plan by Category

NY - Gas	2013	2014	2015	2016	2017	TOTAL
Network Reinforcement - Category 1	10,644	8,105	17,084	12,226	20,556	68,615
Customer & Statutory - Category 2	42,276	47,680	55,441	65,122	66,157	276,676
Modernization & Renovation - Category 3	12,563	9,276	11,729	21,123	24,099	78,791
Automation - Category 4	250	1,770	1,940	1,265	1,265	6,490
Common - Category 6	9,446	12,106	14,121	12,294	17,892	65,860
TOTAL	75,178	78,938	100,316	112,031	129,968	496,431

Below is a chart depicting the above categorization.

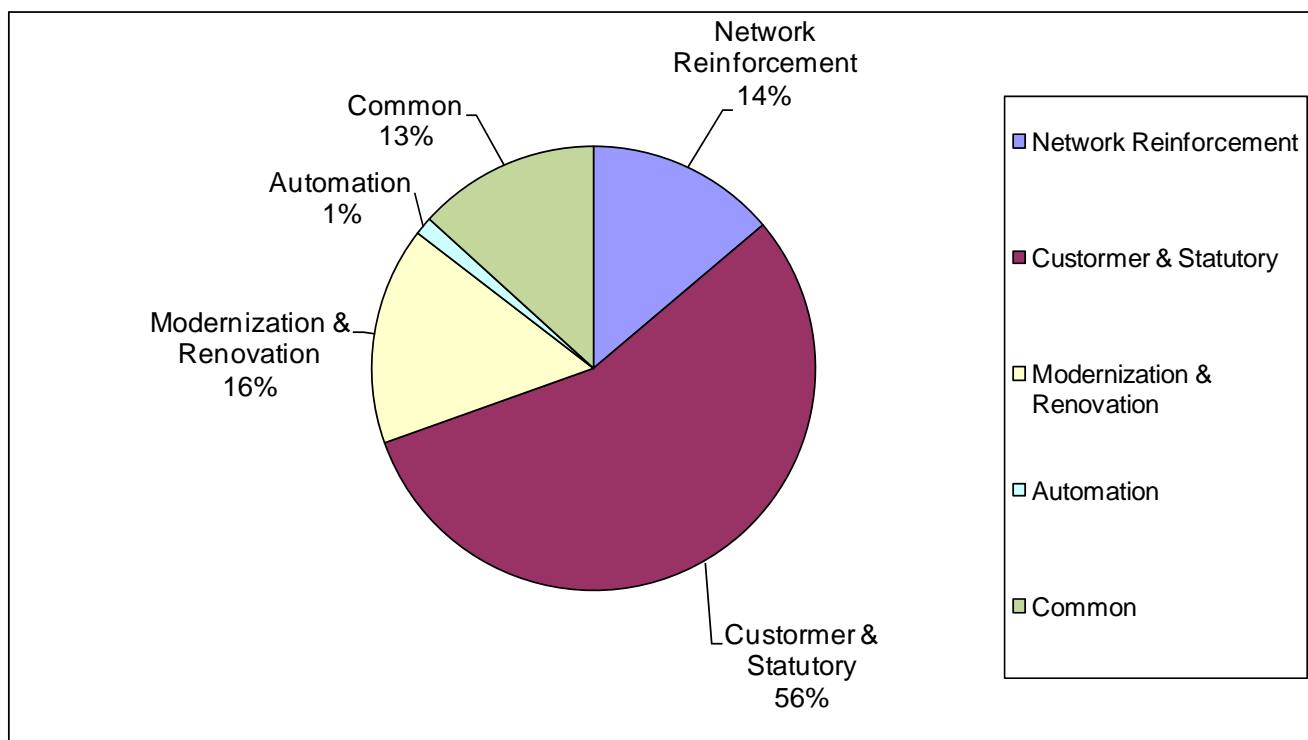


Figure 1.4 Summary of Gas Capital Investment by Category

The following table and chart provides a summary of the Gas Plan by investment reason for the period 2013-2017.

Table 1.7 Summary of the Gas Capital Investment Plan by Investment Reason 2013-2017

	\$000	%
System Capacity	68,615	14%
Growth	6,696	1%
Statutory	269,980	54%
Asset Condition	78,790	16%
Automation	6,490	1%
Other	65,860	13%
TOTAL	496,431	100%

Below is a chart depicting the above categorization.

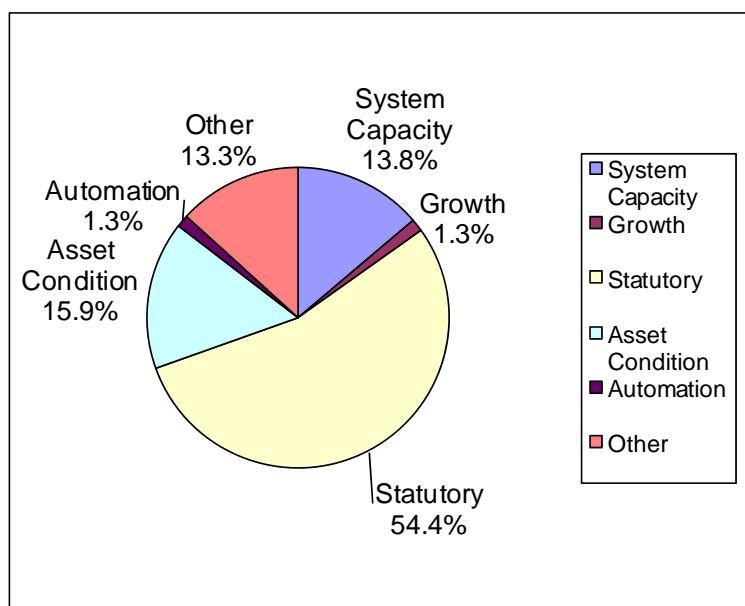


Figure 1.5 Summary of Gas Capital Investment by Investment Reason 2013-2017

2 STRATEGIC OBJECTIVES OF THE PLAN

The Companies will deliver this Capital Investment Plan effectively and efficiently, while accomplishing the following strategic objectives:

Objective 1: Meet the electrical and natural gas needs of our customers

The Companies have an obligation to meet the energy needs of customers. The rate of growth in electrical usage and natural gas usage has decreased from that experienced during more robust economic times. The Companies continue to experience increases in the number of customers, and the Companies expect usage per electric customer to increase by 0.5% to 1.0% per year and usage per gas customer to remain at current levels.

The Companies typically provide electric service to approximately 4,000 new electric customers and 2,500 new natural gas customers, annually. The Companies also need to provide reliable and dependable service to larger commercial and industrial customers, often requiring the upgrading of facilities, the costs of which in certain cases may be all, or partially, offset by contributions from customers pursuant to the Companies line extension policies. The Companies must interconnect large and small generation projects to its transmission and distribution system. In addition, NYSEG plans to add an additional natural gas pipeline in order to mitigate commodity costs for customers.

Objective 2: Achieve service reliability and quality targets

The Plan achieves this strategic objective by the following actions:

- Reduce problems of overloads in lines and transformers under normal operating conditions at peak demand;
- Reduce problems under contingency situations (N-1) and (N-1-1); and
- Enhance operation and restoration of the system through replacement and modernization of end of life equipment.

Objective 3: Replace obsolete equipment and facilities - modernization

During the period 2013-2017, the Companies propose to undertake continued plans to replace near end-of-life equipment and facilities. The Companies are enhancing asset management competencies and include the following criteria to determine the facilities to be replaced:

- Equipment and facilities with high failure rates;
- Technological obsolescence (inability to obtain spare parts);
- Facilities that are in poor condition, and maintenance of such equipment is no longer cost effective;
- Equipment with high maintenance costs;
- An assessment of risk of failure on safety, reliability, and the environment and
- Other indicators of asset health.

The Companies inspect equipment and facilities and will replace any equipment and facilities that have reached their end of life. The Companies expect such replacements may well increase as the Companies continue their enhanced distribution inspection program whereby 20% of all distribution line facilities will be inspected annually, and equipment replaced according to priority. The enhanced asset management competencies are improving the prioritization of assets needing replacement by assessing asset health and including an assessment of the risks related to the assets. The asset health is based upon both condition assessments done during physical inspections and from equipment operation information. The Companies have in place a transmission line wood pole inspection and treatment program that extends the life of wooden poles. The Companies also inspect their transmission circuits by helicopter; as such visuals show crossarm, insulator and other wear that is not visible from the ground. The Companies continue more rigorous analyses of failed equipment to aid improving maintenance practices and asset replacement practices.

The Companies have a zero accident culture. Accordingly, the Companies make improvements in their facilities to enhance safety for their employees and the general public.

Objective 4: Improve effectiveness and efficiency of the network

The Companies continually look for ways to make operations more effective and efficient. One of those ways is through network automation. The Companies plan to modernize the operations of their systems, which will enhance the effectiveness with which we serve customers, enhance reliability, and help the Companies to become more efficient.

Automation is used to control the substation switches, breakers, transformers, and other equipment of the electric system, providing real time information to the Energy Control Center regarding voltages, loads, oil temperature of transformers, on or off positions of breakers and sectionalizers, and alarms when there is a failure in the system.

The main advantage from automation for customers is the Companies' faster response to outages, thus reducing the length of outages resulting from problems in distribution circuits. The crews restoring service can receive notification of an outage sooner than with the current system of notification (receiving a call from a customer notifying us of the outage). Adding reclosers on distribution lines likely will reduce the number of customers out of service during an outage and will facilitate information about the location of the damage in the lines. The remote control of breakers will also increase the efficiency of the crews by reducing their travel time.

Investments in automation will be compatible with technologies required for the development of a smart grid.

Investments in automation in the Plan include:

1. NYSEG and RG&E Energy Control Center Project. The design and installation of a fully integrated EMS/SCADA/DMS/OMS system that replaces the existing EMS/SCADA systems and current "Smartmap" Outage Management System.

The Energy Control Center Project will resolve the following issues and will result in the following benefits:

- One integrated control center platform for NYSEG and RG&E
 - Improve efficiency with a single system that is deployed across all of the Companies' systems.
 - An integrated Energy Management System, SCADA, distribution management system, and outage management system
 - Deployment across 100% of the transmission and distribution network.
- The integration of the EMS/SCADA system with the OMS provides real time transmission, substation, and distribution situational awareness for dispatchers and operators:
 - Improves the identification of interrupted equipment/circuits
 - Decreases outage restoration times
 - Improves accuracy of outage analysis engine
 - Increases general public and utility crew safety
- New infrastructure that facilitates increased automation on the transmission and distribution system while providing a robust foundation for additional automation of the system.
 - Supports substation and distribution automation:
 - Capability to monitor many more data points
 - Simplifies new RTU additions
 - Growing penetration of distributed generation, requiring better coordination of distribution-transmission to manage distributed generation upstream power flows.
 - Stronger demand-side participation and electric vehicles potentially gaining popularity.
 - Outage management based on a variety of integrated inputs, including customer calls, SCADA and other devices.
 - Enterprise Geographic Information System (GIS) Integration:
 - Provide customers a web-based customer information portal providing full interactive services for outage management information.
 - Customer data available to operators and dispatchers
 - Decrease data entry errors and database reconciliation delays
 - Safe operation and maintenance of the bulk power and sub-transmission systems in full compliance with all FERC/NERC/NPCC /ISO and State regulations.
 - Accommodates FERC's Bright Line ruling

All these systems will be combined and integrated into one Energy Control Center system. This project will replace the current system at NYSEG and upgrade the current Siemens

system at RG&E to the Siemens Spectrum system. Each new Energy Control Center system will be the backup for the other.

Energy Control Center systems need regular updates and improvements to remain compliant with NERC Critical Infrastructure Protection Standards (CIPS). The Companies currently have two energy control center systems with two unique SCADA systems. With the increase in distributed generation, distribution automation, and distribution control, the Companies will be modifying these existing systems to incorporate integrated distribution management systems.

2. Modernization and automation of substations. The substation modernization program will prepare substations for automation through new standards of design and equipment. New controls with microprocessor based relays and with high speed connections to the Energy Control Center allow for immediate indication of system disturbances and outages, reducing outage detection time by up to 30 minutes, and maintenance cycles for some equipment may be extended. In addition to the reduced outage duration time, the microprocessor based relaying will have remote connection so that employees will have access to event reports and system data in a few minutes rather traveling to the station to investigate events. This may further reduce overall restoration time depending on the event that occurred. Microprocessor relays and new breakers also have faster fault clearing times, as little as one-half the time of existing equipment, which enhances the safety of the crews and public. The Companies are standardizing the design and equipment in substation that will ultimately result in reduced construction costs. As mentioned previously, the Companies are implementing the IEC 61850 protocol in new substations and substation renovations which will lessen the hours needed for wiring the protection systems of the equipment. The Companies are using advanced technology, quality and standardized equipment which will improve service quality and reduce the need for spares. For example, new breakers, with SF6 as insulating medium, will require less maintenance than that needed for conventional oil-filled breakers. As a result, the number of hours to construct brown field substations potentially can be reduced by up to 6%.

3. Remote Terminal Unit (RTU). Additional and upgraded RTU communication connectivity with substations and switching devices to resolve the following issues:

- Provides the ability to remotely monitor and control substation devices.
- Reduces outages and improves response time through increased real time situational awareness.
- Current radio RTUs have no additional capacity, are outdated and must be replaced to accommodate automation projects.

This project, together with the telecommunications infrastructure below, will provide the backbone to remotely operate sectional devices and reduce outage times. At RG&E additional smaller radio RTUs will be installed on switching equipment at customer substation locations so there will be better visibility of the stations' operations.

4. Telecommunications for remote control. The Companies plan to build or lease the telecommunications infrastructure necessary for the projects described in this section. This involves the strategic addition of fiber optic, microwave links and digital radio capability, depending on security and cost effectiveness. This will include erection of towers needed to communicate from remote locations to the Energy Control Center. The Companies will work with telecommunication providers to determine the least cost approaches to achieving the objectives. These communication links are vital to gain the benefits from automating the substations and distribution system as described in this section.

5. Reclosers. The Companies plan to add electronic reclosers to increase the ability to sectionalize more of the distribution system. These reclosers will reduce the number of customers out of service and facilitate the location of the fault in the lines.

6. Gas SCADA System. NYSEG's Gas SCADA System (GSS) monitors and controls the primary gate stations for the gas distribution systems for NYSEG and RG&E. The system is critical to safe and reliable gas operations and needs to be upgraded for the following reasons:

- The GSS is well beyond its expected eight year life and has been exhibiting an increased number of hardware failures. The last major upgrade was completed in 1999.
- The current server hardware, operating systems, software and security patches are unavailable because they are no longer manufactured or supported by the respective vendors.

Objective 5: Sustain the environment

The Companies comply with all environmental laws and regulations in carrying out its electric and gas delivery services.

NYSEG and RG&E will make decisions today to deliver positive long term results. Operating in an ethical manner and demonstrating a respect for the environment are pillars of the business.

The details described in the Plan support this statement. Reducing the amount of leak prone natural gas mains and services will reduce methane emissions, a known greenhouse gas. Replacing outdated and near end-of-life electrical equipment presents opportunities to recycle both the metal and oil while minimizing the use of landfills. New electrical equipment purchased will also be more energy efficient than present equipment and will also reduce the risk of an oil spill caused by equipment failure.

The tasks in this Plan will take into account environmentally sensitive areas, from the selection of new right-of-ways to the restoration of disturbed areas.

Finally, improvements to the hydro generation facilities will allow the Companies to continue to provide a source of clean, renewable, green electric energy to our customers.

Objective 6: Safety

Safety is the Companies' number one priority. The Companies place much emphasis on the safety of their employees and the public. The Companies operate a zero accident culture and will continue to make investments in order to assure the safe and reliable operation of the system.

No aspect of the Companies' operations is more important than accident prevention. Safety is a value that does not change. There is no job so important that established safety rules are ever compromised. Management strives to provide a hazard-free work environment, to comply with all applicable health and safety laws and regulations, and to educate employees, customers and the public about health and safety hazards associated with our operations. Further, management is committed to the recognition, assessment, and control of health and safety hazards related to our facilities and operations.

3 TRANSMISSION AND DISTRIBUTION SYSTEM AND HYDRO GENERATION FACILITIES

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New York State Electric and Gas Corporation is a combination electric and gas utility serving approximately 880,000 electric customers and 261,000 gas customers in an area of approximately 18,400 square-miles and a population of 2.2 million people in New York State.

Rochester Gas and Electric Corporation is a combination electric and gas utility serving approximately 369,000 electric customers and 305,000 gas customers within a 2,700 square-mile service territory with a population of approximately 1.0 million people in upstate New York.

3.1 ELECTRIC SYSTEM

Figure 3.1 on the next page is a map of the areas in which the Companies provide electric service in New York State.

NYSEG and RG&E provide electric delivery services to over 1.2 million customers in New York State. In 2012, the Companies delivered over 23.7 billion kWh of electricity to these customers. The highest peak demand experienced by the Companies was 5,117 MW which occurred in the summer of 2011. The most recent seasonal peaks were 3,145 MW in the summer and 2,842 MW in the winter for NYSEG, and 1,678 MW in the summer and 1,167 MW in the winter for RG&E. The growth in customer demand over the next five years is estimated to be slightly above 1% per year.

Table 3.1 provides information on the Electric Service Areas and Customers:

Table 3.1 Electric Service Areas and Customers

	area square miles	# cities (> 20,000 population)	# customers (000)	MWh 2012	MW peak load (2012)
NYSEG	18,359	6	880	15,933,697	3,142
RG&E	2,700	3	369	7,723,055	1,678
TOTAL	21,059	9	1,249	23,656,752	4,820

Electric Service Areas

NYSEG and RG&E

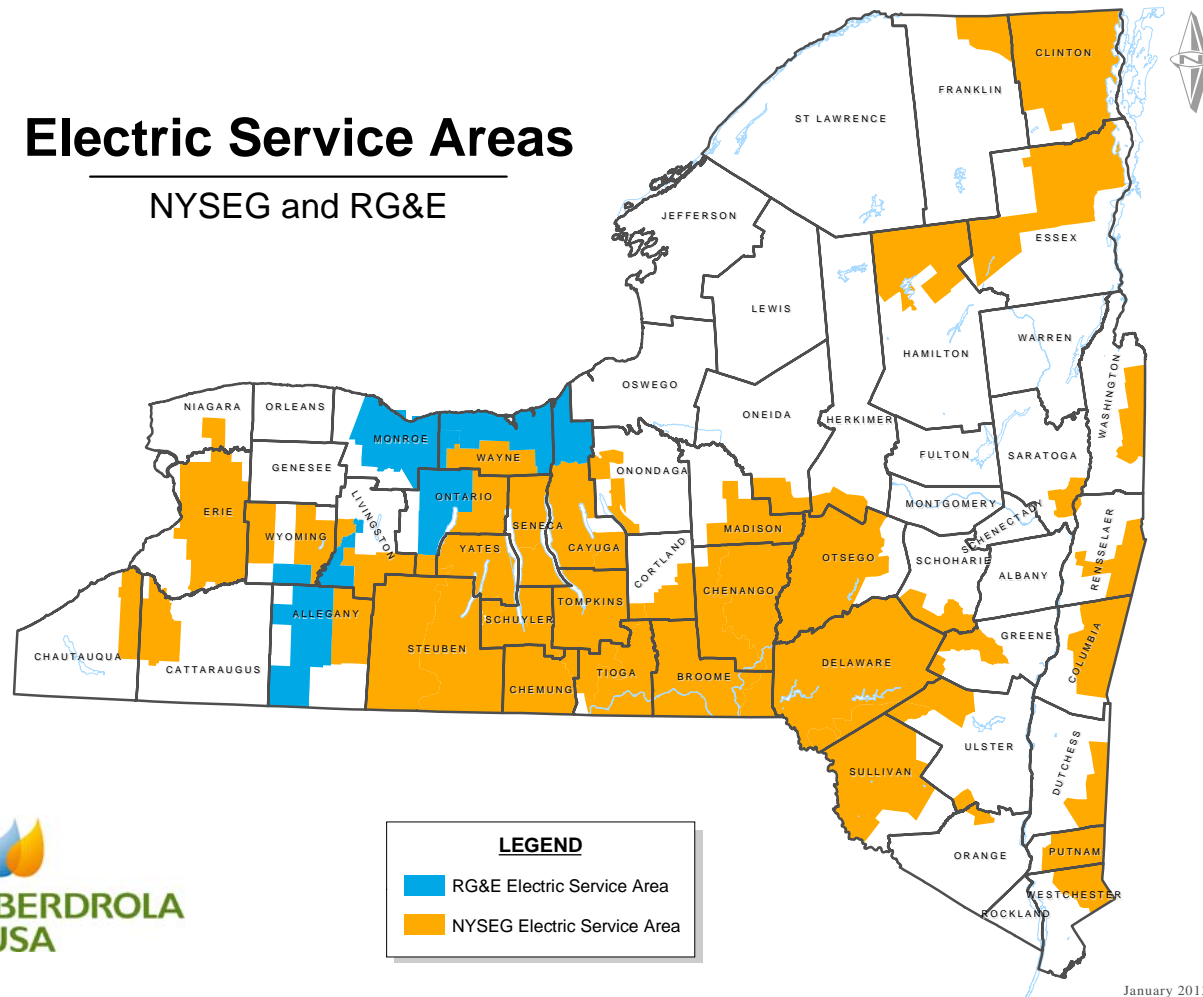


Figure 3.1 Electric Service Area

3.1.1 Electric System Infrastructure

The Companies electric system infrastructure is summarized below by system - transmission and distribution

Table 3.2 Transmission Infrastructure

	NYSEG	RG&E	TOTAL
Lines (circuit miles)	4,568	1,113	5,681
Substations #	117	33	150
Transformers #	395	61	456
MVA	12,688	4,854	17,542
Switching Stations	21	13	34
Breakers (T&D) #	2,265	1,748	4,013
Circuits #	417	135	552
RTU' s #	13	10	23

Table 3.3 Distribution Infrastructure

	NYSEG	RG&E	TOTAL
Lines (circuit miles)	34,403	8,703	43,106
Substations #	315	120	435
Transformers #	865	149	1,014
MVA	3,560	1,841	5,401
RTU' s #	181	240	421
Circuits #	1,409	573	1,982
Reclosers #	697	198	895
Line Transformers (#000)	312	81	393
Poles & General structures (#000)	845	228	1,073

NYSEG

The NYSEG electric system consists of 13 divisions that are supplied from 345 kV, 230 kV, and 115 kV transmission facilities with a total capability of approximately 11,000 MW. NYSEG owns and operates 65 MW of generation (63 MW of hydroelectric and a two MW diesel unit). The historical all-time peak load for NYSEG is 3,352 MW reached in the summer of 2011.

NYSEG is a member of the New York Independent System Operator (NYISO). Facilities designated in the NYISO-Transmission Owners Agreement filed and approved in FERC Docket No. ER97- 1523-000 are under the operational control of the NYISO, and NYISO provides transmission services on all NYSEG transmission facilities pursuant to the NYISO Open Access Transmission Tariff.

The reliability results for NYSEG since 2003 are included in Figure 3.2 below, as measured by the System Average Interruption Frequency Index (“SAIFI”) and Customer Average Interruption Duration Index (“CAIDI”).

RG&E

The Rochester electric system is supplied by three sources that provide a total transmission system capability of approximately 2,507 MW:

- Four bulk power transformers at Station 80, which connect to the NYPA-owned 345 kV bulk transmission system, providing approximately 1,221 MW.
- Three bulk power transformers at Station 122, which connect to the NYPA-owned 345 kV bulk transmission system, providing approximately 670 MW.
- Ginna Station, owned by Constellation Energy Nuclear Group, which can supply up to 610 MW, connects into several local RG&E 115 kV substations and directly into the 345 kV bulk transmission system at Station 122.

RG&E owns 155 MW of generation (98 MW of fossil fuel and 57 MW of hydroelectric). The fossil facilities include two combustion turbines (#2 CT – natural gas and #13 CT-fuel oil) located in Rochester, NY, each having nameplate capacity of 18 MW, and a combined-cycle

natural gas-fired facility located in Hume, NY rated at 62 MW. The fossil generating assets are being auctioned consistent with the Iberdrola merger order and the modified divestiture plan.

The historical all-time peak load for RG&E is 1,765 MW reached in the summer of 2011.

The above bulk transmission sources supply the 115 kV and 34.5kV sub-transmission system that, in turn, feed vast local distribution systems and the 11 kV network transmission system within the City of Rochester.

RG&E is a member of the NYISO. Facilities designated in the NYISO- Transmission Owners Agreement filed and approved in FERC Docket No. ER97-1523-000 are under the operational control of the NYISO, and the NYISO provides transmission services on all RG&E transmission facilities pursuant to the NYISO Open Access Transmission Tariff.

The reliability results for RG&E since 2003 are included in Figure 3.3 below, as measured by SAIFI and CAIDI.

NYSEG CAIDI & SAIFI - 10 Years
[2012 Goals - CAIDI 2.08, SAIFI 1.20]

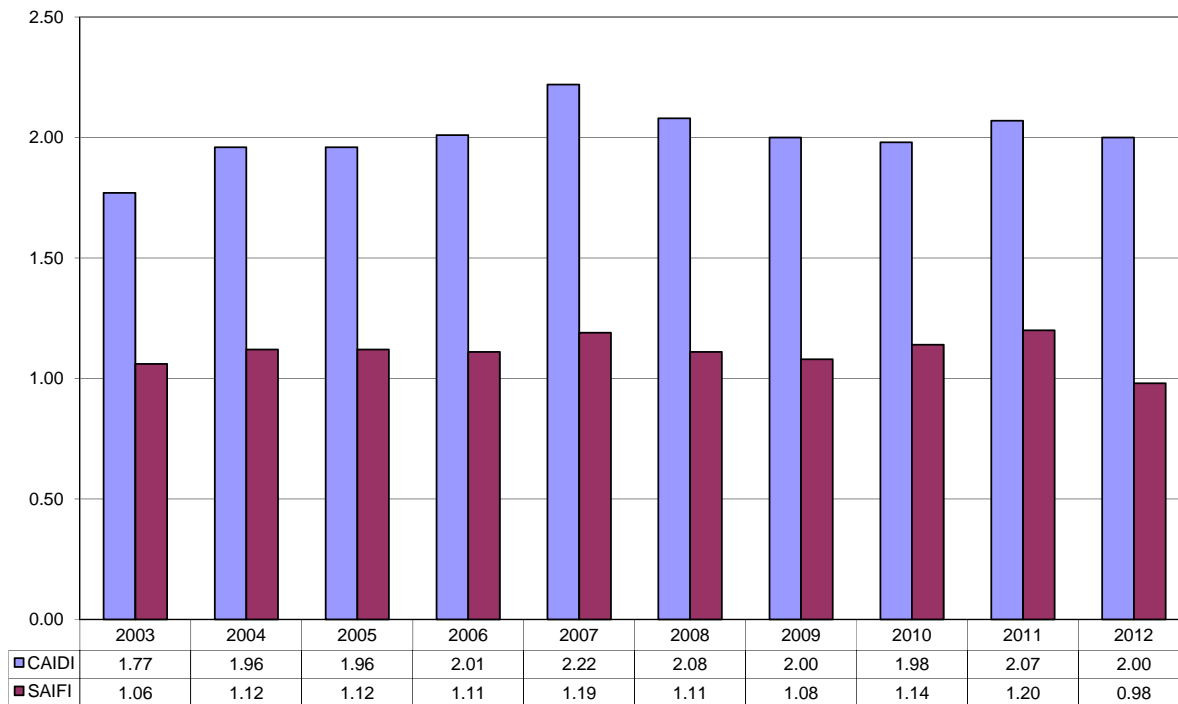


Figure 3.2 NYSEG Service Quality

RG&E CAIDI & SAIFI - 10 Years
[2012 Goals - CAIDI 1.90, SAIFI 0.90]

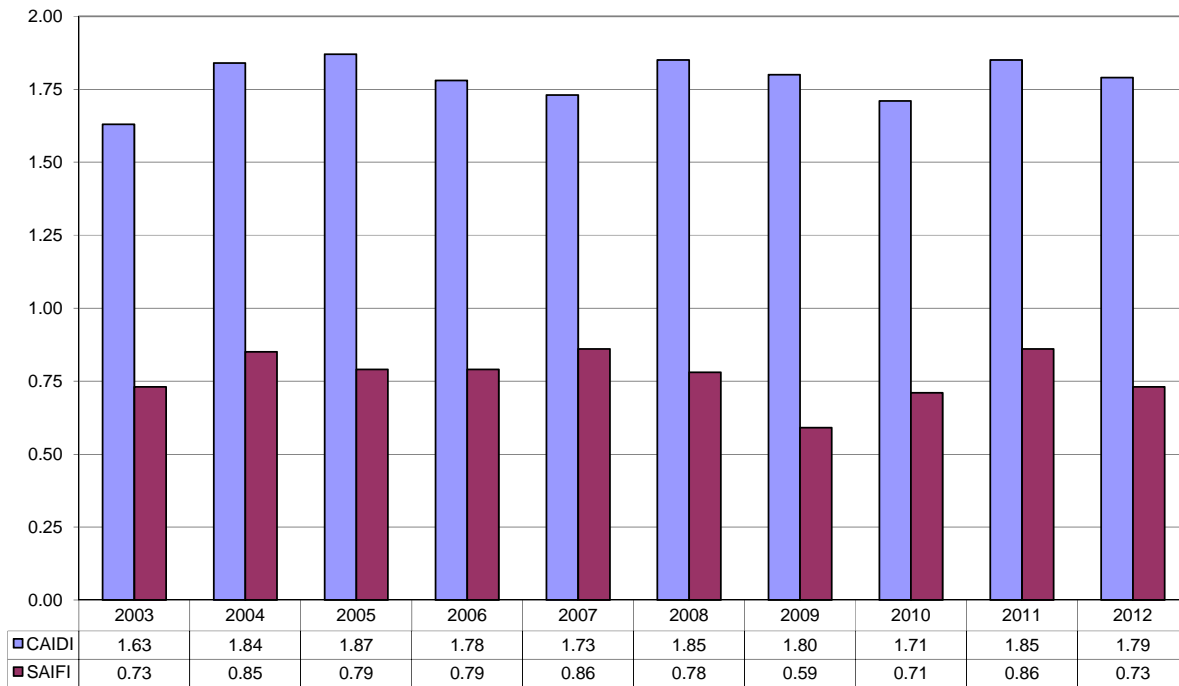


Figure 3.3 RG&E Service Quality

Maps of the Companies' transmission electric systems, showing lines and substations, are provided below in Figure 3.4 and Figure 3.5, with the Rochester City Area provided in Figure 3.6.

