MAJOR PROJECTS

CAPITAL EXPENDITURES
(Thousands of Dollars)

	2010	2011	2012	2013	2014
Electric Projects with Total Capital > $1 million					
Ithaca Reinforcement Project	29,371				
Watercure Rd Sub Transformer Replacement	1,674				
Yawger Rd New Substation	2,072				
Moraine Road Substation Breaker Addition	1,779				
Yahoo Service Project	1,167				
South Park Substation New Transformer	1,348				
Capacitor Additions - Energy Efficiency Initiative	1,500				
Meyer - Add 115kV Capacitor Bank	1,032				
Corning Valley Upgrade	28,667	23,916			
Klinekill - Valkin (NMPC) New 115 kV Transmission Line	1,350	9,664			
Belleayre Substation New Transformer	750	2,649			
Transit St Substation MGP Remediation	50	1,700			
Walden 69kV Transmission Line Upgrade	190	3,186			
Line #807 115kV Conversion	1,715	3,250	2,259		
New Mobile Substations	2,608	1,750	3,500	3,500	1,750
Biogas 34.5kV Collector System	2,962	1,041	1,512	761	862
Bulk Spare Transformer	3,000	3,000			
Silver Creek Substation New Transformer		1,206			
Northend Substation New Capacitor Bank		1,471			
Willet Substation New Transformer		654	2,618		
Flat Street Substation New Transformer		605	3,192		
South Perry New 115kV Transformer		875	3,216		
Windham Substation 115kV Capacitor Addition			1,068		
Perry Center Area Install New 34.5kV Substation			2,533		
South Perry New 230kV Transformer			4,040	12,454	
Westover Substation New 115kV Transformer and Binghamton Division Capacitors			3,939	2,589	
Eelpot New Transformer			570	3,515	
Meyer Substation New Transformer			538	3,385	
Stephentown Substation New Transformer			465	2,465	
Richfield Springs Substation New Transformer			650	1,887	
Tom Miller Rd New Substation			110	2,509	
Coddington Add LTC Capability to 115/34.5kV Transformer				1,095	
Big Tree Substation Capacitor Addition				1,057	

MAJOR PROJECTS

CAPITAL EXPENDITURES
(Thousands of Dollars)

	2010	2011	2012	2013	2014
Harris Lake Source Upgrade				2,336	
Katonah Substation New Transformer				538	3,480
Cobble Hill Substation New Transformer				538	3,097
Coopers Corners Substation New 115kV Transformer				415	2,810
Erie St Substation New Transformer					3,527
Fraser Add 345kV Transformer			100	600	4,200
Coopers Corners Add 345kV Transformer			100	600	3,200
New Gardenville Add 230kV Transformer			100	600	2,200
Wood Street New 345kV Transformer			100	600	11,506
Auburn 345kV Source			3,600	3,000	13,100
Stolle – Dysinger				3,400	1,600
Grid Modernization Initiative					
Transmission Capital Equipment					
Substation Transformers	4,820	7,910	9,606	11,642	14,085
Substation Circuit Breakers (230kV/345kV)		608	608	608	608
Transmission Poles and Towers		16,576	20,131	24,397	29,516
Transmission Overhead Conductor		20,703	25,143	30,471	36,865
Transmission Underground Cable		2,754	3,345	4,053	4,904
Transmission Breakers [>30kV<138kV]		1,332	1,618	1,960	2,372
Distribution Capital Equipment					
Substation Transformers	1,509	10,490	12,740	15,440	18,679
Substation Circuit Breakers (15kV)		1,188	1,443	1,749	2,115
Distribution Poles		35,833	43,518	52,740	63,807
Distribution Overhead Conductor		51,800	62,910	76,241	92,239
Distribution Underground Cable		10,560	10,560	10,560	10,560
Distribution Transformers		5,760	6,995	8,478	10,257
System Security	1,738	3,444	3,376	3,030	3,318
Mobile Radio Project	5,578	2,201			
Electric GIS		4,756	1,113		
Mill C Unit 1-2 Draft Tube Replacements and Foundation Protection	250	1,000			
Total Major Projects	**95,130**	**231,882**	**237,316**	**289,214**	**340,658**

FIVE-YEAR ELECTRIC CAPITAL REQUIREMENTS PLAN

	2010	2011	2012	2013	2014
Electric Department:					
Production - Hydro	2,100	2,100	2,200	2,300	2,300
Transmission Lines	62,894	81,496	52,338	60,396	72,774
Substations	23,553	38,436	59,542	81,663	91,606
Distribution Lines	12,453	113,264	134,013	157,554	186,762
Distribution Transformers	14,800	15,244	17,000	19,000	21,000
Service Installations	2,046	2,107	2,171	2,236	2,303
Meters - Purchases & Installations	3,500	3,605	3,713	3,825	3,939
Distribution Lines - Underground	3,455	2,682	2,732	2,784	2,838
Storm Damage	868	894	921	948	977
Street Lighting	930	958	987	1,016	1,047
Distribution Capacitors	1,302	1,341	1,381	1,423	1,465
Highway Relocations	1,588	1,383	1,395	1,406	1,419
General Plant	0	0	0	0	0
Total Electric	**129,489**	**263,511**	**278,393**	**334,551**	**388,430**
General Department:					
Facilities	3,072	3,164	3,260	3,357	3,458
General Equipment	6,282	2,290	1,893	1,950	2,008
Information Technology - Local	1,257	6,805	3,768	1,837	681
Transportation Equipment	5,500	14,693	15,428	16,199	12,321
General Plant	0	0	0	0	0
Total General	**16,111**	**26,952**	**24,348**	**23,343**	**18,468**
Total Capital	**$145,600**	**$290,463**	**$302,741**	**$357,894**	**$406,898**

Redacted Critical System Infrastructure Information: Map

Capital Project Summary

Project Title
Auburn 345kV Source Project

Project Number
N-10-154

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Auburn

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

The construction of the new 345/115 kV station and the new 115 kV line will increase the short circuit and strengthen the transmission system throughout the Auburn Division and thus reduce the voltage flicker on the system due to NUCOR. It also reduces our dependency on the AES generation in the central area by solving the contingency overload problems of the State Street to Elbridge 115 kV line #972 associated with the long term shutdown of the AES owned generation at Cayuga, Westover, and Greenidge and the forced outage of the Quaker Road to Sleight Road 115 kV line #980 and lessens NYSEG's dependency on the National Grid 115 kV trunk lines. This project will require Article VII Licensing.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Construct a new 345/115 kV substation in the Auburn Division, connect the new station to the Panneli - Clay 345 kV line, and construct a new 115 kV line from the new substation to State Street Substation. This project will require Article VII Licensing.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$1,850	$27,412	$28,000	$375	$7,576	$6,345	$3,442	$75,000

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

3/2/2012	Engineering start
3/1/2013	Major equipment order
3/1/2014	Construction start
12/31/2016	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$3,600	$3,000	$13,100	$55,300	$75,000

Capital Project Summary

Project Title
Belleayre Substation New Transformer project

Project Number
N-10-38

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

X	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Oneonta

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

The State of New York has announced plans to construct a new ski resort complex in the Catskills. The new resort will be built on the border of Ulster and Delaware counties adjacent to the state-owned Belleayre Mountain Ski Center. The project includes two hotels, 259 lodging units, a conference center, spa and golf course. The total projected electrical load addition to the distribution system is estimated at 11.733 MW. This load addition, when added to the existing peak resort load of 2.997 MW, will bring the total expected load of the ski resort to 14.73 MW.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

A. Purchase and install a new 115/34.5kV, 12/16/20MVA, LTC transformer with a 115kV circuit switcher, low side breaker, control house, RTU and one 34.5kV circuit terminal at Belleayre Substation. Build new 34.5kV distribution feeder approximately 2.2 miles from the substation to Belleayre Ski Resort using 477MCM Al conductor.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$196	$1,398	$365	$132	$772	$430	$106	$3,399

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

4/1/2009	Engineering start
5/1/2009	Major equipment order
10/1/2009	Construction start
6/30/2011	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
					$750	$2,649					$3,399

Capital Project Summary

Project Title
Big Tree Substation Capacitor Addition Project

Project Number
N-10-107

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Lancaster

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the 2009 summer peak load period, an outage of the Gardenville to Langner 115 kV line would result in submarginal voltages at Langner Substation (89.5% of nominal 115 kV).Based on the current Lancaster Division summer peak load growth rate of 1.2% per year, it is expected that this area would be exposed to this potential problem for up to 175 hours during the 2009 summer peak load period. The exposure is expected to increase by approximately 25 hours per year for each subsequent summer peak load period. Up to 26 MW and 6600 customers supplied from Langner Substation could potentially be at risk for an outage of the Gardenville to Langner 115 kV line. Installation of the 27 MVAR, 115 kV switched capacitor bank at Big Tree Substation will allow for adequate voltages to be maintained in the area for an outage of the Big Tree to Langner 115 kV line.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install a new 115 kV, 27 MVAR switched capacitor bank at Big Tree Substation.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$112	$181	$360	$22	$199	$142	$41	$1,057

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2013	Engineering start
4/1/2013	Major equipment order
8/1/2013	Construction start
12/31/2013	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
								$1,057			$1,057

Capital Project Summary

Project Title
Bulk Spare Transformer

Project Number
N-10-XXX

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Various

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Bulk power transformers allow for the transmission of power throughout our service territories and are essential for the operation of the electrical system. They are multi-million dollar investments and require years to manufacture and install. A loss of a bulk transformer puts severe limitations on the power system and can result in canceling planned equipment outages, limit power transfers, limit generation, and result in significant extended load shedding.

Currently, there are no dedicated spare bulk power transformers to back up the key transformers presently in service. This project will fund the purchase one spare transformer to back up all in-service bulk power transformers rated 345 - 115kV on both NYSEG's and RG&E's systems. Having the spare transformer will significantly decrease the outage time for loss of an in-service transformer and will limit our exposure to system loading problems.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Purchase one spare transformer rated 345 - 115kV, 400MVA.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$15	$5,800	$72	$20	$65	$25	$3	$6,000

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2010	Engineering start
5/1/2010	Major equipment order
N/A	Construction start
12/31/2011	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
					$3,000	$3,000					$6,000

Capital Project Summary

Project Title
Capacitor Additions - Energy Efficiency Initiative

Project Number
N-10-143

Project Type Electric — Electric or Gas

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Various

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Based on the common EE NY voltage regulation standard, the power factor on the distribution should be ~97% during normal peak loading situations. Transmission Planning has identified NYSEG divisions that need additional capacitors - Binghamton 94.6%, Brewster 85.6%, Elmira 96.5%, Ithaca 95.7%, Lancaster 95.6%, Liberty 94.7%, and Mechanicville 95.1%. Focusing on these 7 areas, 233MVAR of reactive support will be need to be added to bring the power factor to 97%. The RG&E Rochester, Genesee Valley, Lakeshore, and Canandaigua divisions are already at 97%. No action is necessary at RG&E.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

The PSC has a Losses Reduction initiative to review/revise/develop standard planning criteria for transmission and distribution capacitor application. Add 233MVAR of line capacitors on various distribution circuits in Binghamton, Brewster, Elmira, Ithaca, Lancaster, Liberty, and Mechanicville divisions to bring the power factor to 97%.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$122	$702	$0	$49	$373	$217	$37	$1,500

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2010	Engineering start
3/1/2010	Major equipment order
5/1/2010	Construction start
12/31/2010	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
					$1,500						$1,500

Capital Project Summary

Project Title
Cobble Hill Substation New Transformer Project

Project Number
N-10-109

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Lancaster

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the 2009 summer peak load period, an outage of the Cobble Hill 115/34.5 kV transformer would result in submarginal voltages to the customers supplied from the 34.5 kV distribution line #530 (86.1% of nominal 34.5 kV). Based on the current Lancaster Division summer peak load growth rate of 1.2% per year, it is expected that this area would be exposed to this potential problem for up to 250 hours during the 2009 summer peak load period. The exposure is expected to increase by approximately 25 hours per year for each subsequent summer peak load period. Up to 7.0 MW of load and 3463 customers supplied from the 34.5 kV distribution line #530 could potentially be at risk for an outage of the Cobble Hill 115/34.5 kV transformer. Installation of the second 115/34.5 kV, 20/26/33 MVA, LTC transformer at Cobble Hill Substation will allow for adequate voltages to be maintained in the area for an outage of the existing 115/34.5 kV transformer at Cobble Hill Substation.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install a second 115/34.5 kV, 20/26/33 MVA, LTC transformer at Cobble Hill Substation and operate it in parallel with the existing 115/34.5 kV, 20/26/33 MVA LTC transformer.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$355	$1,406	$300	$68	$742	$495	$269	$3,635

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2013	Engineering start
4/1/2013	Major equipment order
9/1/2013	Construction start
12/31/2014	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
								$538	$3,097		$3,635

Capital Project Summary

Project Title

Coddington Add LTC Capability to 115/34.5 kV Transformer #2 Project

Project Number

N-10-106

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Ithaca

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the 2010 summer peak load period, an outage of the Etna to Cayuga Heights 34.5 kV line would cause the 115/34.5 kV, 30/40/50 MVA, LTC transformer #3 at Coddington Substation to exceed it summer LTE rating. Based on the current Ithaca Division summer peak load growth rate of 1.5% per year, it is expected that this area would be exposed to this potential problem for up to 100 hours during the 2010 summer peak load period. The exposure is expected to increase by approximately 15 hours per year for each subsequent summer peak load period. Up to 51.0 MW of load and 12900 customers supplied from the affected substations could potentially be at risk for an outage of the Etna-Cayuga Heights 34.5 kV line. Installation of the voltage regulation capability on the 115/34.5 kV, 30/40/50 MVA, NON-LTC transformer #2 at Coddington Substation and operating the two transformers in parallel will allow for adequate thermal conditions to be maintained in the area for an outage of the Etna to Cayuga Heights 34.5 kV line.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install LTC capability (voltage regulation) on the 115/34.5 kV, 30/40/50 MVA transformer #2 at Coddington Substation and operate the #2 transformer in parallel with the existing 115/34.5 kV, 30/40/50 MVA, LTC transformer #3 at Coddington.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$19	$590	$100	$4	$189	$152	$42	$1,095

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2013	Engineering start
3/31/2013	Major equipment order
6/30/2013	Construction start
12/31/2013	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->					
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
								$1,095			$1,095

Capital Project Summary

Project Title
Coopers Corners Add 345kV Transformer

Project Number
N-10-156

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Liberty

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the 2011 summer peak load period, an outage of the Coopers Corners 115/34.5 kV transformer would result in submarginal voltages at Maplewood (89.8% of nominal 34.5 kV) and Sackett Lake Substations (89.9% of nominal 34.5 kV). Based on the current Liberty Division summer peak load growth rate of 1.7% per year, it is expected that this area would be exposed to this potential problem for up to 60 hours during the 2011 summer peak load period. The exposure is expected to increase by approximately 15 hours per year for each subsequent summer peak load period. Up to 15.5 MW of load and 3403 customers supplied from Maplewood and Sackett Lake Substations could potentially be at risk for an outage of the Coopers Corners 115/34.5 kV transformer. Installation of the second 115/34.5 kV, 30/40/50 MVA, NON-LTC transformer at Coopers Corners Substation will allow for adequate voltages to be maintained in the area for an outage of the existing 115/34.5 kV transformer at Coopers Corners Substation.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install a second 115/34.5 kV, 30/40/50 MVA, NON-LTC transformer at Coopers Corners Substation and operate it in parallel with the existing 115/34.5 kV, 30/40/50 MVA NON-LTC transformer.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$428	$5,648	$1,000	$81	$2,431	$2,058	$854	$12,500

