National Grid

Niagara Mohawk Power Corporation

PROCEEDING ON MOTION OF THE COMMISSION AS TO THE RATES, CHARGES, RULES AND REGULATIONS FOR ELECTRIC SERVICE

CORRECTIONS & UPDATES FILING

Testimony and Exhibits of:

Rudolph L. Wynter, Jr.
Andrew E. Dinkel III
Maureen P. Heaphy
Alfred P. Morrissey, Jr.
Andrew F. Sloey
Infrastructure and Operations Panel

Book 1

May 3, 2010

Submitted to:
New York Public Service Commission
Docket No. 10-E-0050

Submitted by:

nationalgrid

Testimony of
Rudolph L. Wynter, Jr.

Before the Public Service Commission

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Supplemental Testimony

of

Rudolph L. Wynter, Jr.

Senior Vice President, Customer Service Operations

Dated: May 3, 2010

Q. Are you the same Rudolph L. Wynter, Jr. who testified previously in this proceeding?

A. Yes. I submitted direct testimony as part of the Company's January 29, 2010 filing.

Q. What is the purpose of your supplemental testimony?

A. The purpose of this supplemental testimony is to make two minor corrections to my direct testimony and to update certain portions of my testimony either as a result of the availability of complete data for calendar year 2009 or to reflect the impacts of certain changes in the Company's revenue forecast for the three years of the Rate Plan proposed in this case.

Q. Please describe the corrections to your direct testimony.

A. I have two corrections, both on page 33 of my direct testimony. In line 13 on page 33, the figure 31% should be changed to 21%. On line 15 on that page, the figure 11% should be changed to 16%.

Q. Please describe your updates to your direct testimony.

A. I have the following updates to my direct testimony:

- On page 12, lines 15 to 17 of my direct testimony, the figures given for the share of the cost of the Agent Desktop initiative to be

allocated to Niagara Mohawk's electric customers should be changed to the following: Rate Year 1, $728,696; Rate Year 2, $1,007,716, and Rate Year 3, $947,649.

- On page 15, lines 1 to 3 of my direct testimony, the figures for the share of the cost of the IVR initiative allocated to Niagara Mohawk's electric customers should be changed to the following: Rate Year 1, $128,598; Rate Year 2, $122,849, and Rate Year 3, $89,648.
- On page 19, lines 12 to 13 of my direct testimony should be revised by replacing the words "for the third quarter of 2009, Niagara Mohawk's performance was at 98.7 percent" with the following new language: "For 2009, Niagara Mohawk's performance was at 98.7 percent."
- On page 21 of my direct testimony, the sentence beginning on line 17 and ending on line 18 should be replaced in its entirety by the following new sentence: "For 2009, Niagara Mohawk's performance was at 1.03 complaints per 100,000 customers."
- On page 24, line 19 of my direct testimony, the words "81.8 percent through the third quarter of 2009" should be replaced with "81.8 percent in 2009."
- On page 34 of my direct testimony, the sentence beginning on line

13 and ending on line 16 should be replaced in its entirety with the following new sentence: "Thus, the total increase in the revenue requirement attributable to the Company's consumer advocates comes to $248,904 in Rate Year One, $606,914 in Rate Year Two, and $619,023 in Rate Year Three."

- Finally, on page 49 of my direct testimony, the forecasts of net write off expense for Rate Years 1, 2 and 3 presented on lines 16 to 18 should be changed to the following numbers: Rate Year One, $50.0 million, Rate Year Two, $50.6 million, Rate Year Three, $51.4 million.

Q. Does this conclude your supplemental testimony?

A. Yes it does.

Testimony of
Andrew E. Dinkel III

Before the Public Service Commission

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Supplemental Testimony

of

Andrew E. Dinkel III

Dated: May 3, 2010

Q. Please state your name.

A. My name is Andrew E. Dinkel III.

Q. Are you the same Andrew E. Dinkel III who previously submitted prepared direct testimony on behalf of Niagara Mohawk Power Corporation ("Niagara Mohawk" or "the Company") in this proceeding?

A. Yes. I am.

Q. What is the purpose of your supplemental testimony?

A. As part of the Company's "corrections and updates" filing, the purpose of my supplemental testimony is to update the Company's cost of capital, sources and uses of funds statement and financial statistics for the 2011, 2012 and 2013 rate years to reflect changes in the Company's projected external financing needs resulting from corrections and updates being made elsewhere in the filing and latest know events.

Q. Do you sponsor any exhibits as part of your supplemental testimony?

A. Yes. I sponsor the following updated exhibits that were prepared under my direction and supervision:

(i) Exhibit __ (AED-1CU) entitled "Niagara Mohawk Power Corporation – Updated Capitalization and Weighted Average Cost of Capital," and

(ii) Exhibit __ (AED-2CU), which are the workpapers supporting Exhibit __ (AED-1CU).

Q. Please describe the corrections, updates and events that are impacting the Company's external financing needs.

A. First, the Company's projected capital expenditure budget over the 2010 to 2013 time horizon has been reduced by a total of approximately $460 million since the time I prepared my direct testimony and exhibits. Second, the Company will be receiving a tax refund of approximately $275 million in April or May of this year. This tax refund has resulted from the Company adjusting its prior period tax returns to reflect, for tax purposes, the expensing rather than capitalizing of certain prior period capital expenditures made to replace aging infrastructure. Under its interpretation of the IRS code, the Company now considers these expenditures to be a repair of the system rather than new plant investment. Third, updates and corrections to the Company's cost of service sponsored by the Revenue Requirements Panel have reduced Niagara Mohawk's projected cash expenses over the three rate years resulting in higher cash flows from operations.

Q. What is the impact of these corrections and updates on the Company's cost of capital, external financing needs and its plan to maintain a

balanced capital structure that consists of 50% common equity and 50% debt and preferred stock?

A. As a result of the forecast improvement in its cash flow, the Company expects it will not need to issue the $350 million and $500 million of new long-term debt in June 2010 and June 2013, respectively, as indicated in my direct testimony. Instead, Niagara Mohawk anticipates that it will now need to issue $800 million of new long-term debt in October 2012 instead of the $400 million as originally planned. As a result, the effective cost rates of the Company's outstanding long-term debt are now projected to be 5.02% in 2011, 5.65% in 2012 and 6.16% in 2013. To maintain a 50% common equity ratio excluding goodwill, the Company expects that it will pay a common dividend of $200 million in 2010 and additional common dividends of $98 million in 2011, $14 million in 2012 and $90 million in 2013. The Company's updated overall cost of capital reflecting the above changes is as follows:

NIAGARA MOHAWK UPDATED OVERALL COST OF CAPITAL

	2011			2012			2013		
	Capitalization Ratio (%)	Cost Rate (%)	Weighted Cost (%)	Capitalization Ratio (%)	Cost Rate (%)	Weighted Cost (%)	Capitalization Ratio (%)	Cost Rate (%)	Weighted Cost (%)
Long-Term Debt	46.7	5.02	2.34	47.1	5.65	2.66	46.3	6.16	2.85
Short-Term Debt	2.0	2.21	0.04	1.7	3.28	0.06	2.5	4.28	0.11
Customer Deposits	0.7	2.45	0.02	0.7	2.45	0.02	0.6	2.45	0.02
Preferred Stock	0.6	3.62	0.02	0.6	3.62	0.02	0.5	3.62	0.02
Common Equity	50.0	11.10	5.55	50.0	11.10	5.55	50.0	11.10	5.55
Total	100.0		**7.98**	100.0		**8.30**	100.0		**8.54**

Q. Please describe Exhibit __ (AED-1CU) and Exhibit __ (AED-2CU).

A. Schedule 2 of Exhibit __ (AED-1CU) contains the revised projected capitalization and weighted average cost of capital that I am now proposing be adopted for Niagara Mohawk in this proceeding. Schedule 3 sets forth a revised forecast Sources and Uses of funds statement and revised projected financial statistics for the rate years ending December 31, 2011, 2012 and 2013, respectively. Workpapers supporting this exhibit are being provided as Exhibit __ (AED-2CU).

Q. Does that conclude your supplemental testimony?

A. Yes it does.

Exhibits of
Andrew E. Dinkell III

Index of Exhibits

Exhibit __ (AED-1CU)

Updated Capitalization and Weighted Average Cost of Capital

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
WEIGHTED AVERAGE COST OF LONG-TERM DEBT
At September 30, 2009
($000)

LONG-TERM DEBT	RATE %	PRINCIPAL AMOUNT	ANNUAL INTEREST & FEES	ANNUAL AMORTIZATION DEBT DISCOUNT AND EXPENSE	TOTAL INTEREST AND ANNUAL AMORTIZATION	EFFECTIVE RATE
4.881% Senior Notes due 2019 (Issued August 2009)	4.88%	$750,000	$36,608	$381	$36,989	4.93%
3.553% Senior Notes due 2014 (Issued September 2009)	3.55%	$500,000	$17,765	$354	$18,119	3.62%
1991 Series A Pollution Control Revenue Bonds	0.97%	$45,600	$440	$336	$776	1.70%
1985 Series A Pollution Control Revenue Bonds	0.96%	$100,000	$959	$300	$1,259	1.26%
1988 Series A Pollution Control Revenue Bonds	0.97%	$69,800	$674	$134	$808	1.16%
5.15% Pollution Control Tax Exempt	5.15%	$75,000	$3,863	$156	$4,019	5.36%
1985 Series B Pollution Control Revenue Bonds	0.97%	$37,500	$362	$90	$452	1.21%
1985 Series C Pollution Control Revenue Bonds	0.97%	$37,500	$362	$90	$452	1.21%
1986 Series A Pollution Control Revenue Bonds	0.97%	$50,000	$483	$80	$563	1.13%
1987 Series A Pollution Control Revenue Bonds	1.00%	$25,760	$257	$51	$308	1.19%
1987 Series B-1 Pollution Control Revenue Bonds	0.97%	$68,200	$659	$74	$733	1.07%
1987 Series B-2 Pollution Control Revenue Bonds	0.99%	$25,000	$247	$74	$321	1.28%
2004 Series A Pollution Control Revenue Bonds	0.97%	$115,705	$1,118	$301	$1,419	1.23%
Note Payable to NMHI	5.80%	$500,000	$29,000	$0	$29,000	5.80%
Note Payable to NMHI	3.83%	$350,000	$13,405	$0	$13,405	3.83%
Amortization of Reaquired Debt Call Premiums & DD&E				$6,576	$6,576	
		$2,750,065	**$106,201**	**$8,997**	**$115,198**	**4.19%**

Notes
The interest rates on the variable rate pollution control revenue bonds include 25 basis points for remarketing fees and 10 basis points for annual insurance premiums.

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
WEIGHTED AVERAGE COST OF PREFERRED STOCK
At September 30, 2009
($000)

PREFERRED STOCK	RATE %	NET PROCEEDS OUTSTANDING	ANNUAL DIVIDEND	ANNUAL AMORTIZATION ISSUANCE EXP. AND DISCOUNT OR PREMIUM	TOTAL DIVIDEND AND ANNUAL AMORTIZATION	EFFECTIVE RATE
NMK 3.40%	3.41%	$5,730	$196	$0	$196	3.41%
NMK 3.60%	3.56%	$13,859	$494	$0	$494	3.56%
NMK 3.90%	3.83%	$9,697	$371	$0	$371	3.83%
		$29,286	**$1,060**	**$0**	**$1,060**	**3.62%**

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
UPDATED ESTIMATED COST OF SENIOR SECURITIES
AND RATE OF RETURN
($000)

Estimated Cost of Long-Term Debt for year ended December 31, 2011	Principal Amount	Effective Rate	Total Interest and Annual Amortization
As of September 30, 2009 (Per Exhibit __ (AED-1CU), Schedule 1, Page 1)	$2,750,065	4.19%	$115,198
Variable Rate Changes:			
1991 Series A Pollution Control Revenue Bonds		3.91%	$1,785
1985 Series A Pollution Control Revenue Bonds		3.92%	$3,921
1988 Series A Pollution Control Revenue Bonds		3.91%	$2,732
1985 Series B Pollution Control Revenue Bonds		3.91%	$1,468
1985 Series C Pollution Control Revenue Bonds		3.91%	$1,468
1986 Series A Pollution Control Revenue Bonds		3.91%	$1,957
1987 Series A Pollution Control Revenue Bonds		3.88%	$1,000
1987 Series B-1 Pollution Control Revenue Bonds		3.91%	$2,669
1987 Series B-2 Pollution Control Revenue Bonds		3.89%	$974
2004 Series A Pollution Control Revenue Bonds		3.91%	$4,529
Refundings:			
3.83% Note Payable To NMHI Maturing on 6/30/10	($350,000)	3.83%	($13,405)
Amortization of Reaquired Debt Call Premiums & DD&E			($3,860)
Total Long-Term Debt	**$2,400,065**	**5.02%**	**$120,435**

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
UPDATED ESTIMATED COST OF SENIOR SECURITIES
AND RATE OF RETURN
($000)

Estimated Cost of Long-Term Debt for year ended December 31, 2012	Principal Amount	Effective Rate	Total Interest and Annual Amortization
As of December 31, 2011 (Per Exhibit__ (AED-1CU), Schedule 2, Page 1)	$2,400,065	5.02%	$120,435
Variable Rate Changes:			
1991 Series A Pollution Control Revenue Bonds		2.66%	$1,212
1985 Series A Pollution Control Revenue Bonds		2.66%	$2,658
1988 Series A Pollution Control Revenue Bonds		2.66%	$1,855
1985 Series B Pollution Control Revenue Bonds		2.66%	$997
1985 Series C Pollution Control Revenue Bonds		2.66%	$997
1986 Series A Pollution Control Revenue Bonds		2.66%	$1,329
1987 Series A Pollution Control Revenue Bonds		2.66%	$685
1987 Series B-1 Pollution Control Revenue Bonds		2.66%	$1,813
1987 Series B-2 Pollution Control Revenue Bonds		2.66%	$665
2004 Series A Pollution Control Revenue Bonds		2.66%	$3,075
Refundings:			
5.80% Note Payable To NMHI Maturing on 11/1/12	($83,562)	5.80%	($4,847)
New Issuances:			
$800 M of 5.60% 10-Year Senior Notes Issued 10/1/2012	$201,644	5.70%	$11,494
Amortization of Reaquired Debt Call Premiums & DD&E			$0
Total Long-Term Debt	**$2,518,147**	**5.65%**	**$142,368**

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
UPDATED ESTIMATED COST OF SENIOR SECURITIES
AND RATE OF RETURN
($000)

Estimated Cost of Long-Term Debt for year ended December 31, 2013	Principal Amount	Effective Rate	Total Interest and Annual Amortization
As of December 31, 2012 (Per Exhibit __ (AED-1CU), Schedule 2, Page 2)	$2,700,065	5.64%	$152,321
Variable Rate Changes:			
1991 Series A Pollution Control Revenue Bonds		2.50%	$1,140
1985 Series A Pollution Control Revenue Bonds		2.50%	$2,500
1988 Series A Pollution Control Revenue Bonds		2.50%	$1,745
1985 Series B Pollution Control Revenue Bonds		2.50%	$938
1985 Series C Pollution Control Revenue Bonds		2.50%	$938
1986 Series A Pollution Control Revenue Bonds		2.50%	$1,250
1987 Series A Pollution Control Revenue Bonds		2.50%	$644
1987 Series B-1 Pollution Control Revenue Bonds		2.50%	$1,705
1987 Series B-2 Pollution Control Revenue Bonds		2.50%	$625
2004 Series A Pollution Control Revenue Bonds		2.50%	$2,893
Refundings:			
1991 Series A Pollution Control Revenue Bonds on 10/1/13	($11,494)	10.04%	($1,154)
Amortization of Reaquired Debt Call Premiums & DD&E			($3)
Total Long-Term Debt	**$2,688,571**	**6.16%**	**$165,540**

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
ESTIMATED COST OF SENIOR SECURITIES
AND RATE OF RETURN
($000)

Estimated Cost of Preferred Stock for year ended December 31, 2011	Principle Amount	Effective Rate	Total Interest and Annual Amortization
As of September 30, 2009 (Per Exhibit __ (AED-1CU), Schedule 1, Page 2)	$29,286	3.62%	$1,060
Sinking Funds	$0		
Refundings	$0		
New Issuances	$0		
Total Preferred Stock	**$29,286**	**3.62%**	**$1,060**
Estimated Cost of Preferred Stock for year ended December 31, 2012			
Sinking Funds	$0		
Refundings	$0		
New Issuances	$0		
Total Preferred Stock	**$29,286**	**3.62%**	**$1,060**
Estimated Cost of Preferred Stock for year ended December 31, 2013			
Sinking Funds	$0		
Refundings	$0		
New Issuances	$0		
Total Preferred Stock	**$29,286**	**3.62%**	**$1,060**

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
UPDATED ESTIMATED COST OF SENIOR SECURITIES
AND RATE OF RETURN
($000)

	Long-Term Debt	Short-Term Debt	Preferred Stock	Common Stock	Retained Earnings	Less Goodwill	Total Common Equity	Customer Deposits	Total Capitalization
Balance as of September 30, 2009	$2,750,065	$0	$29,286	$3,100,505	$904,422	$1,268,004	$2,736,923	$36,794	$5,553,068
Changes to December 31, 2010	$0	$0	$0	$0	($100,756)	$0	($100,756)	$0	($450,756)
Balance as of December 31, 2010	$2,400,065	$0	$29,286	$3,100,505	$803,666	$1,268,004	$2,636,167	$36,794	$5,102,312
January 2011	$2,400,065	$36,331	$29,286	$3,100,505	$745,317	$1,268,004	$2,577,818	$36,794	$5,080,294
February 2011	$2,400,065	$0	$29,286	$3,100,505	$782,241	$1,268,004	$2,614,742	$36,794	$5,080,887
March 2011	$2,400,065	$0	$29,286	$3,100,505	$812,699	$1,268,004	$2,645,200	$36,794	$5,111,345
April 2011	$2,400,065	$0	$29,286	$3,100,505	$841,279	$1,268,004	$2,673,780	$36,794	$5,139,925
May 2011	$2,400,065	$0	$29,286	$3,100,505	$866,572	$1,268,004	$2,699,073	$36,794	$5,165,218
June 2011	$2,400,065	$22,138	$29,286	$3,100,505	$635,423	$1,268,004	$2,467,924	$36,794	$4,956,207
July 2011	$2,400,065	$74,605	$29,286	$3,100,505	$656,551	$1,268,004	$2,489,052	$36,794	$5,029,802
August 2011	$2,400,065	$15,867	$29,286	$3,100,505	$671,487	$1,268,004	$2,503,988	$36,794	$4,985,999
September 2011	$2,400,065	$384,250	$29,286	$3,100,505	$682,516	$1,268,004	$2,515,017	$36,794	$5,365,412
October 2011	$2,400,065	$325,807	$29,286	$3,100,505	$693,612	$1,268,004	$2,526,113	$36,794	$5,318,065
November 2011	$2,400,065	$294,639	$29,286	$3,100,505	$709,758	$1,268,004	$2,542,259	$36,794	$5,303,043
Eleven Months Total	$26,400,715	$1,153,636	$322,146	$34,105,555	$8,097,455	$13,948,044	$28,254,966	$404,734	$56,536,197
December 2010	$2,400,065	$0	$29,286	$3,100,505	$803,666	$1,268,004	$2,636,167	$36,794	$5,102,312
December 2011	$2,400,065	$184,268	$29,286	$3,100,505	$731,847	$1,268,004	$2,564,348	$36,794	$5,214,761
Total December 2010 & 2011	$4,800,130	$184,268	$58,572	$6,201,010	$1,535,513	$2,536,008	$5,200,515	$73,588	$10,317,073
December 2010 & 2011 Average	$2,400,065	$92,134	$29,286	$3,100,505	$767,756	$1,268,004	$2,600,257	$36,794	$5,158,536
Twelve Months Total	$28,800,780	$1,245,770	$351,432	$37,206,060	$8,865,211	$15,216,048	$30,855,223	$441,528	$61,694,733
Annual Average	$2,400,065	$103,814	$29,286	$3,100,505	$738,768	$1,268,004	$2,571,269	$36,794	$5,141,228
Capitalization Ratios	46.68%	2.02%	0.57%				50.01%	0.72%	100.0%
Cost Rates	5.02%	2.21%	3.62%				11.10%	2.45%	
Return Components	**2.34%**	**0.04%**	**0.02%**				**5.55%**	**0.02%**	**7.98%**

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
UPDATED ESTIMATED COST OF SENIOR SECURITIES
AND RATE OF RETURN
($000)

	Long-Term Debt	Short-Term Debt	Preferred Stock	Common Stock	Retained Earnings	Less Goodwill	Common Equity	Customer Deposits	Total Capitalization
Balance as of December 31, 2011	$2,400,065	$184,268	$29,286	$3,100,505	$731,847	$1,268,004	$2,564,348	$36,794	$5,214,761
January 2012	$2,400,065	$0	$29,286	$3,100,505	$751,853	$1,268,004	$2,584,354	$36,794	$5,050,499
February 2012	$2,400,065	$0	$29,286	$3,100,505	$769,723	$1,268,004	$2,602,224	$36,794	$5,068,369
March 2012	$2,400,065	$39,143	$29,286	$3,100,505	$783,434	$1,268,004	$2,615,935	$36,794	$5,121,223
April 2012	$2,400,065	$0	$29,286	$3,100,505	$813,262	$1,268,004	$2,645,763	$36,794	$5,111,908
May 2012	$2,400,065	$0	$29,286	$3,100,505	$837,806	$1,268,004	$2,670,307	$36,794	$5,136,452
June 2012	$2,400,065	$5,890	$29,286	$3,100,505	$797,228	$1,268,004	$2,629,729	$36,794	$5,101,765
July 2012	$2,400,065	$110,720	$29,286	$3,100,505	$823,453	$1,268,004	$2,655,954	$36,794	$5,232,819
August 2012	$2,400,065	$65,675	$29,286	$3,100,505	$847,199	$1,268,004	$2,679,700	$36,794	$5,211,521
September 2012	$2,400,065	$519,384	$29,286	$3,100,505	$867,667	$1,268,004	$2,700,168	$36,794	$5,685,698
October 2012	$3,200,065	$0	$29,286	$3,100,505	$887,624	$1,268,004	$2,720,125	$36,794	$5,986,270
November 2012	$2,700,065	$180,565	$29,286	$3,100,505	$913,898	$1,268,004	$2,746,399	$36,794	$5,693,109
Eleven Months Total	$27,500,715	$921,378	$322,146	$34,105,555	$9,093,148	$13,948,044	$29,250,659	$404,734	$58,399,632
December 2011	$2,400,065	$184,268	$29,286	$3,100,505	$731,847	$1,268,004	$2,564,348	$36,794	$5,214,761
December 2012	$2,700,065	$133,775	$29,286	$3,100,505	$946,013	$1,268,004	$2,778,514	$36,794	$5,678,434
Total December 2011 & 2012	$5,100,130	$318,043	$58,572	$6,201,010	$1,677,860	$2,536,008	$5,342,862	$73,588	$10,893,195
December 2011 & 2012 Average	$2,550,065	$159,022	$29,286	$3,100,505	$838,930	$1,268,004	$2,671,431	$36,794	$5,446,598
Twelve Months Total	$30,050,780	$1,080,400	$351,432	$37,206,060	$9,932,078	$15,216,048	$31,922,090	$441,528	$63,846,230
Annual Average	$2,504,232	$90,033	$29,286	$3,100,505	$827,673	$1,268,004	$2,660,174	$36,794	$5,320,519
Capitalization Ratios	47.07%	1.69%	0.55%				50.00%	0.69%	100.0%
Cost Rates	5.65%	3.28%	3.62%				11.10%	2.45%	
Return Components	**2.66%**	**0.06%**	**0.02%**				**5.55%**	**0.02%**	**8.30%**

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
UPDATED ESTIMATED COST OF SENIOR SECURITIES
AND RATE OF RETURN
($000)

	Long-Term Debt	Short-Term Debt	Preferred Stock	Common Stock	Retained Earnings	Less Goodwill	Total Common Equity	Customer Deposits	Total Capitalization
Balance as of December 31, 2012	$2,700,065	$133,775	$29,286	$3,100,505	$946,013	$1,268,004	$2,778,514	$36,794	$5,678,434
January 2013	$2,700,065	$0	$29,286	$3,100,505	$984,321	$1,268,004	$2,816,822	$36,794	$5,582,967
February 2013	$2,700,065	$0	$29,286	$3,100,505	$1,020,259	$1,268,004	$2,852,760	$36,794	$5,618,905
March 2013	$2,700,065	$70,136	$29,286	$3,100,505	$1,051,685	$1,268,004	$2,884,186	$36,794	$5,720,467
April 2013	$2,700,065	$25,202	$29,286	$3,100,505	$1,086,294	$1,268,004	$2,918,795	$36,794	$5,710,142
May 2013	$2,700,065	$0	$29,286	$3,100,505	$1,107,186	$1,268,004	$2,939,687	$36,794	$5,705,832
June 2013	$2,700,065	$67,146	$29,286	$3,100,505	$1,038,458	$1,268,004	$2,870,959	$36,794	$5,704,250
July 2013	$2,700,065	$148,698	$29,286	$3,100,505	$1,061,981	$1,268,004	$2,894,482	$36,794	$5,809,325
August 2013	$2,700,065	$101,404	$29,286	$3,100,505	$1,082,584	$1,268,004	$2,915,085	$36,794	$5,782,634
September 2013	$2,700,065	$365,163	$29,286	$3,100,505	$1,100,176	$1,268,004	$2,932,677	$36,794	$6,063,985
October 2013	$2,654,465	$383,266	$29,286	$3,100,505	$1,117,970	$1,268,004	$2,950,471	$36,794	$6,054,282
November 2013	$2,654,465	$384,265	$29,286	$3,100,505	$1,139,463	$1,268,004	$2,971,964	$36,794	$6,076,774
Eleven Months Total	$29,609,515	$1,545,280	$322,146	$34,105,555	$11,790,377	$13,948,044	$31,947,888	$404,734	$63,829,563
December 2012	$2,700,065	$133,775	$29,286	$3,100,505	$946,013	$1,268,004	$2,778,514	$36,794	$5,678,434
December 2013	$2,654,465	$302,807	$29,286	$3,100,505	$1,168,665	$1,268,004	$3,001,166	$36,794	$6,024,518
Total December 2012 & 2013	$5,354,530	$436,582	$58,572	$6,201,010	$2,114,678	$2,536,008	$5,779,680	$73,588	$11,702,952
December 2012 & 2013 Average	$2,677,265	$218,291	$29,286	$3,100,505	$1,057,339	$1,268,004	$2,889,840	$36,794	$5,851,476
Twelve Months Total	$32,286,780	$1,763,571	$351,432	$37,206,060	$12,847,716	$15,216,048	$34,837,728	$441,528	$69,681,039
Annual Average	$2,690,565	$146,964	$29,286	$3,100,505	$1,070,643	$1,268,004	$2,903,144	$36,794	$5,806,753
Capitalization Ratios	46.34%	2.53%	0.50%				50.00%	0.63%	100.0%
Cost Rates	6.16%	4.28%	3.62%				11.10%	2.45%	
Return Components	**2.85%**	**0.11%**	**0.02%**				**5.55%**	**0.02%**	**8.54%**

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
Updated Sources and Use of Funds Statement
And Financial Statistics
($000)

	Rate Year Ending 12/31/11
Sources of Funds	
Internal	
Net Income	$277,818
Depreciation & Amortization	$515,887
Deferred Taxes	($25,773)
Changes in Working Capital/Other	$30,469
Total Internal Sources	$798,402
External	
Long-Term Debt	$0
Money Pool Borrowings	$184,268
Total External Sources	$184,268
Total Sources of Funds	$982,670
Uses of Funds	
Capital Expenditures	$634,610
Dividend Payments	$348,060
Redemptions	
Long-Term Debt	$0
Money Pool Debt	$0
Total Uses of Funds	$982,670
Pre-Tax Interest Coverage Ratio	3.9
FFO Interest Coverage Ratio	5.8
FFO/Debt	25.4%
Debt/EBITDA (x)	2.6

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
Updated Sources and Use of Funds Statement
And Financial Statistics
($000)