Electric Substations and Transmission Lines (34.5-69 kv)

NYSEG and RG&E

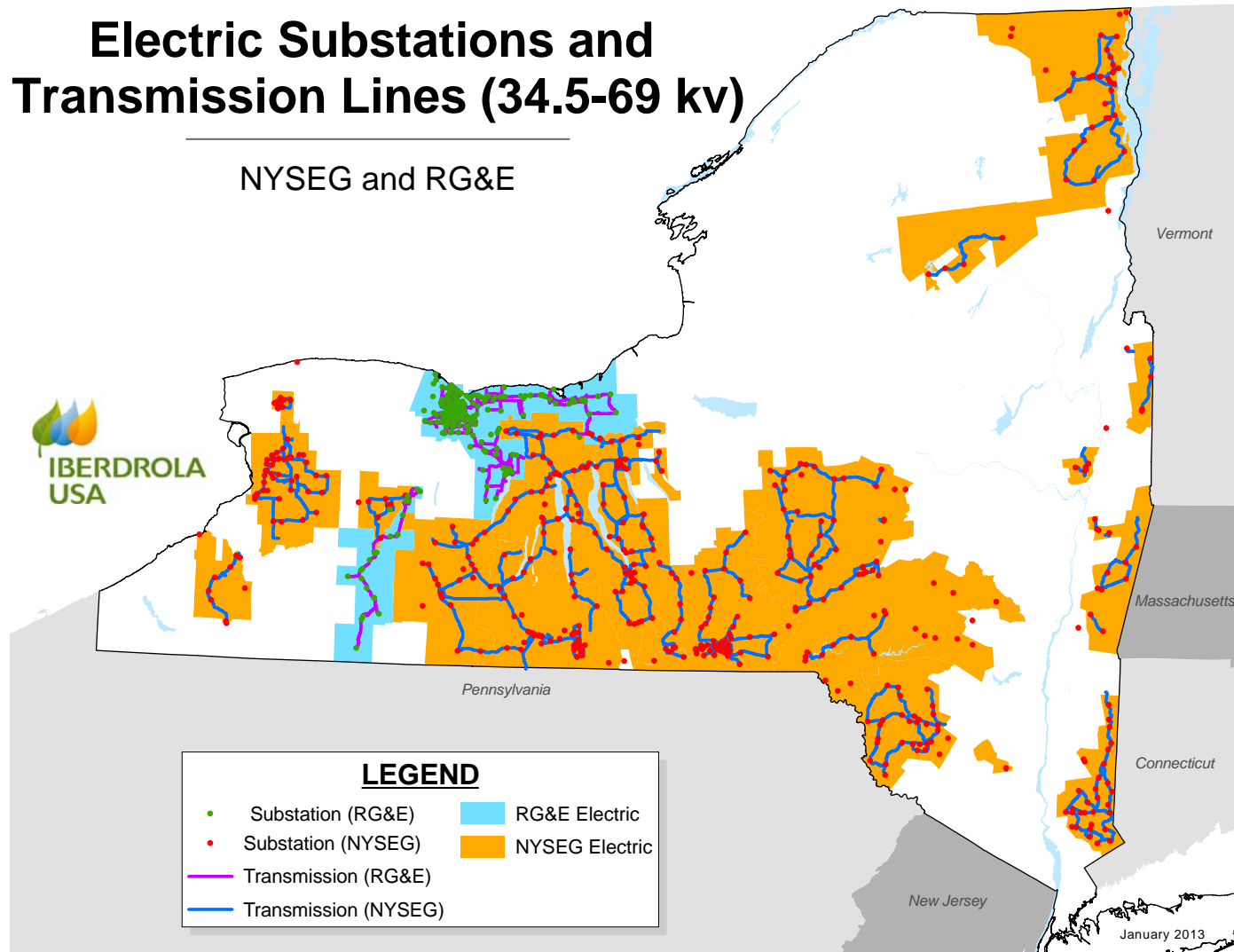


Figure 3.4 Electric Substations and Transmission Lines (34.5kV-69 kV)

Bulk Electric Substations and Transmission Lines (115-345 kv)

NYSEG and RG&E

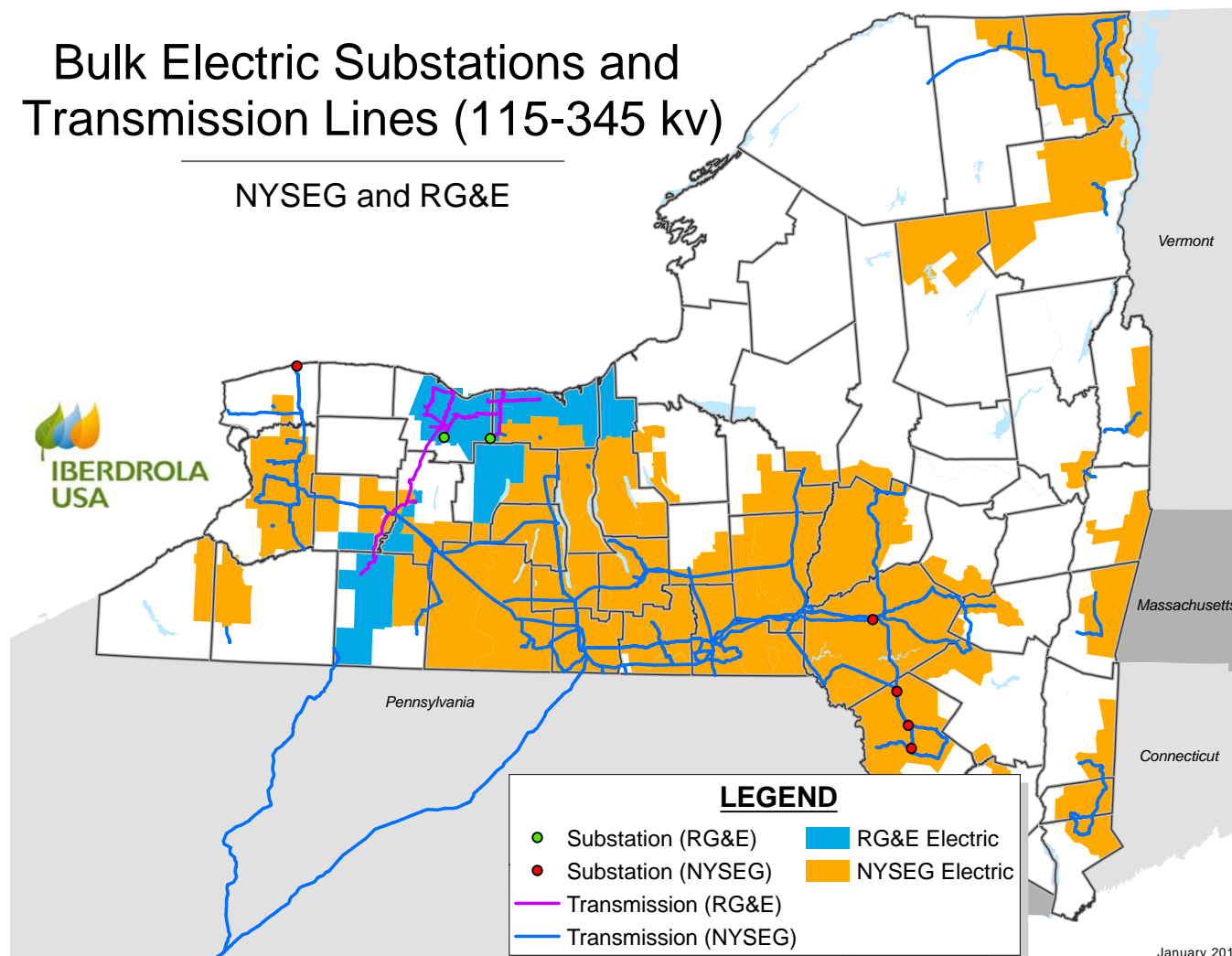


Figure 3.5 Electric Substation and Transmission Lines (115-345 kv)

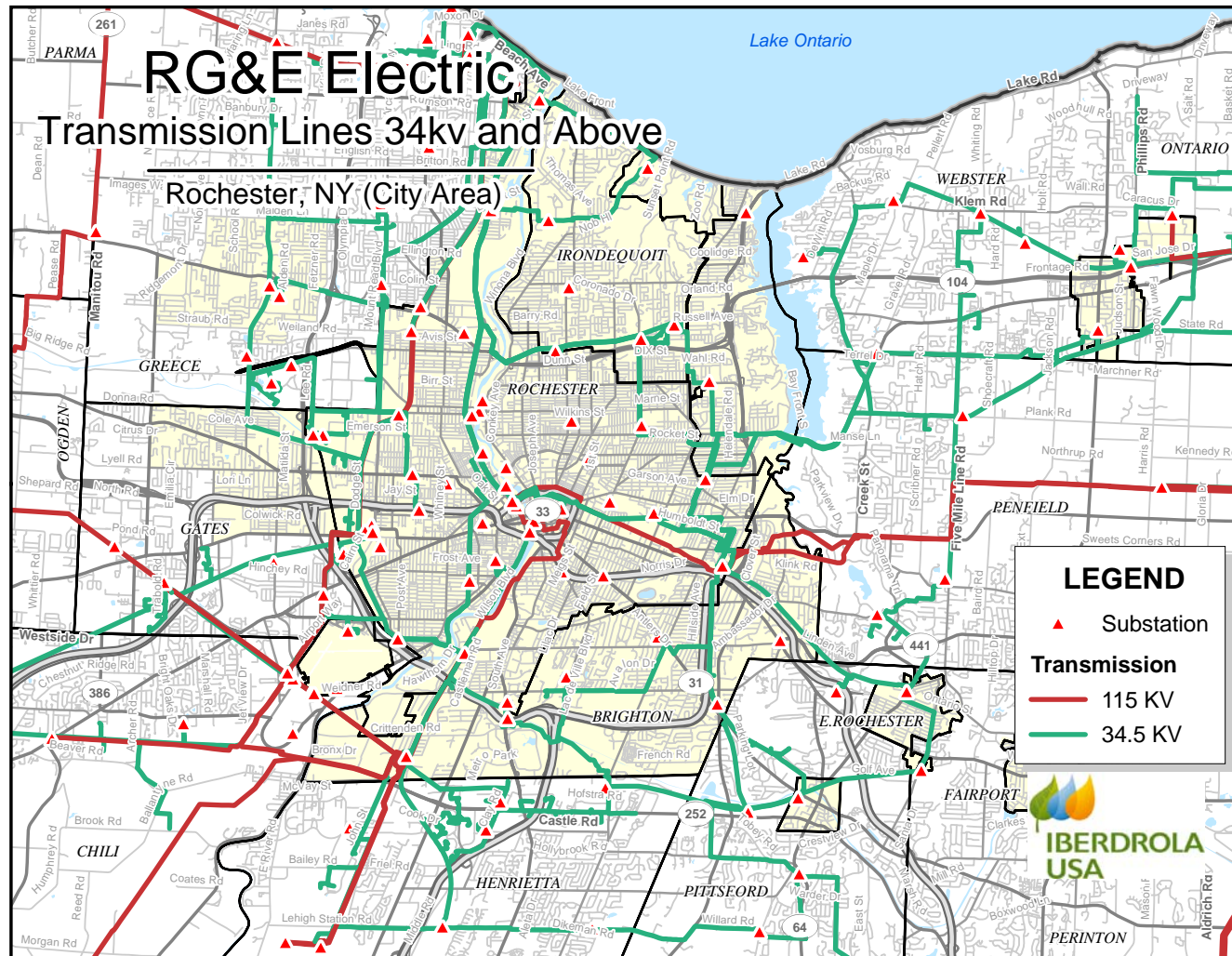


Figure 3.6 Electric Substations and Transmission Lines in Rochester City Area

3.2 GENERATION FACILITIES

NYSEG and RG&E own generating plants throughout New York State as shown in Figure 3.7 below, including 12 hydroelectric generating plants and five relatively small fossil-fueled generation facilities. The hydroelectric plants are located from Plattsburgh in the northeast through the southern tier and in the City of Rochester, and include a total of 24 electric generating units with individual unit capacities ranging from 0.4 MW to 18.5 MW. They all are run-of-the-river hydroelectric facilities. These facilities have the capacity to produce approximately 600,000 MWh of renewable energy annually.

NYSEG's fossil fueled generating plants include a 7 MW natural gas-fired simple cycle (leased) unit in Auburn and a standby diesel generator located at the Harris Lake Substation in the Adirondack State Park having a nameplate capacity of 2 MW. This latter unit produces electric energy to serve local customers in the event of a 46 kV transmission line outage. In 2013, the existing 1960's vintage diesel-generator is proposed to be replaced with a new larger unit in order to serve this local load center more reliably, when needed.

RG&E has three fossil fueled generating plants: Allegany Station, a combined-cycle plant, located in the southern tier, fueled by natural gas and having a nameplate capacity of 62 MW, and two combustion turbines (#2 CT and #13 CT), located in the City of Rochester, fueled by natural gas and fuel oil, respectively, each having nameplate capacity of 15 MW/18 MW (summer/winter ratings). RG&E's three fossil-fuel facilities are included in the Divestiture Plan that was filed with the Commission on October 21, 2011. In 2011, #13 CT experienced equipment failures that caused a forced outage. Due to the estimated repair and other capital costs, RG&E decided to retire the unit. As a result, RG&E filed with the Commission a "Notice of Intent to Retire Beebee Station Unit 13 CT" by letter dated November 18, 2011. The Company will invest in its RG&E fossil facilities only to the extent necessary to sustain plant and public safety, unit availability, and electric service reliability through completion of the auction process.

The Companies strive to maximize the hydroelectric energy produced for our customers from the water that is available and to maintain the fossil units so they are available when required to

support local load centers / networks as dispatched by the NYISO according to the energy market or to provide energy needs during certain T&D network outages.

To that end, the investment strategy is to implement betterment projects that cost-effectively improve unit/station reliability, efficiency, increase capacity, replace aging or obsolete infrastructure/assets and those needed to protect the environment and the safety of employees and the public. Moreover, all of the hydroelectric facilities are under the jurisdiction of the Federal Energy Regulatory Commission (FERC) or the New York Department of Dam Safety. As a result, the Companies also make investments in order to fulfill regulatory obligations.

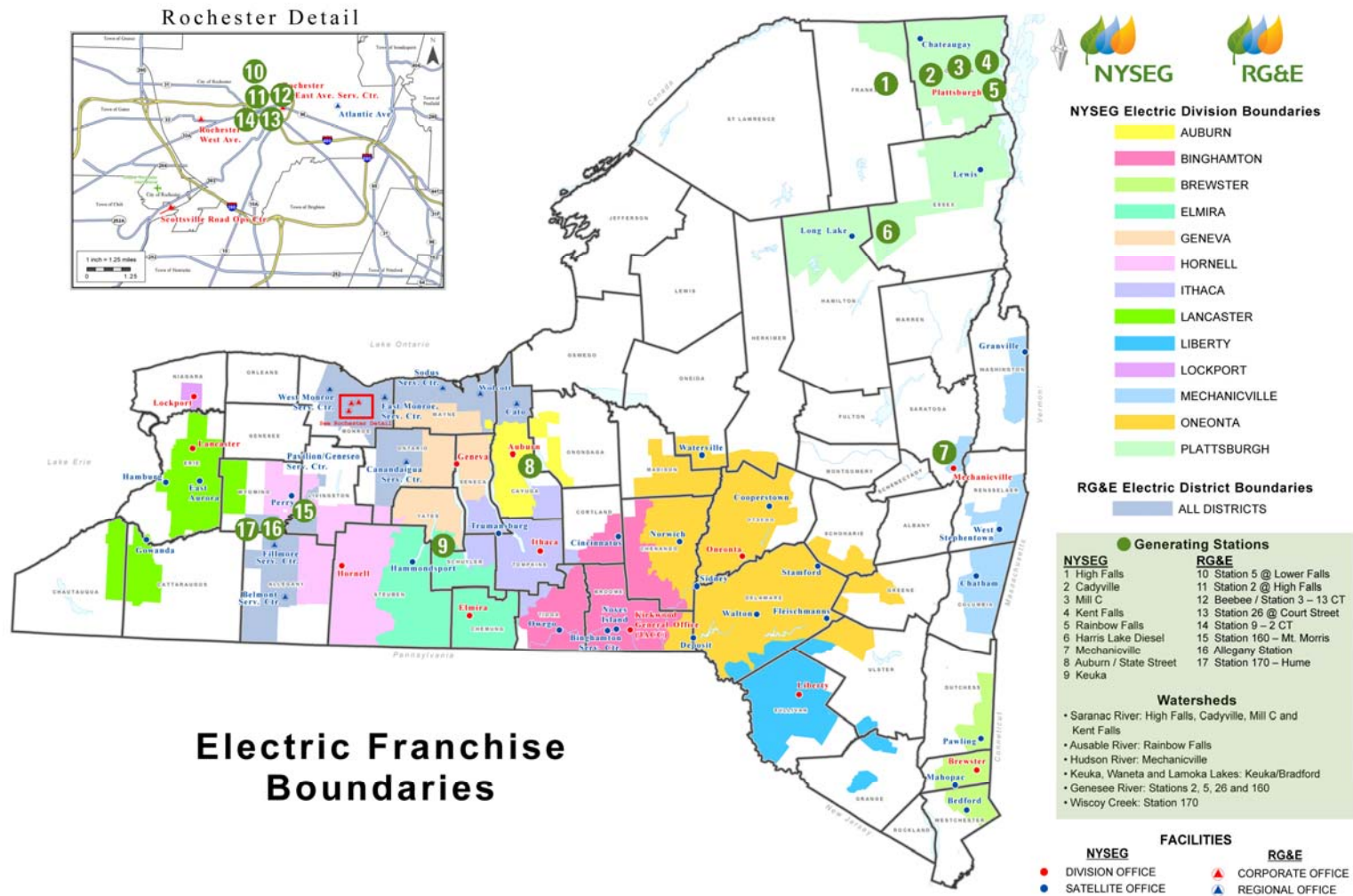


Figure 3.7. Generation Facilities

3.3 NATURAL GAS SYSTEM

Figure 3.8 below is a map of the areas in which the Companies provide natural gas service in New York State. NYSEG and RG&E provide gas delivery service to over 564,000 customers in New York State. In 2012, the Companies delivered over 96 million dth of natural gas to these customers, 51 million dth in NYSEG and 45 million dth in RG&E. The growth in overall customer demand over the next several years is estimated to be approximately 1% per year.

The majority of gas is purchased from interstate gas transmission pipelines and received at system gate stations, where gas flow is metered and regulated and the ownership or custody of the gas transfers from the delivering pipeline to the Companies. Gas is odorized at these facilities. The city gate stations reduce the pressure to system pressure. The Companies also receive gas from local well producers at various locations along its infrastructure. The Companies' system transports gas from the system gate stations to the district regulator stations and field regulators where the pressure is further reduced, controlled, and monitored to meet customer needs. Service laterals connect the local distribution system to customers' meters.

3.3.1 Gas System Infrastructure

Table 3.4 contains information about the Companies natural gas transmission and distribution system as of the end of 2012.

Table 3.4 Gas System Infrastructure

Facilities	2012 – Miles or Number		
	NYSEG	RG&E	TOTAL
TRANSMISSION PIPELINE	15	106	121
DISTRIBUTION PIPELINE	4,733	4,821	9,554
REGULATORS STATIONS (include gate stations)	569	323	892
DISTRIBUTION PIPELINE			
Steel – Protected	2,202	2,481	4,683
Steel - Unprotected	286	355	641
Cast Iron / Wrought Iron	-	64	64
Plastic	2,245	1,921	4,166
Total DISTRIBUTION PIPELINE	4,733	4,821	9,554
SERVICES -Number			
Steel – Protected	33,154	77,119	110,273
Steel - Unprotected	20,243	18,438	38,681
Plastic	170,498	172,022	342,520
Other	7,809	9,867	17,676
Total SERVICES	231,704	277,446	509,150

Gas Service Areas

NYSEG and RG&E

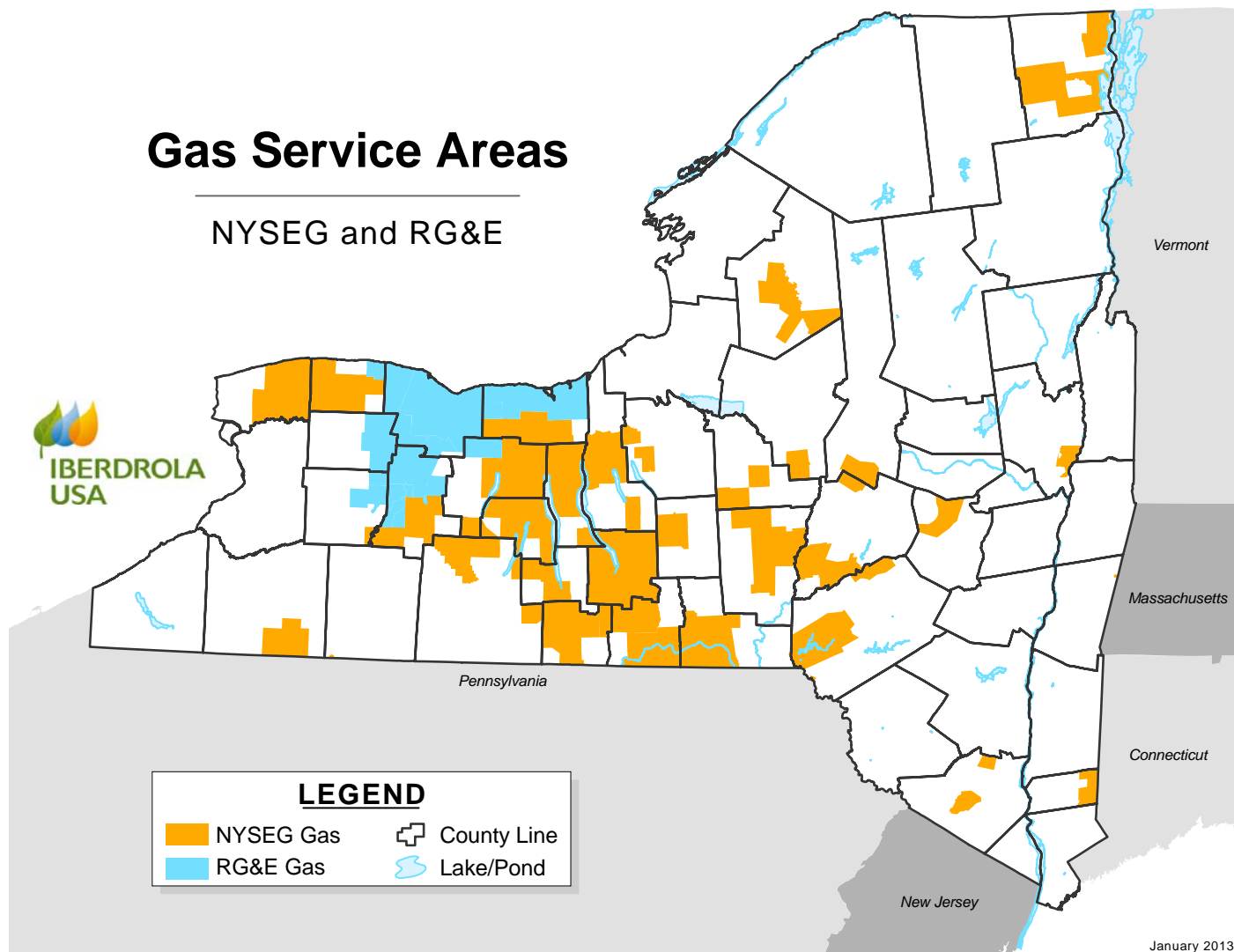


Figure 3.8 Gas Service Areas

Table 3.5 contains safety and reliability metrics for NYSEG and RG&E for 2012.

Table 3.5 Gas Safety and Reliability Metrics

		NYSEG	RG&E
Measurements - Operations			
Emergency Response:			
Natural Gas Leak Response =< 30 min.	Actual	80.39%	88.93%
	Yr-End Target	75.00%	75.00%
Natural Gas Leak Response =< 45 min.	Actual	95.09%	97.81%
	Yr-End Target	90.00%	90.00%
Natural Gas Leak Response =< 60 min.	Actual	98.97%	99.61%
	Yr-End Target	95.00%	95.00%
Leak Management:			
Pending Leak Measure: Total # of all pending leaks (Type 1, 2, 2A and 3) NYSEG = ≤ 100 RG&E = ≤ 200	Actual	20	122
	Yr-End Target	100	200
Damage Prevention:			
Overall Damages per 1000 Tickets	Actual	1.84	1.85
	Yr-End Target	2	2
Mismarks per 1000 Tickets	Actual	0.43	0.4
	Yr-End Target	0.5	0.5
Co Damages per 1000 Tickets	Actual	0.15	0.13
	Yr-End Target	0.2	0.2
Achieve Gas Regulatory Safety & Reliability Targets			
Bare Steel & Leak Prone Main - miles	Actual	28.3	30.2
	Yr-End Target	24	24
Bare Steel & Leak Prone Services - #	Actual	1,559	1,270
	Yr-End Target	1,200	1,000

A map of the Companies' gas systems, showing transmission mains and supply points, is included as figure 3.9.

Gas Transmission Mains and Purchase Points

NYSEG and RG&E

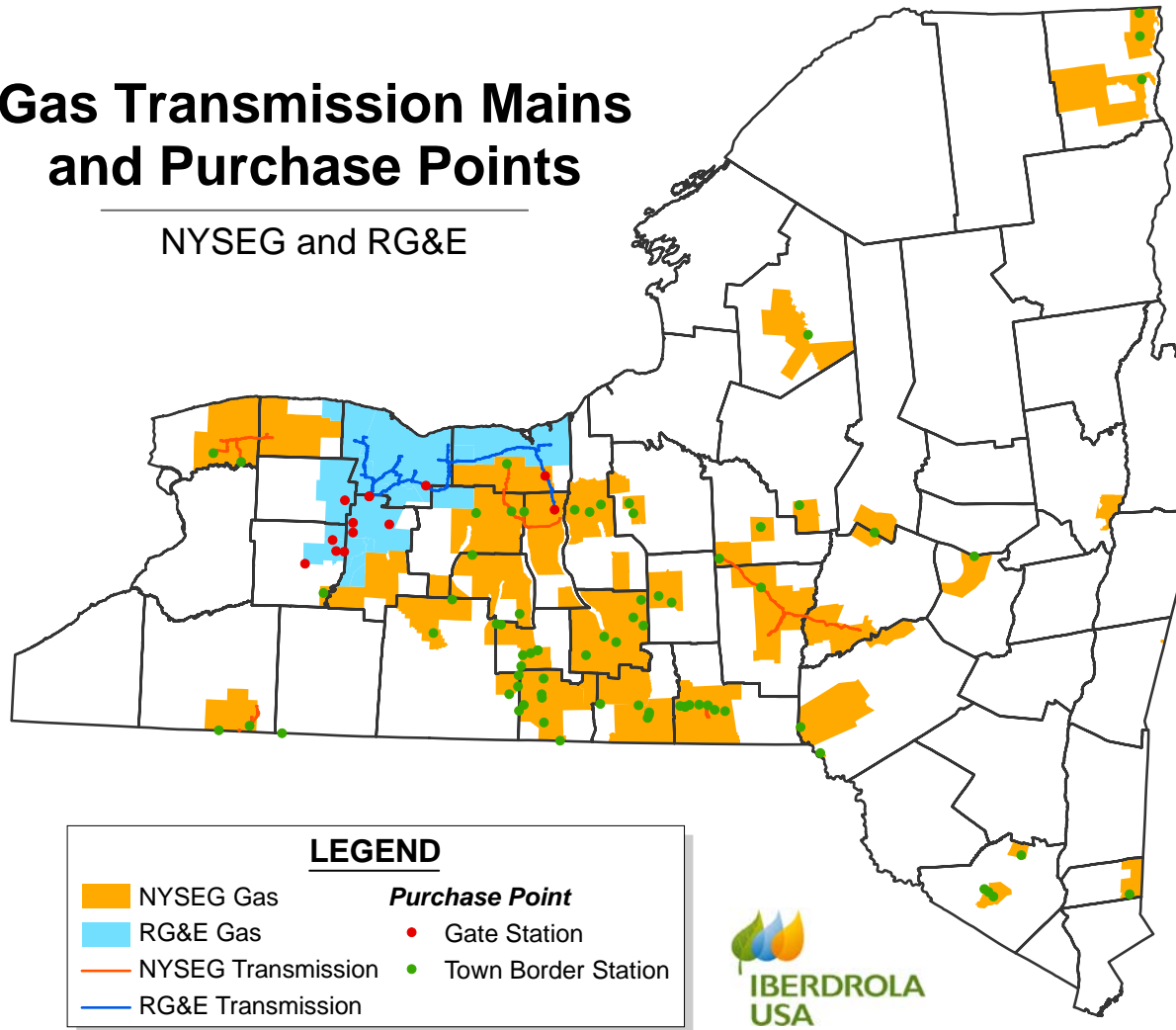


Figure 3.9 Natural Gas System

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This section contains descriptions of the electric projects and programs necessary to accomplish the strategic objectives. The following table summarizes the electric capital investment plan for the Companies.

Table 4.1 Electric Capital Investment Plan by Year (Dollars in Millions)

Company	2013	2014	2015	2016	2017	TOTAL
NYSEG Electric	148,864	212,485	204,000	199,010	299,312	1,063,671
NERC Alert Project	5,831	1,991				7,822
RG&E Electric	153,326	242,141	189,965	187,457	239,000	1,011,889
Subtotal-Electric	308,021	456,617	393,965	386,467	538,312	2,083,382
Appendix L- Electric	318,407					

The investment amount for 2013 has been approved by the Iberdrola USA Board of Directors. The objective of the Plan is to improve system reliability by reducing risks in the system by increasing system capacity, redundancy, and power quality.

4.1 PROJECT CATEGORY 1- NETWORK REINFORCEMENT

This category is related to Objective 2, achieve service reliability and quality. This includes the projects and programs done for the following investment reasons:

System capacity:

Projects and programs done to ensure the system has sufficient capacity, resiliency, or operability to meet the demands of the customers. Examples are:

- Reduce problems of overloads in lines and transformers under normal operating conditions at peak demand.
- Reduce problems under contingency situations (N-1), taking into account prioritization of the projects based upon MW's at risk, the number of customers affected, and length of time of exposure.
- System study driven work not associated with specific new customer loads (new individual customer loads are included in Project Category 2)

- Increases to accommodate organic load growth
- System changes to meet NERC, NPCC, NYPSC or Planning Criteria reliability standards under normal conditions and under contingency conditions
- Provide increased system flexibility and operability
- Customer requested redundancy
- Actions taken to reduce degradation of equipment service lives due to thermal stress
- Improve performance where design standards have changed over time
- Provide appropriate degrees of system configuration flexibility to limit adverse reliability impacts of large contingencies

Power quality

Projects or programs done to correct or maintain regulated voltage level guidelines. This includes work on distribution, transmission and substation facilities and is responsive to low voltage, high voltage or flickering light situations.

The Companies propose to invest \$776M in Category 1 - Network Reinforcements during 2013 through 2017 as is shown in Table 4.2. Category 1 projects will benefit all customers while mitigating risk contingencies in transmission and distribution system. These projects will reduce 2,346 MW of loss of load in contingency situation. The number total of problems to be addressed is 86.

Table 4.2 also shows the portion of the investment for transmission (T) and for Distribution (D) in this category.

Category 1 includes reliability projects with total cost more than \$100,000 and Worst Performer Circuit program. Other reliability projects of less than \$100,000 are part of Division Projects or Transmission and Distribution Infrastructure Replacement Program (TDIRP) that are included in Category 3.

Table 4.2 Category 1 - Electric Network Reinforcement (\$000)

	2013	2014	2015	2016	2017	TOTAL
NYSEG-T	19,720	61,281	38,007	39,930	50,460	209,397
NYSEG-D	4,632	16,224	20,382	19,243	29,533	90,014
TOTAL NYSEG	24,352	77,505	58,389	59,173	79,993	299,412
RG&E-T	64,100	143,548	85,488	70,833	65,620	429,590
RG&E-D	5,932	3,942	7,106	7,761	22,360	47,100
TOTAL RG&E	70,032	147,490	92,594	78,594	87,981	476,690
TOTAL	94,383	224,995	150,983	137,766	167,974	776,102

A description of the most significant projects in this category is included in Attachment 3.

Table 4.3 and Table 4.4 show the total investment for each company divided into the following subcategories:

- Area Reinforcement → Improvement of network infrastructure in an area (almost all these projects include new substations).
- New Line → New line construction
- Improvements in Line → Upgrade existing lines
- Improvements in Substations → Upgrade in substations
- Other reliability risk project

A list of projects over \$1M included in Category 1 is included in Attachment 4.

Table 4.3. Category 1 - NYSEG Electric Projects - Network Reinforcement (\$000)

	2013	2014	2015	2016	2017
Area Reinforcement	3,050	5,387	5,978	20,348	4,456
Improvements in Subsations	19,283	61,359	23,650	26,905	44,834
New Line	800	4,758	19,951	6,647	-
Improvements in Lines	1,219	6,000	6,810	3,273	9,704
Other Risk Reliability projects	-	-	2,000	2,000	21,000
TOTAL NYSEG	24,352	77,505	58,389	59,173	79,993

Table 4.4. Category 1 - RG&E Electric Projects - Network Reinforcement (\$000)

	2013	2014	2015	2016	2017
Area Reinforcement	42,161	104,548	78,151	57,264	-
Improvements in Subsations	18,560	18,176	6,763	10,570	16,249
New Line	6,550	16,575	1,440	3,006	2,024
Improvements in Lines	2,761	3,192	1,240	753	767
Other reliability risk projects	-	5,000	5,000	7,000	68,941
TOTAL RG&E	70,032	147,490	92,594	78,594	87,981

4.1.1 Customer Benefits

The Companies recognize that there are a number of concerns that could result under a single element failure (in transformers or lines), contingency situations (N-1) at peak demand and a much smaller number of failures that could result under normal operating conditions at peak demand, as shown in the next section.