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

3/1/2012	Engineering start
4/1/2013	Major equipment order
4/1/2014	Construction start
12/31/2015	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$100	$600	$3,200	$8,600	$12,500

Capital Project Summary

Project Title
Coopers Corners Substation New 115kV Transformer Project

Project Number
N-10-112

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Liberty

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the 2011 summer peak load period, an outage of the Coopers Corners 115/34.5 kV transformer would result in submarginal voltages at Maplewood (89.8% of nominal 34.5 kV) and Sackett Lake Substations (89.9% of nominal 34.5 kV). Based on the current Liberty Division summer peak load growth rate of 1.7% per year, it is expected that this area would be exposed to this potential problem for up to 60 hours during the 2011 summer peak load period. The exposure is expected to increase by approximately 15 hours per year for each subsequent summer peak load period. Up to 15.5 MW of load and 3403 customers supplied from Maplewood and Sackett Lake Substations could potentially be at risk for an outage of the Coopers Corners 115/34.5 kV transformer. Installation of the second 115/34.5 kV, 30/40/50 MVA, NON-LTC transformer at Coopers Corners Substation will allow for adequate voltages to be maintained in the area for an outage of the existing 115/34.5 kV transformer at Coopers Corners Substation.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install a second 115/34.5 kV, 30/40/50 MVA, Non-LTC transformer at Coopers Corners Substation and operate it in parallel with the existing 115/34.5 kV, 30/40/50 MVA Non-LTC transformer.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$185	$1,341	$490	$35	$609	$441	$124	$3,225

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2013	Engineering start
4/1/2013	Major equipment order
3/1/2014	Construction start
12/31/2014	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
								$415	$2,810		$3,225

Capital Project Summary

Project Title
Corning Valley Upgrade

Project Number
N-10-125

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Elmira

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

The Corning Valley Upgrade project fulfills the Company's obligation to serve the load on its system. By the summer of 2009, the proposed addition of 20 MW of Corning Inc. load, continued load growth in and around the City of Corning, or loss of a 115 kV line will result in sub-marginal voltage throughout the cities of Corning and Elmira and thermal overloads on parts of the 115kV system in Elmira. With the Corning load addition in place, there would be approximately 100 MW of load and 6,500 customers at risk.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

The Corning Valley Upgrade Project includes the construction of one new 230 kV/115 kV substation connecting to the Company's existing 230 kV line 68 between the Company's Hillside and Avoca substations. The new substation will consist of one 230 kV/115 kV transformer, a 230 kV ring bus and a 115 kV line terminal. It will also include the construction of one new 115 kV/12.5kV substation with a 115 kV ring bus and two 115 kV/12.5 kV transformers to replace the existing Science Park substation. A new nine (9) mile 115 kV line will be constructed between the new 230 kV/115 kV substation and existing West Erie Substation with a connection to the new 115 kV/12.5kV substation at Corning, Inc.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$730	$20,950	$18,050	$230	$7,750	$5,367	$2,502	$55,579

Project Status:

	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
X	On-going (construction, restoration, close-out)

Project Status Comments:

Engineering & design and construction is on-going.

Project Estimated Milestone Dates:

3/1/2008	Engineering start
9/1/2008	Major equipment order
3/1/2009	Construction start
10/31/2011	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->			<-- Estimated ($000) -->								-->
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
			$231	$2,765	$33,330	$19,253					$55,579

Capital Project Summary

Project Title
Eelpot New Transformer Project

Project Number
N-10-31

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Hornell

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Eelpot substation serves approximately 22MW of load and 5118 customers. During high load periods, loss of the existing 115/34.5kV transformer at Eelpot substation results in overloads above LTE of the 565 line and low voltages in the area. This would result in shedding approximately 12MW of load to relieve the overload. The period of exposure is approximately 175 hours per year. The criteria used for this project is the single contingency criteria for the transmission system that provides for loss of any element results in the remaining elements being below their long-term emergency rating.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Add a second 56MVA 115/34.5kV transformer with LTC at Eelpot substation.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$326	$1,790	$310	$62	$845	$547	$205	$4,085

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2012	Engineering start
4/1/2012	Major equipment order
8/1/2012	Construction start
10/31/2013	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$570	$3,515			$4,085

Capital Project Summary

Project Title
Electric GIS Project

Project Number
N-10-NNN

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
	Substation
	Generation
X	Common

Division Various

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

The Company's Outage Management System limits the type of outage information that can be presented to customers on the web. The system lacks the flexibility to model real work restoration events (e.g., dynamic modeling and cut-ins) which results in an over-prediction of the numbers of customers affected in many storm situations. Manual intervention is required to analyze and present information. As such, the information cannot be automatically communicated to customers via the web in a meaningful format. An Enterprise GIS system would solve this problem. The Enterprise GIS will provide improved outage analysis capabilities, an enhanced mapping solution, an enterprise platform for GIS, and position GIS and the exiting Outage Management System for Advanced Metering Infrastructure ("AMI"). NYSEG and RG&E use Smartmap with SAP for the Outage Management System. Due to limitations of the obsolete underlying technology, we cannot scale the application to meet the needs of dynamic switching functionality that would improve outage management or provide outage location maps, summary level outage and estimated restoration data on the internet. The solution meets user requirements, has an open architecture; TM&M is a

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install an Enterprise geographical information system(GIS). Move from existing SmartMap system to a more capable outage management / mapping/ GIS sytem. Replace Smartmap with Telvent Miner & Miner's Arc FM suite. The approach for the project will be to standardize on ESRI Arc GIS and TM&M software (Arc View, Arc Editor, Arc SDE, Oracle, ArcFM, ArcFM Viewer, Image Server, and Responder). This is referred to as the Arc FM Solution. The solution will utilize base functionality where possible and add GIS functionality as needed by leveraging open architecture and GIS team expertise.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$50	$3,500	$1,700	$10	$275	$185	$145	$5,865

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2011	Engineering start
4/1/2011	Major equipment order
6/1/2011	Construction start
12/31/2012	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
						$4,752	$1,113				$5,865

Capital Project Summary

Project Title
Erie St Substation New Transformer Project

Project Number
N-10-110

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Lancaster

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the 2012 summer peak load period, an outage of one of the existing 115/34.5 kV transformers at Erie Street Substation would cause the remaining 115/34.5 kV transformer to exceed it summer LTE rating. Based on the current Lancaster Division summer peak load growth rate of 1.2% per year, it is expected that this area would be exposed to this potential problem for up to 50 hours during the 2012 summer peak load period. The exposure is expected to increase by approximately 20 hours per year for each subsequent summer peak load period. Up to 27.0 MW of load and 10800 customers supplied from Erie Street Substation could potentially be at risk for an outage of one of the existing Erie Street 115/34.5 kV transformers. Installation of the third 115/46 kV, 30/40/50 MVA, NON-LTC transformer at Erie Street Substation will allow for adequate thermal conditions to be maintained in the area for an outage of either of the existing 115/34.5 kV transformers at Erie Street Substation.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install a third 115/34.5 kV, 30/40/50 MVA, Non-LTC transformer at Erie Street Substation and operate it in parallel with the two existing 115/34.5 kV, 30/40/50 MVA, Non-LTC transformers.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$351	$1,287	$420	$67	$738	$466	$200	$3,527

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2014	Engineering start
3/31/2014	Major equipment order
6/30/2014	Construction start
12/1/2014	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
									$3,527		$3,527

Capital Project Summary

Project Title
Flat Street Substation New Transformer Project

Project Number
N-10-51

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Geneva

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Sub-marginal voltages presently appear in the areas served from the Pultney, Dundee, Himrod, Keuka Park, Lake, Porters, Merrit Hill, Seneca, and Transelco substations and the LTE rating is exceeded at the Flat St 115/34.5 kV transformer and at the Dundee - Seneca 34.5 kV line upon loss of the Greenidge 115/34.5 kV Transformer. The exposure, to either sub-marginal voltages or thermal overload, given the contingency, is 900 hours/year. Presently, this contingency causes 5524 customers (with 22.5 MW of summer load and 14.9 MW of winter load) to be dropped. Sub-marginal voltages also appear in the areas served from the Keuka Park and Merrit Hill substations upon the loss of the Flat St. 115/34.5 KV transformer. The exposure to sub-marginal voltages given the transformer loss contingency is 25 hours/year. Presently, this contingency causes 274 customers (with 4.3 MW of winter load) to be dropped. The installation of a new transformer will increase system reliability by allowing at least one transformer to remain in-service when one of the transformers is out-of-service.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

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

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$309	$1,584	$355	$59	$771	$504	$215	$3,797

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2011	Engineering start
4/1/2011	Major equipment order
8/1/2011	Construction start
7/31/2012	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
						$605	$3,192				$3,797

Capital Project Summary

Project Title
Fraser Add 345kV Transformer

Project Number
N-10- 157

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Oneonta

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the current summer and winter peak load periods, an outage of the Fraser 345/115 kV transformer and any of the following 115 kV lines: 1) Oakdale-Delhi, 2) Oakdale-Kattelville, 3) Jennison-Kattelville, 4) East Springfield-Inghams, 5) Richfield Springs-Colliers, 6) Richfield Springs-Springfield Center, and 7) East Springfield-Springfield Center would result in submarginal voltages and thermal overload throughout the entire Oneonta Division. Based on the current Oneonta Division summer and winter peak load growth rates of 1.5% and 1.2% per year respectively, it is expected that this area would be exposed to this potential problem for potentially up to 500 hours during 2010. The exposure is expected to increase by approximately 50 hours per year for each subsequent year. Up to 50 MW of load and 10400 customers supplied from the Oneonta Division transmission system could potentially be at risk for an outage of the Fraser 345/115 kV transformer and any of the 115 kV lines mentioned above. Installation of the second 345/115 kV, 150/200/250/280 MVA, LTC transformer at Fraser Substation will allow for adequate voltages and thermal conditions to be maintained in the area for an outage of the existing 345/115 kV transformer at Fraser Su

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

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 transformer.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$438	$5,872	$1,300	$83	$2,589	$2,296	$922	$13,500

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

3/1/2012	Engineering start
4/1/2013	Major equipment order
4/1/2014	Construction start
12/31/2015	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<---- Actual ($000) ----					<---- Estimated ($000) ----						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$100	$600	$4,200	$8,600	$13,500

Capital Project Summary

Project Title
Grid Modernization Initiative (GMI)

Project Number
N-10-NNN

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Various

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

NYSEG currently provides safe and reliable service, as measured through its achievement of established CAIDI and SAIFI performance targets. However, given the volume of aging equipment across its system, NYSEG believes strongly that grid modernization is needed which will systematically replace aging infrastructure while also creating the opportunity to utilize new technology with the goal of improving system reliability through lower average equipment ages across its system and modern technology to enhance the operation of the Company's system.. This needed initiative, however, will require appropriate rate relief to ensure that the Company is able to continue replacement of its aging infrastructure with sufficient pace in order to assure continued good system performance.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

The objective of the GMI is to systematically replace infrastructure over a longer term within a structured and focused program with the goal of reducing the age of the Company's T&D assets to an average that is appropriately approximately half of the current allowed depreciable life of the specific asset category. By removing older equipment, NYSEG expects to increase its overall system reliability through a reduction in equipment related outages.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$93,754	$351,852	$60,417	$36,647	$211,345	$101,888	$38,905	$894,808

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2010	Engineering start
5/1/2010	Major equipment order
3/1/2011	Construction start
12/31/2014	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<---- Actual ($000) ---->					<---- Estimated ($000) ---->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
					$6,329	$165,514	$198,617	$238,340	$286,008		$894,808

Capital Project Summary

Project Title
Harris Lake Source Upgrade Project

Project Number
N-10-64

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Plattsburgh

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

The 1750/2000 KW backup diesel at Harris Lake is unable to supply the peak area load for about 750 hours in the summer and 580 hours in the winter.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Replace the 1960's vintage 1750/2000 KW backup diesel at Harris Lake which a new 3000 KW/3750 KVA unit. Upgrade the fuel and control systems to be compatible with the new unit.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$225	$1,150	$125	$32	$426	$348	$30	$2,336

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/3013	Engineering start
3/1/2013	Major equipment order
7/1/2013	Construction start
12/31/2013	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
								$2,336			$2,336

Capital Project Summary

Project Title
Ithaca Transmission Project

Project Number
N-10-150

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Ithaca

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

The ITP fulfills the Company obligation to meet the requirements as established by the Commission in its August 23, 2006 Order Adopting Recommended Decision with Modifications at page 126 in Case 05-E-1222, which directed NYSEG within 60 days of the issuance of that order to "submit all the governmental and regulatory filings necessary for the Company to perform the transmission upgrades and related work necessary to eliminate the load pocket conditions currently prevailing in Ithaca, New York." The ITP will provide the operating flexibility and capacity needed to ensure that adequate and reliable electric service will be maintained to all customers in the Ithaca Division during extended outages (planned or forced) of AES's Cayuga Station generating units as well as the eventual retirement of one or both of the generating units at Cayuga Station. By Order dated October 30, 2007, the NYPSC granted NYSEG a Certificate of Environmental Compatibility and Public Need for the project.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

The ITP includes the construction of a new 345 kV/115 kV substation in the vicinity of the existing Lapeer Switchyard. The new substation will consist of two 345 kV/115 kV transformers and appurtenant facilities. The substation will be connected to the existing 345 kV line 36 between the Oakdale and Lafayette substations. The project also includes a rebuild of the existing 115 kV line 947 between Etna and the new substations and the construction of a new 115 kV line from Etna to the new substation. The Company will also install 115 kV capacitor banks within its State Street and Wright Avenue substations. The project is currently being constructed and is expected to be completed by mid-June 2010.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$750	$24,312	$22,000	$125	$6,875	$5,626	$2,812	$62,500

Project Status:

	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
X	On-going (construction, restoration, close-out)

Project Status Comments:

Engineering & design and construction on-going.