	Rate Year Ending 12/31/12
Sources of Funds	
Internal	
Net Income	$278,348
Depreciation & Amortization	$478,199
Deferred Taxes	($123,868)
Changes in Working Capital/Other	($62,198)
Total Internal Sources	$570,481
External	
Long-Term Debt	$800,000
Money Pool Borrowings	$0
Total External Sources	$800,000
Total Sources of Funds	$1,370,481
Uses of Funds	
Capital Expenditures	$756,428
Dividend Payments	$63,560
Redemptions	
Long-Term Debt	$500,000
Money Pool Debt	$50,493
Total Uses of Funds	$1,370,481
Pre-Tax Interest Coverage Ratio	3.4
FFO Interest Coverage Ratio	4.3
FFO/Debt	21.2%
Debt/EBITDA (x)	2.6

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
Updated Sources and Use of Funds Statement
And Financial Statistics
($000)

	Rate Year Ending 12/31/13
Sources of Funds	
Internal	
Net Income	$311,298
Depreciation & Amortization	$457,114
Deferred Taxes	($18,101)
Changes in Working Capital/Other	($30,349)
Total Internal Sources	$719,962
External	
Long-Term Debt	$0
Money Pool Borrowings	$169,032
Total External Sources	$169,032
Total Sources of Funds	$888,994
Uses of Funds	
Capital Expenditures	$752,334
Dividend Payments	$91,060
Redemptions	
Long-Term Debt	$45,600
Money Pool Debt	$0
Total Uses of Funds	$888,994
Pre-Tax Interest Coverage Ratio	4.0
FFO Interest Coverage Ratio	5.4
FFO/Debt	24.4%
Debt/EBITDA (x)	2.7

Exhibit __ (AED-2CU)

Workpapers Supporting Exhibit __ (AED-1CU)

SUMMARY OF UDPATES TO EXHIBIT __ (AED-1CU)

Total Capital Expenditures ($000)	**2010**	**2011**	**2012**	**2013**
Filed Forecast	$638,170	$760,409	$853,895	$899,786
Updated Forecast	$547,797	$634,610	$756,428	$752,334
Variance	($90,373)	($125,799)	($97,467)	($147,452)
Depreciation & Amortization				
Filed Forecast		$497,208	$470,927	$454,863
Updated Forecast		$515,887	$478,199	$457,114
Variance		$18,679	$7,272	$2,251
Common Dividends				
Filed Forecast	$0	$249,000	$48,500	$0
Updated Forecast	$200,000	$347,000	$62,500	$90,000
Variance	$200,000	$98,000	$14,000	$90,000
New Long-Term Debt Isssuances				
Filed Forecast	$350,000	$0	$400,000	$500,000
Updated Forecast	$0	$0	$800,000	$0
Variance	($350,000)	$0	$400,000	($500,000)
New Long-Term Debt Interest Expense				
Filed Forecast	$10,465	$17,850	$23,550	$59,317
Updated Forecast	$0	$0	$11,400	$45,600
Variance	($10,465)	($17,850)	($12,150)	($13,717)

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
UPDATED ESTIMATED COST OF SENIOR SECURITIES
AND RATE OF RETURN
($000)

	Long-Term Debt	Short-Term Debt	Preferred Stock	Common Stock	Retained Earnings	Less Goodwill	Total Common Equity	Customer Deposits	Total Capitalization
Balance as of September 30, 2009	$2,750,065	$0	$29,286	$3,100,505	$904,422	$1,268,004	$2,736,923	$36,794	$5,553,068
Changes to December 31, 2010	$0	$0	$0	$0	($100,756)	$0	($100,756)	$0	($450,756)
Balance as of December 31, 2010	$2,400,065	$0	$29,286	$3,100,505	$803,666	$1,268,004	$2,636,167	$36,794	$5,102,312
January 2011	$2,400,065	$36,331	$29,286	$3,100,505	$745,317	$1,268,004	$2,577,818	$36,794	$5,080,294
February 2011	$2,400,065	$0	$29,286	$3,100,505	$782,241	$1,268,004	$2,614,742	$36,794	$5,080,887
March 2011	$2,400,065	$0	$29,286	$3,100,505	$812,699	$1,268,004	$2,645,200	$36,794	$5,111,345
April 2011	$2,400,065	$0	$29,286	$3,100,505	$841,279	$1,268,004	$2,673,780	$36,794	$5,139,925
May 2011	$2,400,065	$0	$29,286	$3,100,505	$866,572	$1,268,004	$2,699,073	$36,794	$5,165,218
June 2011	$2,400,065	$22,138	$29,286	$3,100,505	$635,423	$1,268,004	$2,467,924	$36,794	$4,956,207
July 2011	$2,400,065	$74,605	$29,286	$3,100,505	$656,551	$1,268,004	$2,489,052	$36,794	$5,029,802
August 2011	$2,400,065	$15,867	$29,286	$3,100,505	$671,487	$1,268,004	$2,503,988	$36,794	$4,985,999
September 2011	$2,400,065	$384,250	$29,286	$3,100,505	$682,516	$1,268,004	$2,515,017	$36,794	$5,365,412
October 2011	$2,400,065	$325,807	$29,286	$3,100,505	$693,612	$1,268,004	$2,526,113	$36,794	$5,318,065
November 2011	$2,400,065	$294,639	$29,286	$3,100,505	$709,758	$1,268,004	$2,542,259	$36,794	$5,303,043
Eleven Months Total	$26,400,715	$1,153,636	$322,146	$34,105,555	$8,097,455	$13,948,044	$28,254,966	$404,734	$56,536,197
December 2010	$2,400,065	$0	$29,286	$3,100,505	$803,666	$1,268,004	$2,636,167	$36,794	$5,102,312
December 2011	$2,400,065	$184,268	$29,286	$3,100,505	$731,847	$1,268,004	$2,564,348	$36,794	$5,214,761
Total December 2010 & 2011	$4,800,130	$184,268	$58,572	$6,201,010	$1,535,513	$2,536,008	$5,200,515	$73,588	$10,317,073
December 2010 & 2011 Average	$2,400,065	$92,134	$29,286	$3,100,505	$767,756	$1,268,004	$2,600,257	$36,794	$5,158,536
Twelve Months Total	$28,800,780	$1,245,770	$351,432	$37,206,060	$8,865,211	$15,216,048	$30,855,223	$441,528	$61,694,733
Annual Average	$2,400,065	$103,814	$29,286	$3,100,505	$738,768	$1,268,004	$2,571,269	$36,794	$5,141,228
Capitalization Ratios	46.68%	2.02%	0.57%				50.01%	0.72%	100.0%
Cost Rates	5.02%	2.21%	3.62%				11.10%	2.45%	
Return Components	**2.34%**	**0.04%**	**0.02%**				**5.55%**	**0.02%**	**7.98%**

	Reduction In New LTD Interest Exp.	Change In Depreciation & Amort.	Change In Cash Outflows
January 2011	$1,488	$1,557	$167,865
February 2011	$1,488	$1,557	($10,483)
March 2011	$1,488	$1,557	($10,483)
April 2011	$1,488	$1,557	($10,483)
May 2011	$1,488	$1,557	($10,483)
June 2011	$1,488	$1,557	($10,483)
July 2011	$1,488	$1,557	($10,483)
August 2011	$1,488	$1,557	($10,483)
September 2011	$1,488	$1,557	($10,483)
October 2011	$1,488	$1,557	($10,483)
November 2011	$1,488	$1,557	($10,483)
December 2011	$1,488	$1,557	($10,483)
Total	$17,850	$18,679	

2010 Change in Cash Outflow Reflected in Jan. 2011	
2010 Capital Expenditures	($90,373)
Repair Cost Tax Refund	($275,000)
2010 Dividend Payment	$200,000
$350 M of New Debt Not Issued In 2010	$350,000
2010 After Tax Interest Exp. Savings On Above Debt	($6,279)
Total	$178,348

Exhibit ___ (AED-2CU)
Workpapers
Page 2 of 7
Witness: A.E. Dinkel III

INCREMENTAL ADJUSTMENTS TO FILED FORECAST

Cash Flow Change	Cumulative Change	Change in Dividends	Cumulative Change in Dividends	Cumulative Change in Cash Flow After Div.	Change In Interest Exp.	Cumulative Change in Interest Exp.	Cumulative Cash Flow Change	Change in Retained Earnings	Cumulative Change in Ret Earnings	Change in Short-Term Debt Balance	MP Investment Balance Orginal Forecast	Change in Short-Term Debt Balance	Short Term Debt Balance Original Forecast	Adjusted Retained Earnings	Retained Earnings Original Forecast	2010 Common Dividend
														$803,666	$1,003,666	$200,000
($166,038)	($166,038)	$98,000	$98,000	($264,038)	$0	$0	($264,038)	($97,108)	($97,108)	$264,038	$227,707	$36,331	$0	$842,424	$1,042,424	$200,000
$12,310	($153,729)	$0	$98,000	($251,729)	$468	$468	($252,196)	$425	($96,683)	$252,196	$312,606	($60,410)	$0	$878,924	$1,078,924	$200,000
$12,310	($141,419)	$0	$98,000	($239,419)	$446	$913	($240,332)	$447	($96,236)	$240,332	$287,965	($47,633)	$0	$908,935	$1,108,935	$200,000
$12,310	($129,109)	$0	$98,000	($227,109)	$424	$1,337	($228,447)	$469	($95,767)	$228,447	$345,594	($117,147)	$0	$937,046	$1,137,046	$200,000
$12,310	($116,800)	$0	$98,000	($214,800)	$402	$1,739	($216,539)	$490	($95,277)	$216,539	$424,595	($208,056)	$0	$961,849	$1,161,849	$200,000
$12,310	($104,490)	$0	$98,000	($202,490)	$380	$2,120	($204,610)	$512	($94,765)	$204,610	$182,472	$22,138	$0	$730,188	$930,188	$200,000
$12,310	($92,180)	$0	$98,000	($190,180)	$359	$2,478	($192,659)	$534	($94,231)	$192,659	$118,054	$74,605	$0	$750,782	$950,782	$200,000
$12,310	($79,870)	$0	$98,000	($177,870)	$337	$2,815	($180,686)	$556	($93,675)	$180,686	$164,819	$15,867	$0	$765,162	$965,162	$200,000
$12,310	($67,561)	$0	$98,000	($165,561)	$315	$3,130	($168,691)	$578	($93,098)	$168,691	$0	$168,691	$215,559	$775,614	$975,614	$200,000
$12,310	($55,251)	$0	$98,000	($153,251)	$293	$3,423	($156,674)	$599	($92,498)	$156,674	$0	$156,674	$169,133	$786,110	$986,110	$200,000
$12,310	($42,941)	$0	$98,000	($140,941)	$271	$3,695	($144,636)	$621	($91,877)	$144,636	$0	$144,636	$150,003	$801,635	$1,001,635	$200,000
$12,310	($30,632)	$0	$98,000	($128,632)	$250	$3,944	($132,576)	$643	($91,234)	$132,576	$0	$132,576	$51,692	$823,081	$1,023,081	$200,000
		$98,000			$3,944											

Exhibit ___ (AED-2CU)
Workpapers
Page 3 of 7
Witness: A.E. Dinkel III

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
UPDATED ESTIMATED COST OF SENIOR SECURITIES
AND RATE OF RETURN
($000)

	Long-Term Debt	Short-Term Debt	Preferred Stock	Common Stock	Retained Earnings	Less Goodwill	Common Equity	Customer Deposits	Total Capitalization		Reduction In New LTD Interest Exp.	Change In Depreciation & Amort.	Change In Cash Outflows
Balance as of December 31, 2011	$2,400,065	$184,268	$29,286	$3,100,505	$731,847	$1,268,004	$2,564,348	$36,794	$5,214,761				
January 2012	$2,400,065	$0	$29,286	$3,100,505	$751,853	$1,268,004	$2,584,354	$36,794	$5,050,499	January 2012	$1,488	$606	($8,122)
February 2012	$2,400,065	$0	$29,286	$3,100,505	$769,723	$1,268,004	$2,602,224	$36,794	$5,068,369	February 2012	$1,488	$606	($8,122)
March 2012	$2,400,065	$39,143	$29,286	$3,100,505	$783,434	$1,268,004	$2,615,935	$36,794	$5,121,223	March 2012	$1,488	$606	($8,122)
April 2012	$2,400,065	$0	$29,286	$3,100,505	$813,262	$1,268,004	$2,645,763	$36,794	$5,111,908	April 2012	$1,488	$606	($8,122)
May 2012	$2,400,065	$0	$29,286	$3,100,505	$837,806	$1,268,004	$2,670,307	$36,794	$5,136,452	May 2012	$1,488	$606	($8,122)
June 2012	$2,400,065	$5,890	$29,286	$3,100,505	$797,228	$1,268,004	$2,629,729	$36,794	$5,101,765	June 2012	$1,488	$606	($8,122)
July 2012	$2,400,065	$110,720	$29,286	$3,100,505	$823,453	$1,268,004	$2,655,954	$36,794	$5,232,819	July 2012	$1,488	$606	($8,122)
August 2012	$2,400,065	$65,675	$29,286	$3,100,505	$847,199	$1,268,004	$2,679,700	$36,794	$5,211,521	August 2012	$1,488	$606	($8,122)
September 2012	$2,400,065	$519,384	$29,286	$3,100,505	$867,667	$1,268,004	$2,700,168	$36,794	$5,685,698	September 2012	$1,488	$606	($8,122)
October 2012	$3,200,065	$0	$29,286	$3,100,505	$887,624	$1,268,004	$2,720,125	$36,794	$5,986,270	October 2012	($413)	$606	($408,122)
November 2012	$2,700,065	$180,565	$29,286	$3,100,505	$913,898	$1,268,004	$2,746,399	$36,794	$5,693,109	November 2012	($413)	$606	($8,122)
Eleven Months Total	$27,500,715	$921,378	$322,146	$34,105,555	$9,093,148	$13,948,044	$29,250,659	$404,734	$58,399,632				
December 2011	$2,400,065	$184,268	$29,286	$3,100,505	$731,847	$1,268,004	$2,564,348	$36,794	$5,214,761				
December 2012	$2,700,065	$133,775	$29,286	$3,100,505	$946,013	$1,268,004	$2,778,514	$36,794	$5,678,434	December 2012	($413)	$606	($8,122)
Total December 2011 & 2012	$5,100,130	$318,043	$58,572	$6,201,010	$1,677,860	$2,536,008	$5,342,862	$73,588	$10,893,195				
December 2011 & 2012 Average	$2,550,065	$159,022	$29,286	$3,100,505	$838,930	$1,268,004	$2,671,431	$36,794	$5,446,598				
Twelve Months Total	$30,050,780	$1,080,400	$351,432	$37,206,060	$9,932,078	$15,216,048	$31,922,090	$441,528	$63,846,230	Total	$12,150	$7,272	
Annual Average	$2,504,232	$90,033	$29,286	$3,100,505	$827,673	$1,268,004	$2,660,174	$36,794	$5,320,519				
Capitalization Ratios	47.07%	1.69%	0.55%				50.00%	0.69%	100.0%				
Cost Rates	5.65%	3.28%	3.62%				11.10%	2.45%					
Return Components	**2.66%**	**0.06%**	**0.02%**				**5.55%**	**0.02%**	**8.30%**				

Exhibit ___ (AED-2CU)
Workpapers
Page 4 of 7
Witness: A.E. Dinkel III

INCREMENTAL ADJUSTMENTS TO FILED FORECAST

Cash Flow Change	Cumulative Change	Change in Dividends	Cumulative Change in Dividends	Cumulative Change in Cash Flow After Div.	Change In Interest Exp.	Cumulative Change in Interest Exp.	Cumulative Cash Flow Change	Change in Retained Earnings	Cumulative Change in Ret Earnings	Change in Short-Term Debt Balance	MP Investment Balance Orginal Forecast	Change in Short-Term Debt Balance	Short Term Debt Balance Original Forecast	Adjusted Retained Earnings	Retained Earnings Original Forecast	2010 Common Dividend
	($30,632)		$98,000	($128,632)		$3,944	($132,576)		($91,234)	$132,576		$132,576				
$9,378	($21,253)	$0	$98,000	($119,253)	$351	$4,295	($123,549)	$541	($90,693)	$123,549	$176,041	($52,492)	$0	$842,546	$1,042,546	$200,000
$9,378	($11,875)	$0	$98,000	($109,875)	$325	$4,621	($114,496)	$567	($90,126)	$114,496	$188,156	($73,660)	$0	$859,849	$1,059,849	$200,000
$9,378	($2,497)	$0	$98,000	($100,497)	$300	$4,921	($105,417)	$593	($89,533)	$105,417	$66,274	$39,143	$0	$872,967	$1,072,967	$200,000
$9,378	$6,882	$0	$98,000	($91,118)	$274	$5,195	($96,313)	$618	($88,915)	$96,313	$96,550	($237)	$0	$902,177	$1,102,177	$200,000
$9,378	$16,260	$0	$98,000	($81,740)	$249	$5,444	($87,184)	$644	($88,271)	$87,184	$150,463	($63,279)	$0	$926,077	$1,126,077	$200,000
$9,378	$25,639	$14,000	$112,000	($86,362)	$223	$5,667	($92,028)	($13,331)	($101,602)	$92,028	$86,138	$5,890	$0	$898,830	$1,098,830	$200,000
$9,378	$35,017	$0	$112,000	($76,983)	$236	$5,902	($82,886)	$657	($100,945)	$82,886	$0	$82,886	$27,834	$924,398	$1,124,398	$200,000
$9,378	$44,395	$0	$112,000	($67,605)	$210	$6,113	($73,717)	$682	($100,263)	$73,717	$8,042	$65,675	$0	$947,462	$1,147,462	$200,000
$9,378	$53,774	$0	$112,000	($58,226)	$185	$6,297	($64,523)	$708	($99,555)	$64,523	$0	$64,523	$454,861	$967,222	$1,167,222	$200,000
$408,238	$462,012	$0	$112,000	$350,012	$159	$6,456	$343,556	($406)	($99,961)	($343,556)	$0	($343,556)	$74,544	$987,585	$1,187,585	$200,000
$8,238	$470,250	$0	$112,000	$358,250	($955)	$5,501	$352,750	$708	($99,253)	($352,750)	$0	($352,750)	$533,315	$1,013,151	$1,213,151	$200,000
$8,238	$478,489	$0	$112,000	$366,489	$0	$5,501	$360,988	($248)	($99,501)	($360,988)	$0	($360,988)	$494,763	$1,045,514	$1,245,514	$200,000
		$14,000			$1,556											

Exhibit ___ (AED-2CU)
Workpapers
Page 5 of 7
Witness: A.E. Dinkel III

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
UPDATED ESTIMATED COST OF SENIOR SECURITIES
AND RATE OF RETURN
($000)

	Long-Term Debt	Short-Term Debt	Preferred Stock	Common Stock	Retained Earnings	Less Goodwill	Total Common Equity	Customer Deposits	Total Capitalization		Reduction In New LTD Interest Exp.	Change In Depreciation & Amort.	Change In Cash Outflows
Balance as of December 31, 2012	$2,700,065	$133,775	$29,286	$3,100,505	$946,013	$1,268,004	$2,778,514	$36,794	$5,678,434				
January 2013	$2,700,065	$0	$29,286	$3,100,505	$984,321	$1,268,004	$2,816,822	$36,794	$5,582,967	January 2013	($413)	$188	($12,288)
February 2013	$2,700,065	$0	$29,286	$3,100,505	$1,020,259	$1,268,004	$2,852,760	$36,794	$5,618,905	February 2013	($413)	$188	($12,288)
March 2013	$2,700,065	$70,136	$29,286	$3,100,505	$1,051,685	$1,268,004	$2,884,186	$36,794	$5,720,467	March 2013	($413)	$188	($12,288)
April 2013	$2,700,065	$25,202	$29,286	$3,100,505	$1,086,294	$1,268,004	$2,918,795	$36,794	$5,710,142	April 2013	($413)	$188	($12,288)
May 2013	$2,700,065	$0	$29,286	$3,100,505	$1,107,186	$1,268,004	$2,939,687	$36,794	$5,705,832	May 2013	($413)	$188	($12,288)
June 2013	$2,700,065	$67,146	$29,286	$3,100,505	$1,038,458	$1,268,004	$2,870,959	$36,794	$5,704,250	June 2013	$2,254	$188	$487,712
July 2013	$2,700,065	$148,698	$29,286	$3,100,505	$1,061,981	$1,268,004	$2,894,482	$36,794	$5,809,325	July 2013	$2,254	$188	($12,288)
August 2013	$2,700,065	$101,404	$29,286	$3,100,505	$1,082,584	$1,268,004	$2,915,085	$36,794	$5,782,634	August 2013	$2,254	$188	($12,288)
September 2013	$2,700,065	$365,163	$29,286	$3,100,505	$1,100,176	$1,268,004	$2,932,677	$36,794	$6,063,985	September 2013	$2,254	$188	($12,288)
October 2013	$2,654,465	$383,266	$29,286	$3,100,505	$1,117,970	$1,268,004	$2,950,471	$36,794	$6,054,282	October 2013	$2,254	$188	($12,288)
November 2013	$2,654,465	$384,265	$29,286	$3,100,505	$1,139,463	$1,268,004	$2,971,964	$36,794	$6,076,774	November 2013	$2,254	$188	($12,288)
Eleven Months Total	$29,609,515	$1,545,280	$322,146	$34,105,555	$11,790,377	$13,948,044	$31,947,888	$404,734	$63,829,563				
December 2012	$2,700,065	$133,775	$29,286	$3,100,505	$946,013	$1,268,004	$2,778,514	$36,794	$5,678,434				
December 2013	$2,654,465	$302,807	$29,286	$3,100,505	$1,168,665	$1,268,004	$3,001,166	$36,794	$6,024,518	December 2013	$2,254	$188	($12,288)
Total December 2012 & 2013	$5,354,530	$436,582	$58,572	$6,201,010	$2,114,678	$2,536,008	$5,779,680	$73,588	$11,702,952				
December 2012 & 2013 Average	$2,677,265	$218,291	$29,286	$3,100,505	$1,057,339	$1,268,004	$2,889,840	$36,794	$5,851,476				
Twelve Months Total	$32,286,780	$1,763,571	$351,432	$37,206,060	$12,847,716	$15,216,048	$34,837,728	$441,528	$69,681,039	Total	$13,717	$2,251	
Annual Average	$2,690,565	$146,964	$29,286	$3,100,505	$1,070,643	$1,268,004	$2,903,144	$36,794	$5,806,753				
Capitalization Ratios	46.34%	2.53%	0.50%				50.00%	0.63%	100.0%				
Cost Rates	6.16%	4.28%	3.62%				11.10%	2.45%					
Return Components	**2.85%**	**0.11%**	**0.02%**				**5.55%**	**0.02%**	**8.54%**				

Exhibit ___ (AED-2CU)
Workpapers
Page 6 of 7
Witness: A.E. Dinkel III

INCREMENTAL ADJUSTMENTS TO FILED FORECAST

Cash Flow Change	Cumulative Change	Change in Dividends	Cumulative Change in Dividends	Cumulative Change in Cash Flow After Div.	Change In Interest Exp.	Cumulative Change in Interest Exp.	Cumulative Cash Flow Change	Change in Retained Earnings	Cumulative Change in Ret Earnings	Change in Short-Term Debt Balance	MP Investment Balance Orginal Forecast	Change in Short-Term Debt Balance	Short Term Debt Balance Original Forecast	Adjusted Retained Earnings	Retained Earnings Original Forecast	2010 Common Dividend
	$478,489		$112,000	$366,489		$5,501	$360,988		($99,501)	($360,988)	$0	($360,988)				
$12,153	$490,641	$0	$112,000	$378,641	($1,306)	$4,195	$374,446	$1,058	($98,443)	($374,446)	$0	($374,446)	$355,548	$1,082,764	$1,282,764	$200,000
$12,153	$502,794	$0	$112,000	$390,794	($1,349)	$2,846	$387,948	$1,101	($97,341)	($387,948)	$0	($387,948)	$371,737	$1,117,600	$1,317,600	$200,000
$12,153	$514,947	$0	$112,000	$402,947	($1,392)	$1,454	$401,493	$1,145	($96,196)	($401,493)	$0	($401,493)	$471,629	$1,147,881	$1,347,881	$200,000
$12,153	$527,099	$0	$112,000	$415,099	($1,435)	$18	$415,081	$1,188	($95,008)	($415,081)	$0	($415,081)	$440,283	$1,181,302	$1,381,302	$200,000
$12,153	$539,252	$0	$112,000	$427,252	($1,479)	($1,460)	$428,712	$1,231	($93,777)	($428,712)	$0	($428,712)	$392,370	$1,200,963	$1,400,963	$200,000
($486,247)	$53,005	$90,000	$202,000	($148,995)	($1,522)	($2,982)	($146,013)	($87,125)	($180,903)	$146,013	$78,867	$67,146	$0	$1,219,361	$1,419,361	$200,000
$13,753	$66,758	$0	$202,000	($135,242)	$531	($2,452)	($132,791)	$822	($180,081)	$132,791	$0	$132,791	$15,907	$1,242,062	$1,442,062	$200,000
$13,753	$80,510	$0	$202,000	($121,490)	$482	($1,970)	($119,520)	$871	($179,210)	$119,520	$18,116	$101,404	$0	$1,261,794	$1,461,794	$200,000
$13,753	$94,263	$0	$202,000	($107,737)	$433	($1,537)	($106,200)	$920	($178,291)	$106,200	$0	$106,200	$258,963	$1,278,467	$1,478,467	$200,000
$13,753	$108,016	$0	$202,000	($93,984)	$384	($1,153)	($92,831)	$969	($177,322)	$92,831	$0	$92,831	$290,435	$1,295,292	$1,495,292	$200,000
$13,753	$121,768	$0	$202,000	($80,232)	$335	($818)	($79,413)	$1,018	($176,304)	$79,413	$0	$79,413	$304,852	$1,315,767	$1,515,767	$200,000
$13,753	$135,521	$0	$202,000	($66,479)	$286	($533)	($65,946)	$1,067	($175,237)	$65,946	$0	$65,946	$236,861	$1,343,902	$1,543,902	$200,000
		$90,000			($6,033)											

Exhibit ___ (AED-2CU)
Workpapers
Page 7 of 7
Witness: A.E. Dinkel III

Testimony of
Maureen P. Heaphy

Before the Public Service Commission

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Supplemental Testimony

of

Maureen P. Heaphy

Dated: May 3, 2010

Testimony of Maureen P. Heaphy

Q. Please state your name.

A. My name is Maureen Heaphy.

Q. Are you the same Maureen Heaphy who previously submitted testimony in this proceeding?

A. Yes. I provided direct testimony as part of Niagara Mohawk Power Corporation's ("Niagara Mohawk" or "the Company") January 29, 2010 filing.

Q. What is the purpose of your supplemental testimony?

A. My supplemental testimony supports certain updates that affect Niagara Mohawk's compensation and benefits costs as reflected in the Company's base rate increase filing in this proceeding. Specifically, my testimony supports a revised non-union wage increase effective July 1, 2010, a reduction in non-union overtime costs that will also take effect July 1, 2010 and an increase in the cost of matching non-union employee 401-K contributions that will take effect January 1, 2011.

Q. What is the revised non-union wage increase?

A. The Company has now determined that management wages will increase by 2.3% effective July 1, 2010, rather than 3.0% as reflected in the

Company's January rate filing. Moreover, the Company will align its policies on overtime pay, a change that is expected to reduce the amount of overtime expense. This change will also be implemented July 1, 2010.

Q. Why did the Company make these changes?

A. Based on the current economic climate and a review of updated compensation studies, the Company determined that it was appropriate to reduce the size of the 2010 wage increase and to modify the overtime policy and discontinue the policy for certain non-union employees. The increase of 2.3% reflects a general increase of 2.0% and 0.3% to make market adjustments to individual salaries that are below market levels. As stated above, the change to the overtime policy is a result of the alignment of Company policies.

Q. Have you provided this information to the Revenue Requirements Panel?

A. Yes. The impact of these changes is being reflected in the Revenue Requirements Panel's update. The change in management wages will reduce Niagara Mohawk's labor expenses by $782,000 in 2011, $806,600 in 2012 and $830,800 in 2013. Moreover, these changes will also reduce the amount of the variable pay expense forecast for the rate years by

$117,700 in 2011, $118,900 in 2012 and $122,500 in 2013. The changes in the overtime policy will reduce Niagara Mohawk's labor expenses by $605,200 in 2011, $625,400 in 2012 and $643,900 in 2013.