Many of the Appendix L projects address the following concerns found in the assessment of the system.

4.1.1.1 Transmission

Transmission System Planning has developed Five-Year Reliability-Based Transmission and Substation Capital Projects in order to solve the concerns shown in Table 4.5.

This Plan has been developed to address the concerns shown in Table 4.5, but some of them require modifications in the network which require several years to complete. Projects to address these concerns are expected to be executed during the 2013 through 2017 period, but some of the projects will be placed in service after 2017.

Table 4.5 Transmission System Concerns 2013-2017

	# Problems			MW			# Customers		
	NYSEG	RG&E	TOTAL	NYSEG	RG&E	TOTAL	NYSEG	RG&E	TOTAL
N-1 in Line	11	11	22	306	231.8	537.8	82,328	47,260	129,588
N-1 in Transformer	17	14	31	586	525.2	1111.2	134,379	119,185	253,564
Voltage quality	17	6	23	349	107	456	104,618	28,760	133,378
Transformer overload	2	4	6	22.7	97.6	120.3	6,111	15,441	21,552
Line Overload	2	2	4	71.9	48.4	120.3	11,710	14,017	25,727
TOTALS	49	37	86	1,336	1,010	2,346	339,146	224,663	563,809

Please note that one customer could have been counted more than one time, if the same customer is affected by more than one problem.

[REDACTED]

[REDACTED]

4.1.1.2 Distribution

Distribution System Planning has developed a Reliability Based Distribution approach to solve the concerns shown in Table 4.6. This table also shows the distribution concerns that will be solved by projects with total investment less than \$100,000 that are part of Division Projects and included in Category 3.

This Plan has been developed to address the concerns shown in Table 4.6, but some of them require modifications in the network which require several years to complete. The projects to address these concerns are expected to be executed during the 2013 through 2017 period, but some of the projects will be placed in service after 2017.

Table 4.6 Distribution System Concerns 2012-2016

	# Problems			MW			# Customers		
	NYSEG	RG&E	TOTAL	NYSEG	RG&E	TOTAL	NYSEG	RG&E	TOTAL
Transformer overload	17	2	19	136	9	145	43,122	6,937	50,059
Line overload	22	23	45	90	81	171	19,809	14,411	34,220
N-1	54	39	93	582	662	1,244	116,400	132,400	248,800
TOTALS	93	64	157	808	752	1,560	179,331	153,748	333,079

Please note that one customer could have been counted more than one time, if the same customer is affected by more than one problem.

[REDACTED]

[REDCATED]

NYSEG and RG&E have numerous substations serving distribution circuits where the failure of a transformer would result in the loss of customers and load. Prior to the projects which solve the concern being placed into service, the Companies address these distribution risks by installing a mobile substation as a temporary replacement until the permanent transformer is repaired or replaced.

4.1.2 New Substations

The new substations that address the transmission and distribution system problems and that will be added during the 2013 through 2017 period in this category are as follows:

NYSEG

Columbia County Transmission (Klinekill/Valkin Substation 115 kV transmission line project), in service 2017, Mechanicville Division: New 115kV transmission lines in the towns of Chatham, Ghent, and Stockport within Columbia County, New York. The proposed facilities and improvements include a new 115 kV switching station (Ghent Switching Station), 11.1 miles of 115 kV transmission line (Circuit #726 and National Grid Trunk #15 extension), and improvements at the existing Klinekill 115kV/34.5kV Substation. The project will provide a 115 kV source to the service area, thereby eliminating the associated voltage and thermal problems

Perry Center Area Substation Project, in service 2014, Hornell Division: Construct a new three-breaker, 34.5 kV switching station and bring in all three sections of the 591 line into the new substation and close the normally open switch #59186 between Stanton Avenue and Perry Center Substations. Construction of this switching station at Perry Center will allow for adequate voltages and thermal conditions to be maintained in the area in the event of an outage of the Federal Street to Perry Center 34.5 kV line.

Tom Miller Road Substation Project, in service 2014, Plattsburgh Division: A new 46/12.5 kV substation with one 12/16/20 MVA transformer and 3 distribution circuit breakers to relieve a substation transformer overload condition.

Luther Forest Substation (Mechanicville System Reinforcement Project), in service 2014, Mechanicville Division: A new 115/34.5 kV Substation with one 34.5 kV, 30/40/50 MVA LTC transformer and 2 distribution circuits. The objective is to resolve loading issues with the existing Mulberry Substation by transferring load to a new 115-34.5 kV source at Luther Forest.

Waterloo Substation, in service 2016, Geneva Division: On a company owned site south of the existing substation install the 10/12/14 MVA, 34.5/12.5 KV transformer with two distribution circuits as the new Waterloo Substation. Extend the 34.5 KV transmission line from the old substation to the new substation about 1/4 mile to relieve future overload conditions in the area.

RG&E

New Bulk Power Substation (Station 255, part of Rochester Area Reliability Project), in service 2015: A new 345 kV bulk power system station will be constructed and located approximately 3.8 miles west of the RG&E Station 80. The two NYPA 345kV cross-state transmission lines, SR1-39 (Somerset - Rochester) and NR-2 (Niagara - Rochester), will be brought into the new station. The project will meet present and future RG&E load level requirements under any first contingency condition, i.e., a condition involving the loss of any Bulk Power System transformer along with the loss of Ginna Station.

Station 262, in service 2015: A new 115/34.5 kV, 57 MVA substation with one transformer with LTC. The new substation and the new 34 kV line to Station 26 will provide necessary relief to existing lines and transformers from thermal stress under contingency conditions in the Rochester Central District.

A description of the most significant projects in this category is included in the Attachment 3.

4.2 PROJECT CATEGORY 2 – NEW CUSTOMERS AND STATUTORY REQUIREMENTS

This category is related to meeting the electrical and natural gas requirements of new customers or load additions for specific customer and for projects required by municipalities or

other statutory reasons. This includes the projects and programs done for the following investment reasons:

Growth

Projects done specifically to accommodate new services or to change the existing service of individual customers. Examples are:

- Responding to requests for new service by a retail or wholesale load customer or a generator
- System upgrades required to meet specific customer load additions
- Customer requested relocation of facilities

Statutory (or regulatory):

Projects done for regulatory, governmental, or contractual obligations that are generally non-discretionary. Examples are:

- facility relocations related to public works projects
- inter-utility and other interconnection work that is mandated, such as generator interconnections

The Companies propose to invest in this category during the 2013 through 2017 as is shown in Table 4.7, which divides the investment into Transmission (T) and Distribution (D):

Table 4.7 Category 2 - Electric – New Customers and Statutory Requirements (\$000)

	2013	2014	2015	2016	2017	TOTAL
NYSEG-T	11,672	21,742	3,663	1,092	1,020	39,189
NYSEG-D	33,756	30,352	30,146	29,553	34,279	158,085
TOTAL NYSEG	45,429	52,094	33,809	30,644	35,298	197,274
RG&E-T	9,521	12,225	3,241	2,188	2,231	29,405
RG&E-D	20,411	21,567	21,410	22,122	22,735	108,244
TOTAL RG&E	29,932	33,792	24,651	24,310	24,965	137,649
TOTAL	75,361	85,886	58,460	54,954	60,263	334,924

Table 4.8 shows the total investment for each company by Investment Reason and includes the NERC Alert Project.

Table 4.8. Category 2 - Electric - Growth and Statutory (\$000)

	2013	2014	2015	2016	2017
NYSEG Growth	31,084	26,589	27,614	27,811	32,584
RG&E Growth	17,678	19,486	10,670	11,659	12,011
TOTAL Growth	48,762	46,075	38,284	39,470	44,595
NYSEG Statutory	8,513	23,514	6,195	2,833	2,714
RG&E Statutory	12,254	14,306	13,981	12,651	12,954
TOTAL Statutory	20,767	37,820	20,176	15,484	15,668
NERC Alert Program NYSEG	5,831	1,991			
TOTAL	75,361	85,886	58,460	54,954	60,263

A list of projects over \$1M included in Category 2 is provided in Attachment 5, and a description of the most significant projects is included in Attachment 3.

The programs include in this category are System Security programs and a portion of Division projects.

Security is included in Appendix L. This program expands the use of video surveillance and access control technologies at hydro generating stations and key substations. In parallel with the expanded use of these technologies, the Companies are upgrading their Information Technology infrastructure to satisfy the need for increased bandwidth. With respect to physical security, the Companies will continue to replace and upgrade the perimeter fencing around substations.

Division projects included in this category are: streetlight head replacements, establishing services for individual customers, underground residential developments, commercial services, voltage and highway minor relocate electric facilities. Also included here are meters, transformers, capacitors, and voltage regulators.

The new substations, which are part of the projects included in this category, are the following:

Columbus Substation (Agro Farma Project), in service 2013, Oneonta Division: New 46/12.5kV(GIS) substation (tentatively named "Columbus Substation") adjacent to the existing South Edmeston Substation and building a new 11.4-mile overhead 46kV line from County Line

Substation to the new Agro-Farma Substation. The customer has requested this project be done to serve increased load at Agro-Farma

University of Rochester (U of R Project), in service 2014: 115/34.5kV substation with 2-75MVA transformers to serve the University of Rochester load. The new substation will tap the 115 kV transmission circuits #901 and #902. The existing load served out of Station 33 will be transferred to the new substation. This new arrangement will relieve the Station 33 115/34.5 kV transformers of thermal stress and will accommodate present and future load levels.

Luther Forest Substation (Mechanicville System Reinforcement Project), in service 2015: A new 115/34.5 kV Substation with one 34.5 kV, 30/40/50 MVA LTC transformer and 2 distribution circuits. The objective is to resolve loading issues with the existing Mulberry Substation by transferring load to a new 115-34.5 kV source at Luther Forest.

4.2.1 NERC Facilities Rating Alert Update

The NERC Alert project is a federally mandated initiative for NYSEG to verify ground to conductor clearances for all of its transmission lines that are part of the bulk power system. NERC and the Regional Transmission Entities have become aware of discrepancies between the design and actual field conditions of transmission facilities, including conductors. The verification process is currently being conducted by collecting and analyzing LIDAR (Light Imaging Detection and Ranging) data and field checking all suspected points of clearance violations.

The estimated cost for 2013 and 2014 are included in Table 4.9. This cost is included in Category 2.

Table 4.9 NERC Alert Project (\$000)

	2013	2014
NYSEG	5,831	1,991

4.2.2 FERC Bright Line Bulk Electric System

As mentioned in the Introduction, Section 1.1, FERC (Federal Energy Regulatory Commission) has directed NERC (North American Electric Reliability Corporation) to develop a revised definition of the Bulk Electric System (BES) to further ensure reliable the operation of the US interconnected transmission network. FERC has eliminated the regional discretion in determining what is Bulk and has ordered NERC to adopt a definition of the BES that included all non-radial facilities at 100 kV and above (a so-called “bright-line” approach). On November 18, 2010, FERC issued Order 743 requiring NERC to revise its definition of BES to:

- “eliminate the regional discretion in the current definition”
- “maintain the Bright Line threshold that includes facilities operated at and above 100 kV”
- “establish an exception process and criteria for excluding facilities that are not necessary for operating the interconnected transmission network” (e.g., radial facilities).

NERC filed a revised BES definition and transition plan with FERC on January 2012. FERC then issued Order 773 on December 20, 2012, establishing the “Bright Line” as the new BES definition. This FERC order will greatly expand the scope of facilities in New York State subject to the NERC reliability standards and the associated risk of compliance sanctions. FERC’s Order 773 will take effect during the first Quarter of 2015 and will become enforceable at that time. The following table shows the anticipated impact this revised BES definition will likely have on the NYSEG and RG&E system:

Table 4.10 FERC Bright Line Facility Impacts (as of December, 2012)

	NYSEG	RG&E
Facilities already defined as BES	15 Substations 38 lines	2 Substations 0 lines
Facilities defined as BES under new "Bright Line"	87 Substations 200 lines	25 Substations 31 lines

The Companies are continuing to assess the impact of the new BES definition on its system and the scope of work it will cause to become compliant with NERC’s reliability standards.

A preliminary estimate of capital costs due to work necessary to become compliant to FERC Order 773 from 2013 to 2015 is included in Table 4.11. These costs include work to conduct a planning study of NYSEG's and RG&E's BES system (referred to as the TPL Study), as well as install Disturbance Monitoring Equipment (DME's) at BES substations. The TPL Study, to be conducted to see what projects are required to make the BES system compliant with NERC reliability standards, will identify additional capital projects for substations and transmission lines. Cost estimates for these additional projects are not included in the estimates below as the scope of these projects will not be completely known until the TPL Study is complete in 2015.

Table 4.11 FERC Bright Line Impacts (\$000)

	2013	2014	2015
NYSEG	-	2,700	2,500
RG&E	500	1,000	800
TOTAL	500	3,700	3,300

4.3 PROJECT CATEGORY 3 – MODERNIZATION & RENOVATION

This category is related to replacing obsolete equipment and facilities and improving effectiveness and efficiency of the network. The Companies need to replace equipment that is obsolete either because it is at end of life or it is technologically obsolete. Obsolete equipment can cause safety issues, risk of environmental incidents, and lack of reliability, and such equipment is difficult and costly to maintain and to obtain spares. The major types of facilities included in this category are: poles, batteries, AC & DC panels, relays, switches and substation breakers and some indoor substations. This includes the projects and programs done for the following investment reasons:

Asset condition:

Projects or programs done to reduce the likelihood and consequences of failures of assets and to address potential safety issues. The focus is identification of specific susceptibilities and development of remedies to address specific, ongoing reliability concerns. This work is done proactively and preemptively, not in the process of restoring service. This work is identified by emerging asset condition assessments using a health index and risk assessment approach. Examples are:

- replacing overhead lines/structures
- replacing underground cable
- replacing substation equipment

The Companies continue to complete a thorough analysis of three asset categories annually using new competencies. The categories analyzed are substation breakers, substation batteries, and distribution poles. The results of these analyzes are included in this Plan.

Damage:

Projects or programs done to replace failed or damaged equipment and to restore the system to its original configuration and capability. This work is done to respond to post failure conditions. Examples are:

- damage to facilities from vehicle accidents
- replacement of failed outdoor light equipment
- unplanned or other deterioration

The Companies propose to invest in projects and programs in this category during 2013 through 2017 as follows:

Table 4.12 Category 3 - Electric – Modernization & Renovation (\$000)

	2013	2014	2015	2016	2017	TOTAL
NYSEG-T	8,095	6,193	10,606	10,138	35,181	70,213
NYSEG-D	46,175	39,382	46,906	47,408	61,319	241,190
TOTAL NYSEG	54,270	45,575	57,511	57,546	96,500	311,402
RG&E-T	5,974	9,304	7,933	10,118	24,816	58,145
RG&E-D	25,767	27,013	28,702	31,899	42,190	155,572
TOTAL RG&E	31,741	36,317	36,635	42,017	67,007	213,717
TOTAL	86,011	81,892	94,147	99,563	163,507	525,119

Table 4.13 shows the total investment for each company by projects and programs.

A list of projects over \$1M and programs included in this category is included in Attachment 6.

Table 4.13 Category 3 – Electric - Projects and Programs (\$000)

	2013	2014	2015	2016	2017
NYSEG Projects	5,769	3,107	1,150	2,215	31,139
RG&E Projects	5,491	7,981	3,905	1,000	20,000
TOTAL Projects	11,260	11,088	5,055	3,215	51,139
NYSEG Programs	48,501	42,468	56,361	55,331	65,361
RG&E Program	26,250	28,336	32,730	41,017	47,007
Total Programs	74,751	70,804	89,092	96,348	112,368
TOTAL	86,011	81,892	94,147	99,563	163,507

The description of the most significant projects and programs of this category is provided below:

Station 23 Transformer and 11 kV switchgear - Add 11 kV GIS and two 115/11 kV transformers to Station 23. Add double bus configuration to the 115 kV GIS. Transformer replacements are due to poor health - 1T and 2T are leaking and reaching end of life. Two of the four bus sections of 11 kV are overdutied and need to be upgraded for proper fault current ratings. Bus 3 and 4 are at 96% of rated interrupt capacity.

Station 80 – Replace 1T and 3T - Replace 1T and 3T Transformers with a two new 345/115kV 400 MVA units; replace six 115 kV disconnect switches; replace two 115 kV circuit breakers; and replace one section of 115 kV bus. This will alleviate known maintenance issues with the existing 50 year old units.

TDIRP, Transmission, Distribution Infrastructure Replacement Program - Circuit Breaker Replacement Program: A condition assessment performed by Asset Management of circuit breakers found 68 to be in very poor health and 690 to be in poor health at NYSEG, and 99 to be in very poor health and 368 to be in poor health at RG&E. This program addresses these very poor and poor condition circuit breakers. Replacements will eliminate units most at risk of failure and improve reliability of the system.

TDIRP- Battery Replacement Program: This program replaces current lead-acid systems with engineered Ni-Cd replacements as identified by a condition assessment by Asset Management.

As a critical component of a substation, battery systems that fail to perform or are in poor working condition can hinder operational capability. These systems are nearing their end of life and are being replaced to reduce risk of failure and negative impacts on system operations.

TDIRP- Distribution Pole Replacement Program: The Companies plan to replace over a five-year period poles greater than 75 years old. A condition assessment performed by Asset Management found 22,836 poles at NYSEG greater than 75 years old. Pole inspections show rejection rates increasing rapidly at 50-60 years. RG&E has 3,832 poles greater than 75 years old. The Companies plan a systematic replacement of these higher risk, older poles.

TDIRP- Sectionalizer Replacement Program: This initiative improves distribution system reliability and involves replacing mechanical sectionalizers with electronic reclosers.

TDIRP- Other: The remaining portion of the TDIRP is to replace transmission, substation and distribution equipment based on age and condition for assets on which the Companies have not yet completed a detail condition assessment. These replacements will help maintain system reliability for customers.

Portion of Division Projects: Individual projects that are less than \$100,000 and not included in other special programs such as TDIRP. Jobs include circuit betterment projects, substation and storm.

Cablecure: This program extends the life of the XLP cables at least 20 years. These cables were installed during the period 1970 to 1985 and have experienced a high frequency of premature insulation failures. This program results in lower total life cycle asset costs and reduced outages. This work involves injecting an insulating fluid into the stranding of aged XLP URD primary distribution cables that permeates into the insulation and extends the life.

Substation Modernization Program: Rebuild several Downtown Rochester substations and NYSEG substations to current standards. These substations are old with deteriorating structures. They are difficult on which to do maintenance work and are potentially unsafe for employees and the public. The number of these substations for which the rebuilding is plan

each year is shown in Table 4.14 below. One-half of the costs of this program are included in this category and one-half are included in Category 4, Automation.

The Substation Modernization Program includes the modernization of the following substations:

Modernization of 40 substations in NYSEG: Adams Corners, Bedford Hill, Bodle Hill, Canaan, Cayuga, Cincinnatus, Burdett Clintonville, Colliers, Concord, Chenango Forks, Delhi, Ebenezer, Endicott Railway, Federal Street, Genoa, Gorham, Goulds, Hill Street, Liberty, Marcellus Milo, Monticello, Montour Falls, New Albion, Norton, O'Brien Road, Orchard Park, Raquette Lake, Rein Road, Sampson, Salem, Snyders Lake, South Owego, Swift Street, Tuttle Place, Valois, West Hill and Wynantskill.

Modernization of 11 substations in RG&E: Station 5, 29, 34, 37, 38, 43, 156, 174, 204, 205 and 210.

Other substations will be evaluated during the next several years.

Table 4.14. Substation Modernization

#	2013	2014	2015	2016	2017
Substation modernization NYSEG	2	2	10	13	13
Substation modernization RG&E	2	2	5	5	6

The following assets are expected to be replaced during the 2013 through 2017 period:

Table 4.15. # Assets to be replaced

#	2013	2014	2015	2016	2017
Poles *	10,800	10,600	16,000	16,000	16,000
Batteries	23	23	23	23	23
Breakers	90	141	145	148	152
Reclosers	72	58	58	58	58
Transformers (serving customers)	4,500	4,500	4,500	4,500	4,500
Regulators	127	127	127	127	127
Meters	25,000	25,000	25,000	25,000	25,000

* Includes replacements under the Distribution Pole Replacement Program, Division Projects and other projects and programs included in this Plan.

4.4 PROJECT CATEGORY 4 – AUTOMATION

This category includes the projects and programs to control and monitor the circuits in substations, transformers, and major points of the electric system.

Currently there are many RTUs whose capacity has been exceeded, and much of the distribution delivery system does not have RTUs. The majority of the existing RTUs are also difficult to maintain or to obtain spares, as they are an obsolete technology.

Reclosers need to be installed in the overhead lines to improve quality of service and reduce the number of outages and the duration of outages. They help to achieve a faster localization of faults, a higher level of safety and reduce the number of customers out of service for each distribution line fault.

The communications between substations and the Energy Control Center is presently outdated, so the Companies, in order to support increased automation, must upgrade the communications with new fiber optic lines, links via microwave, additional channels for digital radio or purchase communication pathways from providers.

The Companies propose to invest in this category during 2013 through 2017 as follows:

Table 4.16 Category 4. Electric Automation (\$000)

	2013	2014	2015	2016	2017	TOTAL
NYSEG-T	2,285	2,954	4,318	3,595	3,780	16,931
NYSEG-D	7,577	9,954	20,168	18,221	33,335	89,255
TOTAL NYSEG	9,862	12,908	24,485	21,815	37,115	106,186
RG&E-T	4,872	5,883	5,456	10,030	13,227	39,467
RG&E-D	3,556	5,272	4,871	9,370	20,048	43,116
TOTAL RG&E	8,427	11,155	10,326	19,400	33,275	82,583
TOTAL	18,290	24,063	34,812	41,216	70,390	188,770

Investments in automation in the Plan include:

NYSEG and RG&E Energy Control Center Project: The design and installation of a fully integrated EMS/SCADA/DMS/OMS system that replaces the existing EMS/SCADA systems and current "Smartmap" Outage Management System. The total cost of this project is \$25M; a description is included in Table 4.18.

Automation of substations. The substation modernization program will prepare substations for the automation through new standards of design and equipment. The Substation Modernization Program currently includes 40 substations at NYSEG and 11 substations at RG&E. Other substations will be identified during the next several years. One-half of the costs of this program are included in this category and one-half is included in Category 3, Modernization and Renovation.

The 40 NYSEG substations included in this program are: Adams Corners, Bedford Hill, Bodle Hill, Canaan, Cayuga, Cincinnatus, Burdett Clintonville, Colliers, Concord, Chenango Forks, Delhi, Ebenezer, Endicott Railway, Federal Street, Genoa, Gorham, Goulds, Hill Street, Liberty, Marcellus Milo, Monticello, Montour Falls, New Albion, Norton, O'Brien Road, Orchard Park, Raquette Lake, Rein Road, Sampson, Salem, Snyders Lake, South Owego, Swift Street, Tuttle Place, Valois, West Hill and Wynantskill.

The 11 RG&E substations included in this program are: Station 5, 29, 34, 37, 38, 43, 156, 174, 204, 205 and 210.

Remote Terminal Unit (RTU): Additional and upgraded RTU communication connectivity will be installed in other substations and with switching devices.

Reclosers. The Companies plan to add electronic reclosers to increase the ability to sectionalize more of the distribution system. These reclosers will reduce the number of customers out of service and facilitate the location of the fault in the lines.

Telecommunications for remote control. The Companies plan to build or lease the telecommunications infrastructure necessary for the above projects. This involves the strategic addition of fiber optic, microwave links and digital radio capability, depending on security and cost effectiveness.

Currently the level of Substation automation in the Companies is 54% (78 substations with full control, 258 with partial control out of the total of 620 substations). At the end of the Plan (2017), the Companies expect the level of automation to be approximately 60%. In addition, currently there are 6 reclosers with full control in the Companies, and at the end of the plan there will be approximately 300.

NYSEG and RG&E Smart Grid: Iberdrola USA will be developing a Smart Grid Strategy for NYSEG and RG&E. This plan will consider the potential costs, benefits, schedules, and regulatory approaches associated with a range of possible AMI implementation scenarios for the New York electric and gas utilities. Consideration will be given to a base-case implementation in New York similar to the CMP model, and to alternative scenarios that would incorporate technologies suitable for natural gas meter automation, take into account the capabilities of CCS, identify tariff and system modifications that would facilitate load management by customers, and otherwise accommodate the existing New York infrastructure, the New York customer market, and New York State regulatory policies and practices.

Table 4.17 shows the total investment for each company by projects and programs.

Table 4.17. Category 4 – Electric - Projects and Programs

Title	2013	2014	2015	2016	2017
Smart Grid/AMI	-	0	0	-	7,737,110
SUN SmartGrid Pilot	-	0	1,350,000	180,000	-
Energy Control Center	4,569,611	3,180,000	0	-	-
Applex/iBase System integration	-	60,000	60,000	60,000	60,000
Control Center Telephone - PBX/Recorder/Dispatch Radio	-	1,050,000	350,000	-	-
Energy Control Center Project in NY, Siemens DMS	-	0	700,000	700,000	-
Other projects < \$1M	914,000	118,205	25,300	-	20,000
NYSEG Projects	5,483,611	4,408,205	2,485,300	940,000	7,817,110
NYSEG Telecom (OT) - Fiber Optic Networks	-	2,000,000	4,000,000	4,000,000	4,000,000
NYSEG Telecom (OT) - Microwave Networks	-	1,000,000	2,000,000	2,000,000	2,000,000
NYSEG Telecom (OT) - Multipoint Radio Networks	-	500,000	500,000	500,000	500,000
Brewster RTU Substation Project	1,239,000	0	0	-	-
NYSEG RTU Upgrade Program	3,139,529	3,500,000	8,000,000	7,945,838	15,298,000
Substation Modernization (50%)	-	1,500,000	7,500,000	6,429,639	7,500,000
NYSEG Programs	4,378,529	8,500,000	22,000,000	20,875,477	29,298,000
Total NYSEG	9,862,140	12,908,205	24,485,300	21,815,477	37,115,110
Substation Modernization Project - Station 5	-	441,925	717,776	-	-
Substation Modernization- Station 38 Total Refurbishment	1,660,000	204,909	34,152	-	-
SmartGrid/AMI	-	0	0	-	7,780,870
Energy Control Center (Integrated EMS/DMS/OMS Project)	1,958,405	1,148,703	0	-	-
RG&E Applex/iBase System integration	-	40,000	40,000	40,000	40,000
Reduce Outage Size - Circuit 765- Automation	-	0	0	-	-
Other projects < \$1M	-	349,008	374,700	300,000	-
RG&E Projects	3,618,405	2,184,545	1,166,627	340,000	7,820,870
Substation Modernization (50%)	-	1,420,000	2,529,682	6,560,405	10,500,000
RGE - Recloser/Substation and other Automation Initiatives	1,184,000	0	0	-	-
RGE - Telecomm Major Capital	950,000	0	0	-	-
RGE - Telecomm Minor Capital	175,000	50,000	50,000	50,000	50,000
RGE Telecom (OT) - Fiber Optic Networks	-	750,000	750,000	750,000	750,000
RGE Telecom (OT) - Microwave Networks	-	500,000	500,000	500,000	500,000
RGE Telecom (OT) - Multipoint Radio Networks	-	250,000	250,000	250,000	250,000
Automation Projects 2014-2023	-	1,500,000	2,580,000	8,449,652	10,904,141
RGE RTU (New project)	-	2,000,000	0	-	-
Rge Rtu Program - Carryover	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
RG&E Programs	4,809,000	8,970,000	9,159,682	19,060,057	25,454,141
Total RG&E	8,427,405	11,154,545	10,326,309	19,400,057	33,275,011
Total Category 4 - Electric	18,289,545	24,062,750	34,811,609	41,215,533	70,390,121

* The installation of reclosers during 2013-2017 is included in the Sectionalizer Replacement program under Category 3, Asset Condition.

The most significant project in this category is the Energy Control Center which is described below:

Table 4.18 Category 4. Energy Control Center (\$000)

Project	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Energy Control Center (Appendix L Project)	6,528	4,328				
Total Costs: \$25,000						
<p>Description: The design and installation of a fully integrated EMS/SCADA/DMS/OMS system that replaces the existing EMS/SCADA systems and current "Smartmap" Outage Management System.</p> <p>Reasons and Benefits: New infrastructure that facilitates increased automation on the transmission and distribution system while providing a robust foundation for additional automation of the system. See section 2 for more information</p> <p>Investment Reason: Automation</p>						
<p>Year started: 2010</p> <p>Year in service: 2014</p> <p>Current Status: System engineering and designs are complete. Vendor is completing the coding for the customizations. Pre-Factory Acceptance Testing will begin once the database is ready in the second quarter. Factory Acceptance Testing is scheduled to start in the 4th quarter.</p>						

4.5 PROJECT CATEGORY 5 – RENOVATIONS OF HYDRO GENERATING FACILITIES

Listed in Table 4.19 is a summary of the investments that the Companies plan during the period 2013-2017 in this category. These projects help the Companies meet several strategic objectives including cost-effectively improving unit efficiencies and reliability, increasing capacity, maintaining the infrastructure, protecting the safety of employees and the public, and addressing hydro/license regulatory mandates and obligations.

Table 4.19 Category 5 - Renovation of Hydro Generation Facilities

	2013	2014	2015	2016	2017	TOTAL
Cadyville	75	25	50	1,750	850	2,750
High Falls	418	1,555	450	1,625	1,350	5,398
Kents Falls	-	276	2,245	225	1,525	4,271
Mechanicville	275	100	750	1,075	1,300	3,500
Mill C	800	25	50	250	1,300	2,425
NYSEG Generation Minors	359	424	504	525	525	2,337
Rainbow Falls	103	600	100	150	850	1,803
Saranac ROR/ SCADA Integration (Centralized Hyrdo Control)	-	-	100	500	-	600
Total NYSEG Generation	2,030	3,005	4,249	6,100	7,700	23,084
RGE Generation Minors	804	401	400	402	384	2,391
Station 170	-	30	75	425	575	1,105
Station 160	-	30	75	75	75	255
Station 2	1,706	350	7,975	7,248	6,976	24,255
Station 26	2,083	170	100	150	1,705	4,208
Station 3 (Beebee) Post Demolition Site Improvements	-	200	750	900	-	1,850
Station 5	260	1,000	1,950	1,850	3,785	8,845
Station 7 (Russell) Post Demolition Site Improvements	-	200	750	900	-	1,850
Total RG&E Generation	4,852	2,381	12,075	11,950	13,500	44,758
TOTAL Generation	6,882	5,386	16,324	18,050	21,200	67,842

NYSEG

Cadyville: Cadyville is a run-of-river hydro-electric station located on the Saranac River near Plattsburgh, New York. The powerhouse consists of three units with a total rating of 5,525 kW which produce an average of 25,000 MWh/year of renewable electric energy for the direct benefit of NYSEG customers. Major activities during the forecast period include: Unit 1 major rebuild, installing an automatic flood gate in the dam, installing new switchgear and generator protection, and rebuilding of the gravity dam construction ports.

High Falls: High Falls is a run-of-river hydro-electric station located on the Saranac River near Plattsburgh, New York. The powerhouse consists of three units with a total rating of 15,000 kW which produce an average 86,000 MWh/year of renewable electric energy for the direct benefit of NYSEG customers. Major activities during the forecast period include: Unit 3 major rebuild,

Units 1, 2 and 3 draft tube stop logs, Unit 2 major rebuild, Unit 2 & 3 draft tube liners, field breakers, completion of roadwork to the powerhouse and intake, and gravity dam construction port rebuild.

Kents Falls: Kents Falls is a run-of-river hydro-electric station located on the Saranac River near Plattsburgh, New York. The powerhouse consists of three units with a total rating of 13,680 kW which produce on average 59,500 MWh/yr of renewable electric energy for the direct benefit of NYSEG customers. Major activities during the forecast period include: water conveyance system betterments to replace aging infrastructure (penstock trifurcation, ring girders and emergency bypass valve removal, installing a motorized raking system, and narrower spaced trash racks (regulatory requirement of the FERC hydro license), installing new switchgear and generator protection, and Unit 1 & 2 major rebuilds begin

Mechanicville: Mechanicville is a run-of-river hydro electric station on the Hudson River north of Albany, New York. It consists of two units with a total rating of 18,500 kW which produce on average 99,500 MWh/year of renewable electric energy for the direct benefit of NYSEG customers. Major activities during the forecast period include: a standby electric generator for station power during a loss of offsite power (i.e., during major storm events), a new gallery floor system, ROR / SCADA replacement, spillway resurfacing, and begin relicensing activities.