Project Estimated Milestone Dates:

3/1/2008	Engineering start
6/1/2008	Major equipment order
4/1/2009	Construction start
6/15/2010	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
			$5,129	$28,000	$29,371						$62,500

Capital Project Summary

Project Title
Katonah Substation New Transformer Project

Project Number
N-10-103

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Brewster

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the 2011 summer peak load period, an outage of one of the existing 115/46 kV transformers at Katonah Substation would cause the remaining 115/46 kV transformer to exceed it summer LTE rating. Based on the current Brewster Division summer peak load growth rate of 2.3% per year, it is expected that this area would be exposed to this potential problem for up to 75 hours during the 2011 summer peak load period. The exposure is expected to increase by approximately 25 hours per year for each subsequent summer peak load period. Up to 50.0 MW of load and 11564 customers supplied from Cross River, Poundridge, Cantitoe, and Bedford Hills Substations could potentially be at risk for an outage of one of the existing Katonah 115/46 kV transformers. Installation of the third 115/46 kV, 30/40/50 MVA, LTC transformer at Katonah Substation will allow for adequate thermal conditions to be maintained in the area for an outage of either of the existing 115/46 kV transformers at Katonah Substation.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install a third 115/46 kV, 30/40/50 MVA, LTC transformer at Katonah Substation and operate it in parallel with the two existing 115/46 kV, 30/40/50 MVA LTC transformers.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$238	$1,710	$540	$45	$791	$527	$167	$4,018

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2013	Engineering start
4/1/2013	Major equipment order
4/1/2014	Construction start
12/31/2014	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
								$538	$3,480		$4,018

Capital Project Summary

Project Title
Klinekill – Valkin(NMPC) New 115 kV Transmission Line

Project Number
N-10-52

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Mechanicville

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Upon loss of the 115kV Churchtown-Craryville line sub-marginal voltages appear in areas served by Craryville and Klinekill substations. The same contingency causes the LTE rating to be exceeded at the Craryville 115/34.5 kV transformer, at the Stephentown 115/34.5 kV transformer, and at the 34.5kV line Stephentown -W.Lebanon. The exposure to sub-marginal voltages is 4500 hours per year. Presently, this contingency causes 9940 customers (with 19.2 MW of summer load and 19.8 MW of winter load) to be dropped. The new 115 kV line Valkin – Klinekill will provide a nearby 115 kV source to the Craryville and Klinekill service areas in the event of a contingency, and will eliminate the associated voltage problems.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Construct and install a new 8.5-mile, 115 kV, 477 MCM 18/1 ACSR, line from the Valkin (National Grid) substation to the Klinekill (NYSEG) substation. A new 115 kV terminal will be built at the Klinekill end of the new line. A new substation with a four-breaker ring bus will be constructed at the Valkin end of the new line.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$1,327	$1,670	$1,432	$533	$3,023	$2,189	$840	$11,014

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2010	Engineering start
4/1/2010	Major equipment order
9/1/2010	Construction start
12/31/2011	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000)				-->	<-- Estimated ($000)						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
					$1,350	$9,664					$11,014

Item	Labor	Materials	Contract	Trans.	Others	Contingency	AFDC	Total
Transm	$680	$550	$700	$410	$2,142	$1,428	$480	$6,390

Capital Project Summary

Project Title
Line 807 115kv conversion project

Project Number
N-10-102

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Brewster

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Over the past five years, the Brewster Division has experienced a summer peak load growth rate of 3.15% per year. Completion of this project will provide adequate capacity and reliability to the 115 kV system in the Brewster Division. The conversion of the Carmel to Katonah 46 kV line #807 to 115 kV operation will allow for adequate voltage levels and thermal conditions to be maintained throughout the Brewster Division during an outage of either the Wood Street to Amawalk 115 kV line #996 or the Wood Street to Carmel 115 kV line #992. For loss of either the Wood Street to Amawalk 115 kV line or the Wood Street to Carmel 115 kV line, the area will be exposed to these potential low voltage and thermal overload problems for up to 245 hours in 2010 and 290 hours in 2011. Up to 54 MW and 10000 customers could potentially be at risk for an outage of either the #992 line or the #996 line.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Convert the existing 46 kV line #807 from Carmel to Katonah to 115 kV operation. The new 115 kV line will connect from Carmel Substation to Wood Street Substation to Katonah Substation. A new 115 kV line terminal and two new 115 kV breakers will be added at Carmel Substation, two new 115 kV line terminals and two new 115 kV breakers will be added at Wood Street Substation, and a new 115 kV line terminal and three new 115 kV breakers will be added at Katonah Substation.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$1,669	$1,584	$1,464	$468	$2,158	$1,067	$254	$8,664

Project Status:

	Planning (scoping and budgeting)
X	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Completion of engineering & design and construction deferred to 2010.

Project Estimated Milestone Dates:

2/1/2010	Engineering start
4/1/2010	Major equipment order
9/1/2010	Construction start
12/31/20012	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->				<-- Estimated ($000) -->							
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
				$1,440	$1,715	$3,250	$2,259				$8,664

Capital Project Summary

Project Title
Meyer Substation New Transformer Project

Project Number
N-10-32

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Hornell

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Meyer substation serves approximately 60MW of load and transmission flow and 6740 customers. During high load periods and with the 230/115/34.5kV Meyer transformer out, loss of the existing 115/34.5kV transformer at Meyer substation results in overloads above STE of the 542 line and low voltages in the area. This would result in shedding approximately 5MW of load to relieve the overload. The period of exposure is approximately 875 hours per year. The criteria used for this project is the single contingency criteria for the transmission system that provides for loss of any element results in the remaining elements being above the post-contingency voltage requirement and loss of any element results in the remaining elements being below their long-term emergency rating.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Add a second 56MVA 115/34.5kV transformer with LTC at Meyer substation.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$275	$1,671	$375	$52	$765	$517	$268	$3,923

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

3/1/2012	Engineering start
5/1/2012	Major equipment order
6/1/2013	Construction start
6/30/2013	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$538	$3,385			$3,923

Capital Project Summary

Project Title
Meyer, Add 115kV Capacitor Bank - Hornell

Project Number
N-10-101

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Hornell

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Meyer substation serves approximately 60MW of load and transmission flow which is over 6700 customers. During high load periods and with local generation off, the region will have low-voltages. This would result in shedding approximately 10MW of load to relieve the low-voltage. The period of exposure is approximately 300 hours per year. The criteria used for this project is the system normal criteria for the transmission system that provides when all elements are in-service all elements will be above the pre-contingency voltage requirement.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Add a 115kV 15MVAR capacitor bank at Meyer.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$110	$200	$325	$21	$217	$126	$33	$1,032

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2010	Engineering start
4/1/2010	Major equipment order
8/1/2010	Construction start
12/31/2010	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000)					<-- Estimated ($000)						-->
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
					$1,032						$1,032

Capital Project Summary

Project Title
Mill C 1-2 Draft Tube Replacements and Foundation Protection

Project Number
N-10-194

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Plattsburgh

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

The draft tubes on Units 1, 2 at Mill C were inspected in 2007 and were found to be severely deteriorated or missing large pieces entirely. This has resulted in erosion on the substructures of the station. Further inspections were conducted in a de-watered state in the summer of 2007 to further characterize the problem and to provide data for the design of this modification. At that time, temporary upgrades were installed to stabilize the area and return the units to service. This project is intended to improve the reliability of the station and, to the extent that a smoother transition flow is achieved with the new draft tubes, should recover any lost efficiency caused by the current conditions.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

At Mill C Station in the Plattsburgh Division, the project is the Units 1,2 Draft Tube Replacements and Powerhouse foundation protection. This is an on-going project that is budgeted for an additional $1.25 million during the upcoming 5 year period. Overall project cost is currently budgeted at $1.366 million. In conjunction with the draft tube this work, the powerhouse foundations will be upgraded to address FERC concerns raised in their annual inspections.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$75	$260	$450	$35	$230	$167	$33	$1,250

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2010	Engineering start
4/1/2010	Major equipment order
5/1/2011	Construction start
12/31/2011	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
					$250	$1,000					$1,250

Capital Project Summary

Project Title
Mobile Radio Project

Project Number
N-10-189

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
	Substation
	Generation
X	Common

Division Various

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Replacement is required to comply with FCC requirements and to avoid failure of the current system. Ten Divisions currently utilize an antiquated low-band 48 MHz system. The low band system is vulnerable due to the unavailability of parts needed to maintain the system. Three Divisions use a high band 150 MHz radio system which will not meet FCC requirements. The FCC will prevent the sale of radio equipment having a bandwidth greater than 12.5 kHz after January 2011, and prevent the use after January 2013. The high band systems at NYSEG do not meet these FCC bandwidth requirements. The new system will meet FCC requirements and provide functional operating capabilities for all the NYSEG Divisions.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Replace the existing NYSEG radio system with a 150 MHz digital hybrid private land mobile radio system. The system includes mobile radios for 1500 vehicles, 300 portable radios, and 57 dispatch consoles. Additionally, it includes: the development of 51 tower sites with radio equipment, antennas, shelters, utilities and generators; system connectivity by procuring leased lines and microwave installations; and the acquisition & licensing of the required frequencies.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$2,156	$10,556	$3,482	$967	$2,697	$2,067	$564	$22,489

Project Status:

	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
X	On-going (construction, restoration, close-out)

Project Status Comments:

Project is on-going.

Project Estimated Milestone Dates:

1/1/2008	Engineering start
6/1/2008	Major equipment order
8/1/2008	Construction start
12/31/2011	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

Actual ($000)					Estimated ($000)						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
				$14,710	$5,578	$2,201					$22,489

Capital Project Summary

Project Title
Moraine Rd Substation Breaker Addition

Project Number
N-10-33

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Hornell

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Moraine Road substation serves approximately 20MW of load and 6872 customers. During high load periods, loss of the double circuit 966/538line results in severe low voltages and overloads on the 34.5kV lines in the Moraine Road area. This would result in shedding all Moraine Road load of 20MW. The period of exposure is all hours of the year. Bringing the 115kV line in and out of the station will in effect provide a redundant 115kV source to Moraine Road. Therefore, even with the double circuit outage, a 115kV source would still be in service. The criteria used for this project is the single contingency criteria for the transmission system that provides for loss of any element results in the remaining elements being above the post-contingency voltage requirement and loss of any element results in the remaining elements being below their long-term emergency rating.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Convert the 115kV #966 line terminal at Moraine Road from a single tap of the transmission line to an "in and out" arrangement with two circuit breakers.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$225	$484	$305	$45	$423	$239	58	$1,779

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2010	Engineering start
2/1/2010	Major equipment order
7/31/2010	Construction start
12/31/2010	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

Actual ($000)					Estimated ($000)						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
					$1,779						$1,779

Capital Project Summary

Project Title
New Gardenville Add 230V Transformer Project

Project Number
N-10-158

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Lancaster

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the summer and winter peak load periods, a forced outage of one of the existing 230/115/34.5 kV transformers at Gardenville Substation with the other 230/115/34.5 kV transformer already out of service long term, would cause submarginal voltages and thermal overloads throughout the Lancaster Division. During 2010, there would be up to 85 MW of load and 20600 customers at risk for potential load shed. Based on the current summer and winter peak load growth rates for the Lancaster Division, this area would be exposed to this potential problem for up to 300 hours during 2010. Installation of the third 230/115/34.5 kV, 200/250 MVA, LTC transformer at Gardenville Substation will allow for adequate voltage and thermal conditions to be maintained in the area in the event both of the existing 230/115/34.5 kV transformers at Gardenville were out of service simultaneously.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install a third 230/115/34.5 kV, 200/250 MVA, LTC transformer with a 34.5 kV, 50 MVA tertiary winding at Gardenville Substation and operate it in parallel with the two existing 230/115/34.5 kV transformers.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$400	$4,822	$1,250	$76	$2,284	$1,882	$786	$11,500

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

3/1/2012	Engineering start
4/1/2013	Major equipment order
4/1/2014	Construction start
12/31/2015	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$100	$600	$2,200	$8,600	$11,500

Capital Project Summary

Project Title
New Mobile Substations

Project Number
N-10-NNN

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Various

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Mobile Substations support three major reliability objectives: 1) System restoration in case of in-service failures; 2)Corrective and Preventative maintenance; 3)Infrastructure equipment replacement. Currently, of NYSEG's 18 mobile substations, only 3 are capable of carrying more than 10MVA of load with dual 34.5kV or 46kV primary and dual 4.8kV or 12.5kV secondary voltages. This limited number of larger mobiles is stretched thin and has required deferment of maintenance and capital projects at times of high mobile utilization.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Currently two mobiles are being manufactured with delivery in the first quarter of 2010. The ratings of these mobiles are:

Mobile 20: 22.4MVA 34.5kV X 46kV to 4.8kV X 12.5kV
Mobile 21: 35MVA 115kV to 34.5kV X 12.5kV

NYSEG's existing mobile fleet includes two units(#2 and #3) which are each rated 5 MVA and are 53 years old. Mobile #4 is rated 9.3MVA and is 47 years old. All three mobiles are nearing end and are budgeted for replacement.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$300	$11,225	$750	$250	$392	$124	$67	$13,108

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Project is on-going.

Project Estimated Milestone Dates:

1/1/2010	Engineering start
3/1/2010	Major equipment order
N/A	Construction start
12/31/2015	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
					$2,608	$1,750	$3,500	$3,500	$1,750		$13,108

Capital Project Summary

Project Title
Northend Substation New Capacitor Bank Project

Project Number
N-10-57

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Plattsburgh

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During times of low MW generation from the North Country Wind Plants, and in the event of the simultaneous loss of the 230 kV double-circuit Moses – Willis and the Saranac Energy Generation, sub-marginal voltages and voltage collapse will appear in the areas normally served from the Saranac Energy (Northend) plant. The winter season exposure to sub-marginal voltages and voltage collapse is 3600 hours/year given this contingency. Presently, this contingency causes 2846 customers (with 29.1 MW of winter load) to be dropped during the winter peak season. Installation of a 144 MVAR switched capacitor bank at the Northend 115 kV bus will provide a sufficient local source of reactive power and voltage support during this contingency condition.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install a 115 kV, 144 MVAR, two-step, switched capacitor bank at the Northend substation.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$134	$402	$360	$26	$294	$199	$56	$1,471

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2011	Engineering start
4/1/2011	Major equipment order
8/1/2011	Construction start
12/31/2011	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
						$1,471					$1,471

Capital Project Summary

Project Title
Perry Center Area Install New 34.5kV Substation Project

Project Number
N-10-34

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Homell

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

The Perry Center area serves approximately 20MW of load and 5469 customers. During high load periods, loss of the 591 line in the area results in low voltage and overload above STE on the 590 line. This would result in shedding all 5MW of load in the area. The period of exposure is approximately 262 hours per year. The criteria used for this project is the single contingency criteria for the transmission system that provides for loss of any element results in the remaining elements being above the post-contingency voltage requirement and loss of any element results in the remaining elements being below their long-term emergency rating.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Construct a 3 breaker 34.5kV switching station and terminate all 3 sections of the 591 line. Close the normally open 59186 switch.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$351	$542	$565	$66	$590	$338	$81	$2,533

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2012	Engineering start
3/1/2012	Major equipment order
8/1/2012	Construction start
12/31/2012	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

Actual ($000)					Estimated ($000)						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$2,533				$2,533

Capital Project Summary

Project Title
Richfield Springs Substation New Transformer Project

Project Number
N-10-114

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Oneonta

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the 2009 summer peak load period, an outage of the Richfield Springs to Colliers 115 kV line #929 and the Colliers to Milford 46 kV line #816 double circuit would result in submarginal voltages at Milford (84.4% of nominal 46 kV), Index CoOp (84.7% of nominal 46 kV), South Cooperstown (85.3% of nominal 46 kV, Cooperstown (85.9% of nominal 46 kV), and Oaksville CoOp (88.3% of nominal 46 kV) Substations. Based on the current Oneonta Division summer peak load growth rate of 1.5% per year, it is expected that this area would be exposed to this potential problem for up to 375 hours during the 2009 summer peak load period. The exposure is expected to increase by approximately 75 hours per year for each subsequent summer peak load period. Up to 20.0 MW of load and 5211 customers supplied from Milford, Index CoOp, South Cooperstown, Cooperstown, and Oaksville CoOp Substations could potentially be at risk for an outage of the Richfield Springs to Colliers 115 kV line #929 and the Colliers to Milford 46 kV line #816 double circuit. Installation of the voltage regulating capability on the 115/46 kV transformer at Richfield Springs Substation will allow for adequate voltages to be maintained in the area for an outage of the 929/816