Q. Have your forecasts of management wage increases in 2011-2013 changed as well since the Company's January filing?

A. No. They have not.

Q. What changes is the Company proposing in its 401-K plan for non-union employees?

A. Generally speaking, National Grid matches 50% of the first 6% on a employees contribution to the 401-K plan up to a maximum of 3% of either the employees' base or total salary. Effective January 1, 2011, the new matching formula will be 50% of the first 8% of total salary. This change will increase Niagara Mohawk's 401-K plan costs by approximately $1,022,000 in 2011, $1,040,500 in 2012, and $1,060,200 in 2013. These changes are also being reflected in the Revenue Requirements Panel's update.

Q. When did the Company decide to make this change?

A. The change was approved by senior management on March 18, 2010.

Q. Why is National Grid making this change?

A. The Company is continuing its efforts to align benefits and provide its non-union employees with a common benefits platform that is market competitive. The enhanced Company match on the 401-K plan achieves this objective and also encourages greater participation in the 401-K plan so that employees will take greater responsibility for funding their own retirements. In today's business environment, it is important to offer today's more mobile workers portable benefits such as a 401-K plan.

Q. Is the Company contemplating any other changes to its post-employment benefits?

A. Yes. As I stated in my direct testimony, National Grid is currently reviewing all post-employment benefits. While final decisions have not been made, we will update the parties to this case if and when further changes become known and measurable.

Q. Are there any other updates that may affect the Company's compensation and benefits costs in the near future?

A. Yes. It is likely that the recently enacted health care reform legislation will affect National Grid's costs and benefits. The impact could be significant. We are currently analyzing the impact of the legislation and

will update the parties when the impact is known. The Revenue Requirements Panel will discuss the Company's proposal to address these costs in its update.

Q. Does that conclude your supplemental testimony?

A. Yes it does.

Testimony of
Alfred P. Morrissey, Jr.

Before the Public Service Commission

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Updates and Corrections Testimony

of

Dr. Alfred P. Morrissey

Lead Analyst of Electric Load Forecasting

Dated: May 3, 2010

Testimony of Dr. Alfred P. Morrissey

Table of Contents

I. Introduction

Q. Please state your name.

A. My name is Alfred P. Morrissey.

Q. Are you the same Alfred P. Morrissey who previously provided testimony in this proceeding?

A. Yes. I provided direct testimony as part of the Company's January 29, 2010 filing.

Q. What is the purpose of your updates and corrections testimony?

A. The purpose of my update and corrections testimony is to identify and explain certain updates and/or corrections to my testimony and exhibits from the January 29, 2010 filing.

Q. Are you sponsoring any exhibits through your updates and corrections testimony?

A. Yes. I sponsor 12 exhibits: Exhibits __ (APM-1CU) through (APM-10CU) are updates to the gWh sales, customer count and demand-side management ("DSM") forecast exhibits provided in my January 29, 2010 testimony. Exhibit __ (APM-13CU) provides work papers showing the updated

econometric models. Exhibit __ (APM-14CU) consists of new work papers showing the calculation of forecasted DSM savings.

Q. What updates and/or corrections do you have to your January 29, 2010 testimony and exhibits?

A. I have updates to the econometric forecast of gWh sales before demand-side management (DSM) savings; and corrections and updates to the DSM savings forecast.

II. <u>Econometric Sales Forecast Updates</u>

Q. Would you please describe the updates you are proposing to the Company's econometric forecast of gWh sales before DSM?

A. The forecast in my January 29, 2010 testimony was based on actual gWh sales and customer count data through July 2009 and Moody's economic forecast released in July 2009. The updated forecast is based on actual gWh sales and customer count data through December 2009 and Moody's economic forecast released in January 2010. Also, the geographical area of Moody's regional economic forecast for Upstate New York was fine-tuned to more closely match the Company's service area. Specifically, the Moody's regional economic forecast used to drive the gWh sales forecast in my January 29, 2010 testimony consisted of all of Upstate New York, including certain areas

not served by the Company. For this update, just the specific metropolitan areas and counties in the Company's service area were used.

Q. What metropolitan areas and counties were used in the update?

A. The updated geography includes all of the Albany, Buffalo, Syracuse, Utica and Glen Falls metropolitan areas; all of Moody's Adirondack area county grouping; all of Chautauqua county; 50% of Moody's Western New York county grouping; and 20% of the Rochester metropolitan area.

Q. Why did you change the geography of the regional economic forecast in this way?

A. We collected the actual and forecast metropolitan area and county level economic/demographic data from Moody's in order to comply with the PSC management audit recommendation to develop regional load forecasts. These metropolitan area and county economic/demographic forecasts were added to the service area level and used in the updated gWh sales forecast because a more accurate forecast of service area economic conditions should lead to a more accurate forecast of gWh sales.

Q. Did fine-tuning the geographical area of Moody's regional economic forecast in this way have a large impact on the gWh sales forecast?

A. No. While the levels of service area employment, income, real GDP, population and other economic/demographic variables are lower for the service area than for all of Upstate New York, these variables follow much the same pattern in both regions. In econometric regression analyses, only the pattern of the explanatory variables – that is, their variation and correlation with the dependent variable – matter, not their level.

Q. How does Moody's January economic forecast compare to its July forecast?

A. Moody's lowered its forecast of employment and population; raised its forecast of real personal income for all years except 2013; and raised its forecast of real GDP. This is true for both Upstate New York as a whole and the sum of the metropolitan areas and counties that were used in this update. The updated regional economic forecast is summarized in Exhibit __ (APM-4CU).

Q. What was the impact of using the updated service area economic forecast, along with actual gWh sales data through December 2009, on the econometric forecast of gWh sales?

A. The econometric models were re-estimated using gWh sales, customer count and economic/data through December 2009 and used to produce the updated

forecast from the new service area economic outlook. The SC1 forecast, which is driven primarily by real personal income, is now higher in all years except 2013. The SC2ND forecast, which is driven primarily by population, is slightly lower in all years. Service classes SC2D, SC3 and SC3A, which are driven primarily by real GDP, are higher in all forecast years. Forecasted gWh sales to customers taking service from NYPA, which are based on actual sales for the 12-month period ending December 2009, are significantly lower in all forecast years. In total, gWh sales are lower in all forecast years because of the impact of the updated NYPA sales forecast. The annual differences by service class are shown in the following table:

Updated Econometric Forecast Minus Original Econometric Forecast (GWh Before DSM)

	SC1	SC2ND	SC2D	SC3	SC3a	NYPA & Other	Total
2010	185	-1	22	121	23	-400	-49
2011	168	-3	29	144	33	-401	-29
2012	47	-7	27	143	41	-401	-149
2013	-107	-10	28	147	48	-401	-296

The updated econometric forecast of gWh sales before DSM is shown in Exhibit __ (APM-1CU), Exhibit __ (APM-2CU), Exhibit __ (APM-6CU) and Exhibit __ (APM-7CU). The updated customer forecast is shown in Exhibit __ (APM-8CU). The updated work papers in Exhibit __ (APM-13CU) show

the econometric models, re-estimated using actual sales data through December 2009 along with the updated regional economic/demographic variables.

III. Corrections and Updates to the DSM Savings Forecast

Q. Would you please describe the corrections and updates to the DSM savings forecast?

A. Following discussions with Richard Brash of the DPS Staff, two adjustments were made to the DSM savings forecast, as described in response to IR NM 442, DPS-290, RB-1. The first adjustment was made to reflect conventional assumptions about the timing of when savings from new electric efficiency programs are realized. The second adjustment removed savings for 2012 and 2013 related to potential future participation for programs that have not yet been considered by the Commission for implementation in those years. The original forecast assumed a continuation of current program savings levels in 2012 and 2013. Since programs for these future years have not been presented to the Commission for approval, the energy savings associated with continuation of those programs have been removed from the revised DSM forecast. The gWh difference between the corrected DSM forecast and the original DSM forecast is shown in IR NM 442, DPS-290, RB-1. These

differences are reflected in the DSM savings amounts shown in Exhibit __ (APM-9CU).

Q. Were there any other updates to the DSM savings forecast?

A. Yes. The DSM savings forecast in my January 29, 2010 testimony included only approved Company-sponsored electric efficiency programs with a final Order from the Commission establishing savings amounts. Since the filing, the Company has received final Orders for the three other approved programs, namely the three residential programs described in my direct testimony. Savings amounts from these Orders have been incorporated into the updated DSM forecast. Savings from these programs are included in the savings amounts shown in Exhibit __ (APM-9CU).

Also, the original DSM forecast did not include any incremental savings from NYSERDA's expanded energy efficiency initiatives related to the Commission's Energy Efficiency Portfolio Standard (EEPS) program for New York. The Company had limited information about savings amounts from these initiatives at the time. Since the rate case filing, the Company has obtained the State Administrative Procedures Act (SAPA) notice for the Commission's EEPS programs, published in the February 2010 NYS Register regarding re-balancing of electric and gas energy efficiency program

portfolios. The updated DSM forecast includes NYSERDA savings amounts for Niagara Mohawk from this SAPA notice. These programs and their estimated savings amounts are shown in my Exhibit __ (APM-14CU) work papers.

Q. How was the final DSM adjustment to the econometric forecast of gWh sales calculated from the updated DSM forecast?

A. Exhibit __ (APM-14CU) details the calculation of the updated DSM forecast and the adjustments to the econometric forecast. The half-year convention was applied to all annual savings amounts, including those from NYSERDA programs. There was no update to the allocators used to map savings from Company-sponsored programs to service classes. For the NYSERDA programs, residential savings were allocated to service class SC1 while business program savings were allocated to service classes SC2ND, SC2D, SC3 and SC3A based on the econometric forecast of service class load in these service classes before DSM. After cumulative DSM savings were calculated for all years, 2009 through 2013, incremental DSM was calculated as the difference between savings in the forecast year and savings in 2009. This is because actual 2009 savings achieved are included in the actual 2009 sales data used in the update. These incremental DSM amounts, presented in Exhibit __ (APM-10CU), were subtracted from the econometric forecast.

Q. Please summarize the difference between the updated DSM adjustment to the econometric forecast and the DSM adjustment in your January 29, 2010 testimony.

A. The differences are shown below:

Updated DSM Forecast Minus Original DSM Forecast (Difference in GWh Savings)

	SC1	SC2ND	SC2D	SC3	SC3a	NYPA & Other	Total
2010	105	2	14	-6	4	0	118
2011	249	6	40	3	18	0	316
2012	343	7	56	-50	5	0	361
2013	358	8	63	-96	-10	0	322

Q. Please summarize the difference between the updated forecast of gWh sales with DSM and the same forecast presented in your January 29, 2010 testimony.

A. The differences are shown below:

Updated Sales Forecast Minus Original Sales Forecast (GWh With DSM)

	SC1	SC2ND	SC2D	SC3	SC3a	NYPA & Other	Total
2010	81	-3	8	128	19	-400	-168
2011	-80	-9	-11	142	15	-401	-344
2012	-296	-14	-28	193	36	-401	-509
2013	-465	-18	-36	244	57	-401	-618

Q. How are these differences reflected in the Company's proposed rate request?

A. The updated sales forecast, which reflects these differences, was used by the Revenue Requirement panel to update its revenue requirement forecast.

IV. Conclusion

Q. Does that conclude your testimony?

A. Yes it does.

Exhibits of
Alfred P. Morrissey, Jr.

Index of Exhibits

Exhibit __ (APM-1CU)

Summary of Results

Niagara Mohawk Power Company -- Actual and Forecast GWh Sales Before DSM

Exhibit___(APM-1CU)
Page 1 of 1

Year	Residential	Growth Rate	General Service	Growth Rate	Large Time-of-Use	Growth Rate	NYPA & Other	Growth Rate	Total	Growth Rate
1990	10,168		11,190		8,082		4,357		33,798	
1991	10,179	0.1%	11,208	0.2%	7,923	-2.0%	4,048	-7.1%	33,358	-1.3%
1992	10,254	0.7%	11,132	-0.7%	7,852	-0.9%	4,119	1.8%	33,357	0.0%
1993	10,334	0.8%	11,238	1.0%	7,735	-1.5%	4,222	2.5%	33,529	0.5%
1994	10,277	-0.6%	11,152	-0.8%	7,804	0.9%	4,553	7.8%	33,785	0.8%
1995	10,018	-2.5%	11,099	-0.5%	7,347	-5.9%	4,552	0.0%	33,016	-2.3%
1996	10,074	0.6%	11,044	-0.5%	7,463	1.6%	4,823	6.0%	33,404	1.2%
1997	9,871	-2.0%	10,910	-1.2%	7,639	2.4%	5,002	3.7%	33,422	0.1%
1998	9,714	-1.6%	10,837	-0.7%	7,682	0.6%	5,178	3.5%	33,411	0.0%
1999	10,324	6.3%	11,458	5.7%	7,643	-0.5%	5,326	2.8%	34,750	4.0%
2000	10,083	-2.3%	10,989	-4.1%	7,948	4.0%	5,273	-1.0%	34,294	-1.3%
2001	10,213	1.3%	10,517	-4.3%	6,990	-12.1%	6,158	16.8%	33,878	-1.2%
2002	10,617	3.9%	10,588	0.7%	6,952	-0.5%	5,883	-4.5%	34,039	0.5%
2003	10,890	2.6%	10,679	0.9%	6,829	-1.8%	5,640	-4.1%	34,037	0.0%
2004	10,924	0.3%	10,979	2.8%	7,112	4.1%	5,435	-3.6%	34,450	1.2%
2005	11,599	6.2%	11,529	5.0%	6,983	-1.8%	5,121	-5.8%	35,233	2.3%
2006	11,127	-4.1%	11,254	-2.4%	6,959	-0.3%	4,905	-4.2%	34,246	-2.8%
2007	11,348	2.0%	11,529	2.4%	6,972	0.2%	4,737	-3.4%	34,585	1.0%
2008	11,172	-1.6%	11,415	-1.0%	6,858	-1.6%	4,579	-3.3%	34,023	-1.6%
2009	11,112	-0.5%	11,116	-2.6%	6,397	-6.7%	4,031	-12.0%	32,655	-4.0%
Forecast										
2010	11,327	1.9%	11,324	1.9%	6,369	-0.4%	4,031	0.0%	33,051	1.2%
2011	11,370	0.4%	11,505	1.6%	6,408	0.6%	4,031	0.0%	33,314	0.8%
2012	11,461	0.8%	11,804	2.6%	6,473	1.0%	4,031	0.0%	33,769	1.4%
2013	11,551	0.8%	12,023	1.9%	6,521	0.7%	4,031	0.0%	34,126	1.1%
Compound Annual Growth Rates:										
1990-2008 18-yr		0.5%		0.1%		-0.9%		0.3%		0.0%
1990-2009 19-yr		0.5%		0.0%		-1.2%		-0.4%		-0.2%
1991-1995 4-yr		-0.4%		-0.2%		-1.9%		3.0%		-0.3%
1995-1999 4-yr		0.8%		0.8%		1.0%		4.0%		1.3%
2001-2005 4-yr		3.2%		2.3%		0.0%		-4.5%		1.0%
2005-2009 4-yr		-1.1%		-0.9%		-2.2%		-5.8%		-1.9%
2009-2013 4-yr		1.0%		2.0%		0.5%		0.0%		1.1%

Exhibit ___ (APM-1CU)
Page 1 of 1

Exhibit __ (APM-2CU)

Forecast Compared to Weather-Normalized Historic Sales Data

Niagara Mohawk Power Company -- Weather-Normalized and Forecast GWh Sales Before DSM **Exhibit___(APM-2CU)**
Page 1 of 1

Year	Residential	Growth Rate	General Service	Growth Rate	Large Time-of-Use	Growth Rate	NYPA & Other	Growth Rate	Total	Growth Rate
1990	10,237		11,201		8,082		4,357		33,877	
1991	10,191	-0.5%	11,135	-0.6%	7,923	-2.0%	4,048	-7.1%	33,297	-1.7%
1992	10,408	2.1%	11,300	1.5%	7,852	-0.9%	4,119	1.8%	33,681	1.2%
1993	10,247	-1.6%	11,172	-1.1%	7,735	-1.5%	4,222	2.5%	33,376	-0.9%
1994	10,159	-0.9%	11,085	-0.8%	7,804	0.9%	4,553	7.8%	33,601	0.7%
1995	9,949	-2.1%	11,023	-0.6%	7,347	-5.9%	4,552	0.0%	32,872	-2.2%
1996	10,013	0.6%	11,038	0.1%	7,463	1.6%	4,823	6.0%	33,338	1.4%
1997	9,980	-0.3%	11,027	-0.1%	7,639	2.4%	5,002	3.7%	33,648	0.9%
1998	9,922	-0.6%	10,923	-0.9%	7,682	0.6%	5,178	3.5%	33,704	0.2%
1999	10,298	3.8%	11,386	4.2%	7,643	-0.5%	5,326	2.8%	34,653	2.8%
2000	10,220	-0.8%	11,122	-2.3%	7,948	4.0%	5,273	-1.0%	34,564	-0.3%
2001	10,255	0.3%	10,511	-5.5%	6,990	-12.1%	6,158	16.8%	33,915	-1.9%
2002	10,516	2.5%	10,450	-0.6%	6,952	-0.5%	5,883	-4.5%	33,801	-0.3%
2003	10,842	3.1%	10,680	2.2%	6,829	-1.8%	5,640	-4.1%	33,991	0.6%
2004	11,036	1.8%	11,078	3.7%	7,112	4.1%	5,435	-3.6%	34,660	2.0%
2005	11,298	2.4%	11,252	1.6%	6,983	-1.8%	5,121	-5.8%	34,655	0.0%
2006	11,249	-0.4%	11,290	0.3%	6,959	-0.3%	4,905	-4.2%	34,403	-0.7%
2007	11,277	0.3%	11,442	1.4%	6,972	0.2%	4,737	-3.4%	34,428	0.1%
2008	11,220	-0.5%	11,446	0.0%	6,858	-1.6%	4,579	-3.3%	34,103	-0.9%
2009	11,251	0.3%	11,247	-1.7%	6,397	-6.7%	4,031	-12.0%	32,926	-3.5%
Forecast										
2010	11,327	0.7%	11,324	0.7%	6,369	-0.4%	4,031	0.0%	33,051	0.4%
2011	11,370	0.4%	11,505	1.6%	6,408	0.6%	4,031	0.0%	33,314	0.8%
2012	11,461	0.8%	11,804	2.6%	6,473	1.0%	4,031	0.0%	33,769	1.4%
2013	11,551	0.8%	12,023	1.9%	6,521	0.7%	4,031	0.0%	34,126	1.1%
Compound Annual Growth Rates:										
1990-2008 18-yr		0.5%		0.1%		-0.9%		0.3%		0.0%
1990-2009 19-yr		0.5%		0.0%		-1.2%		-0.4%		-0.1%
1991-1995 4-yr		-0.6%		-0.3%		-1.9%		3.0%		-0.3%
1995-1999 4-yr		0.9%		0.8%		1.0%		4.0%		1.3%
2001-2005 4-yr		2.5%		1.7%		0.0%		-4.5%		0.5%
2005-2009 4-yr		-0.1%		0.0%		-2.2%		-5.8%		-1.3%
2009-2013 4-yr		0.7%		1.7%		0.5%		0.0%		0.9%

Exhibit__ (APM-2CU)
Page 1 of 1

Exhibit __ (APM-3CU)

Exhibit __ (APM-3CU)

Actual 2009 Sales Growth

Actual GWh Sales Growth -- 2009 Versus 2008 **Exhibit___(APM-3CU)**
Page 1 of 1

	Actual			Weather-Normalized		
	2008	**2009**	**Growth**	**2008**	**2009**	**Growth**
Service Class Breakdown						
Residential						
SC1 &SC1TOU	11,172	11,112	-0.5%	11,220	11,251	0.3%
General Service						
SC2ND	635	626	-1.4%	638	634	-0.6%
SC2D	4,390	4,300	-2.1%	4,403	4,365	-0.9%
SC3	6,389	6,189	-3.1%	6,405	6,247	-2.5%
Total	11,415	11,116	-2.6%	11,446	11,247	-1.7%
Large Time-of-Use						
SC3A	4,154	4,239	2.0%	4,154	4,239	2.0%
SC4	305	310	1.7%	305	310	1.7%
SC7	411	438	6.6%	411	438	6.6%
SC11&12	1,989	1,411	-29.1%	1,989	1,411	-29.1%
Total	6,858	6,397	-6.7%	6,858	6,397	-6.7%
NYPA						
Repl & Expansion	3,787	3,418	-9.7%	3,787	3,418	-9.7%
PFJ & Econ Dev	579	402	-30.6%	579	402	-30.6%
Total	4,366	3,820	-12.5%	4,366	3,820	-12.5%
Streetlighting and Border Sales						
Streetlighting	208	206	-0.8%	208	206	-0.8%
Border Sales	5	5	-1.4%	5	5	-1.4%
Total	213	212	-0.8%	213	212	-0.8%
Grand Total	34,023	32,655	-4.0%	34,103	32,926	-3.5%
Market Class Breakdown	4,579	4,031		4,579	4,031	
Residential	11,192	11,131	-0.5%	11,240	11,270	0.3%
Commercial	12,974	12,655	-2.5%	13,005	12,786	-1.7%
Industrial	9,669	8,683	-10.2%	9,669	8,683	-10.2%
Streetlighting	183	182	-0.6%	183	182	-0.6%
Border Sales	5	5	-1.4%	5	5	-1.4%
Grand Total	34,023	32,655	-4.0%	34,103	32,926	-3.5%

Exhibit __ (APM-4CU)

Exhibit __ (APM-4CU)

Summary of Service Area Economic Forecast

Year	Total Employment (000's)	Growth Rate	Non Manufacturing Employment (000's)	Growth Rate	Manufacturing Employment (000's)	Growth Rate	Real Personal Income ($bill)	Growth Rate	Gross State Product ($bill)	Growth Rate	Population (000's)	Growth Rate
1990	1,833.2		1,549.6		283.6		104,841.9		121,186.8		4,135.4	
1991	1,787.7	-2.5%	1,518.7	-2.0%	269.0	-5.2%	103,166.5	-1.6%	119,611.3	-1.3%	4,161.8	0.6%
1992	1,774.0	-0.8%	1,512.1	-0.4%	261.8	-2.7%	105,163.5	1.9%	121,243.9	1.4%	4,182.7	0.5%
1993	1,789.3	0.9%	1,533.8	1.4%	255.4	-2.4%	105,212.4	0.0%	122,472.5	1.0%	4,195.6	0.3%
1994	1,812.8	1.3%	1,558.5	1.6%	254.2	-0.5%	106,512.3	1.2%	125,522.9	2.5%	4,196.8	0.0%
1995	1,824.8	0.7%	1,568.8	0.7%	256.0	0.7%	107,755.8	1.2%	126,132.6	0.5%	4,183.4	-0.3%
1996	1,820.0	-0.3%	1,567.6	-0.1%	252.4	-1.4%	109,142.0	1.3%	128,359.0	1.8%	4,166.9	-0.4%
1997	1,835.3	0.8%	1,584.2	1.1%	251.1	-0.5%	112,022.2	2.6%	134,433.1	4.7%	4,141.7	-0.6%
1998	1,854.5	1.0%	1,602.3	1.1%	252.3	0.5%	115,871.1	3.4%	137,775.5	2.5%	4,123.3	-0.4%
1999	1,892.4	2.0%	1,643.5	2.6%	248.9	-1.3%	117,640.9	1.5%	142,484.0	3.4%	4,116.1	-0.2%
2000	1,915.0	1.2%	1,670.9	1.7%	244.1	-1.9%	120,891.0	2.8%	145,851.3	2.4%	4,113.7	-0.1%
2001	1,898.9	-0.8%	1,666.0	-0.3%	233.0	-4.5%	121,382.9	0.4%	146,679.1	0.6%	4,104.1	-0.2%
2002	1,895.9	-0.2%	1,680.8	0.9%	215.1	-7.7%	121,930.7	0.5%	150,391.3	2.5%	4,102.1	0.0%
2003	1,883.9	-0.6%	1,680.7	0.0%	203.2	-5.5%	124,073.5	1.8%	152,218.1	1.2%	4,102.8	0.0%
2004	1,893.6	0.5%	1,695.0	0.8%	198.6	-2.3%	127,106.8	2.4%	155,605.0	2.2%	4,101.3	0.0%
2005	1,903.9	0.5%	1,709.6	0.9%	194.3	-2.2%	127,158.0	0.0%	160,277.3	3.0%	4,090.2	-0.3%
2006	1,907.9	0.2%	1,716.1	0.4%	191.8	-1.3%	130,607.1	2.7%	165,757.2	3.4%	4,081.5	-0.2%
2007	1,914.0	0.3%	1,726.6	0.6%	187.4	-2.3%	134,874.2	3.3%	169,494.4	2.3%	4,075.8	-0.1%
2008	1,922.1	0.4%	1,740.6	0.8%	181.5	-3.2%	134,014.6	-0.6%	168,638.5	-0.5%	4,075.1	0.0%
2009	1,880.1	-2.2%	1,710.2	-1.7%	169.9	-6.4%	128,952.3	-3.8%	164,878.2	-2.2%	4,073.1	0.0%
Forecast												
2010	1,852.1	-1.5%	1,690.0	-1.2%	162.1	-4.6%	128,757.8	-0.2%	166,945.7	1.3%	4,072.7	0.0%
2011	1,868.2	0.9%	1,708.2	1.1%	159.9	-1.3%	131,071.5	1.8%	170,483.5	2.1%	4,071.8	0.0%
2012	1,930.7	3.3%	1,769.2	3.6%	161.5	1.0%	136,009.9	3.8%	176,352.0	3.4%	4,070.2	0.0%
2013	2,008.2	4.0%	1,843.4	4.2%	164.7	2.0%	140,953.1	3.6%	180,697.6	2.5%	4,068.4	0.0%
		6.7%		7.7%		-2.9%		9.0%		9.3%		
Compound Annual Growth Rates:												
1990-2008 18-yr		0.3%		0.6%		-2.4%		1.4%		1.9%		-0.1%
1990-2009 19-yr		0.1%		0.5%		-2.7%		1.1%		1.6%		-0.1%
1991-1995 4-yr		0.5%		0.8%		-1.2%		1.1%		1.3%		0.1%
1995-1999 4-yr		0.9%		1.2%		-0.7%		2.2%		3.1%		-0.4%
2001-2005 4-yr		0.1%		0.6%		-4.4%		1.2%		2.2%		-0.1%
2005-2009 4-yr		-0.3%		0.0%		-3.3%		0.4%		0.7%		-0.1%
2009-2013 4-yr		1.7%		1.9%		-0.8%		2.2%		2.3%		0.0%

Source: Moody's Economy.com (January 2010)

Exhibit ___ (APM-4CU)
Page 1 of 1

Exhibit __ (APM-5CU)

Exhibit __ (APM-5CU)

Summary of Other Exogenous Variables

Niagara Mohawk Power Company GWh Sales Forecast **Exhibit___(APM-5CU)**
Upstate New York Weather and Number of Days Billed **Page 1 of 1**

Year	CDD	Growth Rate	HDD	Growth Rate	Number of Days Billed	Growth Rate
1990	632		6,172		364.2	
1991	767	21.4%	5,961	-3.4%	365.4	0.3%
1992	345	-55.0%	6,895	15.7%	365.5	0.0%
1993	640	85.5%	6,851	-0.6%	366.7	0.3%
1994	605	-5.5%	7,032	2.6%	365.3	-0.4%
1995	685	13.2%	6,569	-6.6%	365.5	0.0%
1996	524	-23.5%	7,064	7.5%	364.1	-0.4%
1997	419	-20.0%	6,815	-3.5%	365.6	0.4%
1998	609	45.3%	5,722	-16.0%	364.7	-0.2%
1999	729	19.7%	6,211	8.5%	365.9	0.3%
2000	419	-42.5%	6,667	7.3%	365.3	-0.2%
2001	648	54.7%	6,231	-6.5%	364.2	-0.3%
2002	806	24.4%	6,235	0.1%	365.4	0.3%
2003	533	-33.9%	6,989	12.1%	365.6	0.1%
2004	471	-11.6%	6,579	-5.9%	365.9	0.1%
2005	915	94.3%	6,636	0.9%	365.4	-0.2%
2006	643	-29.7%	5,937	-10.5%	364.6	-0.2%
2007	716	11.4%	6,432	8.3%	364.3	-0.1%
2008	563	-21.4%	6,512	1.2%	365.3	0.3%
2009	396	-29.7%	6,709	3.0%	365.6	0.1%
Forecast						
2010	586	48.2%	6,615	-1.4%	365.2	-0.1%
2011	586	0.0%	6,615	0.0%	365.3	0.0%
2012	586	0.0%	6,615	0.0%	365.4	0.0%
2013	586	0.0%	6,615	0.0%	365.4	0.0%