Mill C: Mill C is a run-of-river hydro-electric station located on the Saranac River near Plattsburgh, New York. The powerhouse consists of three units with a total rating of 6,050 kW which produce on average 26,000 MWh/year of renewable electric energy for the direct benefit of NYSEG customers. Major activities during the forecast period include: installing new switchgear and generator protection and perform spillway resurfacing.

Rainbow Falls: Rainbow Falls is a run-of-river hydro-electric station located on the Ausable River near Plattsburgh, New York. The powerhouse consists of two units with a total rating of 3,050 kW which produce on average of 20,000 MWh/year of renewable electric energy for the direct benefit of NYSEG customers. Major activities during the forecast period include: Intake and floodgate upgrades, dam/spillway resurfacing, installing a new intake gate gantry system, rebuilding of the gravity dam construction ports, environmental improvements required of the FERC hydro license (trash racks and trash removal system, and downstream fish bypass), and

restoration of powerhouse that was significantly damaged and taken out of service as a result of the plant flood caused by the Hurricane Irene event on August 28-29, 2011. The capital investment required to restore the powerhouse to service is currently estimated at \$5.0 Million, which except for the insurance deductible (estimated at \$187,500) the Company expects to fully recover through the pending insurance claim.

RG&E

Station 2: Station 2 is a run-of-river hydro-electric station located on the Genesee River in Rochester, New York. The powerhouse consists of a single unit with a rating of 8,500 kW which produces on average 53,500 MWh/year of renewable electric energy for the direct benefit of RG&E customers. Major activities during the forecast period include: Replacing intake structures and replacing the penstock that is approximately 100 years old and is nearing end-of-life, constructing a small spill gate and SCADA/communications control house adjacent to the Central Avenue Dam, installing a high-efficiency static exciter on Unit 1, constructing a substation adjacent to the powerhouse to interconnect the generator output/facilities to the recently constructed distribution Station 137, and, pending a favorable cost-benefit analysis, continue with the addition of a 6.3 MW generating Unit (No. 2), which includes deepening Brown's Race to provide the required flow to Unit 1 and Unit 2 (race deepening pending construction easement/parcel transfer from the City of Rochester).

Station 26: Station 26 is a run-of-river hydro-electric station located on the Genesee River in Rochester, New York. The powerhouse consists of a single unit with a rating of 3,000 kW which is expected to produce (after the unit major rebuild) on average 17,500 MWh/year of renewable electric energy for the direct benefit of RG&E customers. Major activities during the forecast period include: completion of the Unit 1 major rebuild (original equipment installed in 1952), new water conveyance system betterments to replace aging infrastructure (draft tube stop logs and intake shut off gate mechanism/operator) and a new tailrace wall extension.

Station 5: Station 5 is a run-of-river hydro-electric station located on the Genesee River in Rochester, New York. The powerhouse consists of three units with a rating of approximately 46,000 kW which produce an average of 219,000 MWh/year of renewable electric energy for the direct benefit of RG&E customers. Major activities during the forecast period include:

completing the necessary betterments to replace end-of-life infrastructure including spill gate pier and rock stabilizations, generator control and protection upgrade (inter-related with Station 5 Substation Modernization project), and powerhouse civil/structural projects such as rebuilding the access road and concrete betterments.

Station 170: Station 170 (Wiscoy) is a run-of-river hydro-electric station located on the Wiscoy Creek in the Town of Hume, New York. The powerhouse consists of two units with a rating of approximately 1,080 kW and is capable of producing on average 4,000 MWh/year of renewable electric energy. The forecast includes those projects that would be necessary should the station be returned to service. The Company will fully evaluate options for returning the station to service and would implement those projects pending a favorable cost-benefit analysis.

Allegany Station and 2 Combustion Turbine: The Company will invest in these fossil facilities only as necessary to sustain plant and public safety, and pending favorable cost-benefit analysis -- unit availability and reliability through completion of the auction process. No notable investments are currently planned in this 5 year planning cycle.

Russell Station and Beebee Station: The Company and its Owner's Engineer are developing a Demolition and Remediation (D&R) and "end state" specifications for these facilities. For planning purposes, pending further engineering analysis and final decision on the demolition workscope and schedule, as well as the end state requirements, funds are forecasted to construct post-demolition site improvements such as new access roads, security systems, drainage systems, electric and communication services to any remaining or new structures including a new, yet smaller water treatment facility at Russell. The final scope and investment requirements will be further developed as the end state is further defined.

4.6 PROJECT CATEGORY 6 – COMMON- ELECTRIC PORTION

Common investments include fleet, improvements to division and office facilities, operational efficiency projects and information technology projects. At NYSEG common investments are allocated 79.1% to Electric, and at RG&E common investments are allocated 65% to Electric. The most significant component of the common investment is Fleet.

The Companies propose to invest in this category during 2013 through 2017 as follows:

Table 4.20 Category 6 – Common – Electric Portion

	2013	2014	2015	2016	2017	TOTAL
Customer Services	16	1,202	2,310	1,978	-	5,505
Facilities and General Services	1,739	1,129	2,280	4,890	11,437	21,476
General Equipment	1,740	1,879	2,136	2,349	2,096	10,201
Fleet- Transportation Equipment	2,769	7,362	8,679	9,648	22,529	50,986
Information Technology	9,512	11,800	10,134	4,849	6,624	42,918
Mobile Radio Project	2,147	-	-	-	-	2,147
Operations Technology	830	16	17	18	19	901
Total NYSEG Common	18,753	23,389	25,556	23,732	42,705	134,134
Customer Services	728	416	195	-	195	1,534
Facilities and General Services	748	1,680	3,760	3,383	3,383	12,953
General Equipment	650	829	1,414	1,450	1,365	5,707
Fleet Replacement	2,275	2,893	3,846	4,028	4,219	17,261
Information Technology	3,908	5,189	4,470	2,326	3,111	19,004
Operations Technologies	33	-	-	-	-	33
Total RG&E Common	8,341	11,006	13,684	11,187	12,273	56,491
Total Common - Electric Portion	27,094	34,395	39,240	34,918	54,978	190,625

Mobile Radio Project: This project is included in Appendix L. It involves replacing the NYSEG Mobile Radio System with a 150 MHz system for 1,500 vehicles, 300 portables and 57 dispatch consoles. The system requires the development of 51 tower sites with connectivity to the ECC and the acquisition the required frequencies. Replacement is required to comply with the new FCC band-width requirements for high-band systems in three divisions and to avoid failure of the current low-band system in 10 divisions. The total cost of this project is \$64M, most of which has been done in prior years.

Fleet: Purchase of new vehicles in order to move towards industry standard average ages for specific fleet equipment and to replace older and less reliable vehicles.

Facilities and General Services: Improvements to division offices, garages, and other facilities owned or leased by the Companies. Following are the most significant projects, including the total costs (electric and gas portions):

-Kirkwood General Office - renovation, \$1M.

The Kirkwood General Office cooling towers 3 and 4 are at the end of their useful lives and need to be replaced. New cooling towers will produce energy savings and provide reliable space temperature control to the Kirkwood General Office facility. Lighting replacement with high efficiency T-8 and T-5 fixtures as well as space utilization by way of vacating the west section of the building will further increase energy savings and reduce O&M costs.

-Geneva - construct garage and transportation facilities, \$12.1M.

The existing garage and transportation facilities are inefficient and no longer adequately support business area needs. Construction of a new stand alone structure will provide space for required relocation and renovations to Customer Services.

-Sodus - construct new service center, \$3M.

Construct a new service center on a new building site. The existing Sodus/Wolcott Service Center site/facility inherently hinders operational logistics, efficiency, and service which translates to energy waste, lost time and added cost.

-Liberty - construct new service center, \$20.1M.

Construct a LEED Certified, single story service center on a 9-10 acre commercial property near NYS Rte 17 (soon to be I-86), close in proximity to multiple fuel stations and accessible to public utilities such as water, sanitary and storm sewer. The new facility will enhance operational logistics, efficiency, and service which translates to improved energy efficiency and overall effectiveness.

Information Technology: address the Corporation's aging technological infrastructure, critical security requirements, global alignment directives, and the need for enhanced workplace tools to improve effectiveness and efficiency of work. In 2013 these projects include several operational efficiencies programs for the companies and a corporate SAP project (\$31.6M):

The scope of the IT project includes the implementation of the Corporate SAP system and its processes. The enhancements to be achieved in the corporate and networks functions are as follows:

- Corporate: implementation of best practices in the areas of Control, Administration, Tax, Purchasing, Finance, and Treasury.

- Networks: integration of the billing system (“CCS”) utilized by IBERDROLA USA within the Corporate SAP system by developing the required new interfaces. Implementation in the Corporate SAP platform of the current maintenance process, new services and work management system. In addition to this, the Companies will look for improvement and standardization of processes to increase efficiency and productivity: KPIs, measures of labor productivity and service obtained from contractors, analysis of the reliability of the transmission network and substations, improvement of the compatible units and extension to other works in the network and integration of the new system with mobility solutions underway.

Operational Technology: projects to maintain IT the systems with lifecycle infrastructure replacements, planned system upgrades to support added functionality and remain on supported software platforms for compliance, and accounts for organic growth.

5 GAS CAPITAL INVESTMENT PLAN

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This section contains descriptions of the gas projects and programs necessary to accomplish the strategic objectives. The following table summarizes the gas capital investment plan for the Companies:

Table 5.1 Gas Capital Investment Plan by Year (Dollars in Millions)

Company	2013	2014	2015	2016	2017	TOTAL
NYSEG Gas	43,062	42,947	53,086	57,989	71,304	268,388
RG&E- Gas	32,117	35,990	47,229	54,042	58,665	228,043
Subtotal- Gas	75,178	78,938	100,316	112,031	129,968	496,431
Appendix L- Gas	78,499					

5.1 PROJECT CATEGORY 1-NETWORK REINFORCEMENT

This category is related to Objective 2, achieve service reliability and quality. This includes the projects and programs done to address system capacity and pressure needs.

The Companies propose to make the following capital investments in the natural gas system in this category during 2013 through 2017 as follows:

Table 5.2 Gas - Category 1 - Network Reinforcement (\$000)

	2013	2014	2015	2016	2017	TOTAL
NYSEG	8,496	5,865	11,984	9,426	12,396	48,167
RG&E	2,148	2,240	5,100	2,800	8,160	20,448
TOTAL	10,644	8,105	17,084	12,226	20,556	68,615

Table 5.3 shows the projects included in this category.

Table 5.3 Gas - Category 1 - Projects and programs

Title	2013	2014	2015	2016	2017
Critical Valve Installations, Binghamton	-	150,000	150,000	0.00	0.00
Seneca West Pipeline Interconnect to Elmira	7,896,000	1,010,000	-	-	-
Kayner and Ertman Road Stations, Lockport	-	955,000	-	-	-
Distribution Mains - Projects to be identified - NYSEG	-	2,500,000	4,000,000	5,500,000	6,000,000
Port Dickinson Gas Pipeline Loop Extension Towns of Port Dickinson and Fenton, Binghamton, NY	-	-	1,419,000	1,508,000	1,508,000
Boswell Hill Bare Steel Main Replacement Project Town of Union, Binghamton, NY Phases 1, 2, & 3	-	-	1,400,000	1,488,000	1,488,000
Ithaca/Dryden Gas Distribution, Install Gas Mains, Ithaca	-	-	3,770,000	-	-
Gas SCADA System System Replacement	-	-	-	-	3,000,000
Groveland System Reinforcement, Install Gas Mains	-	-	520,000	430,000	200,000
Gas Pipeline Susquehanna River Bore Extension Project Town of Vestal and Village of Johnson City, Binghamton, NY	-	800,000	-	-	-
Seneca East Odorizers, Elmira	600,000	-	-	-	-
Gas SCADA System Software Upgrade	-	250,000	-	-	-
Tow Path Road Gas Regulator Station Installation, Town of Fenton Binghamton, NY	-	-	225,000	-	-
Bradley St, Install Gas Mains, Auburn	-	200,000	-	-	-
Remote Operation Valve System Isolated	-	-	500,000	500,000	200,000
Total NYSEG	8,496,000	5,865,000	11,984,000	9,426,000	12,396,000
MF35 Walworth System Improvement, Install Pipe and Regulator Stations	-	-	-	-	950,000
Buffalo Road Rebuild Regulator Station and Replace Gas Main	-	-	1,600,000	-	-
Whittier Road Improvements, Phase 4, Install Gas Mains, Rochester	-	-	-	-	210,000
Distribution Mains - Projects to be identified - RG&E	-	2,000,000	3,000,000	2,300,000	6,000,000
New Empire West Gate Station, Build New Gate Station, Roch	2,147,750	-	-	-	-
MF13 Geneseo Improvement, Install Gas Mains, Roch	-	-	-	-	500,000
Henrietta 42 Phase 3B, Install Gas Mains, Roch	-	240,000	-	-	-
Remote Operation Valve System Isolated	-	-	500,000	500,000	500,000
Total RG&E	2,147,750	2,240,000	5,100,000	2,800,000	8,160,000
Total Category 1 - Gas	10,643,750	8,105,000	17,084,000	12,226,000	20,556,000

A description of the most significant projects in this category is provided in Attachment 7.

5.2 PROJECT CATEGORY 2 –NEW CUSTOMERS AND STATUTORY REQUIREMENTS

This category is related to meeting the natural gas requirements of our customers. This includes the projects and programs done to address new customers, specific customer needs and statutory projects, such as relocations to accommodate highway changes.

The Companies propose to make investments in projects and programs in this category during 2013 through 2017 as follows:

Table 5.4 Gas - Category 2 – Customer and Statutory (\$000)

	2013	2014	2015	2016	2017	TOTAL
NYSEG	21,376	24,017	26,709	31,345	33,114	136,561
RG&E	20,900	23,663	28,732	33,777	33,043	140,115
TOTAL	42,276	47,680	55,441	65,122	66,157	276,676

A list of projects and programs included in this category is included in the Attachment 8 and a description of the most significant projects in this category (over \$1M) is provided in Attachment 7.

Descriptions of the programs included in this category are provided below:

Gas Meter Program: All new and replacement meters as required due to new services and mandated replacement and change out programs.

Leak Prone Main Replacement Program: The replacement of at least 24 miles of prioritized leak prone cast iron and unprotected steel gas main annually at each company. Beginning in 2015, the Companies plan to increase replacements.

Leak Prone Services Replacement Program: The replacement of at least 2,200 prioritized leak prone unprotected steel gas services annually at the Companies. Beginning in 2015, the Companies plan to increase replacements.

5.3 PROJECT CATEGORY 3 – MODERNIZATION & RENOVATION

This category is related to replacing obsolete equipment and facilities and improving the effectiveness and efficiency of the delivery network. The Companies need to replace equipment that is obsolete either because it is at end of life or it is technologically obsolete. Obsolete equipment can cause safety issues, risk of environmental incidents, and lack of reliability, and such equipment is difficult and costly to maintain and to obtain spares.

The Companies propose investments in this category during 2013 through 2017 as follows:

Table 5.5 Gas - Category 3 – Modernization and Renovation (\$000)

	2013	2014	2015	2016	2017	TOTAL
NYSEG	7,985	6,686	6,216	10,197	13,760	44,844
RG&E	4,577	2,591	5,514	10,926	10,339	33,947
TOTAL	12,563	9,276	11,729	21,123	24,099	78,791

Table 5.6 shows the projects and programs included in this category. A description of the most significant projects is provided in Attachment 7 for projects over \$1M.

Table 5.6. Category 3 – Gas - Projects and Programs (\$000)

	2013	2014	2015	2016	2017
Distribution Main Replacement, Replace Gas Mains, NYSEG	1,900,000	1,957,000	2,015,710	2,076,181	2,138,467
Gas Regulator Modernization & Automation Program, Replace Regulator Stations, NYSEG	2,243,760	2,000,000	2,300,000	4,000,000	4,500,000
NYSEG Transmission Casing Replacement Program, NYSEG	1,056,780	-	1,000,000	1,121,138	1,121,138
Robinson Road Gate Station Rebuild, Lockport	1,510,000	1,830,000	-	-	-
SmarTRAC Replacement, NYSEG	1,274,678	898,810	-	-	-
Transmission Mains - Projects to be identified -NYSEG	-	-	900,000	3,000,000	6,000,000
Total NYSEG	7,985,218	6,685,810	6,215,710	10,197,319	13,759,605
CM1 Replacement Humphrey to Ballantyne Rd, Replace Gas Main, Roch	-	500,000	2,600,000	4,500,000	-
Distribution Main Replacement, Replace Gas Mains, Roch	390,000	401,700	413,751	426,164	438,948
Gas Regulator Modernization & Automation Program, Replace Regulator Station - RGE	765,000	790,000	2,000,000	3,000,000	3,900,000
New Empire West Gate Station, Build New Gate Station, Roch	2,147,750	-	-	-	-
SmarTRAC Replacement, RG&E	1,274,678	898,810	-	-	-
Transmission Mains - projects to be identified - RG&E	-	-	500,000	3,000,000	6,000,000
Total RG&E	4,577,428	2,590,510	5,513,751	10,926,164	10,338,948
Total Category 3- Gas	12,562,646	9,276,320	11,729,461	21,123,483	24,098,553

The most significant programs in this category are:

Gas Regulator Station Replacement Program: Replacement of obsolete equipment and equipment in poor condition associated with regulator and gate stations including regulators, odorizers, heaters, reliefs, RTU equipment, and other associated equipment.

Regulator Station Modernization: Utilize standardized templates for regulator station design that considers safety, obsolescence, operability, capacity and future growth. This program will increase the reliability of our pressure systems.

5.4 PROJECT CATEGORY 4 – AUTOMATION

This category includes the projects and programs done to monitor and control the major points of the gas system.

The Companies propose to make the following capital investments in the natural gas system in this category during 2013 through 2017 as follows:

Table 5.7 Gas- Category 4 – Automation

	2013	2014	2015	2016	2017	TOTAL
NYSEG	250	200	1,425	750	750	3,375
RG&E	-	1,570	515	515	515	3,115
TOTAL	250	1,770	1,940	1,265	1,265	6,490

5.5 PROJECT CATEGORY 6 – COMMON- GAS PORTION

Common investments include fleet, improvements to division and office facilities, operational efficiency projects and information technology projects. At NYSEG common investments are allocated 20.9% to Gas, and at RG&E common investments are allocated 35% to Gas. The most significant component of the common investment is Fleet.

The Companies propose to invest in this category during 2013 through 2017 as follows:

Table 5.8 Category 6. Common- Gas portion

	2013	2014	2015	2016	2017	TOTAL
Customer Services	4	318	610	523	-	1,455
Facilities and General Services	460	298	603	1,292	3,022	5,674
General Equipment	460	497	564	621	554	2,695
Fleet- Transportation Equipment	732	1,945	2,293	2,549	5,953	13,472
Information Technology	2,513	3,118	2,678	1,281	1,750	11,340
Mobile Radio Project	567	-	-	-	-	567
Operations Technology	219	4	5	5	5	238
Total NYSEG Common	4,955	6,180	6,753	6,270	11,284	35,441
Customer Services	392	224	105	-	105	826
Facilities and General Services	403	904	2,024	1,821	1,821	6,974
General Equipment	350	446	761	781	735	3,073
Fleet Replacement	1,225	1,558	2,071	2,169	2,272	9,294
Information Technology	2,104	2,794	2,407	1,253	1,675	10,233
Operations Technologies	18	-	-	-	-	18
Total RG&E Common	4,492	5,926	7,368	6,024	6,608	30,418
Total Common - Electric Portion	9,446	12,106	14,121	12,294	17,892	65,860

Mobile Radio Project: This project is included in Appendix L. It involves replacing the NYSEG Mobile Radio System with a 150 MHz system for 1,500 vehicles, 300 portables and 57 dispatch consoles. The system requires the development of 51 tower sites with connectivity to the ECC and the acquisition the required frequencies. Replacement is required to comply with the new FCC band-width requirements for high-band systems in three divisions and to avoid failure of the current low-band system in 10 divisions. The total cost of this project is \$63M. Most of this project has been completed in prior years

Fleet: Purchase of new vehicles in order to move towards industry standard average ages for specific fleet equipment and to replace older and less reliable vehicles.

Facilities and General Services: Improvements to division offices, garages, and other facilities owned or leased by the Companies. Following are the most significant projects, including the total costs (electric and gas portions):

- Kirkwood General Office - renovation, \$1M.

The Kirkwood General Office cooling towers 3 and 4 are at the end of their useful lives and need to be replaced. New cooling towers will produce energy savings and provide reliable

space temperature control to the Kirkwood General Office facility. Lighting replacement with high efficiency T-8 and T-5 fixtures as well as space utilization by way of vacating the west section of the building will further increase energy savings and reduce O&M costs.

-Geneva - construct garage and transportation facilities, \$12.1M.

The existing garage and transportation facilities are inefficient and no longer adequately support business area needs. Construction of a new stand alone structure will provide space for required relocation and renovations to Customer Services.

-Sodus - construct new service center, \$3M.

Construct a new service center on a new building site. The existing Sodus/Wolcott Service Center site/facility inherently hinders operational logistics, efficiency, and service which translates to energy waste, lost time and added cost.

-Liberty - construct new service center, \$20.1M.

Construct a LEED Certified, single story service center on a 9-10 acre commercial property near NYS Rte 17 (soon to be I-86), close in proximity to multiple fuel stations and accessible to public utilities such as water, sanitary and storm sewer. The new facility will enhance operational logistics, efficiency, and service which translates to improved energy efficiency and overall effectiveness.

Information Technology: address the Corporation's aging technological infrastructure, critical security requirements, global alignment directives, and the need for enhanced workplace tools to improve effectiveness and efficiency of work. In 2013 these projects include several operational efficiencies programs for the companies and a corporate SAP project (\$31.6M):

The scope of the project includes the implementation of the Corporate SAP system and its processes. The enhancements to be achieved in the corporate and networks functions are as follows:

- Corporate: implementation of best practices in the areas of Control, Administration, Tax, Purchasing, Finance, and Treasury.
- Networks: integration of the billing system ("CCS") utilized by IBERDROLA USA within the Corporate SAP system by developing the required new interfaces. Implementation in

the Corporate SAP platform of the current maintenance process, new services and work management system. In addition to this, the Companies will look for improvement and standardization of processes to increase efficiency and productivity: KPIs, measures of labor productivity and service obtained from contractors, analysis of the reliability of the transmission network and substations, improvement of the compatible units and extension to other works in the network and integration of the new system with mobility solutions underway.

Operational Technology: projects to maintain the systems with lifecycle infrastructure replacements, planned system upgrades to support added functionality and remain on supported software platforms for compliance, and accounts for organic growth.

6 2012 INFORMATION

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Table 6.1	2012 Capital Investment	87
Table 6.2	Facilities Placed into Service in 2012	88

6.1 CAPITAL INVESTMENT - 2012

During 2012 the Companies invested \$440.5 M in the electric and natural gas delivery systems (including generation investments). This represents 106% of the 2012 Plan included in the Five Year Capital Investment Plan dated April 1, 2012.

Table 6.1 below includes 2012 capital investment information by operating company and line of business.

Table 6.1 2012 Capital Investment

Company	Actual	2012 Plan	%
NYSEG Electric	174.5	161.3	108%
RG&E Electric	185.6	181.8	102%
Subtotal- Electric	360.1	343.1	105%
Appendix L - Electric		265.9	
NYSEG Gas	43.6	40.3	108%
RG&E Gas	36.9	33.3	111%
Subtotal- Gas	80.5	73.6	109%
Appendix L - Gas		73.6	
TOTAL	440.5	416.7	106%

6.2 FACILITIES PLACED INTO SERVICE

Table 6.2 shows the facilities related to major projects placed into service in 2012.

Table 6.2 Facilities Placed into Service in 2012

Equipment	Total	11.5kV	15kV	12kV	34.5kV	115kV	230kV
Breakers	31	3	0	21	5	2	0
Switchgear	1	0	1	0	0	0	0
Capacitor Banks	5	0	0	0	24 MVAR	150 MVAR	0
Line/Cable	Total Miles	34.5kV	115kV	345kV			
Transmission Line	6.38	6.38	0	0			
Distribution Line	5	5	0	0			
Distribution Cable	4.25	4.25	0	0			
Transformers	1	115/34.5kV	100MVA	LTC			
	1	115/11.5kV	56MVA	LTC			
	1	115/34.5kV	20MVA	Grounding			
	2	34.5/11.5kV	22.4MVA	LTC			
	1	46/13.2kV	14MVA	LTC			
	6	Total	234.8				
Auto Transformers	1	345/115kV	420MVA	LTC			
	1	Total	420				
Substations	1	46/4.16kV					
	1	34/11kV					
	2	Total					

Control House Modifications	0
Control Houses	2

7 APPENDIX L RECONCILIATION

Attachment 2 shows Appendix L reconciliation and total amount of additional projects and programs added to Appendix L during the period 2011-2013.

Here is the summary of the key Appendix L topics:

- Permits/Regulatory Proceedings
 - Rochester Area Reliability Project
 - Columbia County Transmission Project
- Interconnection/Customer Projects
 - University of Rochester
 - Bio Gas Collector System
- System Reinforcements
 - Engineering additions to Scope
 - New Downtown 115 kV Source (Station 23)
 - New 115/34.5 kV Substation (Station 262)
 - Silver Creek Substation
 - Engineering Scope Modifications
 - Willet Substation
 - Auburn Transmission Project
 - Meyer Substation
 - Flat Street Substation
 - South Perry New 115kV Transformer
 - Perry Center Area
 - Eelpot New Transformer
 - Meyer Substation

- Stephentown Substation
 - Richfield Springs Substation
 - Tom Miller Substation
 - Coddington Substation
 - Harris Lake Source Upgrade
 - Station 124 New SVC
 - Rochester Area Reliability project
 - Station 56
- Electric GIS has been rolled into Energy Control Center Project
- Projects Completed
 - Corning Valley
 - Watercure Rd Sub Transformer Replacement
 - Moraine Rd Substation Breaker Addition
 - New Mobile Substation
 - Bulk Spare Transformer
 - Station 424
 - New Station 137
 - New 115 kV Transmission Line (Sta. 13A to Sta. 135)
 - Ithaca Reinforcement
 - Mill C Unit 1+2 draft Tube Replacement
 - Webster East New 12kV Source
 - Station 13A Replace Breaker
 - Culver Rd Electric Facilities Relocation
 - Jefferson Ave Electric Facilities Relocation
 - Station 5 Tunnel Relining
 - Station 5 Wicket Gate Upgrades
- Significant Projects - Scheduled for Completion 2013
 - Station 124 Static Var Compensator
 - Station 124 New PST

- Capacitor Bank Projects (Stations 180,128, 198, 218, 194)
- Walden 69 kV Transmission Line Upgrade
- Mobile Radio Project

Review and modification

- Review of Baseline Appendix L Assumptions: Estimate, Scope and Schedule Analysis
 - Estimate Increase Examples:
 - Columbia County Transmission Project
 - » Route Analysis identified Preferred Route length of 11 Miles triggering Article VII application
 - Station 67 to 418 New 115 kV Transmission Line
 - » Required expansion of Station 67, modifications to control house to accommodate protection and control requirement, location of both above ground and in ground transmission construction
 - Station 218 to Clyde 34.5 Transmission Line
 - » Reconfigure circuit 708 to provide back up for Station 199;
 - » Incorporation of SCADA communication
 - »
 - Estimate Decrease Examples:
 - Station 124 Phase Shifting Transformer
 - » Leveraging work for the Static Var Compensator and Phase Shifting Transformer to gain cost efficiencies
 - Bulk Spare Transformer
 - » Utilization of competitive bid process to achieve cost savings
 - South Perry Transformer Project
 - Current estimate is lower than original based on current transformer bid costs

8 IBERDROLA USA CAPITAL INVESTMENT PRIORITIZATION STRATEGY

Iberdrola USA adopted a Capital Investment Prioritization Strategy in early 2013 that will be the foundation for capital investment allocations and projections for future forecasts for NYSEG and RG&E. The results will be an investment plan in which quick and effective adjustments – increases or decreases – can be made based on predetermined criteria that consider capital needs across each Company. Efficiencies will be created in plan development and adjusting to changing scenarios.

The classification for prioritization of investments will be based on the following categories:

- Mandatory Compliance
- System Capacity
- Reliability Risk
- Group Initiatives
- Efficiency
- Asset Condition Replacement
- Strategic

The Capital Investment Prioritization Strategy will be implemented in 2013 and will be the basis for prioritization moving forward.