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Replace the existing 115/46 kV, 30/40/50 MVA, Non-LTC transformer at Richfield Springs Substation with a new 115/46 kV, 30/40/50 MVA, LTC transformer.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$70	$1,293	$180	$13	$454	$338	$188	$2,537

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2012	Engineering start
6/30/2012	Major equipment order
1/31/2013	Construction start
7/31/2013	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$650	$1,887			$2,537

Capital Project Summary

Project Title
Silver Creek Substation New Transformer Project

Project Number
N-10-76

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

X	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Lancaster

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Circuit #179 presently operates at 4.8 KV and had a summer 2006 peak of 4157 KVA . The largest customer is Lake Shore Hospital which had a peak billed dem available fault current the maximum fuse on the hospital's 1000 KVA padmounted transformer is a 100 amp which limits them to 830 KVA of load. The substation and are both fully loaded. The circuit protection and coordination has been maximized with an intermediate line recloser and can not be increased. It is proposed the 4.8 KV substation transformer bank and the loading and voltage concerns on circuit #179. A 115-12.5 KV 10/fut 12/fut 14 MVA spare transformer is available source.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install the former Croton Falls MTA #4 115 – 12.5kV transformer to establish a new 12.5kV source. The transformer will be protected by a circuit switcher-type de switchboard panel for transformer protection. Install 2.0 miles of system neutral and various step transformers and convert the circuit #179 to 12.5kV operation.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Trans	Other	Contingency	AFUDC	Total
$260	$250	$149	$45	$209	$255	$38	$1,206

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2011	Engineering start
4/1/2011	Major equipment order
6/1/2011	Construction start
12/31/2011	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000)					<-- Estimated ($000)					-->	
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
						$1,206					$1,206

Capital Project Summary

Project Title
South Park Substation New Transformer Project

Project Number
N-10-77

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Lancaster

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

The Armor 12/16/20MVA 34.5/12.5 kV LTC transformer was loaded to 20,676 KVA during the summer 2005 which is 94% of it's rated capacity and 21,711 durin Armor was installed about 1 mile from South Park to contain the loading on the South Park bank. South Park is a 10/12/14 MVA 34.5/12.5 kV LTC transformer lo 11,664KVA during summer 2006 which is 84% of PLBN and 11,532 in June 2007. Summer 2008 was 10,003 KVA. Existing circuit ties and circuit configurations would fully load the South Park bank. Therefore, we can not contain the load on Armor with South Park. The only other 12.5 KV tie is with Lake Ave Circuit 482 w pending. There is no capacity in adjoining 12.5 KV circuits to unload Armor substation.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Replace Transformer #1 with a new 12/16/20 MVA, 34.5/12.5kV transformer with LTC. Upgrade transformer protection to a 34.5kV circuit switcher. Add a new

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Trans	Other	Contingency	AFUDC	Total
$160	$578	$121	$30	$225	$275	$74	$1,463

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

11/1/2009	Engineering start
11/21/2009	Major equipment order
1/1/2010	Construction start
6/30/2010	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->				<-- Estimated ($000) -->							
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
				$115	$1,348						$1,463

Capital Project Summary

Project Title
South Perry New 115kV Transformer Project

Project Number
N-10-36

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Homell

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

South Perry substation serves approximately 34MW of load and 8144 customers which includes Castile. During high load periods, the 115kV/34.5kV transformer at South Perry will overload for system normal conditions or the whole load will be lost for the loss of the existing transformer. This would result in the shedding of approximately 2MW of load to relieve the overload. The period of exposure is approximately 175 hours per year. The criteria used for this project is the system normal criteria for the transmission system that provides when all elements are in-service all elements will be below their normal rating.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Add a second 56MVA 115/34.5kV transformer with LTC at South Perry substation.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$272	$1,771	$425	$52	$792	$547	$232	$4,091

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2011	Engineering start
5/1/2011	Major equipment order
9/1/2011	Construction start
6/30/2012	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

Actual ($000)					Estimated ($000)						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
						$875	$3,216				$4,091

Capital Project Summary

Project Title
South Perry New 230kV Transformer Project

Project Number
N-10-35

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Homell

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

The South Perry and Genesee Region Station 158 serve approximately 90MW of load and over 17,000 customers. During high load periods, loss of one of the two 115kV lines (RG&E 906/924 or NYSEG 934) that supplies the area will cause the other line to overload beyond its LTE rating. This would result in the shedding of approximately 10MW of load to relieve the overload. The period of exposure is approximately 100 hours per year. The criteria used for this projec is the single contingency criteria for the transmission system that provides for loss of any element results in the remaining elements being below their long-term emergency rating.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Add a New 230/115kV LTC transformer at South Perry Substation.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$1,179	$6,253	$2,306	$257	$3,215	$2,143	$1,141	$16,494

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2012	Engineering start
4/1/2012	Major equipment order
6/1/2012	Construction start
12/31/2013	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$4,040	$12,454			$16,494

Capital Project Summary

Project Title
Stephentown Substation New Transformer Project

Project Number
N-10-53

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Mechanicville

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Sub-marginal voltages appear in areas served from the Berlin, Stephentown, W.Lebanon, and Canaan substations upon loss of the Stephentown 115/34.5KV Transformer. The summer exposure is 1750 hours/year. Presently, this contingency causes 5333 customers (with 14.2 MW of summer load and 22.1 MW of winter load) to be dropped. The installation of a new transformer will increase system reliability by allowing at least one transformer to remain in-service when one of the transformers is out-of-service.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

install a new Stephentown 115/34.5 kV, 20/26/33(37) MVA, LTC transformer to operate in parallel with the existing one.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$222	$1,098	$435	$43	$576	$390	$166	$2,930

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2012	Engineering start
4/1/2012	Major equipment order
9/1/2012	Construction start
6/30/2013	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$465	$2,465			$2,930

Capital Project Summary

Project Title
Stolle - Dysinger Project

Project Number
N-10-155

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Lancaster

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

The construction of the new switching station and the new 345 kV line and the installation of the new 345/115 kV transformer will increase the voltage stability of the 345 kV transmission system and allow for increased power transfers across New York State.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Construct a new 345 kV switching station at Dysinger, construct a new 345 kV line from the new Dysinger Station to Stolle Road Substation, and install a new 345/115 kV transformer at Stolle Road Substation. This project will require Article VII Licensing.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$4,237	$34,425	$37,567	$980	$10,345	$9,659	$3,587	$100,800

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

3/1/2013	Engineering start
3/1/2014	Major equipment order
3/1/2015	Construction start
12/31/2018	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
								$3,400	$1,600	$95,800	$100,800

Capital Project Summary

Project Title
Tom Miller Rd New Substation Project

Project Number
N-10-65

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

X	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Plattsburgh

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Hammond Lane Substation is a single bank 46-12.5 KV 12/16/20 MVA Substation with three distribution feeders. It supplies the core commercial area of the City of Plattsburgh along Route #3. The summer peak load to date was 22,021 KVA or 98% of the banks Planned Loading Beyond Nameplate rating.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Construct a new 46-12.5 KV distribution substation on company owned property along Tom Miller Road with a new 12/16/20 MVA transformer and 2 distribution circuit breakers.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$350	$869	$375	$131	$490	$328	$76	$2,619

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

4/1/2012	Engineering start
5/1/2012	Major equipment order
1/1/2013	Construction start
5/31/2013	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$110	$2,509			$2,619

Capital Project Summary

Project Title
Transit St Substation MGP Remediation Project

Project Number
N-10-142

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

X	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Lockport

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Remediation of the western end of this substation site is necessary to comply with a mandate from New York State Department of Environmental Conservation to cleanup coal tar on this property due to the former Manufactured Gas Plant located at the site.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Build a new control house and install a new 12 kV distribution structure with new circuit breakers and regulators at the eastern end of the substation to replace the equipment currently installed in the western end of the station to allow for MGP remediation work.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$165	$695	$120	$45	$390	$292	$43	$1,750

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

6/1/2010	Engineering start
9/1/2010	Major equipment order
3/1/2011	Construction start
11/30/2011	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
					$50	$1,700					$1,750

Capital Project Summary

Project Title
Walden 69kV Transmission Line Upgrade Project

Project Number
N-10-71

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Liberty

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Central Hudson is upgrading the 69kV transmission due to system growth in the Central Hudson, Orange and Rockland, and NYSEG service territories.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Rebuild 0.86 miles of the existing single pole double circuit transmission line and upgrade the station switches and buswork at Walden substation. Two separate single circuit overhead lines will be constructed with 795 ACSR conductor and both having a 1400' section of 1100MCM copper underground cable along Westwood Drive. Two group operated switches will be installed at the line terminals near the Central Hudson tap point for operational purposes.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$394	$1,023	$67	$338	$765	$848	$21	$3,456

Project Status:

	Planning (scoping and budgeting)
X	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Right of Way acquisition is underway.

Project Estimated Milestone Dates:

1/1/2010	Engineering start
9/30/2010	Major equipment order
2/2/2011	Construction start
6/30/2011	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
				$80	$190	$3,186					$3,456

Capital Project Summary

Project Title
Watercure Road Sub Transformer Replacement Project

Project Number
N-10-152

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Elmira

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Transformer Bank #1 at Watercure Rd failed on February 1, 2008. This project is necessary to complete the emergency replacement of Transformer #1.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install (1) 400MVA, 360-240-36.2kV, LTC transformer at Watercure Road Substation to replace the failed Transformer #1.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$180	$4,250	$160	$34	$1,068	$949	$209	$6,850

Project Status:

	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
X	On-going (construction, restoration, close-out)

Project Status Comments:

Manufacture progressing. Present delivery date is 11/09.

Project Estimated Milestone Dates:

3/1/2008	Engineering start
5/1/2008	Major equipment order
11/1/2009	Construction start
6/30/2010	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
			$2,332	$2,844	$1,674						$6,850

Capital Project Summary

Project Title
Westover Substation New 115kV Transformer and Binghamton Division Capacitors Project

Project Number
N-10-46

Project Type Electric — **Electric or Gas**

Project Category(ies) (Select all that apply)

X	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Binghamton

Reasons and Benefits - Provide a detailed description of the project reasons 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 on the Westover #7 115/13.8 kV and 34.5/13.8 kV transformers upon the simultaneous loss of the Oakdale 345/115/34.5 kV transformer # 3 and the Oakdale 345/115 kV transformer #2, in summer 2009. The exposure to either sub-marginal voltages or thermal overload, given the contingency, is 25 hours/day. This contingency causes 1750 customers (with 4.6 MW of summer load and 2.8 MW of winter load) to be dropped. The installation of a new 115/34.5 kV LTC 30/40/50 MVA transformer, operating in parallel with the 115/34.5 kV banks #5 and #6, will allow all of the 115/34.5 kV transformer banks (and windings) at the Westover substation to safely transport present and future thermal flows. Installation of switched capacitor banks will provide local sources of reactive power and voltage support during this contingency.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install a new 115/34.5 kV, 30/40/50 MVA, LTC transformer. Install a 115 kV, 102 MVAR, 2-step, switched capacitor bank, at the Westover (Goudey) substation Install a115 kV, 12.6 MVAR switched capacitor bank at Robble Ave substation. Install a 34.5 kV, 13.2 MVAR switched capacitor bank at the Noyes Island substation. Install a 34.5 kV, 7.2 MVAR switched capacitor bank at Oakdale substation. Install a 34.5 kV, 2.4 MVAR switched capacitor bank at the Whitney Ave substation. Install a 34.5 kV, 2.4 MVAR switched capacitor bank along the 34.5 kV transmission line #431 in the vicinity of the Conklin substation. Install a 34.5 kV, 1.2 MVAR switched capacitor bank along the 34.5 kV transmission line #453 in the vicinity of the Bevier St. substation.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$589	$1,984	$1,388	$119	$1,269	$880	$299	$6,528

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2012	Engineering start
4/1/2012	Major equipment order
7/1/2012	Construction start
6/30/2013	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$3,939	$2,589			$6,528

Capital Project Summary

Project Title
Willet Substation New Transformer Project

Project Number
N-10-48

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Binghamton

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Sub-marginal voltages presently appear in the areas served from the Marathon, Chenango Forks, Dorchester, Greene, Katelville, Willet, High St, Tarbell, and Whitney Ave substations upon loss of the Willet 115/34.5kV transformer. Exposure to sub-marginal voltages, given the transformer loss contingency, during the winter season, is 3070 hours/year. This contingency causes 5097 customers (with 16.3 MW of summer load and 20.7 MW of winter load) to be dropped. In Summer 2011, the sub-marginal voltage problems will appear in areas served from the same set of substations upon loss of the Willet 115/34.5kV transformer. The installation of a new transformer will increase system reliability by allowing at least one transformer to remain in-service when one of the transformers is out-of-service.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

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

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$365	$1,235	$285	$69	$702	$431	185	$3,272

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

3/1/2011	Engineering start
4/1/2011	Major equipment order
9/1/2011	Construction start
6/30/2012	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
						$654	$2,618				$3,272

Capital Project Summary

Project Title
Windham Substation 115kV Capacitor Installation Project

Project Number
N-10-115

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Oneonta

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the 2009 winter peak load period, an outage of the Fraser 345/115 kV transformer would result in submarginal voltage at Windham Substation (89.6% of nominal 115 kV). Based on the current winter peak load growth rate of 1.2% per year, it is expected that the area would be exposed to these potential problems for up to 150 hours during the 2009 winter peak load period. The exposure is expected to increase by approximately 20 hours per year for each subsequent winter peak load period. Up to 15 MW and 3500 customers could potentially be at risk for an outage of the Fraser 345/115 kV transformer. The installation of a 115 kV, 5.4 MVAR switched capacitor bank at Windham Substation will allow for adequate voltages and thermal conditions to be maintained in the area for an outage of the Fraser 345/115 kV transformer.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Install a new 115 kV, 5.4 MVAR switched capacitor bank at Windham Substation.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$132	$197	$325	$25	$202	$166	21	$1,068

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

2/1/2012	Engineering start
4//1/2012	Major equipment order
9/1/2012	Construction start
12/31/2012	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<---- Actual ($000) ---->					<---- Estimated ($000) ---->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$1,068				$1,068

Capital Project Summary

Project Title
Wood Street New 345kV Transformer project

Project Number
N-10-147

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Brewster

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

During the 2009 summer peak load period, when the Brewster Division load is greater than 153 MW, a forced outage of one of the existing 345/115 kV transformers at Wood Street Substation with the other 345/115 kV transformer already out of service long term, would cause widespread submarginal voltages and thermal overloads throughout the Brewster Division. During summer peak load periods, there would be up to 200 MW of load and 35000 customers at risk for potential load shed. Based on the current Brewster Division summer peak load growth rate of 2.3% per year, it is expected that this area would be exposed to this potential problem for up to 4650 hours during the 2009 summer peak load period. The exposure is expected to increase by approximately 200 hours per year for each subsequent summer peak load period. Installation of the third 345/115 kV, 150/200/250/280 MVA, LTC transformer at Wood Street Substation will allow for adequate thermal conditions to be maintained in the area in the event both of the existing 345/115 kV transformers at Wood Street Substation were out of service simultaneously.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

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.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$430	$4,875	$2,109	$101	$2,176	$1,638	$877	$12,206

Project Status:

X	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

1/1/2012	Engineering start
4/1/2012	Major equipment order
9/1/2013	Construction start
10/31/2014	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->					<-- Estimated ($000) -->						
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
							$100	$600	$11,506		$12,206

Capital Project Summary

Project Title
Yahoo Service Project

Project Number
N-10-120

Project Type Electric — **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
	Transmission
X	Substation
	Generation
	Common

Division Lockport

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Yahoo is developing a new data center in Lockport NY and requires approximately 12MW of power for its first phase of development.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Build a new 115kV transmission line approximately one mile from the existing Harrison Radiator substation to a new customer owned substation. Install new line terminal and circuit breaker in the Harrison Radiator substation.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$295	$265	$78	$67	$245	$185	$32	$1,167

Project Status:

	Planning (scoping and budgeting)
X	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Budget estimate complete.