Exhibit ___ (APM-5CU)
Page 1 of 1

Exhibit __ (APM-6CU)

Sales Forecast vs. Historic Sales

Niagara Mohawk Power Company -- Actual and Forecast GWh Sales Before DSM
By Service Class

Exhibit___(APM-6CU)
Page 1 of 1

	RESIDENTIAL		GENERAL SERVICE						LARGE TIME OF USE								NYPA & OTHER						TOTAL	
Year	SC1	Growth Rate	SC2ND	Growth Rate	SC2D	Growth Rate	SC3	Growth Rate	SC3A	Growth Rate	SC4	Growth Rate	SC7	Growth Rate	SC11_12	Growth Rate	Repl & Expan	Growth Rate	PFJ & EDP	Growth Rate	SL & Border	Growth Rate	Total	Growth Rate
1994	10,277		606		3,853		6,693		4,249		1,029		12		2,515		4,118		185		250		33,785	
1995	10,018	-2.5%	619	2.2%	3,910	1.5%	6,570	-1.8%	3,715	-12.6%	1,048	1.8%	26	123.6%	2,558	1.7%	4,054	-1.6%	251	35.5%	248	-0.7%	33,016	-2.3%
1996	10,074	0.6%	681	10.0%	3,905	-0.1%	6,458	-1.7%	3,500	-5.8%	671	-35.9%	45	71.2%	3,247	26.9%	4,326	6.7%	245	-2.4%	253	2.0%	33,404	1.2%
1997	9,871	-2.0%	662	-2.8%	3,917	0.3%	6,331	-2.0%	3,356	-4.1%	358	-46.7%	29	-35.1%	3,896	20.0%	4,507	4.2%	236	-3.7%	259	2.7%	33,422	0.1%
1998	9,714	-1.6%	611	-7.7%	3,949	0.8%	6,277	-0.8%	3,196	-4.8%	373	4.1%	45	54.8%	4,068	4.4%	4,568	1.4%	328	39.2%	282	8.6%	33,411	0.0%
1999	10,324	6.3%	691	13.2%	4,142	4.9%	6,625	5.5%	3,697	15.7%	466	25.0%	30	-32.2%	3,449	-15.2%	4,506	-1.4%	590	79.9%	230	-18.5%	34,750	4.0%
2000	10,083	-2.3%	716	3.5%	4,035	-2.6%	6,237	-5.8%	3,789	2.5%	462	-1.0%	0	na	3,698	7.2%	4,285	-4.9%	762	29.2%	226	-1.4%	34,294	-1.3%
2001	10,213	1.3%	692	-3.3%	4,100	1.6%	5,725	-8.2%	3,908	3.2%	248	-46.3%	0	na	2,834	-23.4%	4,653	8.6%	1,277	67.5%	228	0.6%	33,878	-1.2%
2002	10,617	3.9%	701	1.3%	4,157	1.4%	5,730	0.1%	3,825	-2.1%	250	0.8%	104	na	2,774	-2.1%	4,213	-9.5%	1,441	12.9%	228	0.2%	34,039	0.5%
2003	10,890	2.6%	702	0.2%	4,225	1.6%	5,752	0.4%	3,857	0.8%	286	14.4%	204	96.8%	2,482	-10.5%	3,963	-5.9%	1,450	0.6%	227	-0.6%	34,037	0.0%
2004	10,924	0.3%	685	-2.4%	4,286	1.4%	6,008	4.5%	3,799	-1.5%	320	12.1%	548	168.3%	2,445	-1.5%	3,806	-4.0%	1,403	-3.2%	225	-0.9%	34,450	1.2%
2005	11,599	6.2%	685	-0.1%	4,503	5.1%	6,342	5.6%	4,009	5.5%	297	-7.2%	399	-27.2%	2,278	-6.8%	3,823	0.4%	1,077	-23.3%	222	-1.4%	35,233	2.3%
2006	11,127	-4.1%	647	-5.5%	4,368	-3.0%	6,239	-1.6%	3,862	-3.7%	282	-5.1%	457	14.5%	2,359	3.5%	3,778	-1.2%	908	-15.7%	219	-1.3%	34,246	-2.8%
2007	11,348	2.0%	650	0.4%	4,454	2.0%	6,424	3.0%	4,071	5.4%	282	0.3%	409	-10.6%	2,210	-6.3%	3,758	-0.5%	764	-15.8%	215	-2.0%	34,585	1.0%
2008	11,172	-1.6%	635	-2.2%	4,390	-1.4%	6,389	-0.5%	4,154	2.0%	305	8.0%	411	0.4%	1,989	-10.0%	3,787	0.8%	579	-24.3%	213	-0.6%	34,023	-1.6%
2009	11,112	-0.5%	626	-1.4%	4,300	-2.1%	6,189	-3.1%	4,239	2.0%	310	1.7%	438	6.6%	1,411	-29.1%	3,418	-9.7%	402	-30.6%	212	-0.8%	32,655	-4.0%
Forecast																								
2010	11,327	1.9%	638	1.8%	4,369	1.6%	6,317	2.1%	4,210	-0.7%	310	0.0%	438	0.0%	1,411	0.0%	3,418	0.0%	402	0.0%	212	0.1%	33,051	1.2%
2011	11,370	0.4%	636	-0.3%	4,416	1.1%	6,453	2.2%	4,249	0.9%	310	0.0%	438	0.0%	1,411	0.0%	3,418	0.0%	402	0.0%	212	0.0%	33,314	0.8%
2012	11,461	0.8%	633	-0.5%	4,493	1.8%	6,678	3.5%	4,314	1.5%	310	0.0%	438	0.0%	1,411	0.0%	3,418	0.0%	402	0.0%	212	0.0%	33,769	1.4%
2013	11,551	0.8%	630	-0.6%	4,550	1.3%	6,843	2.5%	4,363	1.1%	310	0.0%	438	0.0%	1,411	0.0%	3,418	0.0%	402	0.0%	212	0.0%	34,126	1.1%
Compound Annual Growth Rates:																								
2005-2009 4-yr		-1.1%		-2.2%		-1.1%		-0.6%		1.4%		1.1%		2.3%		-11.3%		-2.8%		-21.8%		-1.2%		-1.9%
2009-2013 4-yr		1.0%		0.1%		1.4%		2.5%		0.7%		0.0%		0.0%		0.0%		0.0%		0.0%		0.0%		1.1%

Exhibit ___ (APM-6CU)
Page 1 of 1

Exhibit __ (APM-7CU)

Sales Forecast vs. Weather-Normalized Sales

Niagara Mohawk Power Company -- Weather-Normalized and Forecast GWh Sales Before DSM
By Service Class

	RESIDENTIAL		GENERAL SERVICE						LARGE TIME OF USE								NYPA & OTHER						TOTAL	
Year	SC1	Growth Rate	SC2ND	Growth Rate	SC2D	Growth Rate	SC3	Growth Rate	SC3A	Growth Rate	SC4	Growth Rate	SC7	Growth Rate	SC11_12	Growth Rate	Repl & Expan	Growth Rate	PFJ & EDP	Growth Rate	SL & Border	Growth Rate	Total	Growth Rate
1994	10,159		599		3,827		6,658		4,249		1,029		12		2,515		4,118		185		250		33,601	
1995	9,949	-2.1%	615	2.6%	3,873	1.2%	6,535	-1.9%	3,715	-12.6%	1,048	1.8%	26	123.6%	2,558	1.7%	4,054	-1.6%	251	35.5%	248	-0.7%	32,872	-2.2%
1996	10,013	0.6%	678	10.3%	3,909	0.9%	6,451	-1.3%	3,500	-5.8%	671	-35.9%	45	71.2%	3,247	26.9%	4,326	6.7%	245	-2.4%	253	2.0%	33,338	1.4%
1997	9,980	-0.3%	669	-1.4%	3,973	1.6%	6,385	-1.0%	3,356	-4.1%	358	-46.7%	29	-35.1%	3,896	20.0%	4,507	4.2%	236	-3.7%	259	2.7%	33,648	0.9%
1998	9,922	-0.6%	622	-7.0%	3,974	0.0%	6,326	-0.9%	3,196	-4.8%	373	4.1%	45	54.8%	4,068	4.4%	4,568	1.4%	328	39.2%	282	8.6%	33,704	0.2%
1999	10,298	3.8%	689	10.8%	4,103	3.2%	6,595	4.2%	3,697	15.7%	466	25.0%	30	-32.2%	3,449	-15.2%	4,506	-1.4%	590	79.9%	230	-18.5%	34,653	2.8%
2000	10,220	-0.8%	724	5.1%	4,098	-0.1%	6,300	-4.5%	3,789	2.5%	462	-1.0%	0	na	3,698	7.2%	4,285	-4.9%	762	29.2%	226	-1.4%	34,564	-0.3%
2001	10,255	0.3%	694	-4.2%	4,092	-0.1%	5,726	-9.1%	3,908	3.2%	248	-46.3%	0	na	2,834	-23.4%	4,653	8.6%	1,277	67.5%	228	0.6%	33,915	-1.9%
2002	10,516	2.5%	694	0.0%	4,088	-0.1%	5,669	-1.0%	3,825	-2.1%	250	0.8%	104	na	2,774	-2.1%	4,213	-9.5%	1,441	12.9%	228	0.2%	33,801	-0.3%
2003	10,842	3.1%	700	0.9%	4,230	3.5%	5,750	1.4%	3,857	0.8%	286	14.4%	204	96.8%	2,482	-10.5%	3,963	-5.9%	1,450	0.6%	227	-0.6%	33,991	0.6%
2004	11,036	1.8%	692	-1.1%	4,331	2.4%	6,054	5.3%	3,799	-1.5%	320	12.1%	548	168.3%	2,445	-1.5%	3,806	-4.0%	1,403	-3.2%	225	-0.9%	34,660	2.0%
2005	11,298	2.4%	666	-3.7%	4,375	1.0%	6,211	2.6%	4,009	5.5%	297	-7.2%	399	-27.2%	2,278	-6.8%	3,823	0.4%	1,077	-23.3%	222	-1.4%	34,655	0.0%
2006	11,249	-0.4%	653	-1.9%	4,373	0.0%	6,263	0.8%	3,862	-3.7%	282	-5.1%	457	14.5%	2,359	3.5%	3,778	-1.2%	908	-15.7%	219	-1.3%	34,403	-0.7%
2007	11,277	0.3%	645	-1.3%	4,412	0.9%	6,385	2.0%	4,071	5.4%	282	0.3%	409	-10.6%	2,210	-6.3%	3,758	-0.5%	764	-15.8%	215	-2.0%	34,428	0.1%
2008	11,220	-0.5%	638	-1.1%	4,403	-0.2%	6,405	0.3%	4,154	2.0%	305	8.0%	411	0.4%	1,989	-10.0%	3,787	0.8%	579	-24.3%	213	-0.6%	34,103	-0.9%
2009	11,251	0.3%	634	-0.6%	4,365	-0.9%	6,247	-2.5%	4,239	2.0%	310	1.7%	438	6.6%	1,411	-29.1%	3,418	-9.7%	402	-30.6%	212	-0.8%	32,926	-3.5%
Forecast																								
2010	11,327	0.7%	638	0.5%	4,369	0.1%	6,317	1.1%	4,210	-0.7%	310	0.0%	438	0.0%	1,411	0.0%	3,418	0.0%	402	0.0%	212	0.1%	33,051	0.4%
2011	11,370	0.4%	636	-0.3%	4,416	1.1%	6,453	2.2%	4,249	0.9%	310	0.0%	438	0.0%	1,411	0.0%	3,418	0.0%	402	0.0%	212	0.0%	33,314	0.8%
2012	11,461	0.8%	633	-0.5%	4,493	1.8%	6,678	3.5%	4,314	1.5%	310	0.0%	438	0.0%	1,411	0.0%	3,418	0.0%	402	0.0%	212	0.0%	33,769	1.4%
2013	11,551	0.8%	630	-0.6%	4,550	1.3%	6,843	2.5%	4,363	1.1%	310	0.0%	438	0.0%	1,411	0.0%	3,418	0.0%	402	0.0%	212	0.0%	34,126	1.1%
Compound Annual Growth Rates:																								
2005-2009 4-yr		-0.1%		-1.2%		-0.1%		0.1%		1.4%		1.1%		2.3%		-11.3%		-2.8%		-21.8%		-1.2%		-1.3%
2009-2013 4-yr		0.7%		-0.2%		1.0%		2.3%		0.7%		0.0%		0.0%		0.0%		0.0%		0.0%		0.0%		0.9%

Exhibit __ (APM-8CU)

Exhibit __ (APM-8CU)

Customer Forecast

Niagara Mohawk Power Company -- Actual and Forecast Customer Counts
By Service Class

Exhibit___(APM-8CU)
Page 1 of 1

	RESIDENTIAL		GENERAL SERVICE						LARGE TIME OF USE								NYPA & OTHER						TOTAL	
Year	SC1	Growth Rate	SC2ND	Growth Rate	SC2D	Growth Rate	SC3	Growth Rate	SC3A	Growth Rate	SC4	Growth Rate	SC7	Growth Rate	SC11_12	Growth Rate	Repl & Expan	Growth Rate	PFJ & EDP	Growth Rate	SL & Border	Growth Rate	Total	Growth Rate
1994	1,391,084		97,101		45,724		4,186		223		49		10		36		82		0		9,409		1,547,904	
1995	1,397,599	0.5%	98,621	1.6%	45,793	0.1%	4,301	2.8%	224	0.2%	49	0.7%	23	124.4%	34	-4.4%	83		0		6,979	-25.8%	1,553,707	0.4%
1996	1,403,017	0.4%	99,216	0.6%	45,404	-0.8%	4,160	-3.3%	211	-5.5%	33	-32.1%	30	29.0%	56	61.5%	92		2		6,685	-4.2%	1,558,906	0.3%
1997	1,402,341	0.0%	99,993	0.8%	45,513	0.2%	4,089	-1.7%	190	-10.1%	11	-68.0%	27	-9.0%	82	47.2%	85		0		6,710	0.4%	1,559,039	0.0%
1998	1,402,113	0.0%	100,751	0.8%	45,349	-0.4%	4,155	1.6%	202	6.2%	10	-8.6%	28	4.6%	138	68.8%	109		1		5,902	-12.0%	1,558,757	0.0%
1999	1,424,017	1.6%	102,286	1.5%	47,916	5.7%	4,577	10.2%	264	31.0%	128	na	34	21.8%	312	125.8%	231		163		11,576	96.1%	1,591,505	2.1%
2000	1,413,220	-0.8%	103,364	1.1%	43,982	-8.2%	4,203	-8.2%	197	-25.2%	77	-39.7%	1	-98.3%	454	45.5%	1		19		11,976	3.5%	1,577,493	-0.9%
2001	1,416,296	0.2%	104,010	0.6%	44,694	1.6%	4,052	-3.6%	203	3.0%	52	-32.3%	0	na	427	-5.9%	0		6		12,262	2.4%	1,582,002	0.3%
2002	1,419,839	0.3%	105,272	1.2%	44,923	0.5%	4,186	3.3%	221	8.8%	71	36.5%	19	na	499	16.9%	0		0		14,080	14.8%	1,589,110	0.4%
2003	1,423,780	0.3%	105,664	0.4%	45,701	1.7%	4,222	0.9%	202	-8.8%	68	-4.9%	51	na	400	-19.9%	0		0		13,945	-1.0%	1,594,032	0.3%
2004	1,427,963	0.3%	105,501	-0.2%	46,883	2.6%	4,260	0.9%	199	-1.7%	64	-5.6%	53	4.8%	212	-46.9%	0		0		13,762	-1.3%	1,598,896	0.3%
2005	1,432,067	0.3%	105,209	-0.3%	48,372	3.2%	4,268	0.2%	190	-4.4%	54	-16.1%	57	6.9%	183	-13.7%	0		0		13,567	-1.4%	1,603,967	0.3%
2006	1,436,497	0.3%	106,272	1.0%	48,800	0.9%	4,417	3.5%	204	7.5%	66	22.2%	62	8.8%	157	-14.2%	0		0		13,304	-1.9%	1,609,777	0.4%
2007	1,440,581	0.3%	107,467	1.1%	48,848	0.1%	4,473	1.3%	209	2.2%	67	2.5%	65	5.7%	129	-18.0%	0		0		13,045	-1.9%	1,614,884	0.3%
2008	1,444,806	0.3%	107,631	0.2%	49,086	0.5%	4,491	0.4%	212	1.7%	74	9.9%	67	2.9%	118	-8.7%	0		0		12,803	-1.9%	1,619,288	0.3%
2009	1,448,134	0.2%	108,187	0.5%	48,891	-0.4%	4,467	-0.5%	209	-1.7%	75	0.9%	64	-4.3%	113	-3.8%	0		0		12,644	-1.2%	1,622,783	0.2%
Forecast																								
2010	1,452,541	0.3%	108,368	0.1%	49,312	-1.3%	4,474	-1.4%	208	1.2%	75	0.6%	64	0.2%	113	1.2%	0		0		12,418	-1.7%	1,627,573	0.2%
2011	1,456,638	0.3%	108,428	0.2%	50,055	0.3%	4,485	0.1%	210	0.8%	75	0.0%	64	0.0%	113	0.0%	0		0		12,201	-1.7%	1,632,268	0.3%
2012	1,460,735	0.3%	108,505	0.2%	51,274	2.0%	4,495	1.5%	212	0.8%	75	0.0%	64	0.0%	113	0.0%	0		0		11,984	-1.7%	1,637,455	0.3%
2013	1,464,832	0.3%	108,593	0.2%	52,177	1.5%	4,504	1.2%	214	0.8%	75	0.0%	64	0.0%	113	0.0%	0		0		11,767	-1.8%	1,642,338	0.3%
Compound Annual Growth Rates:																								
2005-2009 4-yr		0.3%		0.7%		0.3%		1.1%		2.4%		8.6%		3.2%		-11.4%						-1.7%		0.3%
2009-2013 4-yr		0.3%		0.1%		1.6%		0.2%		0.7%		0.0%		0.0%		0.0%						-1.8%		0.3%

Exhibit __ (APM-8CU)
Page 1 of 1

Exhibit __ (APM-9CU)

Exhibit __ (APM-9CU)

Impact of Company-Sponsored DSM

(1) GWh Sales Forecast Before DSM

Year	Residential SC1	Growth Rate	General Service SC2ND	Growth Rate	General Service SC2D	Growth Rate	General Service SC3	Growth Rate	Large Time-of-Use SC3A	Growth Rate	All Other	Growth Rate	Total	Growth Rate
2009	11,251		634		4,365		6,247		4,239		6,190		32,926	
2010	11,327	0.7%	638	0.5%	4,369	0.1%	6,317	1.1%	4,210	-0.7%	6,190	0.0%	33,051	0.4%
2011	11,370	0.4%	636	-0.3%	4,416	1.1%	6,453	2.2%	4,249	0.9%	6,190	0.0%	33,314	0.8%
2012	11,461	0.8%	633	-0.5%	4,493	1.8%	6,678	3.5%	4,314	1.5%	6,190	0.0%	33,769	1.4%
2013	11,551	0.8%	630	-0.6%	4,550	1.3%	6,843	2.5%	4,363	1.1%	6,190	0.0%	34,126	1.1%
Compound Annual Growth:														
2009-2013 4-yr		0.7%		-0.2%		1.0%		2.3%		0.7%		0.0%		0.9%

(2) DSM Impacts (GWh)

Year	Residential SC1	% of SC1	General Service SC2ND	% of SC2ND	General Service SC2D	% of SC2D	Large General Service SC3	% of SC3	Large Time-of-Use SC3A	% of SC3A	All Other	% of Other	Total	% of Total
2009	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
2010	12	0.1%	3	0.4%	18	0.4%	83	1.3%	38	0.9%	0	0.0%	155	0.5%
2011	41	0.4%	7	1.1%	46	1.0%	210	3.3%	96	2.3%	0	0.0%	400	1.2%
2012	58	0.5%	9	1.5%	60	1.3%	273	4.1%	125	2.9%	0	0.0%	525	1.6%
2013	58	0.5%	9	1.5%	60	1.3%	273	4.0%	125	2.9%	0	0.0%	525	1.5%

(3) = (1) - (2) GWh Sales Forecast With DSM

Year	Residential SC1	Growth Rate	General Service SC2ND	Growth Rate	General Service SC2D	Growth Rate	General Service SC3	Growth Rate	Large Time-of-Use SC3A	Growth Rate	All Other	Growth Rate	Total	Growth Rate
2009	11,251		634		4,365		6,247		4,239		6,190		32,926	
2010	11,315	0.6%	635	0.1%	4,350	-0.3%	6,234	-0.2%	4,172	-1.6%	6,190	0.0%	32,896	-0.1%
2011	11,329	0.1%	629	-0.9%	4,370	0.4%	6,244	0.2%	4,153	-0.4%	6,190	0.0%	32,914	0.1%
2012	11,403	0.7%	624	-0.8%	4,433	1.5%	6,405	2.6%	4,189	0.9%	6,190	0.0%	33,244	1.0%
2013	11,493	0.8%	620	-0.6%	4,490	1.3%	6,570	2.6%	4,238	1.2%	6,190	0.0%	33,601	1.1%
Compound Annual Growth:														
2009-2013 4-yr		0.5%		-0.6%		0.7%		1.3%		0.0%		0.0%		0.5%

Exhibit __ (APM-9CU)
Page 1 of 1

Exhibit __ (APM-10CU)

Exhibit __ (APM-10CU)

Impact of Company-Sponsored DSM and NYSERDA Expanded Energy Initiatives

(1) GWh Sales Forecast Before DSM

Year	Residential SC1	Growth Rate	General Service SC2ND	Growth Rate	General Service SC2D	Growth Rate	General Service SC3	Growth Rate	Large Time-of-Use SC3A	Growth Rate	All Other	Growth Rate	Total	Growth Rate
2009	11,251		634		4,365		6,247		4,239		6,190		32,926	
2010	11,327	0.7%	638	0.5%	4,369	0.1%	6,317	1.1%	4,210	-0.7%	6,190	0.0%	33,051	0.4%
2011	11,370	0.4%	636	-0.3%	4,416	1.1%	6,453	2.2%	4,249	0.9%	6,190	0.0%	33,314	0.8%
2012	11,461	0.8%	633	-0.5%	4,493	1.8%	6,678	3.5%	4,314	1.5%	6,190	0.0%	33,769	1.4%
2013	11,551	0.8%	630	-0.6%	4,550	1.3%	6,843	2.5%	4,363	1.1%	6,190	0.0%	34,126	1.1%
Compound Annual Growth:														
2009-2013 4-yr		0.7%		-0.2%		1.0%		2.3%		0.7%		0.0%		0.9%

(2) DSM Impacts (GWh)

Year	Residential SC1	% of SC1	General Service SC2ND	% of SC2ND	General Service SC2D	% of SC2D	Large General Service SC3	% of SC3	Large Time-of-Use SC3A	% of SC3A	All Other	% of Other	Total	% of Total
2009	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
2010	106	0.9%	6	1.0%	41	0.9%	116	1.8%	60	1.4%	0	0.0%	329	1.0%
2011	252	2.2%	16	2.4%	105	2.4%	295	4.6%	152	3.6%	0	0.0%	820	2.5%
2012	348	3.0%	23	3.7%	159	3.5%	420	6.3%	220	5.1%	0	0.0%	1,171	3.5%
2013	364	3.2%	27	4.2%	186	4.1%	463	6.8%	246	5.6%	0	0.0%	1,286	3.8%

(3) = (1) - (2) GWh Sales Forecast With DSM

Year	Residential SC1	Growth Rate	General Service SC2ND	Growth Rate	General Service SC2D	Growth Rate	General Service SC3	Growth Rate	Large Time-of-Use SC3A	Growth Rate	All Other	Growth Rate	Total	Growth Rate
2009	11,251		634		4,365		6,247		4,239		6,190		32,926	
2010	11,221	-0.3%	632	-0.4%	4,328	-0.9%	6,201	-0.7%	4,150	-2.1%	6,190	0.0%	32,721	-0.6%
2011	11,118	-0.9%	621	-1.8%	4,311	-0.4%	6,158	-0.7%	4,097	-1.3%	6,190	0.0%	32,494	-0.7%
2012	11,112	0.0%	610	-1.7%	4,334	0.5%	6,257	1.6%	4,094	-0.1%	6,190	0.0%	32,598	0.3%
2013	11,187	0.7%	603	-1.2%	4,364	0.7%	6,380	2.0%	4,117	0.5%	6,190	0.0%	32,840	0.7%
Compound Annual Growth:														
2009-2013 4-yr		-0.1%		-1.3%		0.0%		0.5%		-0.7%		0.0%		-0.1%

Exhibit ___ (APM-10CU)
Page 1 of 1

Exhibit __ (APM-13CU)

Workpapers (Econometric Models)

Model: UPNY Energy, SC1_KWH (Est.Period: Jan2003 to Dec2009)

The SYSLIN Procedure
Ordinary Least Squares Estimation

Model	K_10_SC1
Dependent Variable	K_10_SC1
Label	K_10_SC1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	17	1120830	65931.20	221.38	<.0001
Error	66	19656.26	297.8221		
Corrected Total	83	1140487			

Root MSE	17.25752	R-Square	0.98277
Dependent Mean	930.60872	Adj R-Sq	0.97833
Coeff Var	1.85443		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variable Label
Intercept	1	225.2524	113.0305	1.99	0.0504	Intercept
cdd_10	1	1.607662	0.042091	38.19	<.0001	cdd_10
hdd_10	1	0.275267	0.007214	38.16	<.0001	hdd_10
nybdays	1	8.626372	2.896801	2.98	0.0041	nybdays
IDX_RPI	1	1.839892	0.660711	2.78	0.0070	IDX_RPI
jan	1	119.2675	10.21181	11.68	<.0001	jan
may	1	-34.7130	7.612360	-4.56	<.0001	may
sep	1	80.08304	9.359877	8.56	<.0001	sep
dec	1	62.11887	9.378002	6.62	<.0001	dec
jan03	1	-59.5749	19.13783	-3.11	0.0027	
aug03	1	-57.5070	18.54105	-3.10	0.0028	
sep03	1	-63.3087	19.66551	-3.22	0.0020	
sep04	1	-46.1206	19.34470	-2.38	0.0200	
jun05	1	-63.6839	17.67689	-3.60	0.0006	
aug05	1	-67.2512	19.45825	-3.46	0.0010	
sep07	1	-69.4758	19.63797	-3.54	0.0007	
jul09	1	76.63095	18.08419	4.24	<.0001	
dec09	1	-44.7932	18.68097	-2.40	0.0193	

Durbin-Watson	1.947291
Number of Observations	84
First-Order Autocorrelation	0.026355

Model: UPNY Energy, SC2ND_KWH (Est.Period: Jan2002 to Dec2009)

The SYSLIN Procedure
Ordinary Least Squares Estimation

Model	K_10_SC2
Dependent Variable	K_10_SC2ND
Label	K_10_SC2ND

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	14	3455.475	246.8197	119.76	<.0001
Error	81	166.9310	2.060877		
Corrected Total	95	3622.406			

Root MSE	1.43558	R-Square	0.95392
Dependent Mean	55.53397	Adj R-Sq	0.94595
Coeff Var	2.58504		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variable Label
Intercept	1	-661.914	51.50707	-12.85	<.0001	Intercept
cdd_10	1	0.060378	0.002840	21.26	<.0001	cdd_10
hdd_10	1	0.015387	0.000513	29.99	<.0001	hdd_10
nybdays	1	1.227210	0.169834	7.23	<.0001	nybdays
IDX_Popln	1	6.733287	0.515801	13.05	<.0001	IDX_Popln
apr	1	-2.07484	0.559723	-3.71	0.0004	apr
sep	1	2.870524	0.574789	4.99	<.0001	sep
nov	1	-3.36229	0.565091	-5.95	<.0001	nov
dec	1	-2.55282	0.680091	-3.75	0.0003	dec
feb02	1	4.855421	1.472502	3.30	0.0015	
dec02	1	-3.67789	1.565088	-2.35	0.0212	
jun05	1	-4.32986	1.456125	-2.97	0.0039	
feb09	1	8.302167	1.502594	5.53	<.0001	
mar09	1	-7.74697	1.479560	-5.24	<.0001	
dec09	1	-4.78430	1.559445	-3.07	0.0029	