Attachment 1

Detail Project List for 2013 to 2017

NYSEG- Electric List	Investment Reason	%	2013	2014	2015	2016	2017
Cass Hill 12kV Conversion	System Capacity	1.0	-	500,000	-	-	-
Concord Transformer Bank Replacement	System Capacity	1.0	-	-	-	-	250,000
Java Transformer Repacement	System Capacity	1.0	-	-	250,000	1,000,000	-
Pershing Ave Step Transformer Replacement	System Capacity	1.0	-	500,000	-	-	-
2012 - New Bulk Spare Power Transformer	Damage	1.0	1,075,000	902,717	-	-	-
Alden - Add 2nd Transformer Bank	System Capacity	1.0	-	-	-	1,362,450	2,000,000
Auburn Transmission Project (Auburn 345kV Source)	Power Quality	0.8	640,000	3,806,760	15,792,418	5,317,214	-
Auburn Transmission Project (Auburn 345kV Source)	System Capacity	0.2	160,000	951,690	3,948,105	1,329,303	-
Bellayre Ski Center Install new 34.5kv distribution feed for upgrade at Ski Center	Growth	1.0	1	-	-	-	-
Biogas 34.5kV Collector System	Statutory	1.0	600,000	-	-	-	-
Bulkhead - Replace Transformer Bank#2	System Capacity	1.0	-	-	-	1,000,000	1,267,695
Cemetery RD - Replace Transformer Bank #1 and add 4th 12kV Circuit Position.	System Capacity	1.0	-	-	2,128,000	-	-
Circuit 512 (Vestal - Goudey) - Upgrade Conductor - Binghamton	System Capacity	1.0	389,000	-	-	-	-
Clark Street Substation MGP Electric Capital Construction - Auburn	Statutory	1.0	200,000	-	-	-	-
Coddington Add LTC Capability to 115/34.5kV Transformer	System Capacity	1.0	350,000	-	-	-	-
Columbia County Transmission Project (Klinekill 115kV)	System Capacity	1.0	700,000	1,478,591	5,678,068	16,348,231	4,455,875
Coopers Corners, Add 3rd 345/115 kV Transformer	Power Quality	1.0	-	1,000,000	3,000,000	7,800,985	-
Crafts - Add 2nd Transformer and 4th 13.2kV circuit position	System Capacity	1.0	260,000	1,714,000	-	-	-
Davis Road, Replace 115/34.5 kV Transformers #2 & #3 with new LTC's	Power Quality	1.0	-	-	-	-	1,800,000
Dingle Ridge - 2nd Bank and 13.2kV Conversion	System Capacity	1.0	260,000	1,000,000	4,000,000	-	-
DOE- Stimulus Program- Capacitor Banks NYSEG(Ashley, Morgan, Ridge Rd.,	Power Quality	1.0	1,470,903	736,965	-	-	-
Dryden Bank #1 Transformer Replacement	Asset Condition	1.0	-	-	-	750,000	2,000,000
Earlville Bank #1 Transformer Replacement	Asset Condition	1.0	-	-	-	-	387,811
Ebenezer - Add a 2nd Transformer Bank and 2 new circuit positions	System Capacity	1.0	-	-	-	2,000,000	493,920
Eelpot New Transformer	System Capacity	1.0	1,500,000	3,614,490	-	-	-
FERC- Bright Line BES	Statutory	1.0	-	2,700,000	2,500,000	-	-
Flat Street Substation New Transformer	System Capacity	1.0	1,500,000	3,613,796	-	-	-
Fraser Sub - Add 2nd 345/115 kV Transformer	Power Quality	1.0	-	1,200,000	1,500,000	2,200,000	8,519,650
Gardenville, Add 3rd 230/115 kV Transformer	Power Quality	1.0	-	-	-	-	1,000,000
Glenwood - Replace Substation Transformers	System Capacity	1.0	1,000,000	2,337,232	-	-	-
Goudey S/S - Separation from AES Westover Plant - Bing	Statutory	1.0	860,000	5,400,585	-	-	-
Grand Gorge #1 Sub - Replace with transformer with 12/16/20MVA	Growth	1.0	-	-	-	300,000	2,500,000
Grant Avenue - Add 2nd Transformer and 4th circuit position	System Capacity	1.0	260,000	-	-	-	-
Greenidge S/S - Separation from AES Geneva Plant	Statutory	1.0	860,000	2,730,994	-	-	-
Hamburg - Replace Transformer Banks #1 & 2	System Capacity	1.0	-	-	-	500,000	2,862,450
Harris Lake - Diesel Generator Upgrade	System Capacity	1.0	1,300,000	5,480,000	-	-	-
Hickling S/S - Separation from AES Elmira Plant	Statutory	1.0	860,000	4,232,199	-	-	-
Jennison S/S - Separation from AES Oneonta Plant	Statutory	1.0	860,000	3,674,708	-	-	-
Kent 2nd 13.2 KV Ckt and Bank Upgrade - Brewster	Growth	1.0	-	-	-	-	1,000,000
Line 1611 & 1620 Circuit 437 Tilly Foster Rebuild Reconductor	Asset Condition	1.0	-	-	-	110,000	-
Line 601, replace existing facilities	System Capacity	1.0	-	500,000	1,280,000	-	-
Line 807, Convert to 115kV Operation	System Capacity	1.0	800,000	2,240,438	-	-	-
Marcellus Sub - Transformer Replacement	System Capacity	1.0	260,000	-	-	-	-
Mechanicville Reinforcement Project, Construct New Luther Forest Substation	Growth	0.1	149,415	84,112	-	-	-
Mechanicville Reinforcement Project, Construct New Luther Forest Substation	System Capacity	0.9	1,344,731	757,008	-	-	-
Meyer Substation New Transformer - 115/34.5kV	System Capacity	1.0	500,000	3,748,969	-	-	-
Morningside Heights - Add a 2nd Transformer Bank and 3rd circuit position	System Capacity	1.0	260,000	-	-	-	-
MTA-New 13.2kV Circuits - 100% Reimbursable	Growth	1.0	-	1	-	-	-

	Investment Reason	%	2013	2014	2015	2016	2017
NERC Alert Program	Statutory	1.0	5,831,109	1,991,122	-	-	-
North Broadway, Add 2nd 115/34.5 kV Transformer	System Capacity	1.0	-	-	-	-	1,000,000
Oakdale Reconfiguration Project	Power Quality	1.0	-	-	-	-	13,800,000
Old Fall substation - Install 2nd LTC Transformer	System Capacity	1.0	150,000	1,274,313	-	-	-
Orchard Park - Add a 2nd Transformer Bank	System Capacity	1.0	-	-	-	1,000,000	1,295,186
Park St, V/Warsaw Circuit Reconductor - Warsaw Sub CKT 381	System Capacity	1.0	-	-	150,000	-	-
Perry Center Area Install New 34.5kV Substation	System Capacity	1.0	1,247,284	2,224,501	-	-	-
Richfield Springs Substation New Transformer	System Capacity	1.0	200,000	-	-	-	-
River Rd Sub - Replace sub transformer wth non-LTC 10/12/14MVA	System Capacity	1.0	-	-	1,500,000	2,500,000	1,500,000
Robinson Road 230kV Transformer Replacement Project - Lockport	Asset Condition	1.0	3,000,000	1,484,127	-	-	-
Sackett Lake Sub - Replace transformer with 7.5MVA unit and convert	System Capacity	1.0	500,000	972,450	-	-	-
Silver Creek Substation New Transformer	System Capacity	1.0	800,000	3,709,126	-	-	-
Sloan - Add a 2nd Transformer Bank and 4th circuit position.	System Capacity	1.0	-	-	3,198,481	-	-
South Perry - Replace 115/34.5 kV Transformer	System Capacity	1.0	1,004,551	271,924	-	-	-
South Perry New 115kV Transformer	System Capacity	1.0	1,004,551	1,913,014	-	-	-
South Perry New 230kV Transformer	System Capacity	1.0	1,055,893	6,679,051	-	-	-
Stephentown Substation New Transformer	System Capacity	1.0	1,100,000	2,658,406	-	-	-
Tom Miller Rd New Substation	System Capacity	1.0	1,004,845	3,151,306	-	-	-
Transit St Substation MGP Electric Capital Construction	Statutory	1.0	1,300,000	1,793,376	-	-	-
Walden 69kV Transmission Line Upgrade	System Capacity	1.0	30,000	-	-	-	-
Wales Center - Add a 2nd Transformer Bank and 3rd circuit position.	System Capacity	1.0	-	-	2,121,882	-	-
Watercure Rd. - 2nd 345 kV Transformer	System Capacity	1.0	500,000	4,899,729	3,626,597	-	-
West Davenport Sub - Replace sub transformer with non-LTC 7.5/10.5MVA unit.	System Capacity	1.0	-	-	-	2,100,000	2,800,000
Westover Substation New 115kV Transformer and Binghamton Division Capacitors	Power Quality	0.2	360,000	560,683	69,065	-	-
Westover Substation New 115kV Transformer and Binghamton Division Capacitors	System Capacity	0.8	1,440,000	2,242,734	276,258	-	-
Willet Substation New Transformer	System Capacity	1.0	500,000	5,553,754	-	-	-
Windham Substation 115 KV Capacitor Bank Addition	Power Quality	1.0	500,000	2,033,417	-	-	-
Wood Street - Add 3rd 345/115 kV Transformer	System Capacity	1.0	-	746,549	1,506,000	5,000,000	4,856,721
Smart Grid/AMI	Automation	1.0	-	-	-	-	7,737,110
SUN SmartGrid Pilot	Automation	1.0	-	-	1,350,000	180,000	-
Energy Control Center	Automation	1.0	4,569,611	3,180,000	-	-	-
Homer City Breaker 212 Replacement	Asset Condition	1.0	500,000	-	-	-	-
Homer City Breaker 304 Replacement - 2013	Asset Condition	1.0	500,000	1	-	-	-
Callicoon 285, New Gas Compressor Station - Reimbursable	Growth	1.0	700,000	-	-	-	-
Clinton County Highways, Relocate Electric Facilities	Statutory	1.0	125,000	-	-	-	-
Collegetown Terrace Apartments 3 Phase URD Phase 2&3	Growth	1.0	150,000	150,000	-	-	-
Cowlesville, Add 34.5 kV Switched Capacitor Bank	Power Quality	1.0	-	-	-	34,000	322,000
Davis Road - Add 4th Circuit - Electric - Lancaster	Growth	1.0	-	105,000	-	-	-
DolomiteVanBuren/606 transmission underbuild Project	Growth	1.0	1,400,000	-	-	-	-
Goodrich Rd. 5MVA padmount step installation	Growth	1.0	-	-	175,000	-	-
Hanshaw Road HWY Job	Statutory	1.0	150,000	-	-	-	-
Holiday Inn Hotel Ithaca	Growth	1.0	100,000	-	-	-	-
Kiamesha Sub, Concord Resort Install Dedicated 12kv circuit	Growth	1.0	900,000	-	-	-	-
Kionix Manufacturing Re-Build Cayuga Heights Sub	Growth	1.0	500,000	-	-	-	-
Line 526, Rebuild Coddington-South Hill 34.5 kV Line	System Capacity	1.0	-	-	-	200,000	700,000
Lourdes Sub - Add 2nd 5MVA sub padmount transformer and one 4.8KV	Growth	1.0	500,000	-	-	-	-
Main St, V/Warsaw Circuit Reconductor - Warsaw Sub circuit 381 Phase #2	System Capacity	1.0	-	-	170,000	-	-
Marriot Hotel Ithaca	Growth	1.0	300,000	-	-	-	-

	Investment Reason	%	2013	2014	2015	2016	2017
New Waterloo Substation	System Capacity	1.0	-	-	300,000	4,000,000	-
NYSEG Binghamton Glenwood 686 12KV conversion for Load Relief	Growth	0.5	-	-	-	72,500	-
NYSEG Binghamton Glenwood 686 12KV conversion for Load Relief	System Capacity	0.5	-	-	-	72,500	-
Philo 328 - CR 64 Highway Relocation	Statutory	1.0	185,000	-	-	-	-
PSC Losses Reduction Initiative - Add Line capacitors-Elec-NYSEG (carryover)	Statutory	1.0	-	-	400,000	-	-
Raylinski Tap 606, Install six Scadamates nad SCADA sub upgrade	Asset Condition	1.0	-	-	-	250,000	290,000
Relocate Electric Facilities	Statutory	1.0	-	55,000	94,311	25,067	-
Roll Rd 512 Replace cable at URDs	System Capacity	1.0	-	210,000	-	-	-
Roll Rd 545 Upgrade step Transformers at Goodrich Rd	System Capacity	1.0	-	175,000	-	-	-
Roll Road - 4th Circuit - Electric - Lancaster	System Capacity	1.0	-	125,000	-	-	-
Roll Road, Add 34.5 kV Switched Capacitor Bank	System Capacity	1.0	-	-	-	-	356,000
Saratoga County Highways, Relocate Electric Facilities	Statutory	1.0	125,000	-	-	-	-
Saratoga County, URD, Install underground electric	Statutory	1.0	-	-	125,000	-	-
Southerly Hills URD Phase I of III	Growth	1.0	130,000	-	-	-	-
Southerly Hills URD Phase II	Statutory	1.0	-	105,000	80,000	-	-
Southerly Hills URD Phase III	Statutory	1.0	-	-	80,000	-	-
Spaulding Lakes Sub, Lock Lea sub and Meadow Lakes sub. Replace	System Capacity	1.0	-	-	210,000	-	-
State Street 3rd 12.5 KV Circuit - Auburn	System Capacity	1.0	-	-	210,000	-	-
Town of Jay, Electric relocation	Statutory	1.0	-	150,000	-	-	-
Town of Keene, Relocate Electric	Statutory	1.0	-	150,000	-	-	-
Unknown URD Development - Place holder	Growth	1.0	150,000	-	-	-	-
URD Installation Reed Hill Heights Subdivision - 30% Reimbursable	Growth	1.0	105,000	-	-	-	-
Various URD Distribution Work - Place holder	Growth	1.0	200,000	200,000	-	-	-
Vestal 714 4.8 to 12.47 Conversion (Distribution)	Growth	1.0	-	250,000	-	-	-
Vestal 714 4.8 to 12.47 Conversion (Substation)	System Capacity	1.0	-	400,000	-	-	-
Warsaw 381 Circuit Reconductor	System Capacity	1.0	-	250,000	-	-	-
Wehrle Dr, Replace Cable, Terminations & Switch Gear	Damage	1.0	150,000	-	-	-	-
Applex/iBase System integration	Automation	1.0	-	60,000	60,000	60,000	60,000
Control Center Telephone - PBX/Recorder/Dispatch Radio	Automation	1.0	-	1,050,000	350,000	-	-
Energy Control Center Project in NY, Siemens DMS	Automation	1.0	-	-	700,000	700,000	-
GIRED and ICDS (Integrated EMS/DMS/OMS Project)	Automation	1.0	-	118,205	25,300	-	-
Lifecycle Replacement - ECC/XECS systems	Asset Condition	1.0	144,000	720,000	150,000	105,000	105,000
NYSEG - NY Control Center Telephone - Major Capital	System Capacity	1.0	-	-	-	-	-
NYSEG Telecom - Alarm Monitoring Refresh	System Capacity	1.0	-	-	-	150,000	-
NYSEG Telecom - Mobile Radio Projects	System Capacity	1.0	-	20,000	20,000	20,000	20,000
NYSEG Telecom - SONET Refresh	System Capacity	1.0	-	-	200,000	-	450,000
Organic Growth ECC/XECS systems	System Capacity	1.0	-	94,000	94,000	78,000	80,000
Telecomm Bridges for new KGO BU Site	Automation	1.0	-	-	-	-	20,000
Other Reliability Risk Projects	System Capacity				2,000,000	2,000,000	21,000,000
Other Asset Condition Projects	Asset Condition				1,000,000	1,000,000	28,356,234
Total NYSEG Electric Projects			51,530,894	106,632,043	60,318,485	59,565,250	113,285,652
NYSEG Telecom - Blanket	System Capacity	1.0	-	160,000	160,000	160,000	160,000
NYSEG - Recloser/Substation and other Automation Initiatives	Automation	1.0	914,000	-	-	-	-
NYSEG Telecom (OT) - Fiber Optic Networks	Automation	1.0	-	2,000,000	4,000,000	4,000,000	4,000,000
NYSEG Telecom (OT) - Microwave Networks	Automation	1.0	-	1,000,000	2,000,000	2,000,000	2,000,000
NYSEG Telecom (OT) - Multipoint Radio Networks	Automation	1.0	-	500,000	500,000	500,000	500,000
Access Control Improvements	Statutory	1.0	100,000	100,000	605,000	610,000	505,000
Fire Protection	Statutory	1.0	500,000	500,000	500,000	500,000	500,000
Video Alarming	Statutory	1.0	1,188,000	1,322,000	1,174,000	1,061,000	1,034,000

	Investment Reason	%	2013	2014	2015	2016	2017
Brewster RTU Substation Project	Automation	1.0	1,239,000	-	-	-	-
NYSEG RTU Upgrade Program	Automation	1.0	3,139,529	3,500,000	8,000,000	7,945,838	15,298,000
Substations	Asset Condition	1.0	2,500,000	2,500,000	2,652,000	2,652,000	2,814,000
Transmission Line	Asset Condition	1.0	6,000,000	6,000,000	6,365,000	6,365,000	6,753,000
Distribution Line Inspection	Asset Condition	1.0	4,000,000	4,000,000	4,244,000	4,244,000	4,502,000
Distribution Line	Asset Condition	1.0	8,500,000	8,500,000	9,018,000	9,018,000	9,567,000
Government Highway	Statutory	1.0	600,000	600,000	637,000	637,000	675,000
Industrial/Commercial	Growth	1.0	1,000,000	1,000,000	1,061,000	1,061,000	1,126,000
Residential Line Extensions	Growth	1.0	2,500,000	2,500,000	2,652,000	2,652,000	2,814,000
Service Connects	Growth	1.0	3,500,000	3,500,000	3,713,000	3,713,000	3,939,000
Street Lighting	Growth	1.0	1,000,000	1,000,000	1,061,000	1,061,000	1,126,000
Transformers	Growth	1.0	14,000,000	14,000,000	14,853,000	14,853,000	15,757,000
Capacitors	Growth	1.0	500,000	500,000	530,000	530,000	563,000
Meters	Growth	1.0	2,300,000	2,300,000	2,507,792	2,507,792	2,633,182
Regulators	Growth	1.0	1,000,000	1,000,000	1,061,000	1,061,000	1,126,000
Storm	Damage	1.0	1,500,000	1,500,000	1,591,000	1,591,000	1,688,000
WPC Red Circuits	System Capacity	1.0	-	2,000,000	5,000,000	3,000,000	9,004,000
TDIRP- NYSEG Sectionalizer Replacement	Asset Condition	1.0	500,000	314,122	323,546	333,252	343,250
NYSEG - Distribution DPRP	Asset Condition	1.0	14,500,000	9,109,549	9,382,835	9,664,321	9,954,250
NYSEG - Distribution TDIRP	Asset Condition	1.0	5,510,000	3,461,629	3,565,477	3,672,442	3,782,615
TDIRP- NYSEG Replacement 200 Circuit Breaker Program	Asset Condition	1.0	3,690,000	3,802,085	3,927,770	4,046,457	4,154,641
TDIRP- NYSEG, Replace Substation Battery Program	Asset Condition	1.0	800,000	779,915	791,690	814,586	852,234
Substation Transformers Replacement Program	Asset Condition	1.0	-	-	2,000,000	1,000,000	7,000,000
Silicon Carbide Change out Program	Asset Condition	1.0	100,000	100,000	500,000	500,000	500,000
Switch Replacement Program	Asset Condition	1.0	300,000	300,000	1,000,000	1,000,000	1,000,000
Replace Four Critical Single Phase Transformers Installed in 2012	Asset Condition	1.0	400,000	-	-	-	-
T&D Reject Pole Replacement	Asset Condition	1.0	501,000	501,000	1,000,000	1,500,000	1,500,000
Transmission and Distribution Fault Indicators	Asset Condition	1.0	-	-	1,000,000	1,000,000	1,000,000
Old Insulator Change out Program	Asset Condition	1.0	100,000	100,000	1,000,000	1,000,000	1,950,000
Replace failed transformers	Asset Condition	1.0	-	-	500,000	500,000	500,000
Substation Modernization	Automation	0.5	-	1,500,000	7,500,000	6,429,639	7,500,000
Substation Modernization	Asset Condition	0.5	-	1,500,000	7,500,000	6,429,639	7,500,000
Total NYSEG Electric Programs			82,381,529	81,450,300	113,876,110	109,612,965	135,621,172
Total NYSEG Electric			133,912,423	188,082,343	174,194,595	169,178,215	248,906,824

NYSEG- Gas List	Investment Reason	%	2013	2014	2015	2016	2017
Boswell Hill Bare Steel Main Replacement Project Town of Union, Binghamton, NY Phases 1, 2, & 3	System Capacity	1.0	-	-	1,400,000	1,488,000	1,488,000
Bradley St, Install Gas Mains, Auburn	System Capacity	1.0	-	200,000	-	-	-
Critical Valve Installations, Binghamton	System Capacity	1.0	-	150,000	150,000	-	-
Distribution Main Replacement, Replace Gas Mains, NYSEG	Asset Condition	1.0	1,900,000	1,957,000	2,015,710	2,076,181	2,138,467
Distribution Mains - Projects to be identified - NYSEG	System Capacity	1.0	-	2,500,000	4,000,000	5,500,000	6,000,000
Gas Operations Inspection Automation	Automation	1.0	-	-	1,225,000	-	-
Gas Pipeline Susquehanna River Bore Extension Project Town of Vestal and Village of Johnson City, Binghamton, NY	System Capacity	1.0	-	800,000	-	-	-
Gas Regulator Modernization & Automation Program, Replace Regulator	Asset Condition	1.0	2,243,760	2,000,000	2,300,000	4,000,000	4,500,000
Groveland System Reinforcement, Install Gas Mains	System Capacity	1.0	-	-	520,000	430,000	200,000
Ithaca/Dryden Gas Distribution, Install Gas Mains, Ithaca	System Capacity	1.0	-	-	3,770,000	-	-
Kayner and Ertman Road Stations, Lockport	System Capacity	1.0	-	955,000	-	-	-

	Investment Reason	%	2013	2014	2015	2016	2017
Large Government Jobs (to be identified) - NYSEG	Statutory	1.0	-	2,000,000	2,060,000	2,121,800	2,185,454
Leak Prone Main Replacement Program, 201X NYSEG	Statutory	1.0	7,755,800	7,988,474	10,200,000	12,500,000	13,000,000
Minor Distribution Mains, Install Gas Mains, NYSEG	Statutory	1.0	1,135,750	1,169,822	1,204,917	2,000,000	2,300,000
Minor Government Jobs, Replace Gas Mains, NYSEG	Statutory	1.0	705,550	726,716	748,518	1,200,000	1,500,000
Minor Leak Prone Service Renewals, Replace Gas Service, NYSEG	Statutory	1.0	3,469,200	3,573,276	3,680,474	4,000,000	4,500,000
Minor Services, Install Gas Service, NYSEG	Statutory	1.0	5,085,000	5,237,550	5,394,676	6,000,000	6,000,000
NYSEG - Gas Meters	Statutory	1.0	2,984,891	3,074,438	3,166,671	3,261,671	3,359,521
NYSEG - Gas Regulators	Statutory	1.0	239,346	246,526	253,922	261,540	269,386
NYSEG Transmission Casing Replacement Program, NYSEG	Asset Condition	1.0	1,056,780	-	1,000,000	1,121,138	1,121,138
Port Dickinson Gas Pipeline Loop Extension Towns of Port Dickinson and Fenton, Binghamton, NY	System Capacity	1.0	-	-	1,419,000	1,508,000	1,508,000
Robinson Road Gate Station Rebuild, Lockport	Asset Condition	1.0	1,510,000	1,830,000	-	-	-
Seneca East Odorizers, Elmira	System Capacity	1.0	600,000	-	-	-	-
Seneca West Pipeline Interconnect to Elmira	System Capacity	1.0	7,896,000	1,010,000	-	-	-
SmarTRAC Replacement, NYSEG	Asset Condition	1.0	1,274,678	898,810	-	-	-
Tow Path Road Gas Regulator Station Installation, Town of Fenton Binghamton, NY	System Capacity	1.0	-	-	225,000	-	-
Transmission Mains - Projects to be identified -NYSEG	Asset Condition	1.0	-	-	900,000	3,000,000	6,000,000
Gas RTU/Telemetry Upgrade	Automation	1.0	250,000	200,000	200,000	750,000	750,000
Gas SCADA System Software Upgrade	System Capacity	1.0	-	250,000	-	-	-
Gas SCADA System System Replacement	System Capacity	1.0	-	-	-	-	3,000,000
Remote Operation Valve System Isolated	System Capacity	1.0	-	-	500,000	500,000	200,000
Total NYSEG Gas			38,106,755	36,767,612	46,333,888	51,718,330	60,019,966

NYSEG- Generation List	Investment Reason	%	2013	2014	2015	2016	2017
Cadyville	Generation		75,000	25,000	50,000	1,750,000	850,000
High Falls	Generation		418,164	1,555,000	450,000	1,625,000	1,350,000
Kents Falls	Generation			276,000	2,245,000	225,000	1,525,000
Mechanicville	Generation		275,000	100,000	750,000	1,075,000	1,300,000
Mill C	Generation		800,000	25,000	50,000	250,000	1,300,000
NYSEG Generation Minors	Generation	1.0	359,000	424,000	504,000	525,000	525,000
Rainbow Falls	Generation		102,836	600,000	100,000	150,000	850,000
Saranac ROR/ SCADA Integration (Centralized Hyrdo Control)	Generation	1.0	-	-	100,000	500,000	-
Total NYSEG Generation			2,030,000	3,005,000	4,249,000	6,100,000	7,700,000

NYSEG- Common List	Investment Reason	%	2013	2014	2015	2016	2017
Customer Services			20,000	1,520,000	2,920,000	2,500,000	-
Facilities and General Services	Other	1.0	2,198,752	1,427,322	2,882,826	6,182,565	14,458,714
General Equipment			2,200,000	2,375,868	2,700,000	2,970,000	2,650,000
Fleet- Transportation Equipment	Other	1.0	3,500,000	9,306,684	10,972,684	12,196,684	28,481,684
Information Technology	Other	1.0	12,024,850	14,917,756	12,811,570	6,129,896	8,374,133
Mobile Radio Project	Other	1.0	2,714,000	-	-	-	-
Operations Technology	Other	1.0	1,049,845	20,837	21,879	22,973	24,122
Total NYSEG Common	Other	1.0	23,707,447	29,568,467	32,308,959	30,002,118	53,988,653

TOTAL NYSEG			197,756,625	257,423,422	257,086,442	256,998,663	370,615,443
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RG&E- Electric List	Investment Reason	%	2013	2014	2015	2016	2017
Capacitors - DOE Stations 121 & 168- 50% Reimbursable	Power Quality	1.0	188,029	248,384	198,255	212,164	-
Circuit 805	System Capacity	1.0	-	-	-	506,000	2,024,000
FERC- Bright Line BES	Statutory	1.0	500,000	1,000,000	800,000	-	-
Line 926 - Upgrade 115kV Line - Rochester	System Capacity	1.0	1,600,000	523,000	-	-	-
Mobile Substation #3 115/34.5 kV	System Capacity	1.0	1,119,460	4,947,001	251,241	-	-
Mobile Switchgear #134.5/12kV	System Capacity	1.0	-	1,808,000	-	-	-
New Downtown 115kV Source	System Capacity	1.0	7,200,000	11,138,394	-	-	-
RG&E Pilot Wire Replacement Program	Asset Condition	1.0	1,433,302	621,536	-	-	-
Rochester - Add 35kV Circuit - Offload Circuit 783	System Capacity	1.0	150,000	1,050,000	1,000,000	2,500,000	-
Rochester - Sectionalize and Reconductor 115kV Circuit 917 (S7 - S418)	Power Quality	0.6	357,540	1,254,704	-	-	-
Rochester - Sectionalize and Reconductor 115kV Circuit 917 (S7 - S418)	System Capacity	0.4	238,360	836,470	-	-	-
Rochester Area Reliability Project (New Bulk Power Sta - 345kV Source and 115kV Transmission Lines)	System Capacity	1.0	30,485,927	85,000,000	73,000,000	57,264,000	-
Sta 246 Add Second Transformer and Circuits	System Capacity	1.0	-	-	-	600,000	2,000,000
Sta 419- Add new 12kv circuit	System Capacity	1.0	-	60,000	440,000	-	-
Sta. 33 Replace 2 T	Damage	1.0	463,057	309,818	-	-	-
Station 117 - Replace #1 Transformer Bank and convert 3 circuits to 12kV	System Capacity	1.0	-	-	-	-	6,954,000
Station 120 - New 34.5kV Capacitors	Power Quality	1.0	148,000	-	-	-	-
Station 124 New Phase Shifter Transformer	System Capacity	1.0	1,000,000	1,507,102	-	-	-
Station 124 New SVC	Power Quality	1.0	3,062,312	785,926	-	-	-
Station 125 - New 34.5kV Cap Bank	Power Quality	1.0	6,000	4,350	-	-	-
Station 136, Add 2nd Transformer	System Capacity	1.0	750,000	1,964,517	-	-	-
Station 149 transformer/facilities upgrade and secondary source addition	System Capacity	1.0	-	-	500,000	500,000	2,000,000
Station 156 Transformer Bank Upgrade & 12kV Conversion	System Capacity	1.0	-	-	-	250,000	250,000
Station 168 Service Area Reinforcement	System Capacity	1.0	500,000	8,189,000	5,000,000	-	-
Station 173 34.5 kV Switched Capacitor Bank Addition	Power Quality	1.0	255,200	-	-	-	-
Station 178 - 34kV Cap banks	Power Quality	1.0	255,200	10,956	-	-	-
Station 194 - 34kV Cap Bank	System Capacity	1.0	6,000	6,292	-	-	-
Station 210 transformer replacement and 4kV circuit conversion to 12kV	System Capacity	1.0	-	-	-	575,000	2,000,000
Station 218 - 34kV Cap Bank	Power Quality	1.0	260,000	-	-	-	-
Station 218 to Clyde New 34.5kV Transmission Line	System Capacity	1.0	1,599,999	7,127,531	-	-	-
Station 23 Transformer & 11kV Switchgear	Asset Condition	0.8	640,001	2,079,532	-	-	-
Station 23 Transformer & 11kV Switchgear	System Capacity	0.2	160,000	519,883	-	-	-
Station 262- New 115kV/34.5kV Substation	System Capacity	1.0	3,974,638	220,320	151,085	-	-
Station 40 - #5 Transformer relief	System Capacity	1.0	850,000	-	-	-	-
Station 40 - Replace #5 Transformer Bank	System Capacity	1.0	500,000	-	-	-	-
Station 42 - Add (4) 20MVAR Cap Banks Carryover - Rochester	Power Quality	0.5	47,573	180,315	-	-	-
Station 42 - Add (4) 20MVAR Cap Banks Carryover - Rochester	System Capacity	0.5	47,573	180,315	-	-	-
Station 42 - Replace 34.5-11.5kV 3T Transformer - New 12T	System Capacity	1.0	421,287	-	-	-	-
Station 43 - Replace #3 and #4 Transformer Banks.	System Capacity	1.0	-	-	2,454,631	-	-
Station 46 - Replace #1 and #3 Transformer Banks	System Capacity	1.0	-	-	500,000	1,954,631	-
Station 49 - Replace 34.5-11.5kV Xfmr - Rochester	System Capacity	1.0	1,760,715	1,826,278	-	-	-
Station 56 Additional 12kV Source	System Capacity	1.0	3,961,180	1,355,000	-	-	-
Station 56, Add (2) 34.5kV Cap Banks, Rochester	System Capacity	1.0	600,000	373,776	1,167,746	3,503,237	-
Station 69 New 115kV Capacitor (formerly Station 71)	Power Quality	1.0	966,400	-	-	-	-
Station 80 - Replace 1T and 3T Transformers	Asset Condition	0.5	800,000	2,075,056	-	-	-
Station 80 - Replace 1T and 3T Transformers	System Capacity	0.5	800,000	2,075,056	-	-	-
Station 89, Replace #2 Transformer	System Capacity	1.0	-	-	-	2,000,000	2,000,000

	Investment Reason	%	2013	2014	2015	2016	2017
Station 91 Transformer Bank #1 Replacement	System Capacity	1.0	-	-	-	-	-
Station 95 - Add 2nd 34.5-11.5kV Transformer - Rochester	System Capacity	1.0	636,609	186,248	-	-	-
Stations 180 & 128, Add 115 kV Capacitors	Power Quality	1.0	450,000	-	-	-	-
Stations 198 New 34.5kV Capacitors	Power Quality	1.0	8,500	7,890	-	-	-
Stations 67 to 418 New 115kV Transmission Line	Power Quality	1.0	4,800,000	8,337,000	-	-	-
Substation Modernization Project - Station 5	Asset Condition	0.8	-	1,767,699	2,871,103	-	-
Substation Modernization Project - Station 5	Automation	0.2	-	441,925	717,776	-	-
Substation Modernization- Station 38 Total Refurbishment	Asset Condition	0.5	1,660,000	204,909	34,152	-	-
Substation Modernization- Station 38 Total Refurbishment	Automation	0.5	1,660,000	204,909	34,152	-	-
U of R New 115-34kV Substation 251-(\$7,638k reimbursable by U of R)	Growth	1.0	6,328,000	8,775,678	-	-	-
SmartGrid/AMI	Automation	1.0	-	-	-	-	7,780,870
Energy Control Center (Integrated EMS/DMS/OMS Project)	Automation	1.0	1,958,405	1,148,703	-	-	-
new mobile 34-12x11	System Capacity	1.0	-	-	1,500,000	-	-
Alpha St Rehab Group (Alpha,Braddock,Meridn, Wilder), Relocate Electric	Statutory	1.0	360,000	-	-	-	-
Canandaigua Airport Runway Extention	Growth	1.0	80,000	40,000	-	-	-
Charlotte St Hwy, Relocate Electric Facilities	Statutory	1.0	340,000	100,000	-	-	-
Cobbs Hill Hwy Reloc Electric Facilities	Statutory	1.0	250,000	-	-	-	-
demolishing Midtown Plaza -Municipal Highway improvement project	Statutory	1.0	-	-	500,000	-	-
East Ridge Rd.Hwy, Relocate Electric Facilities	Statutory	1.0	500,000	-	-	-	-
Hincher St Group (Hincher, Corrign, Fleming, Rugl), Relocate Electric Facilites	Statutory	1.0	180,000	-	-	-	-
I390 Interchange @ East River Road (exit 16a), Relocate Electric Facilities	Statutory	1.0	100,000	-	-	-	-
Lake Ave (Merrill St to 600' S of Burley St). Relocate Electric Facilities	Statutory	1.0	3,950,000	-	-	-	-
Long Pond Rd. Hwy Relocate Electric Facilities	Statutory	1.0	975,000	-	-	-	-
Maiden Lane Reconstruction (11) from Mt Read Blvd. to Fetzner Rd, Relocate	Statutory	1.0	900,000	-	-	-	-
Melville St Group (Melville, Berwyn, Shafer), Relocate Electric Facilities	Statutory	1.0	-	-	200,000	-	-
Midtown Relocate Electric Facilities	Statutory	1.0	1,008,000	-	-	-	-
NYS Barge Canal Brighton Install Street Lighting	Growth	1.0	400,000	-	-	-	-
NYS Route 531 Interchange @ Rt 31 and Rt 36. Relocate Electric Facilities	Statutory	1.0	120,000	-	-	-	-
Paul Rd Corridor, Relocate Electric Facilities	Statutory	1.0	-	-	500,000	-	-
Portland Ave. Highway, Relocate Electric Facilities	Statutory	1.0	50,000	-	-	-	-
Relocate Electric Facilities	Statutory	1.0	-	10,997,390	9,771,512	10,883,657	11,170,127
Ridgeway Ave Hwy Reloc	Statutory	1.0	50,000	-	-	-	-
Rochester New Underground Residential Distribution Project	Growth	1.0	200,000	-	-	-	-
Route 33 Widening and Rehab from I490 to Marway Circle, Relocate Electric	Statutory	1.0	250,000	-	-	-	-
Rt 441(from Dublin Rd to Wayne County Line), Relocate Electric Facilities33	Statutory	1.0	206,000	-	-	-	-
Seneca Ave Hwy, Relocate Electric Facilities	Statutory	1.0	300,000	-	-	-	-
Sta 104,WPC Install SCADA-Mate Switches on Cir 5157	Asset Condition	1.0	234,200	-	-	-	-
Sta 110, Replace #1T & Convert Circuits to 12kV	System Capacity	1.0	-	-	-	932,000	1,000,000
Sta 155 Canandaigua, Cir 248 Lakeshore Dr 12kV Conversion	System Capacity	1.0	-	-	500,000	-	-
Sta 67, WPC Install SCADA-Mate Switches on Cir 5176	Asset Condition	1.0	260,000	-	-	-	-
Westfall Rd. Highway Relocation, Relocate Electric Facilities	Statutory	1.0	100,000	-	-	-	-
Lifecycle Replacement - ECC/XECS systems	Asset Condition	1.0	-	216,000	45,000	45,000	45,000
RG&E Applex/iBase System integration	Automation	1.0	-	40,000	40,000	40,000	40,000
RG&E Energy Control Center Project in NY, Siemens DMS	Automation	1.0	-	-	300,000	300,000	-
RG&E GIREN/ICDS (Integrated EMS/DMS/OMS Project)	Automation	1.0	-	349,008	74,700	-	-
RG&E Lifecycle Replacement -radio subsystem	System Capacity	1.0	-	5,000	5,000	5,000	5,000
RG&E Organic Growth ECC/XECS systems	System Capacity	1.0	-	34,000	36,000	38,000	40,000
RGE - NY Control Center Telephone - Major Capital	System Capacity	1.0	300,000	150,000	150,000	-	-
Other Reliability Risk Projects	System Capacity			5,000,000	5,000,000	7,000,000	68,940,537