Project Estimated Milestone Dates:

9/1/2009	Engineering start
9/30/2099	Major equipment order
10/1/2009	Construction start
4/30/2010	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000) -->				<-- Estimated ($000) -->							
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
				$886	$1,167						$2,053

Capital Project Summary

Project Title
Yawger Rd New Substation project

Project Number
N-10-70

Project Type Electric **Electric or Gas**

Project Category(ies)
(Select all that apply)

X	Distribution
X	Transmission
X	Substation
	Generation
	Common

Division Elmira

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Philo Rd. substation has experienced a steady load growth of about 4 % per year. Significant retail and industrial growth will surpass the ability of the transformer to serve the load. Additionally, this growth is making it more difficult to provide a contingency support in the event of a transformer failure. There is an expectation of an industrial park along the southern tier corridor along route 17/86 within 2 miles of the retail growth area, thus having an even greater impact on adjacent substations in the area, in particular, the Goss Road substation. Currently the Goss Rd 12.5kV substation has two confirmed block load planned from Synthes USA and Schweitzer Aircraft. These loads will cause the transformer to exceed its Summer Planned Loading Beyond Nameplate rating. This new substation will relieve loading from the Philo Rd and Goss Rd substations. This work will also improve the reliability and provide future relief to the Hickling substation due to the high concentration of retail and industrial load in the area.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Constuct a new 115kV to 12.5kV substation with a 115/12.5 kV, 12/16/20 MVA, LTC transformer, two 115KV breakers,115kV circuit switcher, and 12.5kV switchgear with three 12.5kV circuits.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$704	$2,365	$660	$302	$1,425	$535	$378	$6,369

Project Status:

	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
X	On-going (construction, restoration, close-out)

Project Status Comments:

Remaining construction deferred to 2010.

Project Estimated Milestone Dates:

1/1/2008	Engineering start
3/1/2008	Major equipment order
1/1/2010	Construction start
5/31/2010	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<-- Actual ($000)					<-- Estimated ($000)						-->
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Future	Project Total
				$4,297	$2,072						$6,369

CAPITAL EXPENDITURES
(Thousands of Dollars)

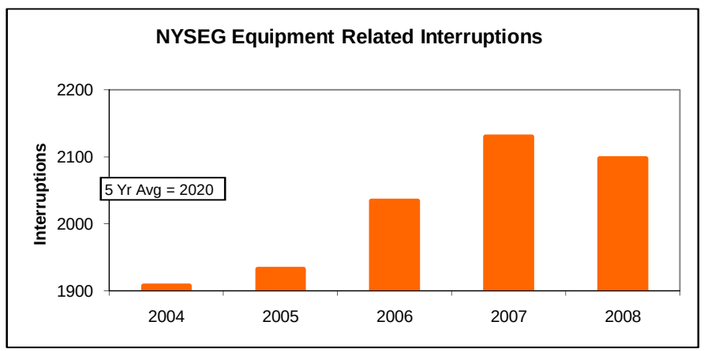
	2007 Actual	2008 Actual	2009 Projection
Electric Department:			
Production - Hydro	1,763	1,653	2,500
Transmission Lines	6,530	14,102	34,285
Substations	13,696	27,011	7,791
Distribution Lines	18,580	16,493	21,754
Distribution Transformers	13,072	13,911	11,285
Service Installations	2,255	7,880	2,296
Meters - Purchases & Installations	2,040	2,037	2,909
Distribution Lines - Underground	0	0	4,647
Storm Damage	(298)	796	1,811
Street Lighting	1,013	1,189	1,080
Distribution Capacitors and Reclosers	1,578	1,698	484
Highway Relocations	2,031	2,480	1,943
General Plant	62	67	0
Total Electric	**62,321**	**89,317**	**92,785**
General Department:			
Facilities	5,316	4,983	3,176
General Equipment	7,682	12,277	532
Information Technology - Local	2,891	4,408	0
Transportation Equipment	11,788	9,814	4,064
General Plant	1,341	0	418
Total General	**29,017**	**31,482**	**8,190**
Total Capital	**$91,338**	**$120,799**	**$100,975**

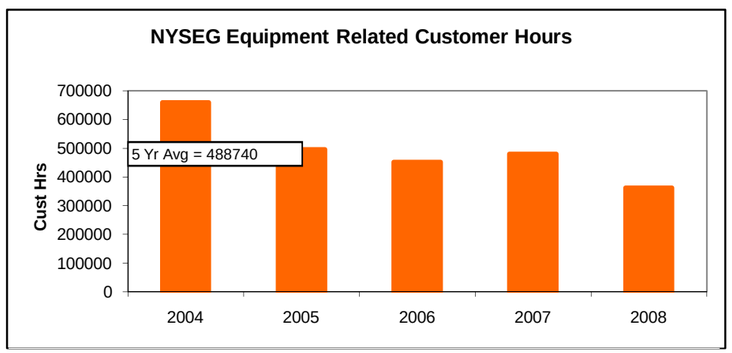
Infrastructure Reliability Program Expenditures
(2005 though 2008 actual, 2009 estimate)

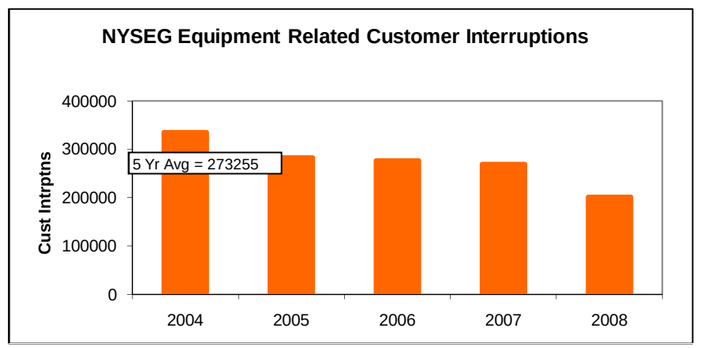
NYSEG (millions)

	2005	2006	2007	2008	2009 Est.	Total
Substations	$ 6.3	$ 17.9	$ 9.9	$ 10.9	$ 1.4	$ 46.4
Distribution	$ 1.4	$ 5.4	$ 5.7	$ 6.8	$ 0.5	$ 19.8
Transmission	$ 3.6	$ 4.6	$ 5.3	$ 6.6	$ 3.9	$ 24.0
	$ 11.3	$ 27.9	$ 20.9	$ 24.3	$ 5.8	$ 90.2

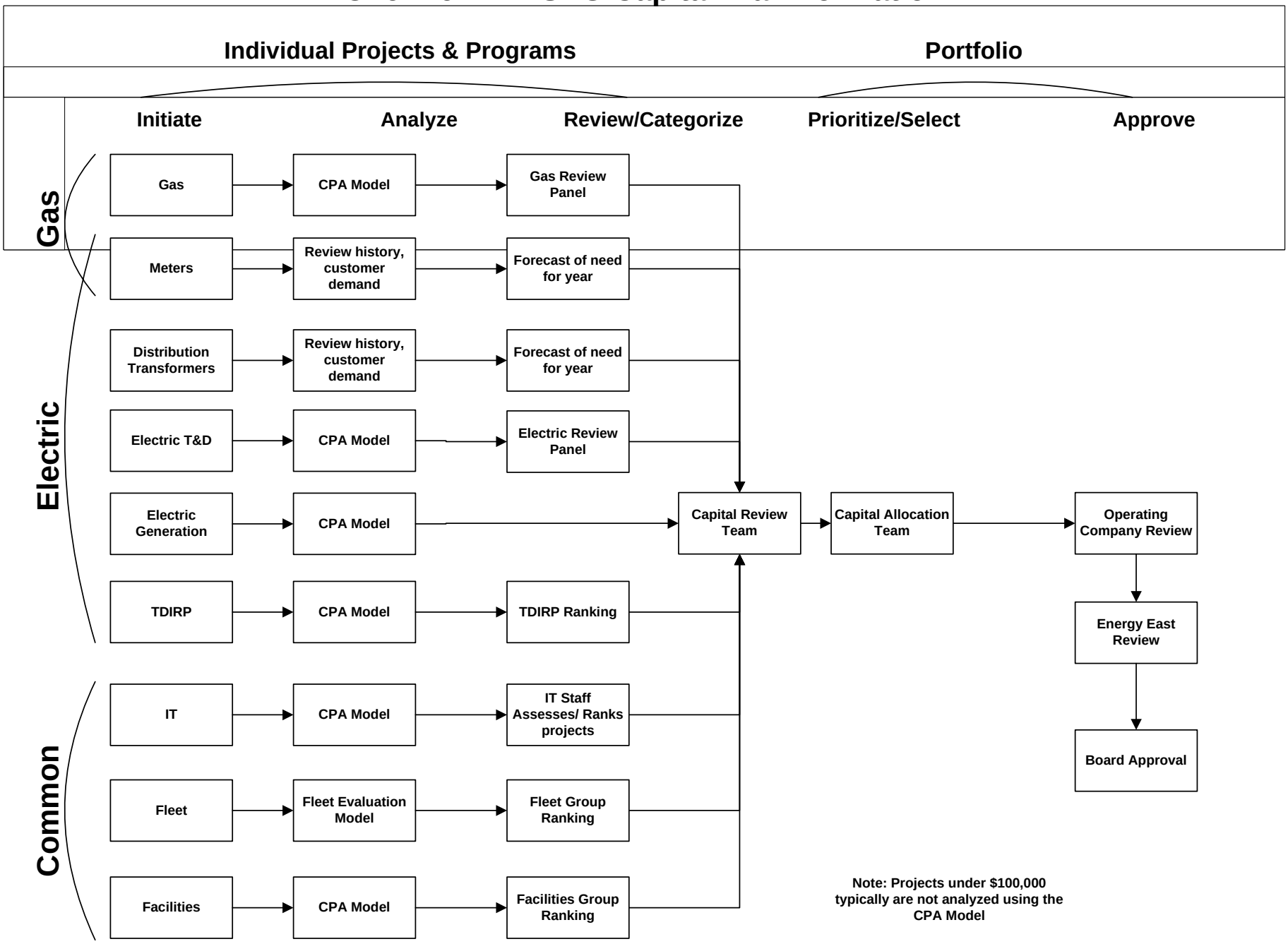
New York State Electric & Gas Corp.			
Equipment Related Outages			
	Customer Hours	Customer Interruptions	Interruptions
2004	657633	335272	1907
2005	495094	282863	1932
2006	450344	277149	2034
2007	479541	269588	2130
2008	361088	201403	2097
	488740	273255	2020







Overview: NYSEG Capital Plan Formation



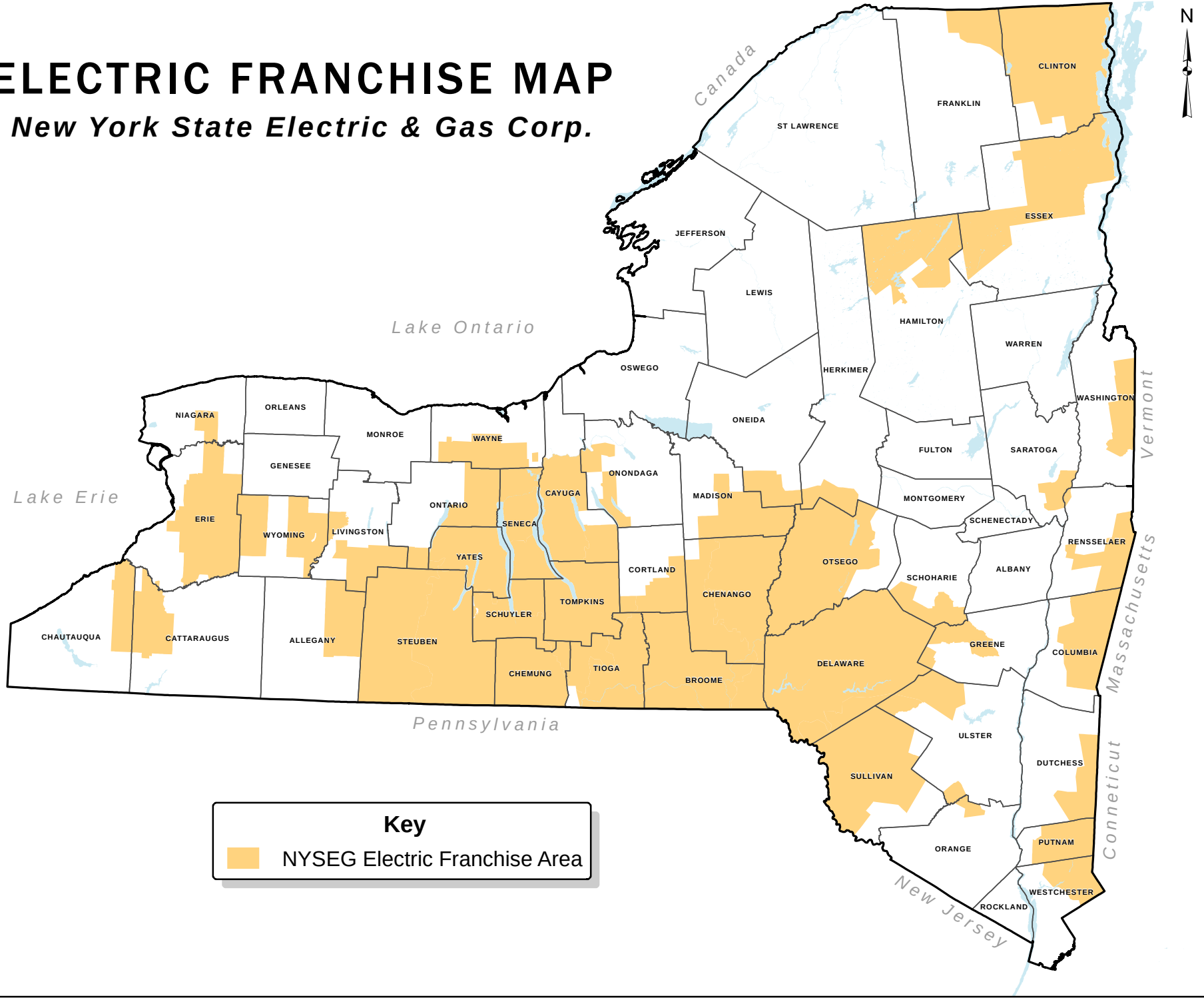
2010 Forecast of Common Capital Expenditure and Allocation

($000)	**Total Category**	**Electric Allocation**	**Gas Allocation**
Fleet	$6,000	$5,500	$500
IT	$1,653	$1,257	$396
Gen Eq	$1,200	$912	$288
Radio	$7,061	$5,370	$1,691
Facilities	$1,840	$1,399	$441
Security	$2,200	$1,673	$527
Total Common	**$19,954**	**$16,111**	**$3,843**

Exhibit __ (NYSEGCRO-9)

ELECTRIC FRANCHISE MAP

New York State Electric & Gas Corp.