Durbin-Watson	1.855475
Number of Observations	96
First-Order Autocorrelation	0.062851

Model: UPNY Energy, SC2D_KWH (Est.Period: Jan2002 to Dec2009)

The SYSLIN Procedure
Ordinary Least Squares Estimation

Model	K_10_SC2
Dependent Variable	K_10_SC2D
Label	K_10_SC2D

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	75354.48	8372.720	95.74	<.0001
Error	86	7520.724	87.45028		
Corrected Total	95	82875.20			

Root MSE	9.35149	R-Square	0.90925
Dependent Mean	361.28697	Adj R-Sq	0.89976
Coeff Var	2.58838		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variable Label
Intercept	1	-95.9794	39.39873	-2.44	0.0169	Intercept
cdd_10	1	0.404048	0.019398	20.83	<.0001	cdd_10
hdd_10	1	0.042118	0.003626	11.61	<.0001	hdd_10
nybdays	1	7.735903	1.055821	7.33	<.0001	nybdays
IDX_GP_Metro	1	1.592062	0.198708	8.01	<.0001	IDX_GP_Metro
sep	1	23.40011	3.799365	6.16	<.0001	sep
oct	1	12.11014	4.151423	2.92	0.0045	oct
nov	1	-9.34637	3.752464	-2.49	0.0147	nov
jun05	1	-34.7613	9.500750	-3.66	0.0004	
jul09	1	24.29786	9.700100	2.50	0.0141	

Durbin-Watson	1.666224
Number of Observations	96
First-Order Autocorrelation	0.139516

Model: UPNY Energy, SC3_KWH (Est.Period: Jan2002 to Dec2009)

The SYSLIN Procedure
Ordinary Least Squares Estimation

Model	K_10_SC3
Dependent Variable	K_10_SC3
Label	K_10_SC3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	14	105559.2	7539.942	48.56	<.0001
Error	81	12576.11	155.2606		
Corrected Total	95	118135.3			

Root MSE	12.46036	R-Square	0.89354
Dependent Mean	511.18473	Adj R-Sq	0.87515
Coeff Var	2.43755		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variable Label
Intercept	1	-414.179	52.48633	-7.89	<.0001	Intercept
cdd_10	1	0.319162	0.024815	12.86	<.0001	cdd_10
hdd_10	1	0.034755	0.004704	7.39	<.0001	hdd_10
nybdays	1	12.32091	1.404630	8.77	<.0001	nybdays
sep	1	21.22715	5.635015	3.77	0.0003	sep
oct	1	23.23307	5.607136	4.14	<.0001	oct
IDX_GP_Metro	1	4.630548	0.273779	16.91	<.0001	IDX_GP_Metro
sep02	1	-39.3596	13.71029	-2.87	0.0052	
dec02	1	55.36860	12.86284	4.30	<.0001	
feb04	1	41.61154	13.03667	3.19	0.0020	
apr05	1	53.51902	12.58119	4.25	<.0001	
jun05	1	-51.1301	12.63825	-4.05	0.0001	
sep05	1	29.58163	13.51855	2.19	0.0315	
apr06	1	-36.8024	12.60477	-2.92	0.0045	
oct06	1	-38.7221	13.40168	-2.89	0.0050	

Durbin-Watson	1.801884
Number of Observations	96
First-Order Autocorrelation	0.096321

Model: UPNY Energy, sc3A_KWH (Est.Period: Jan2002 to Dec2009)

The SYSLIN Procedure
Ordinary Least Squares Estimation

Model	K_10_SC3
Dependent Variable	K_10_SC3A
Label	K_10_SC3A

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	254128.7	28236.53	72.46	<.0001
Error	86	33514.09	389.6988		
Corrected Total	95	287642.8			

Root MSE	19.74079	R-Square	0.88349
Dependent Mean	331.38940	Adj R-Sq	0.87129
Coeff Var	5.95698		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variable Label
Intercept	1	179.2245	47.93009	3.74	0.0003	Intercept
cdd_10	1	0.122391	0.025530	4.79	<.0001	cdd_10
IDX_GP_Metro	1	1.347435	0.432818	3.11	0.0025	IDX_GP_Metro
sep03	1	-100.110	20.08778	-4.98	<.0001	
jan04	1	-311.454	19.98582	-15.58	<.0001	
feb04	1	256.6756	19.98701	12.84	<.0001	
mar04	1	84.27369	19.98853	4.22	<.0001	
may04	1	-222.502	19.95255	-11.15	<.0001	
oct06	1	-61.4986	19.95301	-3.08	0.0028	
jan09	1	74.61359	19.98925	3.73	0.0003	

Durbin-Watson	2.12672
Number of Observations	96
First-Order Autocorrelation	-0.07469

Model: UPNY Energy, SLO_KWH (Est.Period: Jan2002 to Dec2009)

The SYSLIN Procedure
Ordinary Least Squares Estimation

Model	k_10_slo
Dependent Variable	k_10_slo
Label	k_10_slo

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	15	866.6860	57.77907	156.31	<.0001
Error	80	29.57078	0.369635		
Corrected Total	95	896.2568			

Root MSE	0.60798	R-Square	0.96701
Dependent Mean	18.33890	Adj R-Sq	0.96082
Coeff Var	3.31523		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variable Label
Intercept	1	28.89448	2.593533	11.14	<.0001	Intercept
time_trend	1	-0.20503	0.027418	-7.48	<.0001	time_trend
hlight	1	-0.05812	0.001906	-30.49	<.0001	hlight
nybdays	1	0.389731	0.078344	4.97	<.0001	nybdays
jan	1	2.078738	0.300047	6.93	<.0001	jan
feb	1	-1.22450	0.293900	-4.17	<.0001	feb
sep	1	-1.12471	0.247737	-4.54	<.0001	sep
nov	1	-0.88748	0.276065	-3.21	0.0019	nov
jun03	1	-2.66249	0.628045	-4.24	<.0001	
jul03	1	5.666760	0.628073	9.02	<.0001	
jan05	1	-1.87528	0.650675	-2.88	0.0051	
mar05	1	2.049434	0.615538	3.33	0.0013	
mar06	1	-2.28675	0.615512	-3.72	0.0004	
apr06	1	2.127993	0.613349	3.47	0.0008	
sep06	1	-2.38302	0.650566	-3.66	0.0004	
oct06	1	1.818112	0.621732	2.92	0.0045	

Durbin-Watson	1.628872
Number of Observations	96
First-Order Autocorrelation	0.176607

Model: UPNY Customer, SC1_CUST (Est. Period: Jan2002 to Dec2009)

The SYSLIN Procedure
Ordinary Least Squares Estimation

Model	c_10_SC1
Dependent Variable	c_10_SC1
Label	c_10_SC1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	19	8.6906E9	4.574E8	1971.23	<.0001
Error	76	17634904	232038.2		
Corrected Total	95	8.7083E9			

Root MSE	481.70344	R-Square	0.99797
Dependent Mean	1434208.42	Adj R-Sq	0.99747
Coeff Var	0.03359		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variable Label
Intercept	1	1415750	133.5255	10602.8	<.0001	Intercept
time_trend	1	4096.913	24.43930	167.64	<.0001	time_trend
jan	1	4239.154	214.8431	19.73	<.0001	jan
feb	1	4672.078	214.7079	21.76	<.0001	feb
mar	1	4250.045	200.9989	21.14	<.0001	mar
apr	1	4071.513	214.8431	18.95	<.0001	apr
may	1	2075.438	201.6208	10.29	<.0001	may
jun	1	952.3986	190.4781	5.00	<.0001	jun
nov	1	880.6269	201.7404	4.37	<.0001	nov
dec	1	2939.286	201.0027	14.62	<.0001	dec
jan02	1	-1427.64	527.2835	-2.71	0.0084	
feb02	1	-1371.97	527.2835	-2.60	0.0111	
mar02	1	-1474.35	524.1593	-2.81	0.0062	
apr02	1	-1710.22	531.7952	-3.22	0.0019	
nov02	1	1314.796	524.1593	2.51	0.0143	
apr03	1	-1865.14	527.2835	-3.54	0.0007	
may08	1	1412.962	519.6752	2.72	0.0081	
dec08	1	-1409.75	519.6752	-2.71	0.0082	
jan09	1	-2041.03	527.2835	-3.87	0.0002	
feb09	1	-1673.36	527.2835	-3.17	0.0022	

Durbin-Watson	1.629899
Number of Observations	96
First-Order Autocorrelation	0.168602

Model: UPNY Customer, SC2ND_CUST (Est. Period: Jan2002 to Dec2009)

The AUTOREG Procedure

Dependent Variable C_10_SC2ND
C_10_SC2ND

Ordinary Least Squares Estimates

SSE	8289894.87	DFE	89
MSE	93145	Root MSE	305.19647
SBC	1395.5418	AIC	1377.59137
Regress R-Square	0.9402	Total R-Square	0.9402
Durbin-Watson	1.4134		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|	Variable Label
Intercept	1	105181	74.7823	1406.50	<.0001	
css_step	1	1915	126.3790	15.15	<.0001	
time_trend	1	88.2240	26.9073	3.28	0.0015	time_trend
aug	1	318.3463	113.4101	2.81	0.0061	aug
sep	1	229.2443	113.3761	2.02	0.0462	sep
oct05	1	-991.3008	311.3507	-3.18	0.0020	
nov05	1	-1008	311.6672	-3.23	0.0017	

Estimates of Autocorrelations

Lag	Covariance	Correlation	-1 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 1
0	86353.1	1.000000	|********************|
1	21926.1	0.253912	|***** |

Preliminary MSE 80785.8

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-0.253912	0.103107	-2.46

Yule-Walker Estimates

SSE	7570634.1	DFE	88
MSE	86030	Root MSE	293.30860
SBC	1392.19287	AIC	1371.67808
Regress R-Square	0.9291	Total R-Square	0.9454
Durbin-Watson	1.7570		

Model: UPNY Customer, SC2ND_CUST (Est. Period: Jan2002 to Dec2009)

The AUTOREG Procedure

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|	Variable Label
Intercept	1	105154	81.5082	1290.11	<.0001	
css_step	1	1958	122.4611	15.99	<.0001	
time_trend	1	92.7120	26.4188	3.51	0.0007	time_trend
aug	1	324.7080	140.0936	2.32	0.0228	aug
sep	1	240.3090	140.0848	1.72	0.0898	sep
oct05	1	-885.0142	290.5102	-3.05	0.0031	
nov05	1	-853.4486	290.6878	-2.94	0.0042	

Model: UPNY Customer, SC2D_CUST (Est. Period: Jan2002 to Dec2009)

The SYSLIN Procedure
Ordinary Least Squares Estimation

Model	C_10_SC2
Dependent Variable	C_10_SC2D
Label	C_10_SC2D

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	2.1258E8	53145326	192.34	<.0001
Error	91	25144663	276315.0		
Corrected Total	95	2.3773E8			

Root MSE	525.65671	R-Square	0.89423
Dependent Mean	47687.9792	Adj R-Sq	0.88958
Coeff Var	1.10228		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variable Label
Intercept	1	14437.64	1231.263	11.73	<.0001	Intercept
IDX_GP_Metro	1	303.0087	11.14975	27.18	<.0001	IDX_GP_Metro
jan	1	-834.200	195.9202	-4.26	<.0001	jan
feb	1	-798.010	195.9066	-4.07	<.0001	feb
mar	1	-510.233	195.9008	-2.60	0.0107	mar

Durbin-Watson	1.901322
Number of Observations	96
First-Order Autocorrelation	0.048923

Model: UPNY Customer, SC3_CUST (Est. Period: Jan2002 to Dec2009)

The SYSLIN Procedure
Ordinary Least Squares Estimation

Model	C_10_SC3
Dependent Variable	C_10_SC3
Label	C_10_SC3

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	10	1515072	151507.2	280.06	<.0001
Error	85	45983.79	540.9858		
Corrected Total	95	1561055			

Root MSE	23.25910	R-Square	0.97054
Dependent Mean	4347.83333	Adj R-Sq	0.96708
Coeff Var	0.53496		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variable Label
Intercept	1	4165.232	5.607253	742.83	<.0001	Intercept
css_step1	1	130.9037	8.371049	15.64	<.0001	
css_step2	1	238.7464	11.34464	21.04	<.0001	
time_trend	1	9.354002	2.254331	4.15	<.0001	time_trend
sep03	1	-66.5048	24.31947	-2.73	0.0076	
sep04	1	-68.9551	23.80176	-2.90	0.0048	
jul05	1	-90.4965	24.11860	-3.75	0.0003	
aug05	1	-83.2760	24.07686	-3.46	0.0009	
sep05	1	-86.0555	24.03651	-3.58	0.0006	
oct05	1	-85.8350	23.99757	-3.58	0.0006	
nov05	1	-81.6145	23.96004	-3.41	0.0010	

Durbin-Watson	1.891998
Number of Observations	96
First-Order Autocorrelation	0.040689

Model: UPNY Customer, sc3A_CUST (Est. Period: Jan2003 to Dec2009)

The AUTOREG Procedure

Dependent Variable C_10_SC3A
C_10_SC3A

Ordinary Least Squares Estimates

SSE	628.445477	DFE	81
MSE	7.75859	Root MSE	2.78542
SBC	420.718452	AIC	413.426001
Regress R-Square	0.9056	Total R-Square	0.9056
Durbin-Watson	1.4514		

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|	Variable Label
Intercept	1	127.9617	8.1545	15.69	<.0001	
css_step	1	-25.2094	1.0542	-23.91	<.0001	
IDX_GP_Metro	1	0.6991	0.0730	9.58	<.0001	IDX_GP_Metro

Estimates of Autocorrelations

Lag	Covariance	Correlation	-1 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 1
0	7.4815	1.000000	|********************|
1	1.7709	0.236711	|***** |

Preliminary MSE 7.0623

Estimates of Autoregressive Parameters

Lag	Coefficient	Standard Error	t Value
1	-0.236711	0.108626	-2.18

Yule-Walker Estimates

SSE	587.582669	DFE	80
MSE	7.34478	Root MSE	2.71013
SBC	420.193708	AIC	410.470441
Regress R-Square	0.9068	Total R-Square	0.9118
Durbin-Watson	1.6624		

Model: UPNY Customer, sc3A_CUST (Est. Period: Jan2003 to Dec2009)

The AUTOREG Procedure

Variable	DF	Estimate	Standard Error	t Value	Approx Pr > |t|	Variable Label
Intercept	1	129.6161	9.0919	14.26	<.0001	
css_step	1	-24.4186	0.9634	-25.35	<.0001	
IDX_GP_Metro	1	0.6845	0.0816	8.38	<.0001	IDX_GP_Metro

Model: UPNY Customer, slo_CUST (Est. Period: Jan2002 to Dec2009)

The SYSLIN Procedure
Ordinary Least Squares Estimation

Model	c_10_slo
Dependent Variable	c_10_slo
Label	c_10_slo

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	23913028	5978257	2870.95	<.0001
Error	91	189491.5	2082.324		
Corrected Total	95	24102519			

Root MSE	45.63249	R-Square	0.99214
Dependent Mean	13393.7188	Adj R-Sq	0.99179
Coeff Var	0.34070		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variable Label
Intercept	1	14272.95	9.862638	1447.17	<.0001	Intercept
time_trend	1	-217.151	2.086685	-104.07	<.0001	time_trend
jan02	1	-105.850	46.65422	-2.27	0.0256	
jan03	1	-30.6988	46.32044	-0.66	0.5092	
feb03	1	-14.6028	46.29676	-0.32	0.7532	

Durbin-Watson	1.516125
Number of Observations	96
First-Order Autocorrelation	0.23787

Exhibit __ (APM-14CU)

Workpapers (DSM Calculations)

IMPACT DATA
Niagara Mohawk Programs

Installation Year: 2009

Program Name

ANNUAL MWH	**2009**	**2010**	**2011**	**2012**	**2013**
Residential Central A/C	**82**	163	163	163	163
EW Multifamily	**159**	317	317	317	317
SBS	**34,603**	69,206	69,206	69,206	69,206
Enhanced Home Sealing Incentives					
Residential Building Practices and Demonstration Program					
Residential ENERGY STAR® Products and Recycling Program					
Energy Initiative Program (excludes Large Industrial)					
Energy Initiative Program (Large Industrial)					
TOTAL	**34,843**	69,686	69,686	69,686	69,686

IMPACT DATA
Niagara Mohawk Programs

Installation Year: 2010

Program Name

ANNUAL MWH	**2010**	**2011**	**2012**	**2013**
Residential Central A/C	**99**	197	197	197
EW Multifamily	**652**	1,303	1,303	1,303
SBS	**46,138**	92,275	92,275	92,275
Enhanced Home Sealing Incentives	**1,534**	3,068	3,068	3,068
Residential Building Practices and Demonstration Program	**4,860**	9,720	9,720	9,720
Residential ENERGY STAR® Products and Recycling Program	**4,684**	9,368	9,368	9,368
Energy Initiative Program (excludes Large Industrial)	**50,542**	101,083	101,083	101,083
Energy Initiative Program (Large Industrial)	**11,465**	22,930	22,930	22,930
TOTAL	**119,972**	**239,944**	**239,944**	**239,944**

IMPACT DATA
Niagara Mohawk Programs

Installation Year: 2011

Program Name

ANNUAL MWH	**2011**	**2012**	**2013**
Residential Central A/C	**99**	197	197
EW Multifamily	**652**	1,303	1,303
SBS	**46,137**	92,274	92,274
Enhanced Home Sealing Incentives	**2,195**	4,390	4,390
Residential Building Practices and Demonstration Program	**7,290**	14,580	14,580
Residential ENERGY STAR® Products and Recycling Program	**6,700**	13,399	13,399
Energy Initiative Program (excludes Large Industrial)	**50,542**	101,083	101,083
Energy Initiative Program (Large Industrial)	**11,465**	22,930	22,930
TOTAL	**125,078**	**250,156**	**250,156**

IMPACT DATA
Niagara Mohawk Programs (Approved)

Program Name

ANNUAL MWH	**2009**	**2010**	**2011**	**2012**	**2013**
Residential Central A/C	-	-	-	-	-
EW Multifamily	-	-	-	-	-
SBS	8,036	8,040	8,044	8,048	8,052
Enhanced Home Sealing Incentives	2,009	2,109	2,307	2,406	2,407
Residential Building Practices and Demonstration Program	82	815	2,118	2,769	2,769
Residential ENERGY STAR® Products and Recycling Program	159	46,455	138,729	184,866	184,866
Energy Initiative Program (excludes Large Industrial)	34,603	70,740	74,469	76,664	76,664
Energy Initiative Program (Large Industrial)	-	4,860	17,010	24,300	24,300
TOTAL	44,888	133,018	242,676	299,053	299,058

Niagara Mohawk Programs (Approved)

Annual MWh	**2009**	**2010**	**2011**	**2012**	**2013**
Business	42,639	83,640	99,523	109,012	109,016
Residential	2,249	49,378	143,153	190,041	190,042
Totals	44,888	133,018	242,676	299,053	299,058

ANNUALIZED SAVINGS										
Program Administrat	**Sector**	**Program**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**Total**
NYSERDA	ALL	Enhanced M&V	0	0	0	0	0	0	0	0	0
NYSERDA	ALL	Outreach & Education	0	0	0	0	0	0	0	0	0
NYSERDA	ALL	SBCIII Enhanced M&V	0	0	0	0	0	0	0	0	0
NYSERDA	RES	CFL Expansion	43,920	241,560	322,080	380,640	95,160	0	0	(149,772)	933,588
NYSERDA	LI-Res	Low-income-expand EmPowerNY	1,630	7,334	8,167	9,803	2,451	0	0	0	29,385
NYSERDA	C&I	New Construction expansion	0	10,149	38,977	73,539	89,551	55,762	10,921	0	278,899
NYSERDA	C&I	Flex Tech expansion	3,710	33,390	57,505	83,475	72,345	16,695	0	0	267,120
NYSERDA	C&I	Flex Tech industrial process	13,125	118,125	193,594	252,656	213,281	49,219	0	0	840,000
NYSERDA	ALL	Workforce Development	0	0	0	0	0	0	0	0	0
NYSERDA	MF	Geothermal Heat Pump Systems	0	1,248	2,496	2,496	0	0	0	0	6,240
NYSERDA	MF	Electric Reduction in Master-Metered Multifamily Buildings	0	5,241	10,482	10,482	0	0	0	0	26,205
NYSERDA	MF	Multifamily Performance	0	1,570	3,139	3,139	0	0	0	0	7,848
NYSERDA	MF	Low-Income Multifamily Performance	0	1,508	3,015	3,015	0	0	0	0	7,538
NYSERDA	C&I	Existing Facilities	0	0	12,191	24,383	48,768	48,768	12,192	0	146,302
NYSERDA	C&I	Benchmarking and Operations Efficiency	0	0	11,200	24,173	14,933	5,693	0	0	55,999
NYSERDA	**ALL**	**TOTAL**	**62,385**	**420,125**	**662,846**	**867,801**	**536,489**	**176,137**	**23,113**	**(149,772)**	**2,599,124**

Share to Appropriate PA

Central Hudson	5.83%
Con Edison	36.79%
NYSEG	14.09%
Niagara Mohawk	**32.17%**
O&R	4.31%
RG&E	6.80%
Total	100.00%

NYSERDA PROGRAM SAVINGS

ANNUALIZED SAVINGS from NYSERDA Programs Allocated to NIMO Territory			2008	2009	2010	2011	2012	2013	2014	2015	Total
Niagara Mohawk	ALL	Enhanced M&V	0	0	0	0	0	0	0	0	0
Niagara Mohawk	ALL	Outreach & Education	0	0	0	0	0	0	0	0	0
Niagara Mohawk	ALL	SBCIII Enhanced M&V	0	0	0	0	0	0	0	0	0
Niagara Mohawk	RES	CFL Expansion	14,131	77,720	103,626	122,467	30,617	0	0	(48,188)	300,373
Niagara Mohawk	LI-Res	Low-income-expand EmPowerNY	524	2,360	2,628	3,154	789	0	0	0	9,454
Niagara Mohawk	C&I	New Construction expansion	0	3,265	12,540	23,660	28,812	17,941	3,514	0	89,733
Niagara Mohawk	C&I	Flex Tech expansion	1,194	10,743	18,502	26,857	23,276	5,371	0	0	85,943
Niagara Mohawk	C&I	Flex Tech industrial process	4,223	38,006	62,287	81,290	68,621	15,836	0	0	270,262
Niagara Mohawk	ALL	Workforce Development	0	0	0	0	0	0	0	0	0
Niagara Mohawk	MF	Geothermal Heat Pump Systems	0	402	803	803	0	0	0	0	2,008
Niagara Mohawk	MF	Electric Reduction in Master-Metered Multifamily Buildings	0	1,686	3,372	3,372	0	0	0	0	8,431
Niagara Mohawk	MF	Multifamily Performance	0	505	1,010	1,010	0	0	0	0	2,525
Niagara Mohawk	MF	Low-Income Multifamily Performance	0	485	970	970	0	0	0	0	2,425
Niagara Mohawk	C&I	Existing Facilities	0	0	3,922	7,845	15,691	15,691	3,923	0	47,071
Niagara Mohawk	C&I	Benchmarking and Operations Efficiency	0	0	3,603	7,777	4,805	1,832	0	0	18,017
Niagara Mohawk	**ALL**	**TOTAL**	**20,072**	**135,171**	**213,264**	**279,206**	**172,610**	**56,670**	**7,436**	**(48,188)**	**836,242**

SAVINGS from NYSERDA Programs Allocated to NIMO Territory (Uses 1/2 Yr Convention			2008	2009	2010	2011	2012	2013	2014	2015	Total
Niagara Mohawk	ALL	Enhanced M&V	0	0	0	0	0	0	0	0	0
Niagara Mohawk	ALL	Outreach & Education	0	0	0	0	0	0	0	0	0
Niagara Mohawk	ALL	SBCIII Enhanced M&V	0	0	0	0	0	0	0	0	0
Niagara Mohawk	RES	CFL Expansion	7,065	52,991	143,663	256,710	333,252	348,560	348,560	300,373	1,791,174
Niagara Mohawk	LI-Res	Low-income-expand EmPowerNY	262	1,704	4,198	7,089	9,060	9,454	9,454	9,454	50,675
Niagara Mohawk	C&I	New Construction expansion	0	1,633	9,536	27,636	53,872	77,249	87,976	89,733	347,635
Niagara Mohawk	C&I	Flex Tech expansion	597	6,565	21,187	43,867	68,934	83,257	85,943	85,943	396,293
Niagara Mohawk	C&I	Flex Tech industrial process	2,111	23,226	73,372	145,160	220,115	262,344	270,262	270,262	1,266,852
Niagara Mohawk	ALL	Workforce Development	0	0	0	0	0	0	0	0	0
Niagara Mohawk	MF	Geothermal Heat Pump Systems	0	201	803	1,606	2,008	2,008	2,008	2,008	10,642
Niagara Mohawk	MF	Electric Reduction in Master-Metered Multifamily Buildings	0	843	3,372	6,745	8,431	8,431	8,431	8,431	44,684
Niagara Mohawk	MF	Multifamily Performance	0	253	1,010	2,020	2,525	2,525	2,525	2,525	13,383
Niagara Mohawk	MF	Low-Income Multifamily Performance	0	243	970	1,940	2,425	2,425	2,425	2,425	12,853
Niagara Mohawk	C&I	Existing Facilities	0	0	1,961	7,845	19,613	35,303	45,110	47,071	156,903
Niagara Mohawk	C&I	Benchmarking and Operations Efficiency	0	0	1,802	7,492	13,783	17,101	18,017	18,017	76,212
Niagara Mohawk	**ALL**	**TOTAL**	**10,035**	**87,659**	**261,874**	**508,110**	**734,018**	**848,657**	**880,711**	**836,242**	**4,167,306**

Annual MWh	2008	2009	2010	2011	2012	2013	2014	2015	Total
Business	2,708	32,624	112,653	241,592	388,306	487,243	519,297	523,015	2,307,438
Residential	7,327	55,036	149,221	266,519	345,712	361,414	361,414	313,227	1,859,868
Totals	10,035	87,659	261,874	508,110	734,018	848,657	880,711	836,242	4,167,306

COMPANY PROGRAMS

Incremental (GWH	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
SC1	0.00	12.07	28.76	16.93	0.00	(0.00)	0.00
SC2ND	0.00	2.83	4.28	2.14	0.00	(0.00)	0.00
SC2D	0.00	18.37	27.84	13.92	0.00	(0.00)	0.00
SC3	0.00	83.39	126.35	63.17	0.00	(0.00)	0.00
SC3A	0.00	38.16	57.82	28.91	0.00	(0.00)	0.00
Incremental >>	0.00	154.82	245.05	125.08	0.00	(0.00)	0.00
Cumulative (GWH)							
SC1	0.00	12.07	40.83	57.77	57.77	57.76	57.76
SC2ND	0.00	2.83	7.11	9.25	9.25	9.25	9.25
SC2D	0.00	18.37	46.21	60.13	60.13	60.13	60.13
SC3	0.00	83.39	209.73	272.91	272.91	272.91	272.91
SC3A	0.00	38.16	95.98	124.89	124.89	124.89	124.89
Cumulative >>	**0.00**	**154.82**	**399.87**	**524.94**	**524.94**	**524.94**	**524.94**

Incremental and Cumulative start 2010

NYSERDA PROGRAMS

Incremental MWHs	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Business	0.00	80.03	128.94	146.71	98.94	32.05	3.72
Residential	0.00	94.19	117.30	79.19	15.70	0.00	(48.19)
Incremental >>	0.00	174.22	246.24	225.91	114.64	32.05	(44.47)
Cumulative MWHs							
Business	0.00	80.03	208.97	355.68	454.62	486.67	490.39
Residential	0.00	94.19	211.48	290.68	306.38	306.38	258.19
Incremental >>	0.00	174.22	420.45	646.36	761.00	793.05	748.58

% Share

Percent of Total	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015***
SC1	100%	100%	100%	100%	100%	100%	100%
SC2ND	4%	4%	4%	4%	4%	4%	4%
SC2D	28%	28%	28%	28%	28%	28%	28%
SC3	40%	41%	41%	41%	42%	42%	42%
SC3A	28%	27%	27%	27%	27%	26%	26%
Cumulative >>	100%	100%	100%	100%	100%	100%	100%

**** part-year so use 2014 %'s***

Allocate to Rate Codes by Pre-EE % Shares

Cumulative MWHs	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
SC1	0.00	94.19	211.48	290.68	306.38	306.38	258.19
SC2ND	0.00	3.29	8.44	13.97	17.47	18.48	18.62
SC2D	0.00	22.51	58.57	99.15	126.25	134.65	135.68
SC3	0.00	32.55	85.60	147.35	189.87	204.60	206.17
SC3A	0.00	21.69	56.36	95.21	121.04	128.93	129.92
C&I	0.00	80.03	208.97	355.68	454.62	486.67	490.39
TOTAL	**0.00**	**174.22**	**420.45**	**646.36**	**761.00**	**793.05**	**748.58**

TOTAL COMPANY EE, plus NYSERDA EE

Cumulative MWHs	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
SC1	0.00	106.25	252.31	348.44	364.14	364.14	315.96
SC2ND	0.00	6.11	15.55	23.22	26.72	27.73	27.87
SC2D	0.00	40.88	104.78	159.28	186.38	194.79	195.81
SC3	0.00	115.93	295.33	420.26	462.77	477.51	479.07
SC3A	0.00	59.85	152.34	220.09	245.93	253.82	254.81
C&I	0.00	222.78	568.00	822.86	921.80	953.85	957.57
TOTAL	**0.00**	**329.03**	**820.32**	**1,171.30**	**1,285.94**	**1,317.99**	**1,273.53**

Testimony of
Andrew F. Sloey

Before the Public Service Commission

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

PSC Case No. 10-E-0050

Supplemental Testimony of

Andrew F. Sloey

Dated: May 3, 2010

Testimony of Andrew F. Sloey

Q. Please state your name.

A. My name is Andrew F. Sloey.

Q. Are you the same Andrew F. Sloey that previously provided testimony in this proceeding?

A. Yes. I provided direct testimony as part of the Company's January 29, 2010 filing.

Q. What is the purpose of your supplemental testimony?

A. The purpose of my testimony is to provide an update on the Company's review of Non-Utility Property as required by the Commission's Order in Case 09-E-0593.