	Investment Reason	%	2013	2014	2015	2016	2017
Other Assets Condition Projects	Asset Condition			922,428	1,000,000	1,000,000	20,000,000
Total RG&E Electric Projects			95,722,466	178,207,298	108,742,352	90,108,689	126,249,534
RGE - Telecomm Major Capital	Automation	1.0	950,000	-	-	-	-
RGE - Telecomm Minor Capital	Automation	1.0	175,000	50,000	50,000	50,000	50,000
RGE Telecom (OT) - Microwave Networks	Automation	1.0	-	500,000	500,000	500,000	500,000
RGE Telecom (OT) - Multipoint Radio Networks	Automation	1.0	-	250,000	250,000	250,000	250,000
Video Cube installation / Video wall removal	Statutory	1.0	-	94,000	94,000	94,000	94,000
Access Control Improvements	Statutory	1.0	100,000	100,000	100,000	100,000	100,000
Fire Investment	Statutory	1.0	250,000	250,000	250,000	250,000	250,000
RG&E Security Projects (to be replaced with individual projects identified later)	Statutory	1.0	-	-	505,000	510,000	405,000
Video Alarming	Statutory	1.0	1,250,000	1,250,000	745,000	250,000	355,000
RGE Telecom (OT) - Fiber Optic Networks	Automation	1.0	-	750,000	750,000	750,000	750,000
RGE - Recloser/Substation and other Automation Initiatives	Automation	1.0	1,184,000	-	-	-	-
Automation Projects	Automation	1.0	-	1,500,000	2,580,000	8,449,652	10,904,141
RGE RTU (New project)	Automation	1.0	-	2,000,000	-	-	-
Rge Rtu Program - Carryover	Automation	1.0	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Substations	Asset Condition	1.0	1,500,000	1,500,000	1,500,000	1,639,000	1,688,000
Transmission Line	Asset Condition	1.0	1,500,000	1,500,000	1,500,000	1,639,000	1,688,000
Distribution Line	Asset Condition	1.0	6,000,000	6,000,000	6,000,000	6,556,000	6,753,000
Government Highway Minor/Maj	Statutory	1.0	515,000	515,000	515,000	563,000	580,000
Industrial/Commercial	Growth	1.0	1,000,000	1,000,000	1,000,000	1,093,000	1,126,000
Residential Line Extensions	Growth	1.0	1,500,000	1,500,000	1,500,000	1,639,000	1,688,000
Service Connects	Growth	1.0	500,000	500,000	500,000	546,000	563,000
Street Lighting	Growth	1.0	700,000	700,000	700,000	765,000	788,000
Transformers	Growth	1.0	5,000,000	5,000,000	5,000,000	5,464,000	5,628,000
Capacitors	Growth	1.0	70,000	70,000	70,000	76,000	79,000
Meters	Growth	1.0	1,800,000	1,800,000	1,800,000	1,967,000	2,026,000
Regulators	Growth	1.0	100,000	100,000	100,000	109,000	113,000
Storm	Damage	1.0	400,000	400,000	400,000	437,000	450,000
WPC Red Circuits	System Capacity	1.0	415,000	427,450	440,274	453,482	467,086
RG&E- Distribution TDIRP	Asset Condition	1.0	2,335,300	2,202,062	2,368,171	2,439,216	2,512,392
RGE - Distribution DPRP	Asset Condition	1.0	8,000,000	7,543,569	7,204,605	8,355,983	8,606,663
TDIRP- RG&E Sectionalizer Replacement Program	Asset Condition	1.0	500,000	1,414,419	1,014,076	1,044,498	1,075,833
TDIRP- RG&E Replacement 210 Circuit Breaker Program -	Asset Condition	1.0	2,665,000	2,256,798	2,900,908	2,989,008	3,078,679
TDIRP- RGE, Replace Substation Battery Program	Asset Condition	1.0	1,500,000	2,033,152	1,517,740	1,562,200	1,609,066
Substation Transformers Replacement Program	Asset Condition	1.0	-	-	1,500,000	3,000,000	4,250,000
Cablecure	Asset Condition	1.0	800,000	800,000	1,000,000	1,000,000	1,000,000
Old Insulator Change out Program	Asset Condition	1.0	200,000	200,000	750,000	750,000	750,000
Silicon Carbide Change out Program	System Capacity	1.0	150,000	150,000	300,000	300,000	300,000
Single Phase Switchgear Replacement	Asset Condition	1.0	500,000	500,000	1,000,000	1,000,000	1,000,000
Switch Replacement Program	Asset Condition	1.0	-	-	-	-	-
T&D Reject Pole Replacement	Asset Condition	1.0	300,000	300,000	1,000,000	1,000,000	1,000,000
Distribution Fault Indicators	Asset Condition	1.0	50,000	50,000	500,000	1,000,000	1,000,000
Substation Modernization	Automation		-	1,420,000	2,529,682	6,560,405	10,500,000
Substation Modernization	Asset Condition		-	1,420,000	2,529,682	6,560,405	10,500,000
Total RG&E Electric Programs			44,409,300	50,546,450	55,464,138	74,211,848	86,977,860
Total RG&E Electric			140,131,766	228,753,748	164,206,490	164,320,537	213,227,394

RG&E- Gas	Investment Reason	%	2013	2014	2015	2016	2017
	Investment Reason	%	2013	2014	2015	2016	2017
Buffalo Road Rebuild Regulator Station and Replace Gas Main	System Capacity	1.0	-	-	1,600,000	-	-
CM1 Replacement Humphrey to Ballantyne Rd, Replace Gas Main, Roch	Asset Condition	1.0	-	500,000	2,600,000	4,500,000	-
Distribution Main Replacement, Replace Gas Mains, Roch	Asset Condition	1.0	390,000	401,700	413,751	426,164	438,948
Distribution Mains - Projects to be identified - RG&E	System Capacity	1.0	-	2,000,000	3,000,000	2,300,000	6,000,000
Gas Operations Inspection Automation	Automation	1.0	-	1,225,000	-	-	-
Gas Regulator Modernization & Automation Program, Replace Regulator Station	Asset Condition	1.0	765,000	790,000	2,000,000	3,000,000	3,900,000
Henrietta 42 Phase 3A, Install Gas Mains, Roch	Statutory	1.0	365,000	-	-	-	-
Henrietta 42 Phase 3B, Install Gas Mains, Roch	System Capacity	1.0	-	240,000	-	-	-
Henrietta 42 Phase 4, Install Gas Mains, Roch	Statutory	1.0	-	-	306,000	-	-
Henrietta 42 Phase 5, Install Gas Mains, Roch	Statutory	1.0	-	-	-	296,000	-
Large Government Jobs (to be identified) - RG&E	Statutory	1.0	-	5,000,000	5,150,000	5,304,500	5,463,635
Leak Prone Main Replacement Program, 201X RGE	Statutory	1.0	8,712,589	7,500,000	9,000,000	12,000,000	13,000,000
Leak Prone Services Replacement Program - RGE	Statutory	1.0	5,000,000	4,000,000	5,304,500	6,000,000	7,000,000
Maiden Lane, Replace Gas Mains, Roch	Statutory	1.0	-	310,000	-	-	-
MF13 Geneseo Improvement, Install Gas Mains, Roch	System Capacity	1.0	-	-	-	-	500,000
MF35 Walworth System Improvement, Install Pipe and Regulator Stations	System Capacity	1.0	-	-	-	-	950,000
Minor Distribution Mains, Install Gas Mains, Roch	Statutory	1.0	1,330,000	1,369,900	1,410,997	2,000,000	2,200,000
Minor Government Jobs, Replace Gas Mains, Roch	Statutory	1.0	650,000	669,500	689,585	710,273	710,273
Minor New Res Services, Install Gas Service, Roch	Statutory	1.0	1,335,000	1,591,350	1,639,091	1,900,000	2,000,000
New Empire West Gate Station, Build New Gate Station, Roch	Asset Condition	0.5	2,147,750	-	-	-	-
New Empire West Gate Station, Build New Gate Station, Roch	System Capacity	0.5	2,147,750	-	-	-	-
Northeast 60, Phase 1 Install Gas Mains, Roch	Growth	1.0	850,000	-	306,000	470,000	-
Northeast 60, Phase 2A Install Gas Mains, Roch	Growth	1.0	-	-	1,200,000	-	-
Northeast 60, Phase 2B Install Gas Mains, Roch	Growth	1.0	-	-	-	2,500,000	-
Northwest 60, Install Gas Mains and Regulator Stations, Roch	Growth	1.0	-	770,000	-	-	-
RG&E - Gas Meters	Statutory	1.0	2,206,018	2,272,199	2,340,364	2,410,575	2,482,893
RG&E - Gas Regulators	Statutory	1.0	201,365	180,353	185,764	185,764	185,764
RGE New RTU Project, New and Relocate RTU Endpoints, Roch	Automation	1.0	-	330,000	500,000	500,000	500,000
Ridge Rd East, Relocate Gas Mains, Roch	Statutory	1.0	250,000	-	-	-	-
SmarTRAC Replacement, RG&E	Asset Condition	1.0	1,274,678	898,810	-	-	-
Southwest 60 System Improvements, Perry Gate Station to T/O Leicester,	Growth	0.5	-	-	600,000	-	-
Southwest 60 System Improvements, Perry Gate Station to T/O Leicester,	Statutory	0.5	-	-	600,000	-	-
Transmission Mains - projects to be identified - RG&E	Asset Condition	1.0	-	-	500,000	3,000,000	6,000,000
Whittier Road Improvements, Phase 4, Install Gas Mains, Rochester	System Capacity	1.0	-	-	-	-	210,000
Gas Telemetry Replacement	Automation	1.0	-	15,000	15,000	15,000	15,000
Remote Operation Valve System Isolated	System Capacity	1.0	-	-	500,000	500,000	500,000
Total RG&E Gas			27,625,150	30,063,812	39,861,052	48,018,276	52,056,513

RG&E- Generation	Investment Reason	%	2013	2014	2015	2016	2017
RGE Generation Minors	Generation	1.0	803,932	401,000	400,000	402,000	384,000
Station 170	Generation	1.0	-	30,000	75,000	425,000	575,000
Station 160	Generation	1.0	-	30,000	75,000	75,000	75,000
Station 2	Generation	1.0	1,705,691	350,000	7,975,000	7,248,000	6,976,000
Station 26	Generation	1.0	2,082,830	170,000	100,000	150,000	1,705,000
Station 3 (Beebee) Post Demolition Site Improvements	Generation	1.0	-	200,000	750,000	900,000	-
Station 5	Generation	1.0	259,991	1,000,000	1,950,000	1,850,000	3,785,000
Station 7 (Russell) Post Demolition Site Improvements	Generation	1.0	-	200,000	750,000	900,000	-
Total RG&E Generation			4,852,444	2,381,000	12,075,000	11,950,000	13,500,000

	Investment Reason	%	2013	2014	2015	2016	2017
RG&E- Common List	Investment Reason	%	2013	2014	2015	2016	2017
Customer Services			1,120,000	640,000	300,000	-	300,000
Facilities and General Services	Other	1.0	1,151,000	2,584,000	5,784,000	5,204,000	5,204,000
General Equipment			1,000,000	1,275,000	2,175,000	2,230,000	2,100,000
Fleet Replacement	Other	1.0	3,500,000	4,450,000	5,917,000	6,197,000	6,491,000
Information Technology	Other	1.0	6,012,055	7,983,695	6,876,312	3,579,143	4,785,933
Operations Technologies	Other	1.0	50,000	-	-	-	-
Total RG&E Common			12,833,055	16,932,695	21,052,312	17,210,143	18,880,933
TOTAL RG&E			185,442,415	278,131,255	237,194,854	241,498,956	297,664,840
TOTAL			383,199,040	535,554,677	494,281,296	498,497,619	668,280,283

Attachment 2

Reconciliation of Electric Plan Investments to Appendix L

Appendix L Reconciliation - Electric - 2011 - 2013 (\$000)

[illegible]

NYSEG ELECTRIC

Title	2011 Appendix L	2011 Actual	2012 Appendix L	2012 Actual	2013 Appendix L	2013 Plan	2011-2012- 2013 Appendix L (A)	2011 Actual - 2012 Actual - 2013 Plan (B)
Ithaca Reinforcement Project	-	1,518	-	509	-	-	-	2,026
Watercure Rd Sub Transformer Replacement	-	3,003	-	11	-	-	-	3,015
Yawger Rd New Substation	-	312	-	1	-	-	-	313
Moraine Road Substation Breaker Addition	-	2,423	-	638	-	-	-	3,061
Yahoo Service Project	-	(470)	-	1	-	-	-	(469)
Capacitor Additions - Energy Efficiency Initiative	-	584	-	22	-	-	-	606
Meyer - Add 115kV Capacitor Bank - Hornell	-	474	-	777	-	-	-	1,251
Corning Valley Upgrade	23,916	19,389	-	74	-	-	23,916	19,462
Klinekill - Valkin (NMPC) New 115 kV Transmission Line	9,664	273	-	1,091	-	700	9,664	2,064
Transit St Substation MGP Remediation***	1,700	102	-	763	-	1,300	1,700	2,166
Walden 69kV Transmission Line Upgrade	3,186	344	-	4,986	-	30	3,186	5,360
Line #807 115kV Conversion	3,250	1,446	2,259	1,639	-	800	5,509	3,885
New Mobile Substations	1,750	839	1,750	1,071	-	-	3,500	1,910
Biogas 34.5kV Collector System	1,120	122	1,512	1,570	761	600	3,393	2,292
Bulk Spare Transformer	3,000	1,795	-	(3,202)	-	-	3,000	(1,406)
Silver Creek Substation New Transformer	1,206	174	-	399	-	800	1,206	1,373
DOE Stimulus Progam -Northend Substation *	1,471	1,473	-	2,666	-	1,471	1,471	5,610
Willet Substation New Transformer	654	627	2,618	748	-	500	3,272	1,875
Flat Street Substation New Transformer	605	612	3,192	1,935	-	1,500	3,797	4,047
South Perry New 115kV Transformer	875	492	3,216	687	-	1,005	4,091	2,183
Windham Substation 115kV Capacitor Addition	-	48	1,068	53	-	500	1,068	601
Perry Center Area Install New 34.5kV Substation	-	25	2,533	627	-	1,247	2,533	1,899
South Perry New 230kV Transformer	-	1,087	4,040	820	12,454	1,056	16,494	2,963
Westover Substation New 115kV Transformer & Binghamton Division Capacitors	-	523	3,939	895	2,589	1,800	6,528	3,218
Eelpot New Transformer	-	803	570	1,639	3,515	1,500	4,085	3,942
Meyer Substation New Transformer	-	651	538	199	3,385	500	3,923	1,350
Stephentown Substation New Transformer	-	528	465	880	2,465	1,100	2,930	2,508
Richfield Springs Substation New Transformer	-	593	650	1,220	1,887	200	2,537	2,012
Tom Miller Rd New Substation	-	22	110	978	2,509	1,005	2,619	2,004
Coddington Add LTC Capability to 115/34.5kV Transformer	-	910	-	1,321	1,095	350	1,095	2,581
Big Tree Substation Capacitor Addition (In Northend Substation)	-	-	-	-	1,057	-	1,057	-
Harris Lake Source Upgrade	-	-	-	271	2,336	1,300	2,336	1,571
Auburn 345kV Source	-	-	3,600	417	3,000	800	6,600	1,217
Stolle – Dysinger	-	-	-	-	3,400	-	3,400	-
Substation Transformers	-	-	400	-	3,891	-	4,291	-
TDIRP (Substation Transformers)- Program Cost **	25,000	38,984	25,000	17,164	25,000	25,000	75,000	81,148
System Security	3,444	2,976	3,376	2,460	3,030	1,788	9,850	7,224

Title	2011 Appendix L	2011 Actual	2012 Appendix L	2012 Actual	2013 Appendix L	2013 Plan	2011-2012- 2013 Appendix L (A)	2011 Actual - 2012 Actual - 2013 Plan (B)
Mobile Radio Project (portion of electric 79.1%)	2,201	1,172	-	1,765	-	2,147	2,201	5,084
Electric GIS (Has been rolled into ECC Project)	4,756	1,827	1,113	5,283	-	4,570	5,869	11,679
Mill C Unit 1+2 draft Tube Replacement and Foundation Protection	1,000	615	-	-	-	-	1,000	615
TOTALS MAJOR PROJECTS + TDIRP and System Security	88,798	86,300	61,949	52,374	72,374	53,568	223,121	192,242
Other	58,381	65,450	65,425	77,217	68,680	75,052	192,486	217,719
Supplemental projects from 5 Years Capex Plan		18,951		28,355		10,025		57,331
Supplemental programs from 5 Years Capex Plan		8,627		7,405		6,780		22,812
Recent Addition				3,578		3,440		7,018
TOTAL Appendix L	147,179	179,328	127,374	168,930	141,054	148,865	415,607	497,122
NERC Alert Project				5,582		5,831		11,413
Total NYSEG Electric	147,179	179,328	127,374	174,512	141,054	154,696	415,607	508,535

RG&E ELECTRIC

Title	2011 Appendix L	2011 Actual	2012 Appendix L	2012 Actual	2013 Appendix L	2013 Plan	2011-2012- 2013 Appendix L (A)	2011 Actual - 2012 Actual - 2013 Plan (B)
Webster East New 12 kV Source	-	898	-	3,565	-	-	-	4,463
New Station 137	-	3,222	-	212	-	-	-	3,433
Station 424 New Line	-	3,616	-	65	-	-	-	3,681
Station 42 New Capacitors	-	590	-	927	-	95	-	1,612
New 115kV Transmission Line (Sta.13A to Sta.135)	-	1,330	-	(1)	-	-	-	1,329
Station 13A Replace Breakers	-	18	-	(1)	-	-	-	18
Stations 180 and 128 New Capacitors	-	582	-	657	-	450	-	1,689
Culver Rd Electric Facilities Relocation	-	321	-	4	-	-	-	325
Jefferson Ave Electric Facilities Relocation	-	2,311	-	545	-	-	-	2,856
U of R New 115-34kVSubstation	3,760	-	-	476	-	6,328	3,760	6,804
Rochester SCADA NERC Compliance (Roller in ECC)	1,000	-	-	-	-	-	1,000	-
Station 124 New SVC	8,000	8,477	19,923	10,745	-	3,062	27,923	22,284
New Downtown 115kV Source	10,000	5,613	23,875	4,815	-	7,200	33,875	17,628
New Bulk Power Station (RARP)	2,000	1,832	10,000	6,958	80,000	30,486	92,000	39,276
Midtown Electric Facilities Relocation	980	15	-	74	-	1,008	980	1,097
Stations 127125 & 120 New34.5kV Capacitors	2,725	180	-	1,107	-	154	2,725	1,441
Station 168 (together with Station 121)	1,050	-	-	-	-	-	1,050	-
Stations 198 218 194 & 181 New34.5kV Capacitors	2,823	740	-	1,193	-	275	2,823	2,207
Stations 67 to 418 New115kV Transmission Line	1,282	13	7,128	754	-	4,800	8,410	5,567
Station 56 Additional 12kV Source	2,580	115	1,995	3,198	-	3,961	4,575	7,275
Stations 173 178 & 180 New34.5kV Capacitors	1,967	503	-	393	-	510	1,967	1,407
New 115kV/34.5kV Substation (Sta. 262)	-	95	920	3,177	8,336	3,975	9,256	7,246
Station 218 to Clyde New34.5kV Transmission Line	-	39	500	1,272	5,500	1,600	6,000	2,911
Station 121 New 115kV Capacitor (and Station 168)	-	670	-	622	1,217	188	1,217	1,480
Station 71 New 115kV Capacitor (Now Station 69)	-	-	-	58	1,458	966	1,458	1,024
TDIRP Program Costs	15,000	20,802	15,000	15,319	15,000	15,000	45,000	51,121
Substation Transformers (Station 124 New PST)	16,460	5,659	13,773	13,820	1,333	1,000	31,566	20,479
Electric System Security	1,495	2,309	1,495	3,063	1,495	1,600	4,485	6,972
Electric GIS (Has been rolled into ECC Project)	2,368	1,211	556	3,553	-	1,958	2,924	6,722
Station 2 Runner Upgrade andGenerator Rewind	-	702	-	-	-	-	-	702
Station 5 Tunnel Relining***	37,100	20,291	14,400	18,754	-	-	51,500	39,045
Station 5 Wicket Gate Upgrades	4,000	4,573	1,750	4,444	-	-	5,750	9,017
TOTALS MAJOR PROJECTS + TDIRP and System Security	114,590	86,725	111,315	99,769	114,339	84,616	340,244	271,110
Other	21,907	40,224	27,223	37,030	63,014	45,006	112,144	122,261
Supplemental projects from 5 Years Capex Plan		14,617		37,082		16,960		68,659
Supplemental programs from 5 Years Capex Plan		10,448		11,672		6,743		28,863
TOTAL RG&E Electric	136,497	152,014	138,538	185,552	177,353	153,326	452,388	490,892

Attachment 3

Description of the Most Significant Electric Projects

NYSEG

Agro-Farma, Inc. New 46 kV Transmission Line and Substation – 100%	
Reimbursable	1
Auburn Transmission Project.....	2
Coddington Add LTC Capability to 115/34.5kV Transformer	3
Columbia County Transmission (Klinekill 115 kV) (Appendix L project)	4
Coopers Corners, Add 3 rd 345/115 kV Transformer	5
Dingle Ridge - 2nd Bank and 13.2kV Conversion.....	5
DOE- Stimulus Program- Capacitor Banks NYSEG (6 Stations) - 50% Reimb (Appendix L project).....	6
Dryden Bank #1 Transformer Replacement	6
Eelpot New Transformer	7
Flat Street Substation New Transformer.....	7
Fraser Sub - Add 2nd 345/115 kV Transformer	8
Goudey S/S - Separation from AES Westover Plant - Bing	9
Grand Gorge #1 Sub - Replace Transformer with 12/16/20MVA.....	10
Harris Lake - Diesel Generator Upgrade	10
Hickling S/S - Separation from AES Oneonta Plant.....	11
Jennison S/S - Separation from AES Oneonta Plant	12
Kent 2nd 13.2 KV Ckt and Bank Upgrade - Brewster	12
Line 807 Conversion Project (Appendix L project).....	13
Mechanicville Reinforcement Project, Construct New Luther Forest Substation	14
North Broadway, Add 2 nd 115/34.5 kV Transformer	14
Oakdale Reconfiguration Project	15
Old Falls Substation - Install 2nd LTC Transformer	16
River Road Substation - Replace transformer with non-LTC 10/12/14MVA	16
Sackett Lake Substation – Replace transformer with 7.5 MVA unit and convert distribution to 12.5 KV.....	17
South Perry New 230kV Transformer	18
Walden 69kV Transmission Line Upgrade (Appendix L project).....	18
Watercure Rd. - 2nd 345 kV Transformer	19
Westover Substation New 115 kV Transformer & Binghamton Division Capacitors (Appendix L project).....	20
Willet Substation New Transformer	21
Wood Street, Add 3 rd 345/115 kV Transformer	21

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New Bulk Power Station 255 (Rochester Area Reliability Program) (Appendix L)	22
New Downtown 115 kV Source	23
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New 115/34.5 kV Substation, 262 (Appendix L)	24
Mobile Substation #3, 115/34.5kV	24
Sectionalize and Reconductor 115 kV Circuit 917 (Station 7 to Station 418)	25
Station 23 Transformer and 11 kV Switchgear	25
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Station 56 Additional 12 kV Source (Appendix L)	26
Rochester - Station 56, Add (2) 34.5kV Cap Banks.....	27
Station 67 to 418 New 115 kV Transmission Line (Appendix L)	27
Station 80 Replace 1T and 3 T Transformers.....	28
Station 89, Replace #2 Transformer	28
Station 124 New Phase Shifter Transformer (Appendix L)	29
Station 124 New Static VAR Compensator (Appendix L)	29
Station 149 transformer/facilities upgrade and secondary source addition.....	30
Station 168 Service Area Reinforcement.....	30
Station 218 to Clyde Station - New 34.5 Transmission Line (Appendix L).....	31
University of Rochester.....	31
Station 49 - Replace 34.5-11.5kV Transformer - Rochester	32