April 14, 2008

NYSEG CAPITAL EXPENDITURES, RELIABILITY AND OPERATIONS PANEL TESTIMONY INDEX TO WORK PAPERS							
Work Paper No.	**Panel**	**Business**	**Exhibit Reference**	**Title of Work Paper**	**Description of Work Paper**	**WP Format**	**Trade Secret**
200	CRO	Electric	NYSEGCROELECTRIC-1	Cooper Corners Substation New 115kV Transformer - SP&C Estimate	See title	rtf	No
201	CRO	Electric	NYSEGCROELECTRIC-1	Cooper Corners Substation New 115kV Transformer - Substation Estimate	See title	rtf	No
202	CRO	Electric	NYSEGCROELECTRIC-1	Cooper Corners Substation New 115kV Transformer - 10- Year Planning Report	See title	doc	No
203	CRO	Electric	NYSEGCROELECTRIC-1	Ithaca Reinforcement Project – System Estimate	See title	doc	No
204	CRO	Electric	NYSEGCROELECTRIC-1	Ithaca Reinforcement Project – Article VII Summary	See title	doc	No
205	CRO	Electric	NYSEGCROELECTRIC-1	Watercure Rd Sub Transformer Replacement - Substation Estimate	See title	rtf	No
206	CRO	Electric	NYSEGCROELECTRIC-1	Moraine Road Substation Breaker Addition - Substation Estimate	See title	rtf	No
207	CRO	Electric	NYSEGCROELECTRIC-1	Yawger Rd New Substation – Project Estimate	See title	doc	No
208	CRO	Electric	NYSEGCROELECTRIC-1	Moraine Road Substation Breaker Addition – 10-Year Planning Report	See title	doc	No
209	CRO	Electric	NYSEGCROELECTRIC-1	Klinekill – Valkin (NMPC) New 115kV Transmission Line – Substation Estimate	See title	rtf	No
210	CRO	Electric	NYSEGCROELECTRIC-1	Klinekill – Valkin (NMPC) New 115kV Transmission Line – SP&C Estimate	See title	rtf	No
211	CRO	Electric	NYSEGCROELECTRIC-1	Klinekill – Valkin (NMPC) New 115kV Transmission Line – Planning Study	See title	pdf	No
212	CRO	Electric	NYSEGCROELECTRIC-1	Yahoo Service Project Transmission Estimate	See title	pdf	No

NYSEG CAPITAL EXPENDITURES, RELIABILITY AND OPERATIONS PANEL TESTIMONY INDEX TO WORK PAPERS							
Work Paper No.	**Panel**	**Business**	**Exhibit Reference**	**Title of Work Paper**	**Description of Work Paper**	**WP Format**	**Trade Secret**
213	CRO	Electric	NYSEGCROELECTRIC-1	Yawger Rd New Substation – Planning Study	See title	pdf	No
214	CRO	Electric	NYSEGCROELECTRIC-1	Moraine Road Substation Breaker Addition - SP&C Estimate	See title	rtf	No
215	CRO	Electric	NYSEGCROELECTRIC-1	Harrison Radiator Substation-Construct a 115kV line terminal for Yahoo. Removal Estimate	See title	rtf	No
216	CRO	Electric	NYSEGCROELECTRIC-1	Stolle - Dysinger – Stolle Substation Estimate	See title	rtf	No
217	CRO	Electric	NYSEGCROELECTRIC-1	Harrison Radiator Substation-Construct a 115kV line terminal for Yahoo. Construction Estimate	See title	doc	No
218	CRO	Electric	NYSEGCROELECTRIC-1	Stolle - Dysinger – Dysinger Substation Estimate	See title	rtf	No
219	CRO	Electric	NYSEGCROELECTRIC-1	Auburn 345kV Source – Substation Estimate(State Street)	See title	rtf	No
220	CRO	Electric	NYSEGCROELECTRIC-1	Auburn 345kV Source – Substation Estimate	See title	rtf	No
221	CRO	Electric	NYSEGCROELECTRIC-1	Harrison Radiator Substation-Construct a 115kV line terminal for Yahoo. Construction Estimate	See title	rtf	No
222	CRO	Electric	NYSEGCROELECTRIC-1	Northend Substation New Capacitor Bank – Substation Estimate	See title	rtf	No
223	CRO	Electric	NYSEGCROELECTRIC-1	Silver Creek Substation New Transformer – SP&C Estimate	See title	rtf	No
224	CRO	Electric	Section: NYSEG O&M to Maintain Reliable Service Subsections: Distribution Vegetation Management and Transmission Right-of-Way Maintenance	NYSEG CRO Electric Workpaper 1	NYSEG T&D Vegetation Management explanation of incremental costs	xls	No

NYSEG CAPITAL EXPENDITURES, RELIABILITY AND OPERATIONS PANEL TESTIMONY INDEX TO WORK PAPERS							
Work Paper No.	**Panel**	**Business**	**Exhibit Reference**	**Title of Work Paper**	**Description of Work Paper**	**WP Format**	**Trade Secret**
225	CRO	Electric	NYSEGCROELECTRIC-1	Northend Substation New Capacitor Bank – SP&C Estimate	See title	rtf	No
226	CRO	Electric	NYSEGCROELECTRIC-1	Silver Creek Substation New Transformer – Substation Estimate	See title	rtf	No
227	CRO	Electric	NYSEGCROELECTRIC-1	Northend Substation New Capacitor Bank – "Planning Study" or "10-Year Planning Report"	See title	rtf	No
228	CRO	Electric	NYSEGCROELECTRIC-1	South Park Substation New Transformer – Substation Estimate	See title	rtf	No
229	CRO	Electric	NYSEGCROELECTRIC-1	South Park Substation New Transformer - SP&C Estimate	See title	rtf	No
230	CRO	Electric	NYSEGCROELECTRIC-1	Park Substation New Transformer – Planning Study	See title	doc	No
231	CRO	Electric	NYSEGCROELECTRIC-1	Willet Substation New Transformer – "Planning Study" or "10-Year Planning Report"	See title	.doc	No
232	CRO	Electric	NYSEGCROELECTRIC-1	Capacitor Additions- Energy Efficiency Initiative	See title	.doc	No
233	CRO	Electric	NYSEGCROELECTRIC-1	Flat Street Substation New Transformer – "Planning Study" or "10-Year Planning Report	See title	.doc	No
234	CRO	Electric	NYSEGCROELECTRIC-1	South Perry New 115kV Transformer – 10-Year Planning Report	See title	.doc	No
235	CRO	Electric	NYSEGCROELECTRIC-1	Flat Street Substation New Transformer – SP&C Estimate	See title	.rtf	No
236	CRO	Electric	NYSEGCROELECTRIC-1	South Perry New 115kV Transformer - SP&C Estimate	See title	.rtf	No
237	CRO	Electric	NYSEGCROELECTRIC-1	Willet Substation New Transformer – SP&C Estimate	See title	.rtf	No

NYSEG CAPITAL EXPENDITURES, RELIABILITY AND OPERATIONS PANEL TESTIMONY INDEX TO WORK PAPERS							
Work Paper No.	**Panel**	**Business**	**Exhibit Reference**	**Title of Work Paper**	**Description of Work Paper**	**WP Format**	**Trade Secret**
238	CRO	Electric	NYSEGCROELECTRIC-1	Willet Substation New Transformer – Substation Estimate	See title	.rtf	No
239	CRO	Electric	NYSEGCROELECTRIC-1	Flat Street Substation New Transformer – Substation Estimate	See title	.rtf	No
240	CRO	Electric	NYSEGCROELECTRIC-1	South Perry New 115kV Transformer - Substation Estimate	See title	.rtf	No
241	CRO	Electric	NYSEGCROELECTRIC-1	Windham Substation 115kV Capacitor Addition – Substation Estimate	See title	.rtf	No
242	CRO	Electric	NYSEGCROELECTRIC-1	Windham Substation 115kV Capacitor Addition – SP&C Estimate	See title	.rtf	No
243	CRO	Electric	NYSEGCROELECTRIC-1	Perry Center Area Install New 34.5kV Substation – Substation Estimate	See title	.rtf	No
244	CRO	Electric	NYSEGCROELECTRIC-1	Perry Center Area Install New 34.5kV Substation – SP&C Estimate	See title	.rtf	No
245	CRO	Electric	NYSEGCROELECTRIC-1	Perry Center Area Install New 34.5kV Substation – SP&C Estimate	See title	.rtf	No
246	CRO	Electric	NYSEGCROELECTRIC-1	Katonah Substation New Transformer – Substation Estimate	See title	rtf	No
247	CRO	Electric	NYSEGCROELECTRIC-1	Eelpot New Transformer – Substation Estimate	See title	.rtf	No
248	CRO	Electric	NYSEGCROELECTRIC-1	Eelpot New Transformer – SP&C Estimate	See title	.rtf	No
249	CRO	Electric	NYSEGCROELECTRIC-1	Eelpot New Transformer – 10-Year Planning Report	See title	.doc	No
250	CRO	Electric	NYSEGCROELECTRIC-1	Erie Street Substation New Transformer – Substation Estimate	See title	.rtf	No
251	CRO	Electric	NYSEGCROELECTRIC-1	Erie Street Substation New Transformer – SP&C Estimate	See title	.rtf	No

NYSEG CAPITAL EXPENDITURES, RELIABILITY AND OPERATIONS PANEL TESTIMONY INDEX TO WORK PAPERS							
Work Paper No.	**Panel**	**Business**	**Exhibit Reference**	**Title of Work Paper**	**Description of Work Paper**	**WP Format**	**Trade Secret**
252	CRO	Electric	NYSEGCROELECTRIC-1	Erie Street Substation New Transformer – 10-Year Planning Report	See title	.doc	No
253	CRO	Electric	NYSEGCROELECTRIC-1	Wood Street New 345kV Transformer – 10-Year Planning Report	See title	.doc	No
254	CRO	Electric	NYSEGCROELECTRIC-1	Wood Street New 345kV Transformer - Substation Estimate	See title	.rtf	No
255	CRO	Electric	Section: NYSEG O&M to Maintain Reliable Service Subsection: Electric System Maintenance	NYSEG CRO Electric Workpaper 3	NYSEG Electric System Maintenance explanation of incremental costs	xls	No
256	CRO	Electric	NYSEGCROELECTRIC-1	Meyer Substation New Transformer – Substation Estimate	See title	rtf	No
257	CRO	Electric	NYSEGCROELECTRIC-1	Meyer Substation New Transformer – SP&C Estimate	See title	rtf	No
258	CRO	Electric	NYSEGCROELECTRIC-1	Substation New Transformer – 10-Year Planning Report	See title	doc	No
259	CRO	Electric	NYSEGCROELECTRIC-1	Stephentown Substation New Transformer – Substation Estimate	See title	rtf	No
260	CRO	Electric	NYSEGCROELECTRIC-1	Stephentown Substation New Transformer – SP&C Estimate	See title	rtf	No
261	CRO	Electric	NYSEGCROELECTRIC-1	Stephentown Substation New Transformer – 10-Year Planning Report	See title	doc	No
262	CRO	Electric	NYSEGCROELECTRIC-1	Richfield Springs Substation New Transformer – Substation Estimate	See title	rtf	No
263	CRO	Electric	NYSEGCROELECTRIC-1	Richfield Springs Substation New Transformer – SP&C Estimate	See title	rtf	No
264	CRO	Electric	NYSEGCROELECTRIC-1	Richfield Springs Substation New Transformer – 10-Year Planning Report	See title	doc	No

NYSEG CAPITAL EXPENDITURES, RELIABILITY AND OPERATIONS PANEL TESTIMONY INDEX TO WORK PAPERS							
Work Paper No.	**Panel**	**Business**	**Exhibit Reference**	**Title of Work Paper**	**Description of Work Paper**	**WP Format**	**Trade Secret**
265	CRO	Electric	NYSEGCROELECTRIC-1	Coddington Add LTC Capability to 115/34.5kV Transformer – Substation Estimate	See title	rtf	No
266	CRO	Electric	NYSEGCROELECTRIC-1	Coddington Add LTC Capability to 115/34.5kV Transformer – 10-Year Planning Report	See title	doc	No
267	CRO	Electric	NYSEGCROELECTRIC-1	Katonah Substation New Transformer – SP&C Estimate	See title	rtf	No
268	CRO	Electric	NYSEGCROELECTRIC-1	South Perry New 230kV Transformer – Substation Estimate	See title	rtf	No
269	CRO	Electric	NYSEGCROELECTRIC-1	South Perry New 230kV Transformer – Control House Estimate	See title	rtf	No
270	CRO	Electric	NYSEGCROELECTRIC-1	South Perry New 230kV Transformer – SP&C Estimate at South Perry	See title	rtf	No
271	CRO	Electric	NYSEGCROELECTRIC-1	South Perry New 230kV Transformer – SP&C Estimate	See title	rtf	No
272	CRO	Electric	NYSEGCROELECTRIC-1	South Perry New 230kV Transformer – Substation Estimate at South Perry	See title	rtf	No
273	CRO	Electric	NYSEGCROELECTRIC-1	South Perry New 230kV Transformer – Transmission Estimate	See title	xls	No
274	CRO	Electric	NYSEGCROELECTRIC-1	Big Tree Substation Capacitor Addition – Substation Estimate	See title	rtf	No
275	CRO	Electric	NYSEGCROELECTRIC-1	Big Tree Substation Capacitor Addition – SP&C Estimate	See title	rtf	No
276	CRO	Electric	NYSEGCROELECTRIC-1	Big Tree Substation Capacitor Addition – 10-Year Planning Report	See title	doc	No
277	CRO	Electric	NYSEGCROELECTRIC-1	Harris Lake Source Upgrade – Reasons & Benefits	See title	doc	No
278	CRO	Electric	NYSEGCROELECTRIC-1	Harris Lake Source Upgrade – Substation Estimate	See title	rtf	No