Q. Please explain the review that the Company was required to conduct.

A. As discussed in my direct testimony, on December 23, 2009, the Commission issued an Order in the above referenced proceeding regarding the accounting treatment of the Texaco Tank Farm. The Commission directed the Company to address in its next electric rate case filing how it has accounted for all operation and maintenance expenses, property taxes, SIR costs and capitalized costs relating to properties that are classified or

should be classified as Non-Utility Property in the Historical Test Year and Rate Years.

Q. What actions did the Company take in response to the Commission's Order?

A. The Company commenced two reviews of plant. Those reviews were not complete at the time of the Company's January 29, 2010 filing in this proceeding. Accordingly, the Company provided that any adjustments resulting from these reviews would be submitted in its Corrections and Updates filing.

Q. Please explain the Company's reviews of plant.

A. The first review involved a review of land parcels in rate base. The purpose of this review was to identify parcels that should be retired from rate base because of a sale or divestiture or transferred from rate base to Non-Utility Property because the particular parcel was not used or useful. The second review involved research into the status of property currently classified as Non-Utility Property to specifically identify those parcels that were either transferred from rate base and are subject to Site Investigation and Remediation ("SIR") program remediation or were purchased directly to Non- Utility Property to provide benefits to customers by reducing the

overall cost of SIR. As explained in the Company's response to Information Request Number NM-200, AAE-14 and discussed in the supplemental testimony of the Revenue Requirement Panel, in some instances it is more cost effective to purchase contaminated property and undertake remediation as the site owner than it is to remediate the property to unrestricted use status.

Q. Please explain the results of the first review.

A. The first review analyzed rate base land parcels by plant location to identify those parcels that did not also contain rate base plant equipment or other non-land assets. This analysis produced a list of approximately 180 parcels of land that required further research to determine whether they were used and useful to utility operations. This review indicated that many of these parcels were still used and useful for functions such as inventory storage yards and other utility operations.

The review also identified parcels that required retirement as follows: 59 parcels of land in FERC Account 350, Transmission Substation Land, associated with previously owned hydro station assets that were sold as a part of generation divestiture, required retirement. The Company confirmed that these transmission substation land parcels were sold as a

part of divestiture of the hydro stations, that they were removed from the real estate tax assessment basis at the time of sale and that no real estate taxes have been paid on these parcels since that time. However, these parcels were not retired from Plant in Service at the time of the sale. The entries to retire these 59 parcels from Plant in Service were processed in March 2010. In addition, there were four parcels of land that were associated with distribution substations and one parcel of land associated with a former Gas Regulator Station site that upon investigation should have been retired. The entries to retire these five parcels from Plant in Service were also processed in March 2010. The original cost of all 64 parcels retired was $143,152. This first review further identified 9 parcels of land determined to be no longer used and useful to utility operations and they were transferred to Non-Utility Property, also in March 2010. These 9 parcels had an original cost basis of $18,011.

To comply with the prescribed accounting under the Financial Recovery Agreement ("FRA") approved by the Commission in Case No. 29327, a fair market value appraisal of the parcels transferred has been ordered. The FRA provides that in lieu of sharing net gains or losses from the sale of utility property, the entire net amount (calculated as being the delta between the appraised market value and the historical cost base) is to be

set aside for rate making effective July 1, 1990 utilizing a deferral mechanism used to offset remediation costs associated with other properties in the Non-Utility portfolio that are subject to the SIR program. The market appraisal needed to determine this net amount (either a gain or loss) of the parcels transferred from rate base to Non-Utility Property has been commissioned. Journal entries to complete the transfer and recognize any gain or loss will be processed once these have been received.

Q. Please explain the results of the second review.

A review of existing Non-Utility Property was conducted to specifically identify within the Company's fixed asset system those land assets subject to the SIR program, whether transferred from rate base or acquired directly into Non-Utility Property in order to mitigate what would otherwise be higher SIR costs. Eleven locations encompassing 12 parcels of land were identified with an original cost of $2,247,643. These 12 parcels have been uniquely tagged within the Company's fixed asset systems so that costs can be effectively tracked. This same tagging system will be used to account for any future additions to the Non-Utility portfolio that are also subject to the SIR Program.

Q How does the Company propose to account for adjustments resulting from the reviews of plant?

A. The Revenue Requirements Panel provides an explanation of the accounting adjustments resulting from the reviews of plant.

Q. Does this conclude your direct testimony?

A. Yes it does.

Testimony of
Infrastructure & Operations Panel

Before the Public Service Commission

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Corrections and Updates Testimony

of

The Infrastructure and Operations Panel

Dated: May 3, 2010

Testimony of Infrastructure and Operations Panel

I. Introduction

Q. Please identify the members of the Infrastructure and Operations Panel.

A. The Panel consists of Ellen Smith, Bruce Walker and Keith McAfee.

Q. Is this the same panel that testified previously in this proceeding?

A. Yes. The Infrastructure and Operations Panel ("IOP") provided direct testimony as part of the Company's January 29, 2010 filing.

Q. What is the purpose of your corrections and updates testimony?

A. The purpose of the Panel's corrections and updates testimony is to identify and explain certain updates and/or corrections to direct testimony and exhibits from the January 29, 2010 filing.

Q. Are you sponsoring any exhibits through your corrections and updates testimony?

A. Yes. The Panel sponsors the following exhibits:

1. Exhibit __ (IOP-1CU), Schedules 1, 2, 5, 6, and 8 (revised infrastructure investment plan funding schedules to reflect revised capital investment plan);

2. Exhibit __ (IOP-6CU) (revised information systems projects table reflecting corrected amortization amounts and actual spending through March 2010);
3. Exhibit __ (IOP-9CU) (corrected aerial inspection program information);
4. Exhibit __ (IOP-13CU) (corrected and revised description of research, development & demonstration ("RD&D") programs and funding levels); and
5. Exhibit __ (IOP-13ACU) (new exhibit setting forth RD&D program cost allocation percentages and annual funding levels).

Q. What updates and/or corrections do you have to your January 29, 2010 testimony and exhibits?

A. The Panel's corrections and updates testimony describes the following changes to the January 29, 2010 filing:

1. Downward adjustment to the infrastructure investment plan of approximately $99 million for the FY11-FY14 period to reflect removal of some proposed projects from the plan and the addition of others;

2. Updates to reflect a revised in-service date for the Company's Energy Management System ("EMS") replacement project;
3. Changes in the amounts for capital-related operations and maintenance ("O&M") costs and cost of removal ("COR");
4. Corrections in the testimony relating to facilities investments;
5. Corrections relating to information system investments;
6. Corrections relating to the Company's aerial inspection program; and
7. Corrections relating to the proposed research, development and demonstration ("RD&D") programs.

II. Corrections and Updates

Update to Infrastructure Investment Plan

Q. Please describe the Company's updates relating to its infrastructure investment plan.

A. The Company is proposing an overall downward adjustment of $99 million for the period FY11-FY14 in the transmission portion of its investment plan. This adjustment reflects the removal of a number of projects related with the Frontier Region Program described in our direct testimony, as well as the addition of other projects required as a result of the removal of the Frontier Region projects.

Q. Please describe the Frontier Region Program and explain the basis for removing the projects associated with it from the plan.

A. Based on information evaluated after development of the infrastructure plan reflected in the January 29 filing, the Company is proposing to remove from the plan a number of projects included in the Frontier Region Program. The removal of the projects in the Frontier Region Program will also impact the Other Asset Condition Program and the Reliability Criteria Compliance Program. The Frontier Region Program is described at pages 72 and 73 of the direct testimony of the IOP, and we do not repeat a description of the program here.

As part of its continuing review of system needs, in February 2010 the Company performed an extensive review of the drivers behind the planned construction of Tonawanda Station, the closure of the Packard 115 kV bus tie and the re-conductoring of circuits between Packard, Tonawanda and Gardenville substations. The review included 2009 Summer peak results and the latest economic load growth forecast. The updated system representation reflected significant load reductions at several large industrial customers, a modified load distribution across the area and a lower growth rate well into the future. The result of this evaluation indicates that the capacity need driving the Frontier Region Program

projects will not likely materialize within the 15-year horizon for system projections. Therefore, the Company has removed these projects from the capital investment plan proposed in this rate case. Removing these projects from the plan is appropriate, and is consistent with the Commission's directives to eliminate or defer spending when doing so can be accomplished without compromising the provision of safe and reliable service.

Q. Please explain the changes proposed for the Reliability Criteria Compliance and Other Asset Condition programs.

A. As part of the Reliability Criteria Compliance Program, the Strategy to Reinforce the Transmission System in New York's Frontier and Southwest Region (Strategy Paper SG 075 v2 – April 2009) included work to reconductor the #180 and #181 circuits, create a new 115 kV circuit between Packard and Gardenville using retired, in-place assets, and associated substation work at Packard, Tonawanda and Gardenville (referred to in SG 075 v2 as "Frontier Line Rebuilds (T Line and Station)" – project numbers C24018 and C24019, respectively). The reconductoring was originally required to prevent post-fault overloads under N-1 conditions; however, without the system changes at Tonawanda, these overloads are no longer an issue and the reconductoring

is no longer necessary. Nevertheless, because the reconductoring projects would have also addressed important asset condition issues at the same time, it is now necessary to undertake additional projects in the Other Asset Condition Program and the Other System Capacity & Performance program.

Q. What specific projects are affected by removal of the projects in the Frontier Region Program and what are the funding amounts associated with those projects?

A. The affected projects in the Frontier Region Strategy include project numbers C11494 and C11495, as indicated in Exhibit __ (IOP-1), Schedule 8, Sheet 13 of 26. The aggregate funding amounts for these two projects were $29.3 million (FY11), $54.3 million (FY12), $12.2 million (FY13), and $3.4 million (FY14), for a total of $99.2 million for the period FY11-14.

The affected projects in the Reliability Criteria Compliance program include project numbers C24018 and C24019, as indicated in Exhibit __ (IOP-1), Schedule 8, Sheet 15 of 26. The aggregate funding amounts for these two projects were $1.6 million (FY11), $2.1 million (FY12), $14.5

million (FY13), and $21.0 million (FY14), for a total of $39.2 million for the period FY11-14.

Q. Does removal of the Frontier Region Program projects result in the need for other capital work not reflected in the January 29, 2010 plan?

A. Yes. To ensure the long-term reliability of the Buffalo / Niagara Falls area, the Company must undertake six projects in the area - predominately on assets that would have been replaced or made less essential if the Frontier Region Strategy projects had moved forward under the period covered by this case. The projects needed include: (1) installation of permanent capacitor banks at the Huntley 115 kV bus and improvements to grounding at Huntley (project number CNYPL11-1); (2) replacement of the remaining shield wire on the #182 line (project number CNYAS11-1); (3) refurbishment of the Niagara-Gardenville #180 line (southern part) with the double circuited Packard-Urban #181 line (southern part) from Ellicott Junction to the Gardenville substation (project number CNYAS11-2); (4) interim safety related shield wire replacements (under Strategy SG073) on the Huntley – Lockport #36 / #37 lines (project number C28707); (5) replacement of shield wire on the Huntley – Gardenville #38 line (project number C28676); and (6) replacement of the shield wire on

the Packard-Huntley #130 and Walck-Road #133 lines between Huntley and Ellicott Junction (project number C28712).

Planned annual spending for the capacitor bank and grounding improvement project is as follows: FY11 $0.100 million, FY12 $0.400 million, FY13 $2.60 million, and FY14 $0.950 million, for an aggregate cost of $4.05 million over the FY11-FY14 period. Planned annual spending for the Huntley-Lockport #36 / #37, Huntley-Gardenville #38 and Huntley-Walck Road shield wire replacement work is $1.275 million in FY11 and $0.275 million in FY12, for a total of $1.550 million. Planned annual spending for the refurbishment of the #180 and #181 lines is as follows: FY11 $0.02 million, FY12 $0.5 million, FY13 $15.0 million, and FY14 $15.0 million, for an aggregate amount of $30.52 million over the FY11-FY14 period. Planned annual spending for the replacement of the remaining shield wire on the #182 line is as follows: FY11 $0.02 million, FY12 $0.08 million, and FY13 $2.0 million, for an aggregate amount of $2.1 million over the FY11-FY14 period.

The revised capital investment amounts are set forth in Exhibit __ (RRP-6CU), Schedule 1, Sheet 4, to the corrections and updates testimony of the Revenue Requirements Panel.

Q. Has the Infrastructure and Operations Panel prepared revised exhibits that reflect the described changes to the infrastructure investment plan?

A. Yes. Included with our testimony are Exhibit __ (IOP-1CU), Schedules 1, 2, 5, 6, and 8, which reflect the changes described above. In Schedule 8, the pages that include the changes described above are Pages 13-15 and 22-25.

Q. Is the Company proposing any other changes to the infrastructure investment plan proposed in the case?

A. The Company will continue to review system needs; however, at this time, no other changes in the plan are warranted.

<u>Updated In-Service Dates for EMS Replacement Project</u>

Q. Please describe the update related to the revised in-service date for the EMS project.

A. The Company's Energy Management System ("EMS") Replacement Project is described at pages 203-204 of the panel's January 29 direct testimony. In our direct testimony, we indicated that work on the EMS project was expected to continue through the end of 2012. The Company now anticipates that the EMS project will be implemented earlier than initially projected, with a current estimated in-service date of February 2012.

Revised capital-related O&M and COR costs

Q. Please describe the changes to the Company's filing relating to capital-related O&M costs.

A. As described in the IOP testimony (pages 226-230 of 266), whenever the Company undertakes capital investment work that affects existing facilities, it incurs O&M costs related to that capital work. Because the infrastructure investment plan presented in this case reflects an amount of investment greater than in the historical test year period, the Company's January 29, 2010 filing included an amount of incremental capital-related O&M expense. Because of the downward adjustment to the Company's infrastructure investment plan described previously, it is necessary to reduce this level of incremental capital-related O&M expense.

Q. What adjustment is the Company proposing to its capital-related O&M expense?

A. The Company is proposing reductions in capital-related O&M expense associated with the downward adjustments in the infrastructure plan as follows: CY11: $2.22 million reduction; CY12: $0.75 million reduction; and CY13: $0.40 million reduction.

Q. Did the Company identify any other corrections needed in capital-related O&M?

A. Yes. In preparing its response to IR AJR-8, the Company identified a spreadsheet cell reference error that resulted in an overstatement of annual capital-related O&M amounts of $0.64 million. The Company has addressed the cell reference error and calculated a corrected capital-related O&M amount. Adding this adjustment and the adjustment associated with the reduced capital plan amount produces total annual capital-related O&M reductions of: $2.86 million in CY11, $1.39 million in CY12 and $1.04 million in CY13. These reduced amounts are reflected in Exhibit __ (RRP-2CU), Schedule 35, Sheet 4 to the corrections and updates testimony of the Revenue Requirements Panel.

Q. Please describe the changes to the Company's filing relating to cost of removal ("COR").

A. As described in the IOP testimony (pages 134-135 of 266), whenever existing assets are removed from the Company's asset inventory (e.g., due to replacement, retirement, etc.), the Company incurs costs considered COR. The amount of COR estimated in this case is based on the investment levels included in the infrastructure plan. Because of the downward adjustment to the Company's infrastructure investment plan described previously, it is necessary to reduce the level of incremental COR in the case.

Q. What adjustment is the Company proposing to its COR amount?

A. The Company is proposing reductions in COR amounts associated with the downward adjustments in the infrastructure plan as follows: FY11: $2.20 million reduction; FY12: $4.18 million reduction; FY13: $0.53 million reduction; and FY14: $0.61 million reduction. These reduced amounts are reflected in Exhibit __ (RRP-6CU), Schedule 1, Sheet 5 to the corrections and updates testimony of the Revenue Requirements Panel.

Facilities-related investments

Q. Please describe the corrections identified to the Company's facilities-related investment.

A. We describe two corrections to the panel's January 29 testimony. First, at page 188 of 266, the panel describes that National Grid's Northborough, Massachusetts consolidated control center would serve to "back up" the Company's Henry Clay Boulevard consolidated control center in the event of an evacuation of the Henry Clay Boulevard facility. Although the Northborough facility will have visibility over the Company's system**,** the primary back-up facility in the event of an evacuation of the Henry Clay Boulevard control center will be at the Company's Syracuse Office Complex in Syracuse. This correction is only for purposes of clarification, and has no other impact on the Company's operations or revenue requirements.

Q. Please describe the second facilities-related correction.

A. At page 197 of 266, line 9, of the direct testimony, the reduction of lease expense related to the Star Lake facility should read "$8,725," not "$5,500."

Information System investments

Q. Please describe the corrections identified to the Company's information systems investments.

A. The Company's infrastructure-related information system ("IS") investments are described at pages 198-204 of 266 of the IOP's direct testimony, and in Exhibit __ (IOP-6). In responding to IR MM-42, the Company determined that it had reflected only a portion of the applicable amortization amounts for the following Operations-related IS projects in Exhibit __ (IOP-6): INVP 1185, 1242, 1243, 1246, 1363, 1482, 1484, 1642, 2144, 2182, and 2195. Attached as Exhibit __ (IOP-6CU) is a revised table reflecting the correct amortization amounts and actual spending through March 2010.

Aerial Inspection Program

Q. Please describe the corrections identified to the Company's aerial inspection program.

A. The aerial inspection program is described at pages 219-220 of 266 of the IOP's direct testimony. In preparing its response to IR VVP-13, the Company identified several reference errors in Exhibit __ (IOP-9), Schedule 2, relating to the transmission aerial patrol program. These errors were described in detail in the response to IR VVP-13, and are

reflected in revised Exhibit __ (IOP-9CU), Schedule 2, included with this corrections and updates testimony. The corrections do not impact the Company's proposed funding level of the aerial inspection program.

Research, Development and Demonstration ("RD&D") Program

Q. Please describe the corrections identified to the Company's RD&D program.

A. The Company's RD&D programs are described at pages 251-260 of 266 of the IOP's direct testimony, and in Exhibit __ (IOP-13) of the January 29 filing. Exhibit __ (IOP-13) provides a detailed description of each program as well as annual funding amounts for each program. In responding to IR MM-120, the Company determined that the incremental funding amounts described for the programs reflected total funding levels, and not just the portion of funding that was allocable to Niagara Mohawk. In addition, the Company determined that in Exhibit __ (IOP-13), it had reflected the costs (unallocated) of the EPRI Reactive Power Management Program twice ($80,000 annually), incorrectly included the Grid Wise Alliance program ($20,000 annually), and misstated the CY 12 funding for the DV2010 program (should have been $50,000, but was reflected as $150,000).

Q. What has the Company done in this filing to address these errors.

A. The Company calculated Niagara Mohawk's allocated share of the RD&D program costs and included those costs in its updated revenue requirements submission. As a result of these corrections, the corrected incremental RD&D funding levels above the historic test year amount are $0.635 million in CY11, $1.378 million in CY12, and $1.559 million in CY13, for a three-year incremental funding total of approximately $3.57 million. The corrected funding amounts associated with the individual RD&D programs, as well as the allocation percentages and the revised annual funding levels are reflected in Exhibit __ (IOP-13A-CU) included with our testimony. In addition, the panel is sponsoring Exhibit __ (IOP-13CU), which presents the program information originally included in Exhibit __ (IOP-13), revised to reflect removal of the Grid Wise Alliance and redundant EPRI Reactive Power Management programs, as well as the corrections to the funding levels as described above.

Q. Does the panel have any other corrections or updates at this time?

A. No. However, conditions facing the Company are always changing, and the Company is continually evaluating opportunities to reduce costs and provide service to customers in the most efficient manner practicable. To the extent the panel identifies additional corrections or updates that

significantly affect its testimony in this case, it will seek to bring them to the attention of the Commission.

Q. Does this conclude the panel's testimony?

A. Yes, it does.

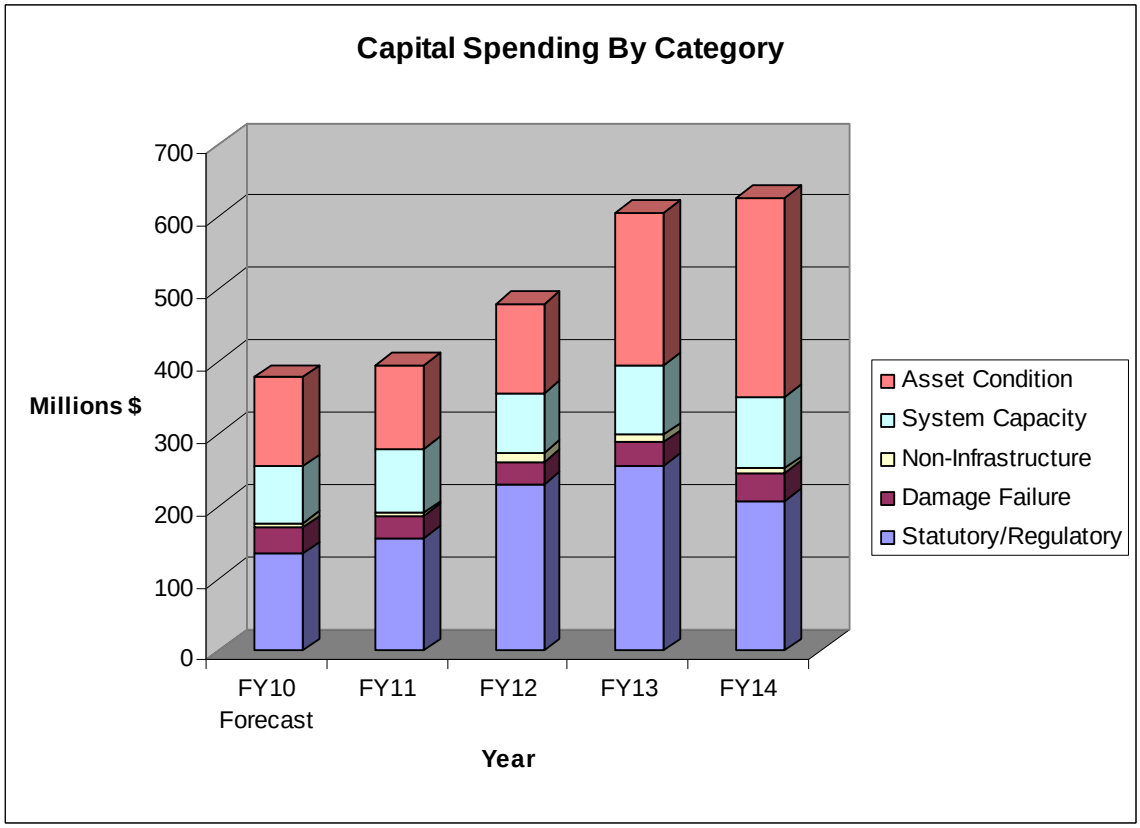
Exhibits of
Infrastructure & Operations Panel

Index of Exhibits

Exhibit __ (IOP-1CU)

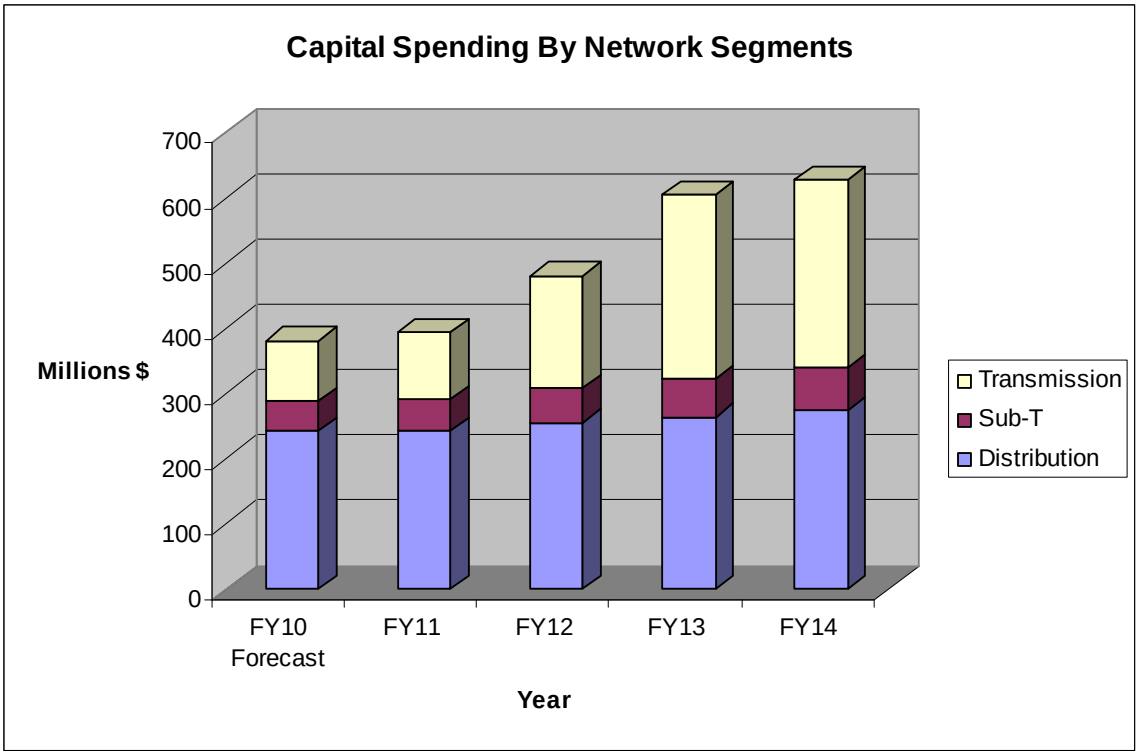
Forecast and Planned T&D Infrastructure Investment Levels by Category
FY10-FY14

Forecast and Planned T&D Infrastructure Investment Levels By Category, FY10-to-FY14, ($Millions)