NYSEG

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Agro-Farma, Inc. New 46 kV Transmission Line and Substation – 100% Reimbursable	11,727 -11,662	3,391 -3,456					
Total Costs: \$ 15,118							
<p>Description: Brand new 46/12.5 kV Columbus Substation, existing 115/46 kV County Line Substation upgrade, new 46 kV Transmission line #834 from County Line Substation to Columbus Substation, new 12.5 kV distribution power lines and existing South Edmeston Substation decommissioning.</p> <p>Reason and benefits: Agro-Farma seeks to increase production capability by 15 MVA and the existing NYSEG system can only support a 5 MVA increase. NYSEG will construct a new 46 kV transmission line paralleling existing Line 803 from County Line Sub to Columbus Substation.</p> <p>Investment Reason: Growth</p>							
<p>Year started: 2010</p> <p>Year in service: 2013</p> <p>Current Status: New 46 kV Transmission Line construction accomplished; new 46 kV bay line under construction in County Line Substation; new Columbus Substation under design and in-ground works under construction.</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Auburn Transmission Project (Appendix L project)	417	800	4,758	19,741	6,647		
Total Costs: \$32,363							
Description: New 115kV electric transmission line between the National Grid Elbridge Substation and the NYSEG State Street Substation, a distance of approximately 14.5 miles. Reason and benefits: The new line will strengthen the transmission system throughout the Auburn Division and reduce voltage flicker due to a large customer. It will also reduce NYSEG's dependence on the AES generating plants. Investment Reason: Power Quality and System Capacity							
Year started: 2012 Year in service: 2016 Current Status: Article VII application to be filed							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Coddington Add LTC Capability to 115/34.5kV Transformer	2,437	350	0				
Total Costs: \$2,787							
<p>Description: Install a second 115/34.5kV, 30/40/50 MVA transformer #2 at Coddington Substation and operate the #2 transformer in parallel with the existing 115/34.5kV, 30/40/50 MVA, LTC transformer #3 at Coddington. Work will include all associated equipment required with this transformer addition.</p> <p>Reason and benefits: During 2010 summer peak an outage to the Cayuga Heights 34.5kV line would cause the 115/34.5kV transformer #3 to exceed the summer LTE rating. Based on a 1.5% growth rate per year, the area would be exposed to 100 hours of summer load per year.</p> <p>Investment Reason: System Capacity</p>							
<p>Year started: 2010</p> <p>Year in service: 2013</p> <p>Current Status: Conceptual Engineering completed, major equipment ordered and delivered, detailed engineering for in ground, above ground, SPC 1 and SPC 2 completed. In ground construction has been completed and above ground construction is progressing.</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Columbia County Transmission (Klinekill 115 kV) (Appendix L project)	1,412	700	1,479	5,678	16,348	4,456	
Total Costs: \$30,073							
<p>Description: New 115 (kV) transmission lines in the towns of Chatham, Ghent, and Stockport within Columbia County, New York. The proposed facilities and improvements include a new 115 kV switching station (Ghent Switching Station), 11.1 miles of 115 kV transmission line (Circuit #726 and National Grid Trunk #15 extension), and improvements at the existing Klinekill 115-kV/34.5-kV Substation.</p> <ul style="list-style-type: none"> • New 115 kV breaker location will be built at Klinekill Substation in the Town of Chatham. The existing control house will be expanded to house the additional controls, but the existing fence line will not be modified. • New 115-kV Switching will be constructed in the Town of Ghent. The 115-kV breaker and a half bus arrangement will consist of two bays that contain a total of three 115-kV breakers <p>Reason and benefits: For line out 115kV Churchtown-Craryville, exposure to imminent voltage collapse and thermal overload is 4500 hrs/yr. This contingency will cause loss of 9,940 customers and 20 MW load. The new line will provide a 115 kV source to the service area.</p> <p>Investment Reason: System Capacity</p>							
<p>Year started: 2010</p> <p>Year in service: 2017</p> <p>Current Status: Under Article VII application</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Coopers Corners, Add 3rd 345/115 kV Transformer	99	0	1,000	3,000	7,801		
Total Costs: \$11,900							
Description: Install a third 345/115 kV, LTC transformer rated 120/160/200 MVA, at Coopers Corners Substation and operate it in parallel with the two existing 345/115 kV, 200 MVA, LTC transformers. Reason and benefits: During the 2012 summer peak period, loss of both Coopers Corners 345/115 kV transformers would result in widespread load shedding in Liberty. Up to 120 MW and 32,000 customers could be exposed to these potential problems for up to 8,760 hours in the 2012 summer. Investment Reason: Power Quality							
Year started: 2014 Year in service: 2016 Current Status: Scope is complete							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Dingle Ridge - 2nd Bank and 13.2kV Conversion		260	1,000	4,000			
Total Costs: \$5,260							
Description: Dingle Ridge - Add a 2nd Bank and 13.2kV Conversion Reason and benefits: Failure of this transformer will result in the loss of service to 783 customers for 10 hours. Investment Reason: System Capacity							
Year started: 2013 Year in service: 2015 Current Status: Not started							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
DOE- Stimulus Program- Capacitor Banks NYSEG (6 Stations) - 50% Reimb (Appendix L project)	4,161	1,471	737				
Total Costs: \$ 6,369 (net of DOE funding)							
Description: Install 115 KV Capacitor Banks at the following stations: Ashley Rd., three-50 MVAR, Morgan Rd., two-25 MVAR, Ridge Rd., two-25 MVAR, Mountindale, two-25 MVAR, Amawalk, two-30 MVAR and Big Tree, two-25 MVAR. Reason and benefits: Installation of the 115 KV shunt capacitor banks will lower system losses. Investment Reason: Power Quality							
Year started: 2011 Year in service: 2013 Current Status: Detailed Engineering & Design complete; Awarded all construction contracts; Obtained all permits; In-Ground complete at 5 stations.							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Dryden Bank #1 Transformer Replacement	0	0	0	0	750	2,000	2,680
Total Costs: \$5,430							
Description: Replace 3 single phase 1667kVA, 34.5-4.8kV transformers with a 3 phase 10//14 MVA LTC transformer. Replace high side fuse protection with a 38kV breaker. Reason and benefits: This 1954 vintage transformer had one unit replaced in 2011 due to high combustible gases and the two remaining units have elevated combustible gas levels. Currently, the transformer is comprised of old and new single phase transformers. Investment Reason: Asset Condition							
Year started: 2016 Year in service: >2017 Current Status: Not started							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Eelpot New Transformer	2,646	1,500	3,614				
Total Costs: \$7,760							
Description: 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. Reason and benefits: Eelpot Road SS serves approx. 22MW of load to 5118 customers. During peak load periods loss of the existing 115/34.5kV transformer at Eelpot Substation results in overloads above the LTE of the 565 line low voltages in the area. This causes shedding of 12MW load. Investment Reason: System Capacity							
Year started: 2010 Year in service: 2014 Current Status: Conceptual engineering complete, Above and In Ground packages complete, Major equipment purchased, In Ground construction phase 1 started.							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Flat Street Substation New Transformer	2,720	1,500	3,614				
Total Costs: \$7,760							
Description: Install a new Flat St 115/34.5 kV, 20/26/33(36.7) MVA, LTC transformer to operate in parallel with existing one. Reason and benefits: Exposure to sub-marginal voltages and thermal overload, for L/O 115/34.5 kV Greenidge Xfr is 900 hrs/yr, w/ 5524 customers (22.5 MW) dropped. For L/O 115/34.5 kV Flat St Xfr, exposure is 25 hrs/yr, w/ 274 customers (4.3 MW) dropped. Investment Reason: System Capacity							
Year started: 2010 Year in service: 2014 Current Status: Conceptual complete, Above and In Ground packages complete, Major equipment purchased, In Ground construction phase 1 started.							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Fraser Sub - Add 2nd 345/115 kV Transformer	80	1,200	1,500	2,200	8,520		
Total Costs: \$13,500							
Description: Install a second 345/115 kV, 150/200/250/280 MVA, LTC transformer at Fraser Substation and operate it in parallel with the existing 345/115 kV, 150/200/250/280 MVA LTC transformer. Reason and benefits: During the 2012 summer and winter periods, an outage of the Fraser 345/115 kV transformer and a 115 kV line results in low voltages in Oneonta. Up to 50 MW and 10400 customers could be exposed to these potential problems for up to 600 hours in 2012. Investment Reason: Power Quality							
Year started: 2012 Year in service: 2016 Current Status: Scope is complete							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Goudey S/S - Separation from AES Westover Plant - Bing	739	860	5,401				
Total Costs: \$7,000							
<p>Description: Acquire additional land, construct a new control house at Goudey-Westover on land owned by NYSEG, install all necessary protection and control devices in the control house, install new substation AC station service, re-cable the entire substation to the new control house, develop sequence plan to cut over each substation transformer and line terminal to the new control house, and retire all existing NYSEG facilities.</p> <p>Reason and benefits: AES filed for Chapter 11 Bankruptcy protection: NYSEG is dependent upon AES for reliable operation of the NYSEG transmission grid. The benefit is to remove the dependencies on the AES Plants to provide reliable operation of the NYSEG Grid</p> <p>Investment Reason: Statutory</p>							
<p>Year started: 2012</p> <p>Year in service: 2014</p> <p>Current Status: AES sold plant to GMMM in December 2012. Project in Detail Design.</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Grand Gorge #1 Sub - Replace Transformer with 12/16/20MVA					300	2,500	2,800
Total Costs: \$5,600							
Description: Replace existing 7.5/10MVA transformer with non-LTC 12/16/20MVA. Replace existing 3-333KVA bus regulators with 3-667KVA (3-875amp) units. Reason and benefits: Gilboa Dam is planning to add 4.4MVA of load. The winter peak of the substation could be as much as 11.8MVA exceed the transformer's winter planned loading beyond nameplate (PLBN) of 10.9MVA. Investment Reason: Growth							
Year started: 2016 Year in service: >2017 Current Status: Not started							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Harris Lake - Diesel Generator Upgrade	271	1,300	5,480				
Total Costs: \$7,051							
Description: Install (1) new 2500 kW diesel generator to supplement the existing 1750 kW generator and fuel system. Furnish all supervision, labor, materials, tools, services, equipment and supplies, and perform all work required for the complete installation of the work. Reason and benefits: Increase supply to meet peak area load. Investment Reason: System Capacity							
Year started: 2012 Year in service: 2014 Current Status: RFP for EPC Contract							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Hickling S/S - Separation from AES Oneonta Plant	558	860	4,232				
Total Costs: \$5,650							
<p>Description: Acquire additional land, construct a new control house at Hickling on land owned by NYSEG, install all necessary protection and control devices in the control house, install new substation AC station service, re-cable the entire substation to the new control house, develop sequence plan to cut over each substation transformer and line terminal to the new control house, and retire all existing NYSEG facilities.</p> <p>Reason and benefits: AES filed for Chapter 11 Bankruptcy protection: NYSEG is dependent upon AES for reliable operation of the NYSEG transmission grid. The benefit is to remove the dependencies on the AES Plants to provide reliable operation of the NYSEG Grid</p> <p>Investment Reason: Statutory</p>							
<p>Year started: 2012</p> <p>Year in service: 2014</p> <p>Current Status: AES sold plant to GMMM in December 2012. Project in Detail Design</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Jennison S/S - Separation from AES Oneonta Plant	592	860	3,675				
Total Costs: \$5,127							
<p>Description: Acquire additional land, construct a new control house at Jennison on land owned by NYSEG, install all necessary protection and control devices in the control house, install new substation AC station service, re-cable the entire substation to the new control house, develop sequence plan to cut over each substation transformer and line terminal to the new control house, and retire all existing NYSEG facilities.</p> <p>Reason and benefits: AES filed for Chapter 11 Bankruptcy protection: NYSEG is dependent upon AES for reliable operation of the NYSEG transmission grid. The benefit is to remove the dependencies on the AES Plants to provide reliable operation of the NYSEG Grid</p> <p>Investment Reason: Statutory</p> <p>Year started: 2012</p> <p>Year in service: 2014</p> <p>Current Status: AES sold plant to GMMM in December 2012. Project in Detail Design</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Kent 2nd 13.2 KV Ckt and Bank Upgrade - Brewster						1,000	4,400
Total Costs: \$5,400							
<p>Description: Relocate and install as the 2nd bank the 7.5/10.5 MVA LTC 46-13.2 KV bank #1 from Pound Ridge to Kent Sub in place of the 5 MVA unit sub. Establish a 13.2 KV bus connection from this new bank to allow conversion of circuit #175 to 13.2 KV operation.</p> <p>Reason and benefits: Converting ckt 175 will allow load relief of Crafts #425 and Tilly Foster # 439.</p> <p>Investment Reason: Growth</p> <p>Year started: 2017</p> <p>Year in service: >2017</p> <p>Current Status: Not started</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Line 807 Conversion Project (Appendix L project)	5,333	800	2,240				
Total Costs: \$8,373							
<p>Description: Convert approximately 13 mile of 46kV to 115 kV. Convert the existing #807, 46 kV line from Carmel to Katonah to 115 kV. The new 115 kV line will extend from Carmel Substation to Wood Street Substation to Katonah Substation.</p> <ul style="list-style-type: none"> • New 115 kV line breaker location and two new 115 kV breakers will be added at Carmel Substation • Two new 115 kV line breaker locations and two new 115 kV breakers will be added at Wood Street Substation • New 115 kV line breaker location and three new 115 kV breakers will be added at Katonah Substation. <p>Reason and benefits: Increase capacity to meet load growth in the Brewster region to provide adequate voltage levels and thermal conditions.</p> <p>Investment Reason: System Capacity</p>							
<p>Year started: 2006</p> <p>Year in service: 2014</p> <p>Current Status: Line Construction is 90% complete. Katonah substation is currently 70% complete, balance of work to be complete early 2013. Wood St. Below Ground 75% complete, intent is to secure additional 2013 funding and complete Wood St. this year. Carmel Scope is complete, Conceptual Engineering was awarded to CG Power and is in final review. CG Power to complete Detail Engineering of Carmel by the close of 2013.</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Mechanicville Reinforcement Project, Construct New Luther Forest Substation	9,335	1,494	841				
Total Costs: \$ 11,670 (90% included in category 1 and 10% in category 2)							
Description: Construct a new 115-34.5 kV substation with two 34.5 kV distribution circuits and two future 34.5 kV distribution circuit positions. Reason and benefits: Resolve loading issues with the existing Mulberry Substation by transferring load to a new 115-34.5 kV source at Luther Forest. Investment Reason: System Capacity – 90%- Growth – 10%							
Year started: 2010 Year in service: 2014 Current Status: In-ground construction completed; 80% of 2 Distribution circuits completed; Transformers & Control Houses received; Above ground construction in progress.							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
North Broadway, Add 2nd 115/34.5 kV Transformer						1,000	6,200
Total Costs: \$7,200							
Description: Install a second 115/34.5 kV, 30/40/50/56 MVA, Non-LTC transformer at North Broadway Substation and operate it in parallel with the existing 115/34.5 kV, 30/40/50/56 MVA Non-LTC transformer. Reason and benefits: During the 2013 summer period, loss of one of the North Broadway 115/34.5 kV transformer would result in an overload of the Erie Street #2 bank. Up to 10 MW and 2,500 customers could be exposed to these potential problems for up to 75 hours in the 2012 summer Investment Reason: System Capacity							
Year started: 2017 Year in service: >2017 Current Status: Not Started							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Oakdale Reconfiguration Project						13,800	30,000
Total Costs: \$43,800							
<p>Description: Install four new 345 kV breakers at Oakdale Substation and reconfigure the 345 kV portion of the substation from a ring bus to a breaker and a half. The reconfiguration of the 345 kV element connections will ensure that no two critical elements can be lost at the same time for a stuck breaker outage and that an adequate N-1-1 contingency supply can be maintained in the Binghamton Division.</p> <p>Reason and benefits: Under today's current system condition and load levels, the permanent shutdown or retirement of the entire AES owned Cayuga Generating Plant results in a voltage collapse situation in NYSEG's Binghamton Division if either of the following N-1-1 contingencies was to occur: 1) Loss of the Lafayette to Clarks Corners 345 kV line and the stuck breaker outage that simultaneous results in the loss of Oakdale to Fraser 345 kV line and the Oakdale 345 kV capacitor bank or 2) Loss of the Oakdale 345/115 kV transformers #1 and the stuck breaker outage that simultaneous results in the loss of Oakdale to Watercure 345 kV line and the Oakdale 345/115 kV transformer #2.</p> <p>Investment Reason: Power Quality</p>							
<p>Year started: 2017</p> <p>Year in service: >2017</p> <p>Current Status: Not Started</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Old Falls Substation - Install 2nd LTC Transformer	221	150	1,274				
Total Costs: \$1,645							
Description: Install 2nd 12/16/20MVA LTC transformer at Old Falls substation. Install three 12.5KV distribution feeders. Reason and benefits: The Old Falls substation transformer tripped in Summer 2011 due to an overload. The summer peak was record as high as 24MVA but the existing substation bank only has a summer PLBN rating of 22MVA. Investment Reason: System Capacity Year started: 2012 Year in service: 2014 Current Status: Preliminary design & scoping started. Intent is to complete Conceptual Engineering in 2013, including a RFP Package ready to bid Detail Engineering in 2014.							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
River Road Substation - Replace transformer with non-LTC 10/12/14MVA				1,500	2,500	1,500	
Total Costs: \$5,500							
Description: Replace existing 3-2.5/3.125 MVA sub transformer with non-LTC 1-10/12/14 MVA with dual 4.8/12.5 KV windings. Reason and benefits: The non-diversified sum of the distribution circuits during Summer 2010 has been as high as 8.4MVA, loading the 10.5 MVA bank by 80%. Investment Reason: System Capacity Year started: 2015 Year in service: 2017 Current Status: Not Started							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Sackett Lake Substation – Replace transformer with 7.5 MVA unit and convert distribution to 12.5 KV	202	500	972				
Total Costs: \$1,674							
<p>Description: Replace the substation transformer with a non-LTC 7.5/10 MVA unit with dual 4.8/12.5 KV windings. Install an additional 438A sub-regulator unit to circuit 121 and an additional 668A sub-regulator unit to circuit 120. Convert circuits 020 and 121 from 4.8 KV to 12.5 KV.</p> <p>Reason and benefits: The Birchwood Estate served from circuit 121 is adding 70 units over three phases. Circuit 121 will not be able to support the third phase load addition at 4.8 KV. The 121 circuit will need to be converted to 12.5 KV.</p> <p>Investment Reason: System Capacity</p>							
<p>Year started: 2012</p> <p>Year in service: 2014</p> <p>Current Status: Preliminary design & scoping started. Intent is to complete Conceptual Engineering in 2013, including a RFP Package ready to bid Detail Engineering in 2014.</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
South Perry New 230kV Transformer	2,293	1,056	6,679				
Total Costs: \$10,028							
Description: Add a new 230/115kV LTC transformer at the South Perry substation. Adding a 230kV transformer may require the addition of a new 230kV switchyard. Reason and benefits: The South Perry and Genesee Region Station 158 serve approx. 90MW of load to over 17,000 customers. During high load periods, loss of one or the two 115kV lines that supplies that area will cause the other line to overload beyond its LTE rating. Investment Reason: System Capacity							
Year started: 2010 Year in service: 2014 Current Status: 20% Detailed Engineering & Design. Finish detailed engineering in 2013. Construction Phase will commence in 2014.							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Walden 69kV Transmission Line Upgrade (Appendix L project)	5,446	30					
Total Costs: \$5,476							
Description: Rebuild .86 miles of single pole double circuit 69 kV transmission with two separate single circuit overhead lines. Approximately 1,600 feet of the new lines will be underground construction. Reason and benefits: Central Hudson is upgrading the 69 kV transmission due to system growth in the Central Hudson, Orange and Rockland, and NYSEG service territories. Investment Reason: System Capacity							
Year started: 2008 Year in service: 2013 Current Status: Project is intended to be in-service by 2/28/13.							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Watercure Rd. - 2nd 345 kV Transformer	3,987	500	4,899	3,627			
Total Costs: \$13,013							
Description: Install a second 400MVA 360/240/36.2KV, LTC transformer at Watercure substation. Install 3 345kV circuit breakers and 4 230kV circuit breakers to connect the new transformer in parallel with the existing bank #1. Reason and benefits: The project will mitigate the emergency conditions encountered after the failure of bank #1 Investment Reason: System Capacity							
Year started: 2010 Year in service: 2015 Current Status: The conceptual engineering package and breaker technical specifications have been developed and are being reviewed.							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Westover Substation New 115 kV Transformer & Binghamton Division Capacitors (Appendix L project)	1,622	1,800	2,803	346			
Total Costs: \$6,571							
Description: <ul style="list-style-type: none"> • New Westover (Goudey) 115/34.5 kV, 30/40/50 MVA, LTC transformer bank. • Install 102 MVAR, two-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. <p>Reason and benefits: Sub-marginal voltages appear in the areas served from the Morgan, Langdon, Fuller Hollow, Jones and Conklin substations and the 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 transformers.</p> <p>Investment Reason: System Capacity and Power Quality</p> <p>Year started: 2010</p> <p>Year in service: 2015</p> <p>Current Status: Conceptual Engineering complete & procurement of Detail Design started & Transformer delivered – on site on temporary pad.</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Willet Substation New Transformer	1,548	500	5,554				
Total Costs: \$7,602							
Description: Install a second 115/34.5kV, 20/26/33 MVA LTC transformer to operate in parallel with the existing transformer at the substation. Work will include all associated equipment required with this transformer addition. Reason and benefits: The installation of the second transformer will increase the system reliability by allowing at least one transformer to remain in-service when one of the transformers is out-of-service. Investment Reason: System Capacity Year started: 2010 Year in service: 2014 Current Status: 60% of long lead items are already purchased. The kick off meeting for the Detailed Engineering is expected for first the week of April.							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Wood Street, Add 3rd 345/115 kV Transformer	97	0	747	1,506	5,000	4,857	
Total Costs: \$12,207							
Description: Install a third 345/115 kV, 150/200/250/280 MVA, LTC transformer at Wood Street Substation and operate it in parallel with the two existing 345/115 kV, 150/200/250/280 MVA LTC transformers. Reason and benefits: During the 2012 summer period, an outage of one Wood Street 345/115 kV transformer with the other one already out would result in low voltage in Brewster. Up to 200 MW and 35,000 customers could be exposed to these potential problems for up to 5,100hours in 2012. Investment Reason: System Capacity Year started: 2012 Year in service: 2017 Current Status: Scope is complete,							

RG&E

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
New Bulk Power Station 255 (Rochester Area Reliability Project) (Appendix L)	8,820	30,486	70,000	73,000	72,264		
Total Costs: \$254,570							
Description: <ul style="list-style-type: none"> • New BPS (bulk power system) Station 255, located approximately 3.8 miles west of the RG&E Station 80, 345/115 kV 800 MVA, two transformers of 400 MVA. • Two NYPA 345kV cross-state transmission lines, SR1-39 (Somerset - Rochester) and NR-2 (Niagara - Rochester), will be brought in and out of the new station. • A breaker-and-a-half setup for the 345 kV bus • A 115 kV breaker-and-a-half bus • New Line #940 (approximately 10 miles in length) will tie into the western part of the RG&E 115 kV system at Station 418. • New Line #941 (approximately 14.3 miles in length, 7.9 miles overhead and 6.4 miles underground) will tie into the RG&E 115 kV system at Station 23. <p>Reason and benefits: For loss of Ginna and one 345/115 kV transformer, the remaining transformer capacity will be insufficient due to load growth. Station 255 will provide needed transformer capacity. Two new 115kV sources will help with local voltage and flow problems.</p> <p>Investment Reason: System Capacity</p>							
Year started: 2010							
Year in service: 2016							
Current Status Engineering/Permitting (Article VII application filed September 2011)							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
New Downtown 115 kV Source (Appendix L)	11,875	7,200	11,138				
Total Costs: \$30,213							
Description: <ul style="list-style-type: none"> • New gas-insulated 115 kV bus at Station 23 • Two new 115/34.5 kV, 65MVA, transformers at Station 23 • Station 3 will be rebuilt as Station 137. • Two new 2.5-mile, 34.5 kV, feeds from Station 23 to Station 137. • Swap the 901 and 902 lines from Station 82 to Station 33 • Re-conductor the 901 line to 400 MVA. • Add a phase-shifting transformer on the 920 line at Station 42. • Relocate 11 kV phase-shifting transformer from Station 23 to new Station 137. <p>Reason and benefits: New 34.5 kV feeds will reduce load on 34.5 kV circuits from Station 33 to Station 137 and off-load Station 33 transformers. PST at Station 42 will provide controllable third source to Station 42. The exposure to this contingency is 50 hrs/yr, affecting 12,440 customers and 60 MW of load.</p> <p>Investment Reason: System Capacity</p>							
<p>Year started: 2010</p> <p>Year in service: 2014</p> <p>Current Status: 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</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
New 115/34.5 kV Substation, 262 (Appendix L)	3,272	3,975	220	151			
Total Costs: \$7,618							
Description: <ul style="list-style-type: none"> • New 115/34.5 kV, 57 MVA substation, one transformer of 57 MVA in Rochester • New 1.5-mile, 34.5 kV line from the new substation to Station 26 • New 34.5/11.5 kV, 37 MVA, transformer at Station 26 Reasons and Benefits: Loss of circuit 741 (S33-S26) or loss of 34.5/11.5kV transformer at Station 26 results in excessive overload of 11.5 kV circuit 629. Exposure is 175 hours per year, potentially affecting 700 customers and 38 MW of load. Investment Reason: System Capacity							
Year started: 2012 Year in service: 2015 Current Status: Engineering. Progress in Architectural, Structural, Civil and design for Station 262 and Station 26							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Mobile Substation #3, 115/34.5kV	161	1,120	4,947	251			
Total Costs: \$6,479							
Description: Purchase new 34.5kV mobile switchgear unit - also to be operated at 12.47kV. Reasons and Benefits: In order to facilitate major substation rebuilds on the same site, this equipment allows flexibility in construction and will help reduce outages that will be required for substation modifications. Investment Reason: System Capacity							
Year started: 2011 Year in service: 2015 Current Status: Engineering and Procurement							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Sectionalize and Reconductor 115 kV Circuit 917 (Station 7 to Station 418)	1,663	596	2,091				
Total Costs: \$4,350							
Description: Sectionalize Circuit 917. Use automatic motor operators at Station 93, Station 69 and Station 113. Use 115 kV circuit breakers at Station 70. Reasons and Benefits: Sectionalization of circuit 917 will allow automatic isolation of a persistent fault on any line section, and quick restoration of electric service to 34,000 customers and 115 MW of load. Updating will prevent thermal overload on remaining sections. Investment Reason: System Capacity							
Year started: 2010 Year in service: 2014 Current Status: Not Started							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 23 Transformer and 11 kV Switchgear	4,198	800	2,599				
Total Costs: \$7,597							
Description: Add 11 kV GIS and two 115/11 kV transformers to Station 23. Add double bus configuration to the 115 kV GIS. Reasons and Benefits: Transformer replacements are due to aging infrastructure. 1T-2T are leaking and reaching end of life. Two of the four bus sections of 11 kV are overdutied, need to be upgraded for proper fault current ratings. Bus 3-4 today at 96% of rated interrupt capacity. Investment Reason: System Capacity							
Year started: 2011 Year in service: 2014 Current Status: Engineering							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 117 - Replace #1 Transformer Bank and convert 3 circuits to 12kV operation						6,954	
Total Costs: \$6,954							
Description: Replace Transformer Bank #1 at Station 117 with a new 34.5-4.16x12.5 kV, 13.4/17.9/22.4 MVA Transformer Bank and convert the 3 existing 4.16 kV distribution circuits to 12.5 kV operations. Reasons and Benefits: The loading on the existing 5.25 MVA transformer banks #1 at Station 117 has reached 92% of its PLBN rating during the summer peak of 2011. Investment Reason: System Capacity							
Year started: 2017 Year in service: 2017 Current Status: Not Started							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 56 Additional 12 kV Source (Appendix L)	3,314	3,961	1,355				
Total Costs: \$8,630							
Description: Install a second 115/12 kV transformer with provision for three new circuit positions. Reasons and Benefits: This project will improve reliability to the entire area while allowing further room for growth. Investment Reason: System Capacity							
Year started: 2011 Year in service: 2014 Current Status: Engineering/Permitting							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Rochester - Station 56, Add (2) 34.5kV Cap Banks	117	600	374	1,168	3,503		
Total Costs: \$5,762							
Description: Add an additional 9MVAR to both 34.5kV 9MVAR capacitor banks at Station 56. Reasons and Benefits: L/O one of the two Station 56 115/34.5kV Xfrs results in thermal overload on Station 56 transformers. The exposure is 90 hrs/yr, affecting 6500 customers and 40 MW of load. Investment Reason: System Capacity							
Year started: 2012 Year in service: 2016 Current Status: Engineering							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 67 to 418 New 115 kV Transmission Line (Appendix L)	767	4,800	8,337				
Total Costs: \$ 13,904							
Description: New six-mile, 115 kV line from Station 67 to Station 418 Reasons and Benefits: Loss of Circuit 910 (S67-S418), causes sub marginal voltages and thermal overload on Circuit 917 (S7-S418). The exposure is 300 hours per year, affecting 39,000 customers and 160 MW of load. Investment Reason: Power Quality							
Year started: 2010 Year in service: 2014 Current Status: Engineering/Permitting							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 80 Replace 1T and 3 T Transformers	5,819	1,600	4,150				
Total Costs: \$11,569							
Description: Replace 1T & 3T transformers with new 345/115 kV 400 MVA units; replace six 115 kV disconnect switches; replace two 115 kV circuit breakers; replace one section of 115 kV bus. Reasons and Benefits: This will alleviate known maintenance issues with the existing 50 year old units. Investment Reason: System Capacity							
Year started: 2010 Year in service: 2014 Current Status: Engineering							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 89, Replace #2 Transformer					2,000	2,000	2,800
Total Costs: \$6,800							
Description: Replace 34/4 kV transformer with a 34/12 kV unit. Convert the two existing 4 kV circuits to 12 kV. Reasons and Benefits: The service area of this new 12 kV source can be extended northward where the 12 kV capacity will benefit an adjacent town that is experiencing significant new residential and commercial growth with limited 4 kV supply capacity. Investment Reason: System Capacity							
Year started: 2016 Year in service: 2018 Current Status: Not started							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 124 New Phase Shifter Transformer (Appendix L)	22,514	2,529	1,507				
Total Costs: \$26,550							
Description: Add a New Phase Shifter Transformer Reasons and Benefits: For loss of either circuit 911 or circuit 932, the remaining circuit will get thermally overloaded. With a phase shifting transformer on each line, the flow on the remaining line can be regulated to stay within cable ratings. Exposure is 25 hrs/yr (in cable only), affecting 4,800 customers and 23 MW of load. This is also a part of the FERC Ginna settlement that exposes RG&E to \$840,000/day of potential fines until complete. Investment Reason: System Capacity							
Year started: 2010 Year in service: 2014 Current Status: Construction							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 124 New Static VAR Compensator (Appendix L)	19,477	4,100	786				
Total Costs: \$24,363							
Description: Add a +/-200 MVAR Static VAR Compensator (SVC) at the 115 kV bus of Station 124. Reasons and Benefits: Dynamic voltage support is required for voltage transient stability for large contingencies which include the tripping of Ginna. The exposure is 25 hours per year, affecting 9,650 customers and 47 MW of load. Investment Reason: System Capacity							
Year started: 2009 Year in service: 2014 Current Status: Construction							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 149 transformer/facilities upgrade and secondary source addition				500	500	2,000	5,700
Total Costs: \$8,700							
Description: Replace existing station transformer with new. Add second 10 MVA, LTC type transformer. Upgrade existing distribution circuits from 4 kV to 12 kV. Reconductor primary feeder for ratings increase. Reasons and Benefits: Upgrade will unburden existing overloaded station transformer, accommodate anticipated area load growth, enhance other station circuit ties with 12 kV upgrade, and facilitate better secondary source contingency. Investment Reason: System Capacity							
Year started: 2015 Year in service: 2018 Current Status: Not started							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 168 Service Area Reinforcement	3,061	500	8,189	5,000			
Total Costs: \$16,750							
Description: Sectionalize National Grid 115 kV Trunks #2 and #4 at Station 168 with 115 kV circuit breakers. Install fixed and switched voltage controlled capacitors along 34.5 kV circuits presently served from Station 168. Reasons and Benefits: In the event of a contingency under summer peak or winter peak load conditions, the remaining 115/34.5 kV transformer at Station 168 will be loaded above its thermal capacities Investment Reason: System Capacity							
Year started: 2011 Year in service: 2015 Current Status: Scoping/ Preliminary Engineering							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 218 to Clyde Station - New 34.5 Transmission Line (Appendix L)	1,311	1,600	7,128				
Total Costs: \$ 10,039							
Description: New eight-mile, 34.5 kV line from the Clyde Station to Station 218 Reasons and Benefits: The new 34.5 kV line will relieve the existing 34.5 kV line (from the Clyde Station to Station 218) of thermal stress through parallel operation. Investment Reason: System Capacity							
Year started: 2011 Year in service: 2014 Current Status: Engineering							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
University of Rochester Prior to reimbursement Reimbursement	476	9,437 -3,109	12,517 -3,741				
Total Costs: \$22,430 (prior to reimbursement), \$15,580 (after reimbursement), \$6,850 (reimbursed)							
Description This is a new 115-34 kV substation being built based on University of Rochester need. Reasons and Benefits: This is a new 115-34.5kV Substation to be built to serve additional load and offload Station 33. This project is partially reimbursable by the customer. Investment Reason: Growth							
Year started: 2011 Year in service: 2014 Current Status: Engineering/Permitting							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Station 49 - Replace 34.5-11.5kV Transformer - Rochester	2,254	2,040	1,826				
Total Costs: \$ 6,120							
Description: Replace the two 34.5/11.5kV transformers with larger LTC units. Reasons and Benefits: For L/O one of the two Station 49 34.5/11.5kV transformers under peak load, thermal overload on the remaining 34.5/11.5kV transformer will appear, together with submarginal voltages. The exposure is 400 hrs/yr, affecting 570 customers and 2 MW of load. Investment Reason: System Capacity							
Year started: 2011 Year in service: 2014 Current Status: Engineering and procurement							

Attachment 4

List of Electric Projects Included in Category 1

Network Reinforcement

Title	2013	2014	2015	2016	2017
NYSEG Area Reinforcement					
Mechanicville Reinforcement Project, Construct New Luther Forest Substation	1,344,731	757,008	-	-	-
Tom Miller Rd New Substation	1,004,845	3,151,306	-	-	-
Columbia County Transmission Project (Klinekill 115kV)	700,000	1,478,591	5,678,068	16,348,231	4,455,875
New Waterloo Substation	-	-	300,000	4,000,000	-
TOTAL NYSEG Area Reinforcement	3,049,576	5,386,905	5,978,068	20,348,231	4,455,875
NYSEG - Improvements in Substations					
Harris Lake - Diesel Generator Upgrade	1,300,000	5,480,000	-	-	-
Oakdale Reconfiguration Project	-	-	-	-	13,800,000
Fraser Sub - Add 2nd 345/115 kV Transformer	-	1,200,000	1,500,000	2,200,000	8,519,650
Wood Street - Add 3rd 345/115 kV Transformer	-	746,549	1,506,000	5,000,000	4,856,721
Coopers Corners, Add 3rd 345/115 kV Transformer	-	1,000,000	3,000,000	7,800,985	-
Watercure Rd. - 2nd 345 kV Transformer	500,000	4,899,729	3,626,597	-	-
South Perry New 230kV Transformer	1,055,893	6,679,051	-	-	-
Willet Substation New Transformer	500,000	5,553,754	-	-	-
Eelpot New Transformer	1,500,000	3,614,490	-	-	-
Flat Street Substation New Transformer	1,500,000	3,613,796	-	-	-
Meyer Substation New Transformer - 115/34.5kV	500,000	3,748,969	-	-	-
Westover Substation New 115kV Transformer and Binghamton Division Capacitors	1,440,000	2,242,734	276,258	-	-
Stephentown Substation New Transformer	1,100,000	2,658,406	-	-	-
Perry Center Area Install New 34.5kV Substation	1,247,284	2,224,501	-	-	-
Alden - Add 2nd Transformer Bank	-	-	-	1,362,450	2,000,000
Hamburg - Replace Transformer Banks #1 & 2	-	-	-	500,000	2,862,450
Glenwood - Replace Substation Transformers	1,000,000	2,337,232	-	-	-
South Perry New 115kV Transformer	1,004,551	1,913,014	-	-	-
Windham Substation 115 KV Capacitor Bank Addition	500,000	2,033,417	-	-	-
Orchard Park - Add a 2nd Transformer Bank	-	-	-	1,000,000	1,295,186
Bulkhead - Replace Transformer Bank#2	-	-	-	1,000,000	1,267,695
DOE- Stimulus Program- Capacitor Banks NYSEG(Ashley, Morgan, Ridge Rd., Mountindale, Amawalk, Big Tree) - 50% Reimb	1,470,903	736,965	-	-	-
Davis Road, Replace 115/34.5 kV Transformers #2 & #3 with new LTC's	-	-	-	-	1,800,000
South Perry - Replace 115/34.5 kV Transformer	1,004,551	271,924	-	-	-
Java Transformer Repacement	-	-	250,000	1,000,000	-
Gardenville, Add 3rd 230/115 kV Transformer	-	-	-	-	1,000,000
North Broadway, Add 2nd 115/34.5 kV Transformer	-	-	-	-	1,000,000
Westover Substation New 115kV Transformer and Binghamton Division Capacitors	360,000	560,683	69,065	-	-
NYSEG - NY Control Center Telephone - Major Capital	-	-	-	-	-
Old Fall substation - Install 2nd LTC Transformer	150,000	1,274,313	-	-	-
River Rd Sub - Replace sub transformer wth non-LTC 10/12/14MVA	-	-	1,500,000	2,500,000	1,500,000