NYSEG CAPITAL EXPENDITURES, RELIABILITY AND OPERATIONS PANEL TESTIMONY INDEX TO WORK PAPERS							
Work Paper No.	**Panel**	**Business**	**Exhibit Reference**	**Title of Work Paper**	**Description of Work Paper**	**WP Format**	**Trade Secret**
279	CRO	Electric	NYSEGCROELECTRIC-1	Harris Lake Source Upgrade – Substation Estimate - Removal	See title	rtf	No
280	CRO	Electric	NYSEGCROELECTRIC-1	Meyer – Add 115kV Capacitor Bank – Substation Estimate	See title	rtf	No
281	CRO	Electric	NYSEGCROELECTRIC-1	Meyer – Add 115kV Capacitor Bank – SP&C Estimate	See title	rtf	No
282	CRO	Electric	NYSEGCROELECTRIC-1	Meyer – Add 115kV Capacitor Bank – 10-Year Planning Report	See title	doc	No
283	CRO	Electric	NYSEGCROELECTRIC-1	Belleayre Substation New Transformer – Substation Estimate	See title	rtf	No
284	CRO	Electric	NYSEGCROELECTRIC-1	Belleayre Substation New Transformer – SP&C Estimate	See title	rtf	No
285	CRO	Electric	NYSEGCROELECTRIC-1	Katonah Substation New Transformer – 10-Year Planning Report	See title	doc	No
287	CRO	Electric	NYSEGCROELECTRIC-1	Cobble Hill Substation New Transformer – Substation Estimate	See title	rtf	No
288	CRO	Electric	NYSEGCROELECTRIC-1	Cobble Hill Substation New Transformer – SP&C Estimate	See title	rtf	No
289	CRO	Electric	NYSEGCROELECTRIC-1	Cobble Hill Substation New Transformer – 10-Year Planning Report	See title	doc	No
290	CRO	Electric	NYSEGCROELECTRIC-1	Binghamton 10 Year Study	See title	doc	No
291	CRO	Electric	NYSEGCROELECTRIC-1	NYISO OC Meeting Minutes	Corning Valley Upgrade	pdf	No
292	CRO	Electric	NYSEGCROELECTRIC-1	Fraser Add 345kV Transformer – Substation Estimate	See title	rtf	No
293	CRO	Electric	NYSEGCROELECTRIC-1	Fraser Add 345kV Transformer – 10-Year Planning Report	See title	doc	No
294	CRO	Electric	NYSEGCROELECTRIC-1	New Gardenville Add 230kV Transformer – Substation Estimate	See title	rtf	No

NYSEG CAPITAL EXPENDITURES, RELIABILITY AND OPERATIONS PANEL TESTIMONY INDEX TO WORK PAPERS							
Work Paper No.	**Panel**	**Business**	**Exhibit Reference**	**Title of Work Paper**	**Description of Work Paper**	**WP Format**	**Trade Secret**
295	CRO	Electric	NYSEGCROELECTRIC-1	New Gardenville Add 230kV Transformer – 10-Year Planning Report	See title	doc	No
296	CRO	Electric	NYSEGCROELECTRIC-1	Coopers Corners Add 345kV Transformer – Substation Estimate	See title	rtf	No
297	CRO	Electric	NYSEGCROELECTRIC-1	Coopers Corners Add 345kV Transformer – 10-Year Planning Report	See title	doc	No
298	CRO	Electric	NYSEGCROELECTRIC-1	System Security Summary	See title	xls	No

Capital Estimate

Standard	Group	BES Only* Capital Estimate	BES Plus** Capital Estimate
BAL	Resource and Demand Balancing	$ -	$ -
CIP	Critical Infrastructure Protection	$ 10,436,000	$ 10,436,000
COM	Communications	$ -	$ -
EOP	Emergency Preparedness and Operations	$ 125,000	$ 125,000
FAC	Facilities Design, Connections, and Maintenance	$ -	$ -
INT	Interchange Scheduling and Coordination	$ -	$ -
IRO	Interconnection Reliability Operations and Coordination	$ -	$ -
MOD	Modeling, Data, and Analysis	$ -	$ -
NUC	Nuclear	$ -	$ -
PER	Personnel Performance, Training, and Qualifications	$ -	$ -
PRC	Protection and Control	$ 2,320,000	$ 59,269,000
TOP	Transmission Operations	$ -	$ -
TPL	Transmission Planning	$ 6,600,000	$ 6,600,000
VAR	Voltage and Reactive	$ -	$ -
Total Capital		$ 19,481,000	$ 76,430,000

* Includes costs due to the proposed change in the definition of BES, assuming no change to currently enforceable NERC ERO standards

** Includes costs due to the proposed change in the definition of BES, accounting for currently enforceable NERC ERO standards, as well as expected changes and additions to those standards

O&M Estimate

Standard	Group	BES Only* O&M Estimate	BES Plus** O&M Estimate
BAL	Resource and Demand Balancing	$ -	$ -
CIP	Critical Infrastructure Protection	$ 13,500	$ 13,500
COM	Communications	$ -	$ -
EOP	Emergency Preparedness and Operations	$ 552,000	$ 552,000
FAC	Facilities Design, Connections, and Maintenance	$ 8,000	$ 8,000
INT	Interchange Scheduling and Coordination	$ -	$ -
IRO	Interconnection Reliability Operations and Coordination	$ -	$ -
MOD	Modeling, Data, and Analysis	$ -	$ -
NUC	Nuclear	$ -	$ -
PER	Personnel Performance, Training, and Qualifications	$ 475,000	$ 475,000
PRC	Protection and Control	$ 757,500	$ 795,000
TOP	Transmission Operations	$ 210,000	$ 210,000
TPL	Transmission Planning	$ 880,000	$ 880,000
VAR	Voltage and Reactive	$ -	$ -
Total O&M		$ 2,896,000	$ 2,933,500

* Includes costs due to the proposed change in the definition of BES, assuming no change to currently enforceable NERC ERO standards

** Includes costs due to the proposed change in the definition of BES, accounting for currently enforceable NERC ERO standards, as well as expected changes and additions to those standards

INCREMENTAL POSITIONS

Number	Position	Annual Salary	Overhead	Total
Customer Service				
2	Customer Advocate Analyst	$77,000	0.32	$203,280
9	Field Customer Service Representative	$43,400	0.32	$515,592
Electric Reliability				
50	Electric Craft Workers	$79,000	0.32	$5,214,000
8	Distribution Engineering, Planning, and Supervision	$70,000	0.32	$739,200
9	Maintenance Engineering, Electric Test, and Vegetation Management	$69,500	0.32	$825,660
24	Operations, Security and Real Estate Supervision, Coordination, and Administration	$60,000	0.32	$1,900,800
102	Total Electric and Customer Service			$9,398,532

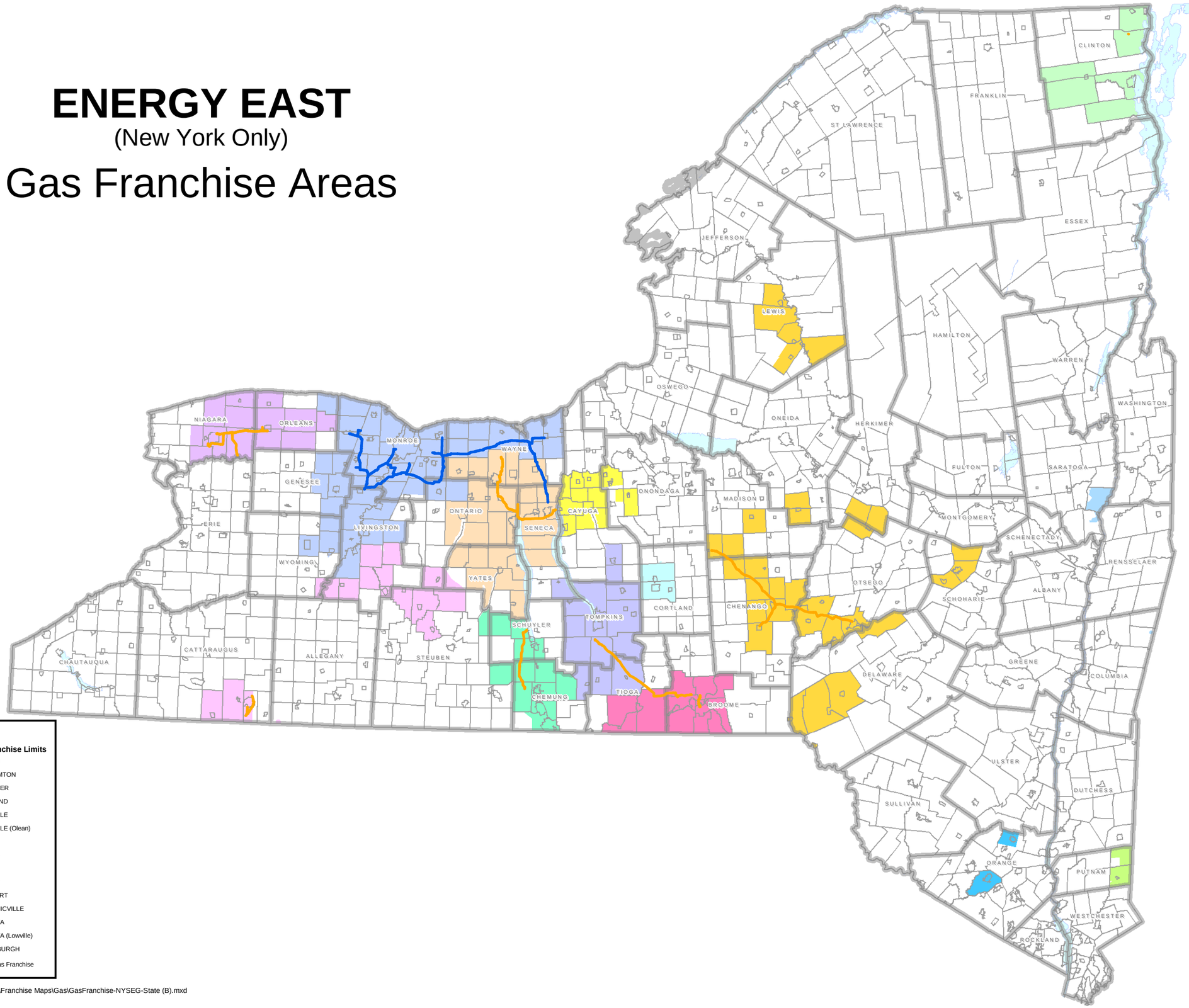
Incremental O&M Programs

Program Description	Incremental Rate Year Dollars
Vegetation Management - Distribution	$25,312,789
Vegetation Management - Transmission	$407,997
Stray Voltage	$2,386,154
Incremental Maintenance	$8,535,729
T&D Loss Study	$350,000
Co-Operatives	$110,125
Rainbow Falls Dredging	$150,000
Keuka Hydro Wayne Gates Dredging and Cleanout	$250,000
Hydro Relicensing Mandates	$108,000
Incremental Positions (Electric)	$9,973,260
Total	**$47,584,054**

ENERGY EAST

(New York Only)

Gas Franchise Areas



LEGEND

Gas Transmission Pipe	Division Franchise Limits
NYSEG	AUBURN
RG&E	BINGHAMTON
	BREWSTER
County Line	CORTLAND
Town/City/Village Line	DANSVILLE
	DANSVILLE (Olean)
	ELMIRA
	GENEVA
	ITHACA
	LIBERTY
	LOCKPORT
	MECHANICVILLE
	ONEONTA
	ONEONTA (Lowville)
	PLATTSBURGH
	RG&E Gas Franchise

\\Krkadtnt1\Domain Shares\ARCGIS Data\Misc Maps\Franchise Maps\Gas\GasFranchise-NYSEG-State (B).mxd
Revised: 10-11-2005

Gas Safety Performance Measures - NYSEG

Measure	Targets	Gas - Revenue Adjustment
Replacement of Leak-Prone Main	20 Miles	$344,000
Replacement of Leak-Prone Services	2000 Services	$344,000
Leak Management	100 Leaks (All Types)	$516,000
Overall Damages	2.0/1000	$172,000
Damages due to Mismarks	0.5/1000	$430,000
Damages Caused by Company and Company Contractors	0.2/1000	$172,000
Emergency Response		
Within 30 Minutes	75%	$344,000
Within 45 Minutes	90%	$172,000
Within 60 Minutes	95%	$86,000
Total		**$2,580,000**

NYSEG Gas Capital Budget History, Proposal and Forecast

	2004-2008 Spent ($1000s)					Test Year	Forecast				
Category	**2004**	**2005**	**2006**	**2007**	**2008**	**7/08-6/09**	**2010**	**2011**	**2012**	**2013**	**2014**
NYSEG Transmission Mains	433	27	-31	5	25	25	0	594	1,026	773	520
Seneca West Pipeline Interconnect to Elmira Distribution System	6,350						0	4,285			
NYSEG Distribution Mains	7,155	6,577	3,373	3,939	7,628	7,879	6,706	9,471	13,439	14,402	10,736
NYSEG Gas Services	1,724	7,850	7,795	7,009	10,936	11,734	7,687	8,678	8,938	9,206	9,483
NYSEG Meters & Service Regulators	120	1,352	1,185	1,706	3,496	3,122	3,796	4,210	4,336	4,466	4,600
NYSEG M&R/Gate & Distribution Reg Stations	-0.46	382	874	2,349	1,033	643	0	1,204	1,240	1,277	1,316
NYSEG Production Plant	1587	0	0	0	264	357	0	1901	50	50	52
NYSEG Highway Relocations	0	1,187	2,547	2,901	3,445	3,327	3,811	3,925	4,043	4,164	4,289
NYSEG General Plant/Misc.	0	0	45	0	0	-1	0	2,426	478	492	0
NYSEG Sub-total	**17,369**	**17,375**	**15,788**	**17,909**	**26,827**	**27,086**	**22,000**	**36,694**	**33,550**	**34,830**	**30,996**
NYSEG Common Allocation							**3,843**	**6,494**	**6,796**	**6,804**	**5,400**
NYSEG Total	**17,369**	**17,375**	**15,788**	**17,909**	**26,827**	**27,086**	**25,843**	**43,188**	**40,346**	**41,634**	**36,396**

NYSEG Transmission Mains includes:

2011 Transmission Casing Replacement Program
2012 Transmission Casing Replacement Program and Lansing Interconnect ($600K)
2013 Transmission Casing Replacement Program
2014 Transmission Casing Replacement Program

NYSEG Distribution Mains includes:

2011 Main replacements, extensions, and system reinforcements
2012 Main replacements, extensions, system reinforcements, Lansing Interconnect ($450K), Oakwood to Gardner POD
2013 Main replacements, extensions, system reinforcements, and Village of Pawling Franchise Expansion
2014 Main replacements, extensions, and system reinforcements

NYSEG Production Plant includes Migration and Replacement of OPTO 22 PLC at Seneca Lake Storage Facility.
NYSEG General Plant/Misc. includes Binghamton Gas SCADA System Migration.

Capital Project Summary

Project Title
NYSEG 2010 Leak Prone Main Replacement Program

Project Number
N-10-13

Project Type Gas **Electric or Gas**

Project Category(ies)
(Select all that apply)

x	**Distribution**
	Transmission
	Substation
	Generation
	Common

Division Multiple NYSEG

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

NYSEG will avoid future O&M associated with leak repairs and bare steel main isolation. NYSEG's cost of gas will also be reduced via a decrease in lost and unaccounted for gas. Replacing vintage main will also allow NYSEG to maintain safe, reliable service to gas customers.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Remove and replace 20.0 miles of bare steel main in varying diameters in the Ithaca, Lockport, Geneva, Auburn, Elmira, Binghamton, Oneonta, Liberty and Mechanicville Divisions.

Map - Attach a map and/or one-line of the facilities impacted by the project - NA, mains to be replaced are located throughout service franchise.

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$2,024	$881	$2,755		$1,616		24	$7,300

There is a one-time O&M cost in 2010 of $296 in addition to the capital expense of $7,300.