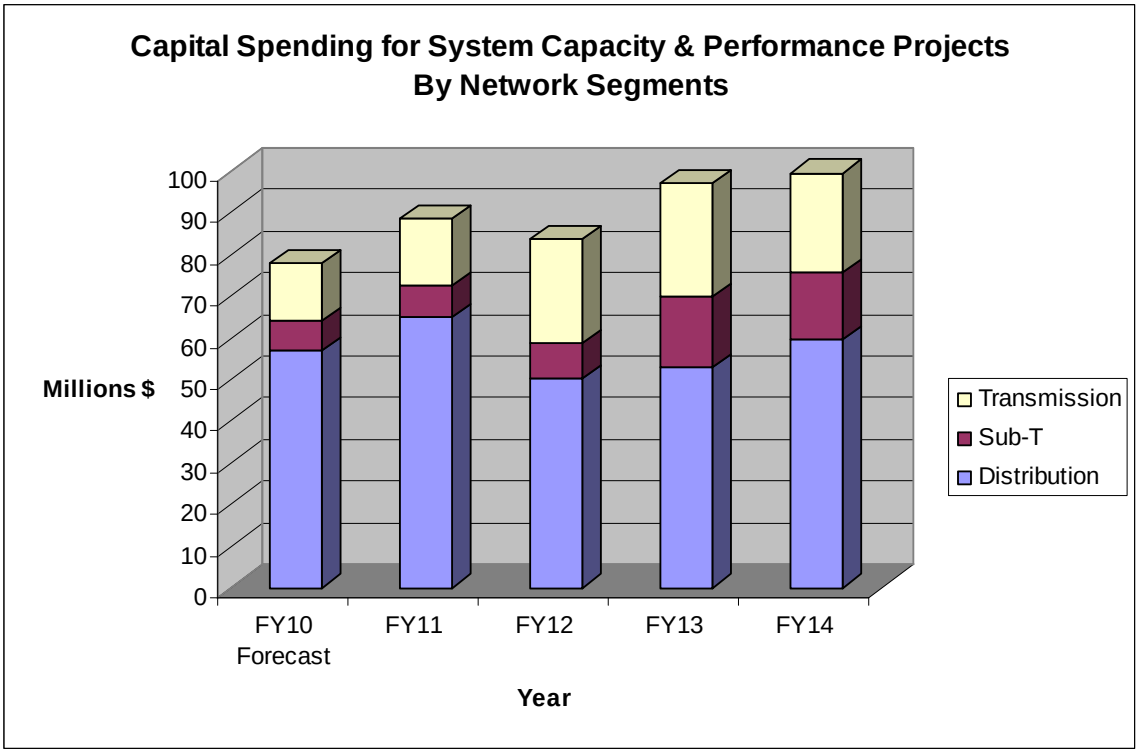
	FY10 Forecast	FY11	FY12	FY13	FY14	FY11-14
Statutory/Regulatory	134	157	231	256	207	**850**
Damage Failure	36	31	31	33	38	**133**
Non-Infrastructure	7	3	11	11	7	**32**
System Capacity	78	89	84	97	99	**369**
Asset Condition	123	116	124	210	275	**725**
Total	**378**	**395**	**481**	**606**	**627**	**2108**

Forecast and Planned T&D Infrastructure Investment Levels
By Network Segment, FY10-to-FY14, ($Millions)



	FY10 Forecast	FY11	FY12	FY13	FY14	FY11-14
Distribution	243	244	255	265	275	**1039**
Sub-T	43	48	53	58	65	**224**
Transmission	93	103	173	283	286	**845**
Total	**378**	**395**	**481**	**606**	**627**	**2108**

Forecast and Planned T&D Infrastructure Investment Levels
For System Capacity and Performance Category, FY10-to-FY14, ($Millions)

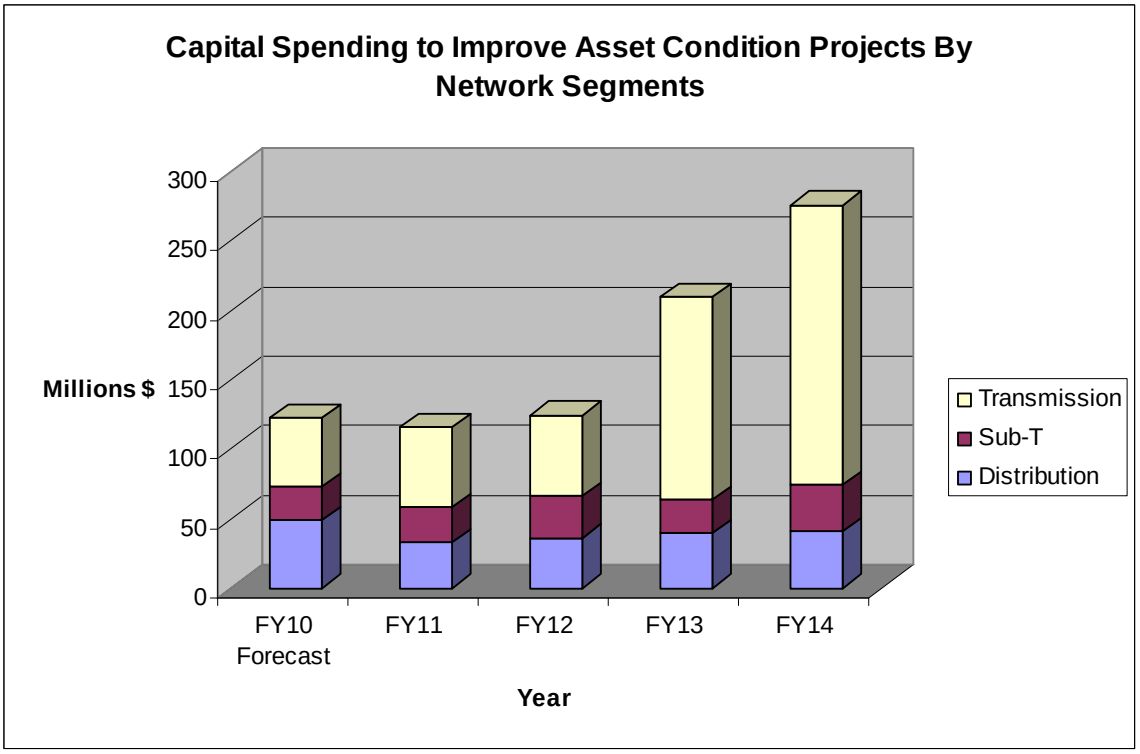


	FY10 Forecast	FY11	FY12	FY13	FY14	FY11-14
Distribution	57	65	50	53	60	**228**
Sub-T	7	8	8	17	16	**49**
Transmission	14	16	25	27	24	**92**
Total	**78**	**89**	**84**	**97**	**100**	**369**

Planned T&D Infrastructure Investment Levels For System Capacity and Performance Category by Network Segment and Program, FY11-to-FY14, ($Millions)

NETWORK SEGMENT	BUDGET CLASSIFICATION/ PROGRAM	FY11	FY12	FY13	FY14	FY11-FY14
DISTRIBUTION	Planning Criteria	30	22	23	21	**96**
	Blanket	7	7	8	8	**30**
	Distribution Line Transformer	5	5	8	10	**28**
	Recloser Application	5	6	6	10	**27**
	Substation EMS/RTU	5	5	5	6	**21**
	Engineering Reliability Review	8	1	1	1	**11**
	Pockets of Poor Performance	2	2	2	2	**8**
	Substation Overarching	1	4	0	0	**5**
	Feeder Hardening	3	0	0	0	**3**
	Substation Relay/Protection	0	0	0	1	**1**
	Capacitor Application	0	0	0	0	**0**
	Distribution Line Regulator	0	0	0	0	**0**
	Open Wire Primary	0	0	0	0	**0**
	URD Primary	0	0	0	0	**0**
	TBD	(1)	(2)	0	0	**(2)**
	TOTAL DISTRIBUTION	**65**	**50**	**53**	**60**	**228**
SUB-TRANSMISSION	Planning Criteria	1	6	13	8	**28**
	Distribution & Sub-transmission Automation	1	1	2	4	**8**
	New Business	7	0	0	0	**7**
	Blanket	1	1	1	1	**3**
	TBD	(2)	0	1	4	**3**
	Substation Relay/Protection	0	1	0	0	**1**
	Subtransmission Line Overarching	0	0	0	0	**0**
	TOTAL SUB-TRANSMISSION	**8**	**8**	**17**	**16**	**49**
TRANSMISSION	Frontier Region	0	0	0	2	**2**
	Reliability Criteria Compliance	10	27	19	2	**59**
	Other System Capacity & Performance	6	8	12	22	**48**
	Overhead Line Refurbishment Program	5	0	0	0	**5**
	Load	2	2	0	0	**4**
	Reserve	(8)	(12)	(4)	(2)	**(26)**
	TOTAL TRANSMISSION	**16**	**25**	**27**	**24**	**92**
TOTAL		**89**	**83**	**97**	**100**	**369**

Forecast and Planned T&D Infrastructure Investment Levels
For Asset Condition Category, FY10-to-FY14, ($Millions)



	FY10 Forecast	FY11	FY12	FY13	FY14	FY11-14
Distribution	49	33	35	39	41	**148**
Sub-T	24	25	30	25	32	**112**
Transmission	50	58	58	146	202	**464**
Total	**123**	**116**	**124**	**210**	**275**	**725**

Forecast and Planned Infrastructure Investment Levels
For Asset Condition Category by Program, Distribution Segment by Program
FY11-to-FY14, ($Millions)

BUDGET CLASSIFICATION/ PROGRAM	FY11	FY12	FY13	FY14	FY11-FY14
Substation Indoor Substation	9	14	18	18	**59**
Blanket	6	6	5	5	**22**
Substation Circuit Breaker/Recloser	4	2	4	7	**17**
Primary Underground Cable	3	5	3	5	**16**
Substation Metal Clad Switchgear	1	5	5	3	**14**
Networks	2	2	2	2	**8**
Substation Power Transformer	2	2	2	2	**8**
Planning Criteria	1	2	1	0	**4**
Manhole/Vault	2	0	0	1	**3**
Substation Overarching	1	0	0	1	**2**
Open Wire Primary	1	0	0	0	**1**
Substation Battery and Related	0	0	0	1	**1**
Substation Circuit Switcher	1	0	0	0	**1**
Distribution Line Transformer	0	0	0	0	**0**
Duct	0	0	0	0	**0**
Engineering Reliability Review	0	0	0	0	**0**
Miscellaneous Underground Equipment	0	0	0	0	**0**
Overhead Secondary	0	0	0	0	**0**
Potted Porcelain Cutout	0	0	0	0	**0**
Substation Non-transformer Reactor	0	0	0	0	**0**
Substation Relay/Protection	0	0	0	0	**0**
Substation Voltage Regulator	0	0	0	0	**0**
Subtransmission Line Overarching	0	0	0	0	**0**
Wood Pole	0	0	0	0	**0**
(blank)	0	0	0	0	**0**
TBD	(1)	(2)	(1)	(3)	**(7)**
TOTAL DISTRIBUTION	**33**	**35**	**39**	**41**	**148**

Forecast and Planned Infrastructure Investment Levels
For Asset Condition Category, Sub-Transmission Segment by Program, FY11-to-FY14, ($Millions)

BUDGET CLASSIFICATION/ PROGRAM	FY11	FY12	FY13	FY14	FY11-FY14
Subtransmission Line Overarching	15	18	10	0	**43**
Subtransmission Underground Cable	1	6	7	12	**26**
Subtransmission and Distribution Tower	1	2	4	5	**12**
Substation Circuit Breaker/Recloser	0	0	3	3	**6**
Substation Indoor Substation	1	2	1	2	**6**
Primary Underground Cable	3	1	1	0	**5**
Blanket	1	1	1	1	**4**
TBD	(1)	(3)	(2)	10	**4**
Substation Metal Clad Switchgear	1	2	0	0	**3**
Open Wire Primary	2	0	0	0	**2**
Underground/Padmounted Switch	1	1	0	0	**2**
Substation Capacitor & Switch	0	0	0	0	**0**
Substation Power Transformer	0	0	0	0	**0**
Wood Pole	0	0	0	0	**0**
TOTAL SUB-TRANSMISSION	**25**	**30**	**25**	**32**	**112**

Planned Infrastructure Investment Levels for Asset Condition Category, Transmission Segment by Budget Classification FY11-to-FY14, ($Millions)

BUDGET CLASSIFICATION/ PROGRAM	FY11	FY12	FY13	FY14	FY11-FY14
Overhead Line Refurbishment Program	20	32	53	92	**198**
Substation Rebuilds	3	9	59	69	**140**
Other Asset Condition	22	7	28	24	**81**
Transformer Replacement Strategy	4	7	7	7	**25**
Circuit Breaker Replacement Strategy	1	1	7	15	**23**
Shield Wire Strategy	8	7	0	0	**15**
Relay Replacement Strategy	0	1	4	7	**11**
3A/3B Tower Strategy	0	0	0	6	**6**
Steel Tower Strategy	5	0	0	0	**5**
Battery Strategy	1	1	1	1	**4**
U-Series Relay Strategy	2	1	0	0	**3**
Flying Ground Strategy	0	0	0	1	**1**
RHE Breaker Replacement	0	0	1	0	**1**
Reserve	(9)	(9)	(13)	(19)	**(50)**
TOTAL TRANSMISSION	**57**	**57**	**147**	**203**	**463**

Planned T&D Infrastructure Investment Levels For Statutory/Regulatory Category by Network Segment, Program and Project ($Millions)

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
Distribution	3rd Party Attachments	CNC022	Cent NY-Dist-3rd Party Attach Blanket	50	0.1	0.1	0.1	0.1	0.4
		CNE022	East NY-Dist-3rd Party Attach Blanket	50	0.1	0.1	0.1	0.1	0.4
		CNW022	West NY-Dist-3rd Party Attach Blanket	50	0.1	0.1	0.1	0.1	0.3
	3rd Party Attachments Total				**0.3**	**0.3**	**0.3**	**0.3**	**1.1**
	Inspection & Maintenance	C26159	FH – NE D-Line Work Found by Insp.	42	5	8.8	7.5	6.5	27.8
		C26160	FH – NC D-Line Work Found by Insp.	42	5	8.8	7.5	6.5	27.8
		C26161	FH – NW D-Line Work Found by Insp.	42	5	8.8	7.5	6.5	27.8
		C26162	FH – NE UG Work Found by Insp.	42	0.8	0.8	0.8	0.8	3.3
		C26163	NC – UG Work Found by Insp.	42	0.8	0.8	0.8	0.8	3.3
		C26164	NW – UG Work Found by Insp.	42	0.8	0.8	0.8	0.8	3.3
		E07209	FH – NE D-Line Work Found by Insp.	42	0	0	0	0	0
		E07210	FH – NC D-Line Work Found by Insp.	42	0	0	0	0	0
		E07211	FH – NW D-Line Work Found by Insp.	42	0	0	0	0	0
		E07212	FH – NE UG Work Found by Insp.	42	0	0	0	0	0
		E07213	FH – NC UG Work Found by Insp.	42	0	0	0	0	0
		E07214	FH – NW UG Work Found by Insp.	42	0	0	0	0	0
	Inspection & Maintenance Total				**17.4**	**29**	**25.1**	**22.1**	**93.5**
	Land and Land Rights	CNC009	Cent NY-Dist-Land/Rights Blanket	50	1.3	1.4	1.6	1.7	6
		CNW009	West NY-Dist-Land/Rights Blanket	50	0.6	0.6	0.7	0.8	2.7
	Land and Land Rights Total				**1.9**	**2.1**	**2.2**	**2.4**	**8.7**
	Meters – Dist	CN3604	NiMo Meter Purchases	50	5	5.5	6	6.4	22.9
		CNC004	Cent NY-Dist-Meter Blanket	50	0.7	0.7	0.7	0.8	2.9
		CNE004	East NY-Dist-Meter Blanket	50	0.8	0.8	0.8	0.9	3.3
		CNW004	West NY-Dist-Meter Blanket	50	0.7	0.7	0.8	0.8	3.1
	Meters – Dist Total				**7.1**	**7.8**	**8.3**	**8.8**	**32.1**
	New Business	C24233	Primary service for Taconic Farms	50	0.5	0	0	0	0.5
		C29682	GML Tower	50	0.5	0	0	0	0.5
		C30685	Wal-Mart Sheridan Dr. – New Service	50	0.3	0	0	0	0.3
		C31298	Fairland URD	50	0.2	0	0	0	0.2
		C31602	Bolton 52 – Convert Valley Woods Rd	50	0.3	0	0	0	0.3
		C31612	Helderberg Meadows URD, Phase 1	50	0.4	0	0	0	0.4
		C32301	Bell's Pond Mobile Home URD	50	0.1	0	0	0	0.1
		C32891	Jenna's Forest URD	50	0.1	0	0	0	0.1
		CNC010	Cent NY-Dist-New Bus-Resid Blanket	50	10.3	11	11.6	12.2	45.2
		CNC011	Cent NY-Dist-New Bus-Comm Blanket	50	4.1	4.3	4.5	4.7	17.5
		CNE010	East NY-Dist-New Bus-Resid Blanket	50	9.8	10.5	11.1	11.6	42.9

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		CNE011	East NY-Dist-New Bus-Comm Blanket	50	4	4.2	4.4	4.6	17.1
		CNW010	West NY-Dist-New Bus-Resid Blanket	50	7.7	8.3	8.7	9.1	33.9
		CNW011	West NY-Dist-New Bus-Comm Blanket	50	4.5	4.7	5	5.2	19.3
		RESERVE 036_010 LINE	Reserve for New Business Residential Unidentified Specifics & Schedule Changes	50	2.4	3.6	3.8	4	13.9
		RESERVE 036_011 LINE	Reserve for New Business Commercial Unidentified Specifics & Schedule Changes	50	1	2.4	2.5	2.7	8.6
	New Business Total				**46**	**49.1**	**51.6**	**54**	**200.7**
	Outdoor Lighting – Capital	C26839	Mercury Vapor Replacement	50	2.5	3	2.8	0	8.3
		CNC012	Cent NY-Dist-St Light Blanket	50	2.9	3.1	3.2	3.3	12.5
		CNE012	East NY-Dist-St Light Blanket	50	1.9	2	2.1	2.1	8.1
		CNW012	West NY-Dist-St Light Blanket	50	3.4	3.6	3.7	3.9	14.5
	Outdoor Lighting – Capital Total				**10.7**	**11.6**	**11.8**	**9.3**	**43.4**
	Public Requirements	C15724	NYSDOT Ridge Rd Bridge	50	0.1	0	0	0	0.1
		C21511	DOT Queensbury Exit 18	50	1.6	0	0	0	1.6
		C22173	NYS DOT Route 5	50	0.8	0	0	0	0.8
		C22454	Green Ave Road Widening	50	0.1	0	0	0	0.1
		C26639	Seneca Niagara Casino Relocation NF	50	0.1	0	0	0	0.1
		C29742	DOTR I-81 bridge reconstruction Syr	50	0	0	0	0	0
		C29825	DOT Albany Co., Johnston Rd.	50	0.1	0	0	0	0.1
		C30825	372 Battenkill Bridge – DOT	50	0.1	0	0	0	0.1
		C31258	DOT Glenville, Glenridge Rd.	50	0.3	0	0	0	0.3
		C31318	DOT Albany, Fuller Rd.	50	0.1	0	0	0	0.1
		C31543	DOT Amsterdam, Bridge St.	50	0.3	0	0	0	0.3
		C31554	DOT PIN3045.55 Rt104 Osw-Scriba	50	0.2	0	0	0	0.2
		C31811	DOT Erie Canal Lock E-13	50	0.5	0	0	0	0.5
		C31868	DOTR PIN7804.42 Rt68	50	0.2	0	0	0	0.2
		C32234	DOTR Latham, Rte.'s 2/7 Br/I-87	50	0.2	0	0	0	0.2
		C32286	DOT Saratoga, Rte. 9P Bridge	50	0.2	0	0	0	0.2
		C32359	NYSDOTR Rte. 28, Woodgate to McKeev	50	0.2	0	0	0	0.2
		C32432	DOT Schoharie, Rte.'s 30, 30A & 443	50	0.2	0	0	0	0.2
		C32850	DOT 4098.04- Rt 98 & 238 Attica	50	0.2	0	0	0	0.2
		C33253	DOT-Relocate facilities Maple Rd	50	0	0	0	0	0
		C33351	DOT CR106/Pine Grove Rd	50	0	0	0	0	0
		CNC013	Cent NY-Dist-Public Require Blanket	50	1	1.1	1.2	1.2	4.6
		CNE013	East NY-Dist-Public Require Blanket	50	1.9	2	2.1	2.2	8.2
		CNW013	West NY-Dist-Public Require Blanket	50	1.4	1.5	1.6	1.7	6.2
		RESERVE 036_013 LINE	Reserve for Public Requirements Unidentified Specifics & Schedule Changes	50	1.6	7.4	7.8	8.2	25
	Public Requirements Total				**11.3**	**12.1**	**12.7**	**13.3**	**49.4**
	Transformers & Related Equipment	CN3620	NiMo Transformer Purchases	50	26.8	29.9	32.5	34.5	123.7

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		CNC020	Cent NY-Dist-Transf/Capac Blanket	50	0	0	0	0	0
		CNE020	East NY-Dist-Transf/Capac Blanket	50	0	0	0	0	0
		CNW020	West NY-Dist-Transf/Capac Blanket	50	0	0	0	0	0
	Transformers & Related Equipment Total				**26.8**	**29.9**	**32.5**	**34.5**	**123.8**
Distribution Total					**122**	**141.8**	**144.6**	**144.8**	**552.7**
Sub-Transmission	Inspection & Maintenance	C26165	FH – NE SubT Work Found by Insp.	42	3.2	3.3	3.7	3.8	14
		C26166	FH – NC SubT Work Found by Insp.	42	3.2	3.3	3.7	3.8	14
		C26167	FH – NW SubT Work Found by Insp.	42	3.2	3.3	3.7	3.8	14
		E07215	FH – NE SubT Work Found by Insp.	42	0		0	0	0
		E07216	FH – NC SubT Work Found by Insp.	42	0		0	0	0
		E07217	FH – NW SubT Work Found by Insp.	42	0		0	0	0
	Inspection & Maintenance Total				**9.6**	**10**	**11**	**11.5**	**42.1**
	New Business	C23713	NE-Great Escape	50	0		0	0	0
		C30409	34.5kv Tap to Chau. Co. Lndfill-nug	50	0.1		0	0	0.1
		C32813	New 23kV Cables – New Kaleida Stat.	50	0.1		0	0	0.1
		CNC071	CNY Sub Trans-Line New Business	50	0.2	0.2	0.2	0.3	0.9
		CNE071	ENY Sub Trans-Line New Business	50	0.1	0.1	0.1	0.1	0.4
		CNW071	WNY Sub Trans-Line New Business	50	0.2	0.2	0.2	0.2	0.9
		RESERVE 036_010 LINE	TxD RESERVE for New Business Residential Unidentified Specifics & Schedule Changes	50	0		0	0	0
		RESERVE 036_011 LINE	TxD RESERVE for New Business Commercial Unidentified Specifics & Schedule Changes	50	0		0	0	0
	New Business Total				**0.8**	**0.6**	**0.6**	**0.6**	**2.5**
	Public Requirements	C26405	NYSDOTR Rt28 Woodgate to McKeever	50	1		0	0	1
		C31180	Sub-T Reimb Glenridge Rd	50	0		0	0	0
		CNC072	CNY Sub Trans-Line Public Require	50	0.1	0.1	0.1	0.1	0.4
		CNE072	ENY Sub Trans-Line Public Require	50	0.1	0.2	0.2	0.2	0.6
		CNW072	WNY Sub Trans-Line Public Require	50	0	0	0.1	0.1	0.2
		RESERVE 036_013 LINE	TxD RESERVE for Public Requirements Unidentified Specifics & Schedule Changes	50	0		0	0	0
	Public Requirements Total				**1.3**	**0.3**	**0.3**	**0.3**	**2.2**
Sub-Transmission Total					**11.7**	**10.8**	**11.9**	**12.4**	**46.8**
Transmission	Clay Station Rebuild	C32539	Clay Station Line Project	49	0.1	2	2	0	4.1
	Clay Station Rebuild Total				**0.1**	**2**	**2**	**0**	**4.1**
	Clearance Strategy	C31141	Oswego Lafayette 17, T2420 CCR	33	0.5	0	0	0	0.5
		C03256	Transmission Tower Clearances	40	1	15	15	15	46
	Clearance Strategy Total				**1.5**	**15**	**15**	**15**	**46.5**
	Digital Fault Recorder Strategy	C03726	Digital Fault Recorder Strategy	49	1.1	0	0	0	1.1
		C29487	Repl DFR at Non-BPS Stations	27	0	0	0	0	0
	Digital Fault Recorder Strategy Total				**1.1**	**0**	**0**	**0**	**1.1**
	Generation	CNYX63	Alabama Ledge Wind-Loop in, Loop-out	49	0.2	0.2	0	0	0.4

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		CNYX63R	Alabama Ledge Wind-Loop in, Loop-out Reimbursable portion	49	-0.2	-0.4	0	0	-0.5
		CNYX64	Alabama Ledge Wind-RTU/Metering/Relay upgrades	49	1	0.7	0	0	1.6
		CNYX64R	Alabama Ledge Wind-RTU/Metering/Relay upgrades-Reimbursable portion	49	-1	-0.7	0	0	-1.6
		CNYX01	Athens Generation Expansion –Permanent Line	1	6	10.4	25.5	26.1	68
		CNYX01R	Athens Generation Expansion –Permanent Line Reimbursable	1	-6	-10.4	-25.5	-26.1	-68
		CNYX02	Athens Generation Expansion –Permanent Sub	1	0	0	0.5	3.4	3.9
		CNYX02R	Athens Generation Expansion –Permanent Sub Reimbursable	1	0	0	-0.5	-3.4	-3.9
		C23413	BEDCO Substation Work	49	0.1	0	0	0	0.1
		CNYX60	Cape Vincent Wind-RTU/Metering/Relay upgrades	49	0.1	2.7	0	0	2.8
		CNYX60R	Cape Vincent Wind-RTU/Metering/Relay upgrades-Reimbursable	49	-0.1	-2.7	0	0	-2.8
		CNYX70	Clayton Wind-Loop in, Loop-out	49	0.4	2	0	0	2.4
		CNYX70R	Clayton Wind-Loop in, Loop-out Reimbursable portion	49	-0.4	-2	0	0	-2.4
		CNYX71	Clayton Wind-RTU/Metering/Relay upgrades	49	0.3	1	0	0	1.3
		CNYX71R	Clayton Wind-RTU/Metering/Relay upgrades-Reimbursable portion	49	-0.3	-1	0	0	-1.3
		C29583	Fairfield Wind Farm Interconnection	49	0.8	0	0	0	0.8
		C29583R	Fairfield Wind Farm Interconnection – Reimbursable Portion	49	-0.8	0	0	0	-0.8
		C29782	Fairfield Wind-loop in loop out	49	1	0	0	0	1
		C29782R	Fairfield Wind-loop in loop out(reimb)	49	-1	0	0	0	-1
		CNYX68	Green Power-Cody Rd-loop in,loop out	49	0.5	0	0	0	0.5
		CNYX68R		49	-0.5	0	0	0	-0.5
		CNYX69	Green Power-Cody Rd-RTU,metering	49	1	0	0	0	1
		CNYX69R		49	-1	0	0	0	-1
		CNYPL3	Inghams SPS updates	40	0.1	0.1	0.1	0.1	0.4
		CNYX53	Jordanville Wind-Loop in,Loop out	49	0.2	0.5	0	0	0.7
		CNYX53R	Jordanville Wind-Loop in,Loop out Reimbursable Portion	49	-0.2	-0.5	0	0	-0.7
		CNYX54	Jordanville Wind-RTU/metering/Relay upgrades	49	0.2	2.3	0	0	2.5
		CNYX54R	Jordanville Wind-RTU/metering/Relay upgrades Reimbursable Portion	49	-0.2	-2.3	0	0	-2.5
		CNYX65	New Grange Wind-Loop in, Loop-out	49	0.4	0.4	0	0	0.8
		CNYX65R	New Grange Wind-Loop in, Loop-out Reimbursable portion	49	-0.4	-0.4	0	0	-0.8
		CNYX66	New Grange Wind-RTU/Metering/Relay upgrades	49	1.3	1.1	0	0	2.4
		CNYX66R	New Grange Wind-RTU/Metering/Relay upgrades-Reimbursable portion	49	-1.3	-1.1	0	0	-2.4
		C27745	Noble Bliss 1 – New Arcade Tap	49	0.3	0	0	0	0.3
		C27745R	Noble Bliss 1 – New Arcade Tap – Reimbursable Portion	49	-0.3	0	0	0	-0.3
		C24981	Noble Bliss Wind Farm	35	0.1	0	0	0	0.1
		C24981R	Noble Bliss Wind Farm – Reimbursable Portion	49	-0.1	0	0	0	-0.1
		CNYX67	Sherman Island Upgrade-RTU/Metering/Relay upgrades	49	0.8	0	0	0	0.8