Title	2013	2014	2015	2016	2017
Dingle Ridge - 2nd Bank and 13.2kV Conversion	260,000	1,000,000	4,000,000	-	-
West Davenport Sub - Replace sub transformer with non-LTC 7.5/10.5MVA unit.	-	-	-	2,100,000	2,800,000
Silver Creek Substation New Transformer	800,000	3,709,126	-	-	-
Sloan - Add a 2nd Transformer Bank and 4th circuit position.	-	-	3,198,481	-	-
Ebenezer - Add a 2nd Transformer Bank and 2 new circuit positions	-	-	-	2,000,000	493,920
Cemetery RD - Replace Transformer Bank #1 and add 4th 12kV Circuit Position.	-	-	2,128,000	-	-
Wales Center - Add a 2nd Transformer Bank and 3rd circuit position.	-	-	2,121,882	-	-
Crafts - Add 2nd Transformer and 4th 13.2kV circuit position	260,000	1,714,000	-	-	-
Sackett Lake Sub - Replace transformer with 7.5MVA unit and convert distribution to 12.5KV	500,000	972,450	-	-	-
Other projects <\$1M	1,330,000	1,174,000	474,000	442,000	1,638,000
TOTAL NYSEG - Improvements in Substations	19,283,182	61,359,103	23,650,283	26,905,435	44,833,622
NYSEG New Lines					
Auburn Transmission Project (Auburn 345kV Source)	800,000	4,758,450	19,740,523	6,646,517	-
State Street 3rd 12.5 KV Circuit - Auburn	-	-	210,000	-	-
Total NYSEG New Lines	800,000	4,758,450	19,950,523	6,646,517	-
NYSEG - Improvements in Line					
WPC Red Circuits	-	2,000,000	5,000,000	3,000,000	9,004,000
Line 807, Convert to 115kV Operation	800,000	2,240,438	-	-	-
Line 601, replace existing facilities	-	500,000	1,280,000	-	-
Line 526, Rebuild Coddington-South Hill 34.5 kV Line	-	-	-	200,000	700,000
Other projects <\$1M	419,000	1,260,000	530,000	72,500	-
Total NYSEG - Improvements in Lines	1,219,000	6,000,438	6,810,000	3,272,500	9,704,000
Other Reliability Risk Projects	-	-	2,000,000	2,000,000	21,000,000
TOTAL NYSEG	24,351,758	77,504,896	58,388,874	59,172,683	79,993,497
RG&E Area Reinforcement					
New Downtown 115kV Source	7,200,000	11,138,394	-	-	-
Rochester Area Reliability Project (New Bulk Power Sta - 345kV Source and 115kV Transmission Lines)	30,485,927	85,000,000	73,000,000	57,264,000	-
Station 262- New 115kV/34.5kV Substation	3,974,638	220,320	151,085	-	-
Station 168 Service Area Reinforcement	500,000	8,189,000	5,000,000	-	-
TOTAL RG&E Area Reinforcement	42,160,565	104,547,714	78,151,085	57,264,000	-
RG&E - Improvements in Substations					
Mobile Substation #3 115/34.5 kV	1,119,460	4,947,001	251,241	-	-
Station 56, Add (2) 34.5kV Cap Banks, Rochester	600,000	373,776	1,167,746	3,503,237	-
Station 89, Replace #2 Transformer	-	-	-	2,000,000	2,000,000
Station 124 New SVC	3,062,312	785,926	-	-	-
Station 49 - Replace 34.5-11.5kV Xfmr - Rochester	1,760,715	1,826,278	-	-	-
Station 80 - Replace 1T and 3T Transformers	800,000	2,075,056	-	-	-

Title	2013	2014	2015	2016	2017
Station 124 New Phase Shifter Transformer	1,000,000	1,507,102	-	-	-
Mobile Switchgear #134.5/12kV	-	1,808,000	-	-	-
new mobile 34-12x11	-	-	1,500,000	-	-
Station 149 transformer/facilities upgrade and secondary source addition	-	-	500,000	500,000	2,000,000
Sta 246 Add Second Transformer and Circuits	-	-	-	600,000	2,000,000
Sta 110, Replace #1T & Convert Circuits to 12kV	-	-	-	932,000	1,000,000
Station 117 - Replace #1 Transformer Bank and convert 3 circuits to 12kV operation.	-	-	-	-	6,954,000
Station 56 Additional 12kV Source	3,961,180	1,355,000	-	-	-
Station 136, Add 2nd Transformer	750,000	1,964,517	-	-	-
Station 210 transformer replacement and 4kV circuit conversion to 12kV	-	-	-	575,000	2,000,000
Station 43 - Replace #3 and #4 Transformer Banks.	-	-	2,454,631	-	-
Station 46 - Replace #1 and #3 Transformer Banks	-	-	500,000	1,954,631	-
Other projects <\$1M	5,506,370	1,533,633	389,255	505,164	295,000
Total RG&E - Improvements in Substations	18,560,037	18,176,289	6,762,873	10,570,032	16,249,000
RG&E New Lines					
Station 218 to Clyde New 34.5kV Transmission Line	1,599,999	7,127,531	-	-	-
Stations 67 to 418 New 115kV Transmission Line	4,800,000	8,337,000	-	-	-
Circuit 805	-	-	-	506,000	2,024,000
Rochester - Add 35kV Circuit - Offload Circuit 783	150,000	1,050,000	1,000,000	2,500,000	-
Sta 419- Add new 12kV circuit	-	60,000	440,000	-	-
Total RG&E New Lines	6,549,999	16,574,531	1,440,000	3,006,000	2,024,000
RG&E - Improvements in Line					
WPC Red Circuits	415,000	427,450	440,274	453,482	467,086
Line 926 - Upgrade 115kV Line - Rochester	1,600,000	523,000	-	-	-
Rochester - Sectionalize and Reconductor 115kV Circuit 917 (S7 - S418)	595,900	2,091,174	-	-	-
Rochester - Sectionalize and Reconductor 115kV Circuit 917 (S7 - S418)	238,360	836,470	-	-	-
Silicon Carbide Change out Program	150,000	150,000	300,000	300,000	300,000
Sta 155 Canandaigua, Cir 248 Lakeshore Dr 12kV Conversion	-	-	500,000	-	-
Total RG&E - Improvements in Line	2,760,900	3,191,624	1,240,274	753,482	767,086
Other Reliability Risk Projects	-	5,000,000	5,000,000	7,000,000	68,940,537
TOTAL RG&E	70,031,501	147,490,158	92,594,232	78,593,514	87,980,623
Total Category 1 - Electric	94,383,260	224,995,054	150,983,106	137,766,197	167,974,120

Attachment 5

List of Electric Projects Included in Category 2

Customer and Statutory Requirement

Title	2013	2014	2015	2016	2017
NYSEG Growth					
Transformers	14,000,000	14,000,000	14,853,000	14,853,000	15,757,000
Service Connects	3,500,000	3,500,000	3,713,000	3,713,000	3,939,000
Residential Line Extensions	2,500,000	2,500,000	2,652,000	2,652,000	2,814,000
Meters	2,300,000	2,300,000	2,507,792	2,507,792	2,633,182
Industrial/Commercial	1,000,000	1,000,000	1,061,000	1,061,000	1,126,000
Regulators	1,000,000	1,000,000	1,061,000	1,061,000	1,126,000
Street Lighting	1,000,000	1,000,000	1,061,000	1,061,000	1,126,000
Capacitors	500,000	500,000	530,000	530,000	563,000
Agro-Farma, Inc. New 46kV Transmission Line & Substation - 100% Reimbursable	3,391,000				
	(3,391,000)				
MTA-New 13.2kV Circuits - 100% Reimbursable	1,343,589	1	-	-	-
	(1,343,589)				
Grand Gorge #1 Sub - Replace with transformer with 12/16/20MVA		-	-	300,000	2,500,000
DolomiteVanBuren/606 transmission underbuild Project	1,400,000	-	-	-	-
Kent 2nd 13.2 KV Ckt and Bank Upgrade - Brewster	-	-	-	-	1,000,000
Other projects <\$1M	3,884,416	789,112	175,000	72,500	-
Total NYSEG Growth	31,084,416	26,589,113	27,613,792	27,811,292	32,584,182
NYSEG Statutory					
FERC- Bright Line Bes	-	2,700,000	2,500,000	-	-
Goudey S/S - Separation from AES Westover Plant - Bing	860,000	5,400,585	-	-	-
Hickling S/S - Separation from AES Elmira Plant	860,000	4,232,199	-	-	-
Jennison S/S - Separation from AES Oneonta Plant	860,000	3,674,708	-	-	-
Greenidge S/S - Separation from AES Geneva Plant	860,000	2,730,994	-	-	-
Transit St Substation MGP Electric Capital Construction	1,300,000	1,793,376	-	-	-
Government Highway	600,000	600,000	637,000	637,000	675,000
Video Alarming	1,188,000	1,322,000	1,174,000	1,061,000	1,034,000
Fire Protection	500,000	500,000	500,000	500,000	500,000
Access Control Improvements	100,000	100,000	605,000	610,000	505,000
Other projects <\$1M	1,385,000	460,000	779,311	25,067	-
Total NYSEG Statutory	8,513,000	23,513,862	6,195,311	2,833,067	2,714,000
NERC Alert Program	5,831,109	1,991,122	-	-	-
Total NYSEG	45,428,525	52,094,097	33,809,103	30,644,359	35,298,182
RG&E Growth					
Transformers	5,000,000	5,000,000	5,000,000	5,464,000	5,628,000
Meters	1,800,000	1,800,000	1,800,000	1,967,000	2,026,000
Capacitors	70,000	70,000	70,000	76,000	79,000
Residential Line Extensions	1,500,000	1,500,000	1,500,000	1,639,000	1,688,000
Industrial/Commercial	1,000,000	1,000,000	1,000,000	1,093,000	1,126,000
Street Lighting	700,000	700,000	700,000	765,000	788,000
Service Connects	500,000	500,000	500,000	546,000	563,000
Regulators	100,000	100,000	100,000	109,000	113,000

Title	2013	2014	2015	2016	2017
U of R New 115-34kV Substation 251	9,437,000	12,516,678	-	-	-
	(3,109,000)	(3,741,000)			
NYS Barge Canal Brighton Install Street Lighting	400,000	-	-	-	-
Rochester New Underground Residential Distribution Project	200,000	-	-	-	-
Canadaigua Airport Runway Extention	80,000	40,000	-	-	-
Total RG&E Growth	17,678,000	19,485,678	10,670,000	11,659,000	12,011,000
RG&E Statutory					
Relocate Electric Facilities	-	10,997,390	9,771,512	10,883,657	11,170,127
Government Highway Minor/Maj	515,000	515,000	515,000	563,000	580,000
Lake Ave (Merrill St to 600' S of Burley St). Relocate Electric Facilities	3,950,000	-	-	-	-
FERC- Bright Line Bes	500,000	1,000,000	800,000	-	-
RG&E Security Projects (to be replaced with individual projects identified later)	-	-	505,000	510,000	405,000
Video Alarming	1,250,000	1,250,000	745,000	250,000	355,000
Fire Investment	250,000	250,000	250,000	250,000	250,000
Midtown Relocate Electric Facilities	1,008,000	-	-	-	-
Other projects <\$1M	4,781,000	294,000	1,394,000	194,000	194,000
Total RG&E Statutory	12,254,000	14,306,390	13,980,512	12,650,657	12,954,127
Total RG&E	29,932,000	33,792,068	24,650,512	24,309,657	24,965,127
Total Category 2- Electric	75,360,525	85,886,165	58,459,615	54,954,016	60,263,309

Attachment 6

List of Electric Projects and Programs Included in Category 3

Modernization & Renovation

Title	2013	2014	2015	2016	2017
Dryden Bank #1 Transformer Replacement	-	0	0	750,000	2,000,000
Earlville Bank #1 Transformer Replacement	-	0	0	-	387,811
Line 1611 & 1620 Circuit 437 Tilly Foster Rebuild Reconductor	-	0	0	110,000	-
Robinson Road 230kV Transformer Replacement Project - Lockport	3,000,000	1,484,127	0	0	0
Homer City Breaker 212 Replacement	500,000	0	0	0	0
Homer City Breaker 304 Replacement - 2013	500,000	1	0	0	0
Replace Four Critical Single Phase Transformers Installed in 2012	400,000	0	0	0	0
2012 - New Bulk Spare Power Transformer	1,075,000	902,717	0	0	0
Lifecycle Replacement - ECC/XECS systems	144,000	720,000	150,000	105,000	105,000
Other projects <\$1M	150,000	0	0	250,000	290,000
Other Asset Condition Projects			1,000,000	1,000,000	28,356,234
NYSEG Projects	5,769,000	3,106,845	1,150,000	2,215,000	31,139,045
Substation Modernization Program (50%)	0	1,500,000	7,500,000	6,429,639	7,500,000
Old Insulator Change out Program	100,000	100,000	1,000,000	1,000,000	1,950,000
Replace failed transformers	0	0	500,000	500,000	500,000
Silicon Carbide Change out Program	100,000	100,000	500,000	500,000	500,000
Switch Replacement Program	300,000	300,000	1,000,000	1,000,000	1,000,000
T&D Reject Pole Replacement	501,000	501,000	1,000,000	1,500,000	1,500,000
Transmission and Distribution Fault Indicators	0	0	1,000,000	1,000,000	1,000,000
Distribution Line	8,500,000	8,500,000	9,018,000	9,018,000	9,567,000
Distribution Line Inspection	4,000,000	4,000,000	4,244,000	4,244,000	4,502,000
Transmission Line	6,000,000	6,000,000	6,365,000	6,365,000	6,753,000
Substations	2,500,000	2,500,000	2,652,000	2,652,000	2,814,000
Storm	1,500,000	1,500,000	1,591,000	1,591,000	1,688,000
NYSEG - Distribution TDIRP - 2013	5,510,000	3,461,629	3,565,477	3,672,442	3,782,615
NYSEG - Distribution TDIRP - 2013	14,500,000	9,109,549	9,382,835	9,664,321	9,954,250
TDIRP- NYSEG Sectionalizer Replacement	500,000	314,122	323,546	333,252	343,250
TDIRP- NYSEG Replacement 200 Circuit Breaker Program - Base Case	3,690,000	3,802,085	3,927,770	4,046,457	4,154,641
TDIRP- NYSEG, Replace Substation Battery Program	800,000	779,915	791,690	814,586	852,234
Substation Transformers Replacement Program	0	0	2,000,000	1,000,000	7,000,000
NYSEG Programs	48,501,000	42,468,300	56,361,318	55,330,697	65,360,990
Total NYSEG	54,270,000	45,575,145	57,511,318	57,545,697	96,500,035
RG&E Pilot Wire Replacement Program	1,433,302	621,536	0	0	0
Station 23 Transformer & 11kV Switchgear	640,001	2,079,532	0	0	0
Station 80 - Replace 1T and 3T Transformers	800,000	2,075,056	0	0	0
Substation Modernization- Station 38 Total Refurbishment	1,660,000	204,909	34,152	0	0
Substation Modernization Project - Station 5	0	1,767,699	2,871,103	0	0
Sta 104,WPC Install SCADA-Mate Switches on Cir 5157	234,200	0	0	0	0
Sta 67, WPC Install SCADA-Mate Switches on Cir 5176	260,000	0	0	0	0
Sta. 33 Replace 2 T	463,057	309,818	0	0	0
Other Asset Condition Projects		922,428	1,000,000	1,000,000	20,000,000
RG&E Projects	5,490,560	7,980,978	3,905,255	1,000,000	20,000,000
Substation Modernization	0	1,420,000	2,529,682	6,560,405	10,500,000
Lifecycle Replacement - ECC/XECS systems	0	216,000	45,000	45,000	45,000

Title	2013	2014	2015	2016	2017
Cablecure	800,000	800,000	1,000,000	1,000,000	1,000,000
Distribution Fault Indicators	50,000	50,000	500,000	1,000,000	1,000,000
Old Insulator Change out Program	200,000	200,000	750,000	750,000	750,000
Single Phase Switchgear Replacement	500,000	500,000	1,000,000	1,000,000	1,000,000
T&D Reject Pole Replacement	300,000	300,000	1,000,000	1,000,000	1,000,000
Distribution Line	6,000,000	6,000,000	6,000,000	6,556,000	6,753,000
Transmission Line	1,500,000	1,500,000	1,500,000	1,639,000	1,688,000
Substations	1,500,000	1,500,000	1,500,000	1,639,000	1,688,000
Storm	400,000	400,000	400,000	437,000	450,000
RG&E- Distribution TDIRP - 2013	2,335,300	2,202,062	2,368,171	2,439,216	2,512,392
RGE - Distribution DPRP - 2013	8,000,000	7,543,569	7,204,605	8,355,983	8,606,663
TDIRP- RG&E Sectionalizer Replacement Program	500,000	1,414,419	1,014,076	1,044,498	1,075,833
TDIRP- RG&E Replacement 210 Circuit Breaker Program - Base Case	2,665,000	2,256,798	2,900,908	2,989,008	3,078,679
TDIRP- RGE, Replace Substation Battery Program	1,500,000	2,033,152	1,517,740	1,562,200	1,609,066
Substation Transformers Replacement Program	0	0	1,500,000	3,000,000	4,250,000
RG&E Programs	26,250,300	28,336,000	32,730,182	41,017,310	47,006,633
Total RG&E	31,740,860	36,316,978	36,635,437	42,017,310	67,006,633
Total Category 3- Electric	86,010,860	81,892,123	94,146,755	99,563,006	163,506,668

Attachment 7

Description of the Most Significant Gas Projects

NYSEG

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Seneca West Pipeline Interconnect to Elmira (Appendix L Project)	1,764	7,896	1,010	0	0	0	
Total Costs: \$ 10,670							
<p>Description: Construction and operation of a five mile, 8" steel, 1100 psig high pressure natural gas transmission pipeline and two new meter and regulator stations which will connect Inergy Midstream's Seneca Lake West Pipeline in Big Flats, NY directly to NYSEG's Elmira gas distribution system in Horseheads, NY.</p> <p>Reason and benefits: Construction of this project will allow NYSEG to turn back or release Dominion Transmission capacity that currently serves a portion of the Elmira distribution system. This will reduce NYSEG's demand charges as well as variable and fuel expenses. In addition to the reduced expenses, an added benefit results from an increase in reliability of the Elmira gas distribution system. This pipeline would also allow for local production from Marcellus Shale to be used as a replacement for primary point capacity. When the project is completed, Elmira will be a Local Production Area (LPA-1) as proposed in the NYSEG rate case.</p> <p>Investment Reason: System Capacity</p>							
<p>Year started: 2011</p> <p>Year in service: 2013</p> <p>Final Restoration: 2014</p> <p>Current Status: Engineering complete, Construction Services & Material procurements in progress with construction beginning in second quarter of 2013. The Article VII application was sent to the PSC for review on November 30, 2011. PSC Order granting approval to construct project received January 2013.</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Robinson Road Gate Station Rebuild	88	1,510	1,830	0	0	0	
Total Costs: \$ 3,428							
<p>Description: Rebuild Robinson Road gate station including new: metering, regulators and monitors, catalytic heaters, odorization equipment and control lines, SCADA, RTU, phone and electric lines, relief valves and buildings. A new regulator station will also be constructed to serve the Robinson Road, West Loop, and State Road Distribution mains. The gate station MAOP is 877 psig. The gate station is currently serviced by a single tap on the existing wrapped steel 20-inch transmission gas main operated by Tennessee Gas Pipeline (TGP). The project includes a second tap on the 30-inch steel wrapped transmission gas main operated by TGP to improve reliability.</p> <p>Reason and benefits: The existing gate station cannot supply demand, the equipment is outdated, and the heater is beginning to fail. The rebuild will result in a safer station, fewer long term maintenance issues, minimize maintenance costs and increase reliability. Any interruption of this gate station on a high use day would result in major outage across the Lockport system, which currently supplies more than 36,000 customers in two counties. Having the second tap provides station redundancy and guarantees flows from the TGP Transmission network in the event one main is out of service for maintenance or experiences low pressure.</p> <p>Investment Reason: Asset Condition</p>							
<p>Year started: 2011</p> <p>Year in service: 2014</p> <p>Current Status: In Design</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Ithaca/Dryden Gas Distribution, Install Gas Mains	0	0	0	3,770	0	0	
Total Costs: \$ 3,770							
<p>Description: Install approximately 7 miles of 8-inch wrapped steel 124 psig gas main along West Dryden Road and a new 60 psig MAOP Regulator Station at the intersection of Warren Road and West Dryden Road.</p> <p>Reason and benefits: Existing system is below 70% of maximum operating pressure on design day. The system is experiencing growth and lacks capacity to support additional load. This will facilitate more efficient distribution through the Ithaca/Dryden Gas Distribution pressure system and help compensate for recent and future increases in customer load demands.</p>							
<p>Year started: 2015</p> <p>Year in service: 2015</p> <p>Current Status: In Design</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Groveland System Reinforcement – Interconnect to RGE	0	0	0	520	430	200	
Total Costs: \$ 3,185							
<p>Description: Phase 1 - Install 2.8 miles of 6" polyethylene and Phase 2 – Install 1.4 miles of 8" high density polyethylene gas mains.</p> <p>Reason and benefits: Existing endpoint system pressure is below 70% of outlet set pressure of the serving Groveland regulator station and near 50% maximum allowable operating pressure (MAOP) on design day for the system. The system is experiencing growth and lacks capacity to support additional load. In Phase 1 install new gas mains on the medium pressure (MP) 60 psig MAOP gas pressure system along Groveland Hill Road north of Dennison Road and along Abele Road will improve the endpoint system pressure at Gypsy Lane. In Phase 2 install new gas main on the higher pressure 124 psig MAOP gas pressure system along Kysarville Byarsville Road south of Dansville-Mt. Morris Road and upgrade the existing regulators at Groveland regulator station with low differential pressure regulators.</p> <p>Phase 2 improvements would reinforce and increase the system inlet pressure of the 124 psig system from 49.3 psig to 57.0 psig providing natural gas to the Groveland regulator station and raise the outlet set pressure from 46 psig to 52 psig. This improved outlet set pressure improves the endpoint pressure at Gypsy Lane from 33.9 psig to 41.2 psig. This equates to a system pressure at 80% of outlet set pressure of the serving Groveland regulator station and 70% maximum allowable operating pressure (MAOP) on design day for the system.</p> <p>Investment Reason: System Capacity</p>							
<p>Year started: 2015</p> <p>Year in service: 2017</p> <p>Current Status: In Planning</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Boswell Hill Bare Steel Main Replacement Project	0	0	0	1,400	1,488	1,488	
Total Costs: \$ 4,376							
Description: Install new 10 inch wrapped steel gas main. Reason and benefits: Existing gas main is unprotected steel and undersized for system capacity. This project will replace sections over a three year period with the tie in and abandonment of the unprotected steel to take place in the third year. Investment Reason: System Capacity							
Year started: 2015 Year in service: 2017 Current Status: In Planning							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Port Dickinson Gas Pipeline Loop Extension	0	0	0	1,419	1,508	1,508	
Total Costs: \$ 4,435							
<p>Description: Install new 8 inch wrapped steel gas main.</p> <p>Reason and benefits: This proposed 124 psig pipeline will provide a two way feed to supplement the current supply point at Hinman's Corners Station and provide a loop feed to the 20 psig distribution system in the Town of Chenango and the Village of Chenango Bridge. This new pipeline will raise the inlet pressures at Hinman's Corners from 88 to 100 psig and will raise the low pressure point in the 20 psig system from 9 to 14 psig on peak day. This project will be undertaken over a three year period with the tie in and regulator station completed in the third year.</p> <p>Investment Reason: Asset Condition and System Capacity</p>							
<p>Year started: 2015</p> <p>Year in service: 2017</p> <p>Current Status: Planning complete, design to begin</p>							

RG&E

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Buffalo Road Rebuild Regulator Station and Replace Gas Main	0	0	0	1,600	0	0	
Total Costs: \$ 1,600							
<p>Description: Work involves rebuilding the Buffalo Rd Regulator Station (RS), which includes Regulator Station 290, 291 and 343. Replace all inlet piping to operate at 330 psig MAOP. Install new regulators, and new branch and relief stack piping for RS 290 and RS 343. Install new inlet and outlet valves and bypass valves. Install new station SCADA and automation for the Buffalo Rd station. Work also involves replacing approximately 113' of 20" WRST crossing Buffalo Road near the barge canal originally installed in 1951 with approximately 120' of new 20" wrapped steel gas main.</p> <p>Reason and benefits: Replaces fifty year old regulator equipment and piping. Improves system reliability and capacity for the MF120 Western Monroe, MF99 East Station and SF180 CM1B systems. This project is part of the overall transmission system and feeder main system improvement projects, including the New Empire West Gate station and CM1 replacement.</p> <p>Investment Reason: Asset Condition and Growth</p>							
<p>Year started: 2015</p> <p>Year in service: 2015</p> <p>Current Status: In Planning</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
New Empire West Gate Station, Build New Gate Station	1,495	4,295	0	0	0	0	
Total Costs: \$ 5,790							
<p>Description: Install new gate station located near Humphrey Rd and Route 386, Town of Chili, New York. Rebuild regulator station (RS) 424 Middle Road and RS 425 Ballantyne Road. Replace inlet piping to RS 214, 295, 355, 358, 460, 461, and Buffalo Road Station</p> <p>Reason and benefits: Improve pipeline safety, system reliability, and reduce system supply and operating constraints. Improve pipeline safety by reducing operating pressures and replace pipeline sections to less than 20% SMYS. Improve overall transmission and feeder system reliability, and improve system pressures at major distribution stations. Improve system supply and operating constraints by allowing greater flexibility year round for system nominations between suppliers. The removal of supply constraints will reduce the cost of gas supply to customers. Increase overall system capacity by 20% for long term load growth.</p> <p>Investment Reason: Growth</p>							
<p>Year started: 2012</p> <p>Year in service: 2013</p> <p>Current Status: In Design</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Southwest 60 System Improvements, Perry Gate Station to Town of Leicester, Replace Gas Mains	0	0	0	1,200	0	0	
Total Costs: \$ 1,200							
Description: Replace 15,500 feet of 8 inch and 6 inch gas main. Reason and benefits: Replace leak prone pipe (unprotected steel) and provide reinforcement to gas pressures on the Southwest 60 psi system which has been and continues to experience industrial load expansion. Improves overall system pressure by increasing pipe size from 6 inch to 8 inch main and will increase system flow capacity in this area. Investment Reason: Asset Condition							
Year started: 2015 Year in service: 2015 Current Status: In Planning							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
CM1 Replacement Humphrey to Ballantyne Road, Replace Gas Mains	0	0	500	2,600	4,500	0	
Total Costs: \$ 7,600							
<p>Description: Install 22,800'- 24" wrapped steel pipeline parallel to CM1 22 ½" pipeline from new Empire Tap north to regulator station 425 on Ballantyne Rd. This is an Article VII project.</p> <p>Reason and benefits: Transmission pipeline leak and material (1950s). New pipeline design for less than 20% SMYS. This project removes the operating constraint on gas supply from the Empire Pipeline by allowing 100% of design day supply to flow from Empire, RG&E's Mendon Gate Station. Improved transmission system reliability and capacity. This is an Article VII project with engineering planned to begin in 2013 (\$500,000). Delay of this project puts off ability to serve new load growth in the RG&E system similar to the New Empire West Gate Station project and other new Rochester area gas loads that may be requested. In addition to accommodating load growth, this project removes gas supply constraints on the Empire Pipeline. The removal of supply constraints may reduce the cost of gas supply. Delay of this project also continues a transmission asset integrity issue due to a past leak on the CM1 transmission gas main. Improve pipeline safety by reducing operating pressures on CM1 section from Ballantyne Rd north to Buffalo Rd to 120 psig, and replace CM1 pipeline section from Humphrey Rd to Ballantyne Rd with a 24 inch pipeline designed to less than 20% SMYS.</p> <p>Investment Reason: Asset Condition</p>							
<p>Year started: 2014</p> <p>Year in service: 2016</p> <p>Current Status: In Planning</p>							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Northeast 60 Phase 2A, Install Gas Mains	0	0	0	1,200	0	0	
Total Costs: \$ 1,200							
Description: Install 5,100 feet of 12" steel and 1,500 feet of 6" plastic gas main. Rebuild regulator stations 247 and 319. Reason and benefits: Existing system is at 50% of maximum operating pressure on design day. The system is experiencing growth and lacks capacity to support additional load. Investment Reason: System Capacity							
Year started: 2015 Year in service: 2015 Current Status: In Planning							

Project	Prior	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	>
Northeast 60 Phase 2B, Install Gas Mains	0	0	0	0	2,500	0	
Total Costs: \$ 2,500							
Description: Install 4 miles of 12" steel gas main. Rebuild two regulator stations Reason and benefits: Existing system is at 50% of maximum operating pressure on design day. The system is experiencing growth and lacks capacity to support additional load. Investment Reason: System Capacity							
Year started: 2016 Year in service: 2016 Current Status: In Planning							

Attachment 8

List of Gas Projects and Programs Included in Category 2

Customer and Statutory Requirement

Title	2013	2014	2015	2016	2017
	2013	2014	2015	2016	2017
Leak Prone Main Replacement Program, 201X NYSEG	7,755,800	7,988,474	10,200,000	12,500,000	13,000,000
Minor Leak Prone Service Renewals, Replace Gas Service, NYSEG	3,469,200	3,573,276	3,680,474	4,000,000	4,500,000
Minor Services, Install Gas Service, NYSEG	5,085,000	5,237,550	5,394,676	6,000,000	6,000,000
NYSEG - Gas Meters	2,984,891	3,074,438	3,166,671	3,261,671	3,359,521
Large Government Jobs (to be identified) - NYSEG	-	2,000,000	2,060,000	2,121,800	2,185,454
Minor Distribution Mains, Install Gas Mains, NYSEG	1,135,750	1,169,822	1,204,917	2,000,000	2,300,000
Minor Government Jobs, Replace Gas Mains, NYSEG	705,550	726,716	748,518	1,200,000	1,500,000
NYSEG - Gas Regulators	239,346	246,526	253,922	261,540	269,386
Total NYSEG	21,375,537	24,016,802	26,709,178	31,345,011	33,114,361
Northeast 60, Phase 2B Install Gas Mains, Roch	-	-	-	2,500,000	-
Northeast 60, Phase 1 Install Gas Mains, Roch	850,000	-	306,000	470,000	-
Northeast 60, Phase 2A Install Gas Mains, Roch	-	-	1,200,000	-	-
Northwest 60, Install Gas Mains and Regulator Stations, Roch	-	770,000	-	-	-
Southwest 60 System Improvements, Perry Gate Station to T/O Leicester, Replace Gas Mains	-	-	600,000	-	-
Leak Prone Main Replacement Program, 201X RGE	8,712,589	7,500,000	9,000,000	12,000,000	13,000,000
Leak Prone Services Replacement Program - RGE	5,000,000	4,000,000	5,304,500	6,000,000	7,000,000
Large Government Jobs (to be identified) - RG&E	-	5,000,000	5,150,000	5,304,500	5,463,635
RG&E - Gas Meters	2,206,018	2,272,199	2,340,364	2,410,575	2,482,893
Minor New Res Services, Install Gas Service, Roch	1,335,000	1,591,350	1,639,091	1,900,000	2,000,000
Minor Distribution Mains, Install Gas Mains, Roch	1,330,000	1,369,900	1,410,997	2,000,000	2,200,000
Minor Government Jobs, Replace Gas Mains, Roch	650,000	669,500	689,585	710,273	710,273
RG&E - Gas Regulators	201,365	180,353	185,764	185,764	185,764
Southwest 60 System Improvements, Perry Gate Station to T/O Leicester, Replace Gas Mains	-	-	600,000	-	-
Henrietta 42 Phase 3A, Install Gas Mains, Roch	365,000	-	-	-	-
Maiden Lane, Replace Gas Mains, Roch	-	310,000	-	-	-
Henrietta 42 Phase 4, Install Gas Mains, Roch	-	-	306,000	-	-
Henrietta 42 Phase 5, Install Gas Mains, Roch	-	-	-	296,000	-
Ridge Rd East, Relocate Gas Mains, Roch	250,000	-	-	-	-
Total RG&E	20,899,972	23,663,302	28,732,301	33,777,112	33,042,565
Total Category 2- Gas	42,275,509	47,680,104	55,441,479	65,122,123	66,156,926