Project Status:

x	**Planning (scoping and budgeting)**
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Project Estimated Milestone Dates:

111/1/09	**Engineering start**
NA	**Major equipment order**
1/1/2010	**Construction start**
12/31/2010	**In-service**

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<---- Actual ($000) ----					<---- Estimated ($000) ----						---->
2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**Future**	**Project Total**
					$7,300						$7,300

Capital Project Summary

Project Title

Seneca West Pipeline Interconnect to the Elmira Distribution System

Project Number

N-10-19

Project Type Gas **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
x	Transmission
	Substation
	Generation
	Common

Division Elmira

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

Construction of this project will allow Seneca Lake Storage Gas and local production supplies to flow directly to the distribution system without having to be redelivered from the interstate pipelines. In addition to the reduced expenses, an added benefit results from an increase in reliability of the Elmira gas distribution system and further optimization of the Seneca Lake gas storage facility. Engineering, Licensing, Environmental, Real Estate and Article VII preparation activities could begin in the fall of 2010. Material procurement and construction of the pipeline facilities are proposed to be completed in 2011.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

The project involves the construction and operation of a high pressure natural gas transmission pipeline which would connect the Seneca Lake West Pipeline directly to NYSEG's Elmira gas distribution system.

Map - Attach a map and/or one-line of the facilities impacted by the project. No sketch available.

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$290	$1,226	$2,010		$693		66	$4,285

Project Status:

x	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Project Estimated Milestone Dates:

8/15/2010	Engineering start
1/15/2011	Major equipment order
5/15/2011	Construction start
11/1/2011	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<---- Actual ($000) ----					<---- Estimated ($000) ----						---->
2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**Future**	**Project Total**
						$4,285					$4,285

Capital Project Summary

Project Title
Binghamton Gas SCADA System Migration Project

Project Number
N-10-17

Project Type Gas **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
x	Transmission
	Substation
	Generation
	Common

Division Binghamton

Reasons and Benefits - Provide a detailed description of the project reasons and benefits

As with all computer systems, NYSEG's Gas SCADA System requires regular upgrades due to hardware, operating system and software age and obsolescence; vendor support; and changing technologies. The current NYSEG Gas SCADA System was installed in 1999. This SCADA system provides monitoring capability, supervisory control, data acquisition for NYSEG's gas system as well as Rochester's major gate stations. The hardware architecture, including servers and workstations, as well as operating systems, has gone beyond the normal expected life. Hardware replacements can only be obtained on the secondary market.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Upgrade the NYSEG Gas SCADA System to the latest release of the Televent Gas SCADA System Product. This work will include the replacement of workstations, servers and related hardware, upgrade of operating systems, and software applications.

Map - Attach a map and/or one-line of the facilities impacted by the project. Not applicable - location within Binghamton ECC.

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$275	$35	$1,825		$30		84	$2,249

There is a one-time O&M cost in 2011 of $30 in addition to the capital expense of $2,249.

Project Status:

x	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Project Estimated Milestone Dates:

NA	Engineering start
4/1/2011	Major equipment order
NA	Construction start
4/31/2012	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<---- Actual ($000) ----					<---- Estimated ($000) ----						
2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**Future**	**Project Total**
						$2,249					$2,249

Capital Project Summary

Project Title

Replacement of OPTO 22 PLC at Seneca Lake Storage Facility

Project Number

N-10-18

Project Type Gas **Electric or Gas**

Project Category(ies)
(Select all that apply)

	Distribution
x	Transmission
	Substation
	Generation
	Common

Division Elmira

Reasons and Benefits - Provide a detailed description of the project reasons and benefits. Sketch not included.

OPTO 22, the current PLC equipment utilized at Seneca Storage Facility to control the function and daily operation of the facility's gas handling equipment is now obsolete and is no longer technically supported by the manufacturer. Additionally, spare parts necessary for repair are also no longer available from the manufacturer. Consequently, increased durations in equipment downtime and esclated annual maintenance costs have resulted due to decreased spare part availablility and reliance on qualified third party technicians rather than manufacturer support. The Telvent PLC system equipment is currently utilized by Gas Control and supported by the Company's IT Department.

Project Scope - description of the facilities to be constructed that provide the solution for the need identified in the reasons and benefits.

Replace existing OPTO 22 Program Logic Control (PLC) Equipment with new Telvent PLC Equipment at NYSEG's Seneca Lake Storage Facility in Watkins Glen, NY.

Map - Attach a map and/or one-line of the facilities impacted by the project

Project Estimate:

Labor	Matl/Equip	Contract	Transport	Other	Contingency	AFUDC	Total
$37	$200	$1,359		$10		20	$1,626

There is a one-time O&M cost in 2011 of $225 in addition to the capital expense of $1,626.

Project Status:

x	Planning (scoping and budgeting)
	Development (approval, engineering and pre-construction)
	On-going (construction, restoration, close-out)

Project Status Comments:

Project Estimated Milestone Dates:

1/1/2011	Engineering start
1/3/2011	Major equipment order
6/1/2011	Construction start
11/31/11	In-service

Project Estimated Annual Capital Requirements: (2009 is actual year-to-date plus estimate)

<---- Actual ($000) ----					<---- Estimated ($000) ---->						
2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**Future**	**Project Total**
						$1,626					$1,626

Incremental Positions

Number	Position	Annual Salary	Overhead	Total
26	Gas Fitter	$76,300	0.32	$2,618,616
1	Gas Supervisor	$85,000	0.32	$112,200
1	Supervisor Meter Lab	$70,000	0.32	$92,400
2	Analyst Quality Assurance	$56,000	0.32	$147,840
2	Gas Engineer	$60,000	0.32	$158,400
1	Analyst Gas Engineering	$50,000	0.32	$66,000
0.5	Gas Trainer	$65,000	0.32	$42,900
33.5	Total - Gas			$3,238,356
1	Meter Engineer	$65,000	0.32	$85,800
1	Analyst (Meter Lab)	$50,000	0.32	$66,000
4	Meter Technicians	$80,100	0.32	$422,928
6	Total Electric			$574,728

NYSEG and RG&E Gas R&D Budget History, Proposal and Forecast

	2004-2009 Spent vs. Budgeted					Test Year	Proposed		2011-2014 Forecast		
Category	**2004**	**2005**	**2006**	**2007**	**2008**	**7/08 - 6/09**	**2010**	**2011**	**2012**	**2013**	**2014**
NYSEG Millennium	650	369	650	650	650	554	650	650	650	650	650
NYSEG Internal	688	479	867	1,927	1,798	1,434	863	450	450	450	450
NYSEG NYSERDA	341	359	391	420	499	496	387	402	418	435	452
NYSEG Sub-total	**1,679**	**1,207**	**1,908**	**2,997**	**2,947**	**2,484**	**1,900**	**1,502**	**1,518**	**1,535**	**1,552**
budget	**2,050**	**2,050**	**2,050**	**2,050**	**2,050**	**2,050**					
difference	**-371**	**-843**	**-142**	**947**	**897**	**434**					
RGE Millennium	314	314	314	314	290	143	314	314	314	314	314
RGE Internal	9	105	69	11	25	23	150	450	450	450	450
RGE NYSERDA	308	320	331	345	431	435	356	369	384	399	415
RGE Sub-total	**631**	**739**	**714**	**670**	**746**	**601**	**820**	**1,133**	**1,148**	**1,163**	**1,179**
NYSEG/RGE Total	**2,310**	**1,946**	**2,622**	**3,667**	**3,693**	**3,085**	**2,720**	**2,635**	**2,666**	**2,698**	**2,731**

All NYSEG previous rate case budgeted dollars were spent. Overspending in 2007-8 corrected deferred under spending from 2001-2006.
RGE dollars were trued-up annually.
NYSEG's NYSERDA 18-a assessment in 2009-10 is forecast by DPS at $387,000 and is forecast here to increase 4% per year from 2011-2014.
RGE's NYSERDA 18-a assessment in 2009-10 is forecast by DPS at $356,000 and is forecast here to increase 4% per year from 2011-2014.
RGE's Millennium expenditures during the test year appear lower due to the majority of the expenditures scheduled for the second half of 2009.
The assumptions and calculations to determine the distribution of NYSEG and RGE expenditures during the transition year of 2010 are as follows:
For NYSEG:
Use the full amount for the Internal expenditure of $1,400K, pay the full amount for NYSERDA for 2010 estimated at $387K from the $1,400K = $1,013K; subtract the amount that would be transferred to RGE for the last 4 months of 2010 assuming an annual amount of $450K or $150K. This results in the 2010 amount for internal of $863K.

For RGE: Use the full amount of $450K shown for Internal in 2011 times 1/3 = $150K for the last 4 months of 2010.

Table 2. 2010 Program Detail, Showing Complimentary NYSEG and RGE Programs

2010 Program Detail	
NYSEG Millennium	**$ (000's)**
NYSEARCH	225
OTD	125
Renewables/GHG	165
Salary/Expenses	135
Sub-total	**650**
NYSEG Internal	
GasOps Internal Technology Field Evaluations	248
RIT Aerial Leak Survey	150
Energy Insights	20
Marcellus Impacts	50
Flame Spray	90
NIMCO	75
GTI-SMP	50
Salary/Expenses	180
Sub-total	**863**
NYSEG NYSERDA	**387**
NYSEG Total	**1900**
RGE Millennium	
NYSEARCH	100
OTD	125
Renewables/GHG	74
Salary/Expenses	15
Sub-total	**314**
RGE Internal	
GasOps Internal Technology Field Evaluations	40
RIT Aerial Leak Survey	0
Energy Insights	20
Marcellus Impacts	0
Flame Spray	35
NIMCO	25
GTI-SMP	0
Salary/Expenses	30
Sub-total	**150**
RGE NYSERDA	**356**
RGE Total	**820**
NYSEG/RGE TOTAL	**2,720**

NYSEG Integrity Management Budget History, Proposal and Forecast

	2004-2008 Spent ($1000s)					Test Year	Proposed	Forecast			
Category	**2004**	**2005**	**2006**	**2007**	**2008**	**7/08-6/09**	**2010**	**2011**	**2012**	**2013**	**2014**
NYSEG HCAs ILI/Assessments		7	185	572	170	155	365	1,266	315	758	410
Uptime-Data Management Processing and Maintenance	0	0	0	0	0	0	130	20	20	20	20
IMP Manual-annual reviews/revisions	0	0	0	0	10	10	10	10	10	10	10
Training/Certifications	0	0	0	0	20	20	20	20	20	20	20
Total	0	7	185	572	200	185	525	1,316	365	808	460

Incremental O&M Programs

Program Description	Annual O&M Dollars	
IMP	$525,000	
DIMP	$100,000	
Gas Main Clearing	$250,000	
Damage Prevention	$50,000	
Public Awareness	$50,000	
Meter Relocation	$816,000	(960 times $850)
Seneca Storage O&M	$48,000	($62,000 x 0.78)
Exposed Piping on Bridges	$300,000	
Seneca Well Logging	$125,000	
R&D	$863,000	Internal Funding
R&D	$650,000	Millennium
R&D	$387,000	NYSERDA
Incremental Positions (Gas)	$3,238,356	
Total	$7,402,356	

Seneca Lake Gas Storage Facility Budget 5-Year Forecast

Expenditure	2010	2011	2012	2013	2014
O&M Expenditures					
Supervision/Operations	72,000	73,000	75,000	78,000	80,000
Compressor Station Lab/Ops	405,000	419,000	432,000	445,000	459,000
General Material	9,000	10,000	11000	12000	13,000
Vendor Services	12,000	13,000	14,000	15,000	16,000
Transportation	18,000	19,000	20,000	21,000	22,000
Other	8,000	8,000	8,000	8,000	8,000
Fuel/Power	144,000	148,000	152,700	157,500	162,000
Gas Loss (ESD)	5000	5200	5300	5700	6000
Property Lease	858,300	884,000	910,500	937,800	965,900
Air Compressor Maintenance	7000	7200	7,400	7,600	7900
DR Compressor Maintenance	25,000	27,000	30,000	33,000	65,000
DR Compressor Maint Vendor	30,000	35,000	38,000	39,000	75,000
Well Integrity Testing		125,000			
Telephone	350	400	450	500	550
Total Projected O&M	1,593,650	1,773,800	1,704,350	1,760,100	1,880,350
Capital Expenditures					
Replace OPTO 22		1,851,000			
Misc. Equipment		50,000	52,000	53,000	55,000
Misc. Main Valve replacements	15,000	15,000	15,000	15,000	15,000
Total Projected Capital	15,000	1,916,000	67,000	68,000	70,000

NYSEG CAPITAL EXPENDITURES, RELIABILITY AND OPERATIONS PANEL TESTIMONY INDEX TO WORK PAPERS							
Work Paper No.	**Panel**	**Business**	**Exhibit Reference**	**Title of Work Paper**	**Description of Work Paper**	**WP Format**	**Trade Secret**
100	CRO	Gas	NYSEGCROGAS-8	Meter Relocation Revenue Recovery	Quantitative analysis regarding arrears and inside / outside meter location	pdf	No
101	CRO	Gas	NYSEGCROGAS-9	Seneca Cost Sharing	PSC IR Information Request explaining treatment of cost at Seneca Storage	pdf	No
102	CRO	Gas	NYSEGCROGAS-3	Contractor Price Increases (Redacted)	Pricing comparison information for construction cost.	pdf	Yes
102a	CRO	Gas	NYSEGCROGAS-3	Contractor Price Increases	Pricing comparison information for construction cost.	ppt	Yes
103	CRO	Gas	NYSEGCROGAS-8	Meter Department Positions	Work papers detailing positions required.	xls	Yes
103a	CRO	Gas	NYSEGCROGAS-8	Meter Department Positions (Redacted)	Work papers detailing positions required.	xls	Yes
104	CRO	Gas	NYSEGCROGAS-8	Exposed Piping Cost Estimates	Engineering estimates regarding repair cost for exposed piping	doc	No
105	CRO	Gas	NYSEGCROGAS-8	Damage Prevention Plans	Program Cost Information	doc	No
106	CRO	Gas	NYSEGCROGAS-5	Positions	Field information detailing gas fitter / pipeman requirements	xls	Yes
106a	CRO	Gas	NYSEGCROGAS-5	Positions (Redacted)	Field information detailing gas fitter / pipeman requirements	xls	Yes
107	CRO	Gas	NYSEGCROGAS-5	Positions	Field information detailing gas fitter / pipeman requirements	xls	Yes
107a	CRO	Gas	NYSEGCROGAS-5	Positions (Redacted)	Field information detailing gas fitter / pipeman requirements	xls	Yes
108	CRO	Gas	NYSEGCROGAS-5	Positions	Field information detailing gas fitter / pipeman requirements	xls	Yes
108a	CRO	Gas	NYSEGCROGAS-5	Positions (Redacted)	Field information detailing gas fitter / pipeman requirements	xls	Yes
109	CRO	Gas	NYSEGCROGAS-5	Positions	Field information detailing gas fitter / pipeman requirements	xls	No

NYSEG CAPITAL EXPENDITURES, RELIABILITY AND OPERATIONS PANEL TESTIMONY INDEX TO WORK PAPERS							
Work Paper No.	**Panel**	**Business**	**Exhibit Reference**	**Title of Work Paper**	**Description of Work Paper**	**WP Format**	**Trade Secret**
110	CRO	Gas	NYSEGCROGAS-5	Positions	Field information detailing gas fitter / pipeman requirements	xls	Yes
110a	CRO	Gas	NYSEGCROGAS-5	Positions (Redacted)	Field information detailing gas fitter / pipeman requirements	xls	Yes