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		CNYX67R	Sherman Island Upgrade-RTU/Metering/Relay upgrades-Reimbursable portion	49	-0.8	0	0	0	-0.8
		CNYX55	St Lawrence Wind-Loop in, Loop-out	49	0.1	0.9	0	0	1
		CNYX55R	St Lawrence Wind-Loop in, Loop-out Reimbursable Portion	49	-0.1	-0.9	0	0	-1
		CNYX56	St Lawrence Wind-RTU/Metering/Relay upgrades	49	0.6	1.6	0	0	2.2
		CNYX56R	St Lawrence Wind-RTU/Metering/Relay upgrades-Reimbursable Portion	49	-0.6	-1.6	0	0	-2.2
		CNYX49	WestHill Wind –Loop in-loop out	49	0.4	0	0	0	0.4
		CNYX49R	WestHill Wind –Loop in-loop out Reimbursable Portion	49	-0.4	0	0	0	-0.4
		CNYX50	WestHill Wind –RTU/metering	49	0.6	0	0	0	0.6
		CNYX50R	WestHill Wind-RTU/metering Reimbursable Portion	49	-0.6	0	0	0	-0.6
	Generation Total				**0.1**	**0**	**0.1**	**0.1**	**0.3**
	Load	CNYPL8	New Distribution for Load Growth	30	0.2	2	2	2	6.2
		C27423	Reynolds Road 115-13.2Kv Second Bank	35	0.7	0	0	0	0.7
		C29824	Unifax	49	0.1	0.2	0	0	0.3
		C29824R	Unifax –Reimbursable Portion	49	-0.1	-0.2	0	0	-0.3
	Load Total				**0.9**	**2**	**2**	**2**	**6.9**
	Luther Forest	C22738	Luther Forest Relay and Malta Sub work	49	3.4	4.8	0	0	8.2
	Luther Forest Total				**3.4**	**4.8**	**0**	**0**	**8.2**
	Northeast Region Reinforcement	CNYX39	Design/Build NERR	36	0.5	5	13.4	11.9	30.8
		C18250	Re-conductor Rotterdam 1&2 Lines – Part of NERR	49	3	0	0	0	3
		CNYX39A	Rotterdam Banks – Part of NERR	36	0	0	1.3	17.7	19
		C31418	Spier Rotterdam Line#3 – Part of NERR	49	1.6	9.7	25.3	8.6	45.1
		C31326	Turner Rd new 230-115kV Station – Part of NERR	49	2	25	17.3	0.2	44.4
		C31419	Turner Road New Line Taps – Part of NERR	49	0.3	1.5	7.8	0.1	9.6
	Northeast Region Reinforcement Total				**7.3**	**41.2**	**65**	**38.5**	**151.9**
	Other Statutory/ Regulatory	C29483	Repl 23 meters Interconnect/ NYISO	49	0.8	2	1.8	1.4	5.9
		C32551	Various Station – Range Operations	49	0.1	0	0	0	0.1
	Other Statutory/Regulatory Total				**0.8**	**2**	**1.8**	**1.4**	**5.9**
	RTU Strategy	C03772	RTU Replacements NERC, EMS, Obsolescence	49	1.5	2	1.4	0	4.9
	RTU Strategy Total				**1.5**	**2**	**1.4**	**0**	**4.9**
	Station BPS Upgrades	C28686	Porter – 115kV upgrade to bulk power	40	0.1	12	12	0	24.1
		C28705	Upgrade 115kV Clay Sub to BPS NPCC	49	9.8	8	11	0	28.8
	Station BPS Upgrades Total				**9.9**	**20**	**23**	**0**	**52.9**
	Reserve	CNYX32	Reserve	49	-3.2	-10.7	-11.2	-6.6	-31.7
	Reserve Total				**-3.2**	**-10.7**	**-11.2**	**-6.6**	**-31.7**
Transmission Total					**23.3**	**78.2**	**99**	**50.4**	**250.9**
Total Statutory/Regulatory					**157**	**230.8**	**255.5**	**207.6**	**850.4**

Planned T&D Infrastructure Investment Levels For Damage/Failure Category by Network Segment, Program and Project ($Millions)

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
Distribution	Damage/ Failure	C18595	DxT Substation Dmg/Fail Reserve C36	50	0.1	0.1	0.1	0.2	0.5
		CNC002	Cent NY-Dist-Subs Blanket	50	0.4	0.4	0.4	0.4	1.6
		CNC014	Cent NY-Dist-Damage/Failure Blanket	50	4	4.2	4.4	4.5	17.1
		CNE002	East NY-Dist-Subs Blanket	50	0.6	0.7	0.7	0.7	2.7
		CNE014	East NY-Dist-Damage/Failure Blanket	50	5.4	5.8	6	6.2	23.4
		CNW002	West NY-Dist-Subs Blanket	50	0.4	0.4	0.4	0.4	1.6
		CNW014	West NY-Dist-Damage/Failure Blanket	50	5	5.3	5.5	5.7	21.6
		RESERVE 036_014 LINE	Reserve for Damage/Failure Unidentified Specifics & Schedule Changes	50	2.6	2.8	2.9	3	11.2
		RESERVE 036_014 SUB	Reserve for Damage/Failure Unidentified Specifics & Schedule Changes (substation)	50	1	1	1	1	4
	Damage/Failure Total				**19.5**	**20.6**	**21.4**	**22.1**	**83.6**
	Major Storms - Dist	C00056	Storm Damage - Dist - Western Div	50	0.5	0.5	0.5	0.5	2
		C00328	Storm Damage Distribution East Div.	50	0.5	0.5	0.5	0.5	2
		C12965	Storm Damage-Dist-Cent Div	50	0.5	0.5	0.5	0.5	2
	Major Storms - Dist Total				**1.4**	**1.5**	**1.6**	**1.6**	**6.1**
Distribution Total					**20.9**	**22.1**	**22.9**	**23.7**	**89.7**
Sub-Transmission	Damage/ Failure	CNC073	CNY Sub Trans-Line Damage Failure	50	0.6	0.6	0.6	0.7	2.5
		CNC074	CNY Sub Trans-Substation Blanket	50	0.3	0.4	0.4	0.4	1.4
		CNE073	ENY Sub Trans-Line Damage Failure	50	0.8	0.9	0.9	0.9	3.5
		CNE074	ENY Sub Trans-Substation Blanket	50	0.1	0.1	0.1	0.1	0.5
		CNW073	WNY Sub Trans-Line Damage Failure	50	1.6	1.7	1.7	1.8	6.9
		CNW074	WNY Sub Trans-Substation Blanket	50	0.1	0.1	0.1	0.1	0.5
		RESERVE 036_014 LINE	TxD RESERVE for Damage/Failure Unidentified Specifics & Schedule Changes	50	0		0	0	0
		RESERVE 036_014 SUB	TxD RESERVE for Damage/Failure Unidentified Specifics & Schedule Changes (substation)	50	0		0	0	0
	Damage/Failure Total				**3.6**	**3.8**	**3.9**	**4**	**15.3**
Sub-Transmission Total					**3.6**	**3.8**	**3.9**	**4**	**15.3**
Transmission	NY Inspection Projects	C26923	NY Inspection Projects - Capital	49	0.4	1	1	3	5.4
	NY Inspection Projects Total				**0.4**	**1**	**1**	**3**	**5.4**
	Other Damage/ Failure	C29320	Curtis St- Repl LN10 &13 Relays	26	0	0.2	0	0	0.2
		C28324	Geres Lock Sub- Repl 14 115kV Disc	19	0.3	0	0	0	0.3
		C32504	Getzville-Sta60-Repl Cntrl Hse Roof	35	0	0	0	0	0

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C28303	Kensington Sub Repl TB#4 & 5 LTC Control	28	0	0	0	0	0
		C32964	Leeds - PV 92 T5330 Str 361	40	0	0.5	0	0	0.5
		C20546	New Gardenville-Repl 230kV Discs	27	0.1	0	0	0	0.1
		C22391	Oneida - TB#3 Failure	49	0.8	0	0	0	0.8
		C28964	Oneida Sub- Replace LTG & Recpt Ckts	16	0.2	0	0	0	0.2
		C32596	Porter Sub - Repl. Barre neutr & Auto	35	0	0	0	0	0
		C31660	Replace Damaged Insulators	40	0.4	0	0	0	0.4
		C18952	S. Oswego R/R LN1 Tone Package	33	0.2	0	0	0	0.2
		C03278	Transmission Line Replacements - Budgetary Reserve	49	0.2	0.2	0.2	0.2	0.8
		C03792	Transmission Station Failures - Budgetary Reserve	49	1	1.4	2.7	3.1	8.2
		C03481	Transmission Storm Budgetary Reserve	49	0.3	0.3	0.3	0.3	1
		C13622	Transmission UG C Budgetary Reserve - Co 36	49	0	0	0	0	0.1
		C26144	Yahnundasis - Repl 18 & 28 Switches	28	0.4	0	0	0	0.4
	Other Damage/Failure Total				**3.8**	**2.5**	**3.2**	**3.6**	**13.2**
	Steel Tower Strategy	C25539	Visual Grade 6 Tower Replacements	40	0.1	0.1	0.1	0.1	0.5
	Steel Tower Strategy Total				**0.1**	**0.1**	**0.1**	**0.1**	**0.5**
	Wood Pole Strategy	C11640	Wood Pole Management - NY	43	1.8	1.5	1.6	3	7.9
	Wood Pole Strategy Total				**1.8**	**1.5**	**1.6**	**3**	**7.9**
Transmission Total					**6.1**	**5.2**	**5.9**	**9.8**	**26.9**
Total Damage/Failure					**30.6**	**31.1**	**32.7**	**37.5**	**131.9**

Planned T&D Infrastructure Investment Levels For System Capacity & Performance Category by Network Segment, Program and Project ($Millions)

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
Distribution	Blanket	CNC015	Cent NY-Dist-Reliability Blanket	50	1.7	1.9	2	2.2	7.8
		CNE015	East NY-Dist-Reliability Blanket	50	1.6	1.8	1.9	2	7.3
		CNW015	West NY-Dist-Reliability Blanket	50	3.3	3.5	3.8	4.1	14.7
	Blanket Total				**6.6**	**7.2**	**7.8**	**8.3**	**29.8**
	Capacitor Application	C32510	Brockport Feeder Capacitors	36	0.3	0	0	0	0.3
	Capacitor Application Total				**0.3**	**0**	**0**	**0**	**0.3**
	Distribution Line Regulator	C06679	Boyntonville 51 Regulators	50	0.1	0	0	0	0.1
	Distribution Line Regulator Total				**0.1**	**0**	**0**	**0**	**0.1**
	Distribution Line Transformer	C10967	IE - NW Dist Transformer Upgrades	30	1.5	1.5	2.5	3.2	8.8
		C14846	IE - NC Dist Transformer Upgrades	30	1.5	1.5	2.5	3.2	8.8
		C15828	IE - NE Dist Transformer Upgrades	30	1.5	1.5	2.5	3.2	8.8
	Distribution Line Transformer Total				**4.5**	**4.6**	**7.6**	**9.7**	**26.4**
	Engineering Reliability Review	C06698	Clinton 53 - Convert Ft Plain	23	0	0	0	0	0
		C07438	Chestertown 52 - Duell Hill Rd.	27	0.2	0	0	0	0.2
		C15727	NR-Gilpin Bay 95661-Fish Creek Pond	23	0	0	0	0	0
		C15732	NR-Gilpin Bay 95661-Hoel Pond	23	0	0	0	0	0
		C16117	IE - NE ERR and Fuse	30	0.4	0.4	0.4	0.4	1.6
		C16118	IE - NC ERR and Fuse	30	0.4	0.4	0.4	0.4	1.6
		C16119	IE - NW ERR and Fuse	30	0.4	0.4	0.4	0.4	1.6
		C19272	Caroga - G'ville 53 Feeder Tie	49	0.2	0	0	0	0.2
		C22959	NR-W.Adams87554-Church St	49	0.1	0	0	0	0.1
		C26876	Corinth 52 - Eastern Ave. Rebuild	36	0.9	0	0	0	0.9
		C26877	Guy Park Retirement Dist. Line	36	0.1	0	0	0	0.1
		C26973	NR-State St 95463-Judson St Rebuild	27	0.2	0	0	0	0.2
		C28176	Scofield 53 - Hadley/Harrisburg Rds	36	0.2	0	0	0	0.2
		C28617	Lehigh 66954 Teelin Rd Relocate	27	0.1	0	0	0	0.1
		C28620	Oneida 50153 Route 5	27	0	0	0	0	0
		C28623	Poland 62257 Steuben Rd	27	0	0	0	0	0
		C28625	F20871 rebuild ties F4768/F2569	27	0.2	0	0	0	0.2
		C28652	Delameter F9352 new ties w/18251,53	28	0.3	0	0	0	0.3
		C28689	F9753 Rebuild/Conv tie w/F21754	30	0.2	0	0	0	0.2
		C28692	F8566 Rebuild Various Sections	24	0	0	0	0	0
		C28716	Knapp Rd 22651 Feeder Tie	23	0	0	0	0	0
		C28717	N.Leroy 0455 - Mumford 5052 Fdr Tie	36	0.4	0	0	0	0.4

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C28718	E.Batavia 2855 - N.Leroy 0456 Tie	30	0.8	0	0	0	0.8
		C28719	Batavia 0155 - Knapp Rd 22651 Tie	36	0.5	0	0	0	0.5
		C28720	N.Eden 8251 Tie w/ F8861 & F8862	27	0	0	0	0	0
		C28721	Delameter 9354 - 9353 Feeder Tie	27	0	0	0	0	0
		C28723	Delameter 9352 - Eden Ctr 8862 Tie	27	0	0	0	0	0
		C28726	Sweet Home F22457 tie with F2165	28	0.1	0	0	0	0.1
		C28791	Krumkill 51 Russell Rd convert	36	0.1	0	0	0	0.1
		C28823	Pinebush 37154 Prescott Woods	23	0	0	0	0	0
		C29101	NR-N Gouverneur 98352-Rt58 Transfer	27	0.3	0	0	0	0.3
		C29424	Battenkill 56 - Weibel 51 Tie	31	0.1	0	0	0	0.1
		C29426	Center St 54 - Rebuild Route 5S	18	0	0	0	0	0
		C29429	Chestertown 52 - Schroon River Rd	30	0.5	0	0	0	0.5
		C29430	Corinth 52 - Hudson River Crossing	35	0.2	0	0	0	0.2
		C29431	Farnan Rd 51 - Bluebird Road	21	0	0	0	0	0
		C29433	Inghams 51 - Route 108	23	0	0	0	0	0
		C29434	Middleburg 51 - Tie to Schoharie	30	0.1	0	0	0	0.1
		C29435	Northville 52 - EJ West 51 Tie	23	0	0	0	0	0
		C29437	Saratoga 4.16 kV Conversion	23	0	0	0	0	0
		C29438	Scofield Rd 53 - Tie to Corinth 51	30	0.8	0	0	0	0.8
		C29439	St Johnsville - Sanders Road	21	0	0	0	0	0
		C31772	Lehigh 66951 Tie with Turin 65355	50	0.5	0	0	0	0.5
	Engineering Reliability Review Total				**8.1**	**1.2**	**1.2**	**1.2**	**11.7**
	Feeder Hardening	C10968	FH - NW Feeder Hardening	45	1	0	0	0	1
		C13145	FH - NC Feeder Hardening	45	1	0	0	0	1
		C13146	FH - NE Feeder Hardening	45	1	0	0	0	1
	Feeder Hardening Total				**3**	**0**	**0**	**0**	**3**
	Open Wire Primary	C28610	Peterboro Reconductor Main St.	27	0.2	0	0	0	0.2
		C28616	Walesville Reconductor Utica St	27	0.1	0	0	0	0.1
	Open Wire Primary Total				**0.3**	**0**	**0**	**0**	**0.3**
	Planning Criteria	C00376	St. Johnsville 51-Wagner/Wiltse Rds	14	0.2	0	0	0	0.2
		C06533	East Golah 51 - Second Bank	38	1.4	0	0	0	1.4
		C06765	East Golah -F5151E, F5151W & F5151C	38	0.8	0	0	0	0.8
		C06850	Whitaker 51 River Crossing	27	0.1	0	0	0	0.1
		C07477	Northville 52 - Convert N. Shore Rd	23	0.1	0	0	0	0.1
		C07482	Battenkill 34257 - Rebuild/convert	49	0.1	0	0	0	0.1
		C07798	EJ West 03841 - Convert to 13.2kV	50	0.1	0	0	0	0.1
		C08153	PS&I Activity - New York	36	0.1	0.1	0.1	0.1	0.4
		C08606	Delmar 440, Jun, Vooh 52 Conversion	27	0.6	0	0	0	0.6
		C12719	Rosa Road 55 - Overloaded Ratio bks	15	0.1	0	0	0	0.1
		C15669	Cuba 05 - Replace Transformer Bank	27	0	0	0	0	0
		C15678	Chautauqua 57 - Replace Xfmr	36	0.9	0	0	0	0.9
		C15765	Sheppard Rd. 29 - Second Bank	45	0.8	0	0	0	0.8

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C17962	Schroon 51 - Rebuild Route 74	23	0	0	0	0	0
		C18991	Port Henry 51 - Convert Westport	27	0.4	0	0	0	0.4
		C20691	Selkirk - Bethlehem Tie	50	0	0	0	0	0
		C26379	Attica12-Rebuild,Xfer F1263 to 0158	30	0.8	0.8	0	0	1.6
		C26418	Sycaway - Add M/C and 13.2kV Bus	35	2.1	0	0	0	2.1
		C26481	S. Newfane 71 - Replace Bank	48	0	0	0	0	0
		C26577	Buffalo Sta. 63 bank replacement	43	0.1	0	0	0	0.1
		C26819	Sycaway add 2nd Xfmr & 115 kV equip	40	1.9	0	0	0	1.9
		C27062	East Golah 51 - Secondary Breakers	38	0.7	0	0	0	0.7
		C27322	Raquette Lake 2.5 MVA	50	0.1	0.4	0	0	0.5
		C27323	NR- Morristown 2.5 MVA	34	0.1	0	0	0	0.1
		C27449	Swann Rd TB2 Replacement	34	2.2	0	0	0	2.2
		C28022	Sycaway-add new feeders	35	0.3	0	0	0	0.3
		C28023	Reynolds Rd - add new feeders	36	0.6	0	0	0	0.6
		C28545	LeMoyne Ave Rebild	48	0.4	0.1	0	0	0.5
		C28606	F5769/5763 Rebuild r/o Floradale	27	0.3	0	0	0	0.3
		C28607	Lehigh 66952 Tie With Colosse 32151	27	0.8	0	0	0	0.8
		C28608	McGraw 69 Low Voltage improvement	30	0.5	0	0	0	0.5
		C28618	Valley 59476 Rebuild Rasbach Rd	27	0	0	0	0	0
		C28619	Cavanaugh 61652 River Road	18	0	0	0	0	0
		C28622	Poland Convert Old State Rd	27	0	0	0	0	0
		C28765	Johnson 35251 - getaway replacement	30	0.1	0	0	0	0.1
		C28770	Inman Rd -Add M/C & 13.2kV Bus work	39	1	2.2	0	0	3.2
		C28772	Inman Rd - add new feeders	39	1	0	0	0	1
		C28780	Seminole 33904 - add feeder tie	30	0.1	0	0	0	0.1
		C28781	Riverside 28854 - replace getaway	36	0.2	0	0	0	0.2
		C28816	Chittenango Relief	34	0.3	0	0	0	0.3
		C28820	Park Load Relief	36	0.1	0	0	0	0.1
		C28825	Krumkill Voorheesville Tie	36	0.5	0	0	0	0.5
		C28832	Bartell 56 Orangeport	29	0.3	0	0	0	0.3
		C28837	Canajoharie D-Line Work	36	0.9	0	0	0	0.9
		C28843	Church St 04358 exten.	41	0.1	0	0	0	0.1
		C28844	Brook Rd 36957 Exten. Adams Road	36	0.5	0	0	0	0.5
		C28847	Fairdale Load Relief	29	0.3	0	0	0	0.3
		C28848	Mexico Load Relief	34	0.2	0	0	0	0.2
		C28849	Phoenix Load Relief	30	0.2	0	0	0	0.2
		C28852	Starr 53 Step Down	34	0.5	0	0	0	0.5
		C28854	Cortland 02 Relief	34	0.1	0	0	0	0.1
		C28869	E Syracuse 69 Conductor	27	0.1	0	0	0	0.1
		C28870	Station 21 - Split F2173	48	0.3	0	0	0	0.3
		C28874	Queensbury D-Line Work	36	0	0	0	0	0
		C28929	Frankhauser New Station - Line Work	41	0.6	0.6	0	0	1.2

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C28931	Frankhauser-115-13.2KV- Bus & Bkrs	41	0.3	2	0	0	2.3
		C29030	Batavia 01 - UG Cable Recond.	48	1	0.3	0	0	1.3
		C29049	Younsgtown 88 - Station Rebuild	36	0.8	0	0	0	0.8
		C29181	Station 79 - F7961 Relief	41	0.1	0	0	0	0.1
		C29182	Station 79 - F7962 Relief	41	0.2	0	0	0	0.2
		C29186	Station 214 - Install TB2	34	0.2	1.2	0	0	1.4
		C29187	Station 214 - New F21466	34	0.1	0.5	0	0	0.6
		C29425	Brook Road 55/57 - Daniels Rd	23	0	0	0	0	0
		C30124	Wilson Station 93 - Load Relief	48	0	0.8	0.8	0	1.5
		C30506	N Syracuse Sub Getaways	38	0	1	0	0	1.1
		C31550	DxT Study Budgetary Reserve - NIMO	49	0.1	0.1	0.1	0	0.3
		C32070	Rosa Rd 13756 - getaway replacement	27	0	0	0	0	0
		C32171	Amsterdam 32654 - extension	36	0.4	0	0	0	0.4
		C32306	NW Upgrade Panama Xfrm / Regs	36	0	0.5	0	0	0.5
		C32310	NW Langford 18061 Upgrade regs	23	0	0	0	0	0
		C32311	Fly 54 Fremont RR Cross	23	0	0	0	0	0
		C32313	NW N Collins Repl T1 Xfrm	24	0	0	0	0	0
		C32339	Farmersville Transformer Replacement	45	0.5	1.6	0	0	2.1
		C32342	Sinclairville Transformer Replace	41	0.5	1.6	0	0	2.1
		C32344	Shelby 7657 Reconductoring	30	0	0.2	0	0	0.2
		C32345	Butts Rd. 7252 Extension	30	0.7	0	0	0	0.7
		C32346	W. Albion Transformer Addition	45	0.5	2.5	0	0	3
		C32347	NW 15467 336 SpC Med. Service #2	39	0	0.5	0.1	0	0.5
		C32348	NW Sta 154 - New 15465 Feeder	39	0	0.6	0	0	0.6
		C32349	NW - New 15465 Assoc DLine projects	39	0	0.5	0	0	0.5
		C32350	Albion 8064 Getaway Reconductoring	30	0.2	0	0	0	0.2
		C32354	NW Baker St Station Cap Bank	36	0.2	0.9	0.1	0	1.1
		C32368	NC Starr Rd Second Xfrm-13kv Switch	39	0	0.6	0.2	0	0.8
		C32390	NW-Batavia Sub Dist. Line Cap Banks	34	0.1	0	0	0	0.1
		C32413	Tonawanda 4.16 057 Recon UG Getaway	36	0.3	0	0	0	0.3
		C32430	S.Philadelphia 764 Transf. Upgrade	18	0	0	0.4	0	0.4
		C32446	Harris 54 Relief	27	0	0	0	0	0
		C32452	NW 15564 Fdr, Recond ug getaway	36	0.1	0	0	0	0.2
		C32453	NW Fdr 4671 Recond UG cable	41	0.2	0	0	0	0.2
		C32470	NW F3964 Extend ug, Xfer load	41	0.2	0	0	0	0.2
		C32494	Gilbert Mill Relief	36	0.5	0	0	0	0.5
		C32495	Paloma Second Transformer	39	0	0	0	0.4	0.4
		C32496	Harris Second Transformer	39	0	0	0	0.4	0.4
		C32497	Duguid Second Transformer	39	0	0	0.4	0.9	1.3
		C32503	NC Starr Rd. Second Xfrm	39	0	1.9	0.4	0	2.3
		C32594	Labrador 115-13.2kV	27	0	0	0	0	0
		C32595	Rathbun Labrador conversion	27	0	0	0	0	0

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C32597	Ogden Brook- install 13.2 kV s/gear	36	0.3	2	2.8	0	5
		C32598	Ogden Brook - Install new feeders	36	0.1	0.6	0.3	0	1
		C32959	Burgoyne - Inst. 2nd trans & s/gr	14	0	0	0	1.1	1.1
		C32972	Burgoyne - inst. cable getaways	14	0	0	0	0	0
		C33012	Ballston - Inst. second tranf & s/g	28	0	0	2.9	0.7	3.6
		CNC016	Cent NY-Dist-Load Relief Blanket	50	0.4	0.4	0.4	0.5	1.8
		CNE016	East NY-Dist-Load Relief Blanket	50	0.2	0.2	0.2	0.2	0.9
		CNW016	West NY-Dist-Load Relief Blanket	50	0.5	0.5	0.5	0.5	2
		RESERVE 036_016 LINE	Reserve for Load Relief Unidentified Specifics & Schedule Changes	34	-1.7	-2.4	1.3	1.5	-1.2
		RESERVE 036_016 SUB	Reserve for Load Relief Unidentified Specifics & Schedule Changes (substation)	34	-0.8	-1.2	11.7	15	24.8
	Planning Criteria Total				**29.9**	**21.5**	**22.5**	**21.4**	**95.3**
	Pockets of Poor Performance	C32576	Pockets of Poor Performance - NYW	41	0.7	0.7	0.7	0.7	2.8
		C32577	Pockets of Poor Performance - NYC	41	0.7	0.7	0.7	0.7	2.8
		C32578	Pockets of Poor Performance - NYE	41	0.7	0.7	0.7	0.7	2.8
	Pockets of Poor Performance Total				**2.1**	**2.1**	**2.1**	**2.1**	**8.5**
	Recloser Application	C13266	IE - NE Recloser Installations	41	1.7	2	2	3.3	9
		C13267	IE - NC Recloser Installations	41	1.7	2	2	3.3	9
		C13268	IE - NW Recloser Installations	41	1.7	2	2	3.3	9
	Recloser Application Total				**5**	**6**	**6**	**10**	**27**
	Substation EMS/RTU	C19851	REP - Dist Subs Without RTUs	30	0.3	0.3	0.3	0.3	1
		C20173	REP - Dist Subs EMS RTU DNP Plan	50	0.2	0.2	0.2	0.2	0.6
		C22151	NY RTU Program - DxT Subs	50	1.8	1.8	1.8	2	7.4
		CNYEMS	EMS Placeholder	34	2.5	3	3	4	12.5
	Substation EMS/RTU Total				**4.7**	**5.2**	**5.2**	**6.4**	**21.5**
	Substation Overarching	C28831	N Syracuse Capacity Inc	48	0.7	2.3	0.1	0	3.1
		C32367	Bennett Rd. Sub Capacitor Install	36	0.4	1.4	0	0	1.8
	Substation Overarching Total				**1.1**	**3.7**	**0.1**	**0**	**4.9**
	Substation Relay/Protection	C28449	Metallic Pilot Wire Protection Repl	34	0.1	0.3	0.3	0.5	1.1
	Substation Relay/Protection Total				**0.1**	**0.3**	**0.3**	**0.5**	**1.1**
	TBD	RESERVE 036_015 LINE	Reserve for Reliability Unidentified Specifics & Schedule Changes	34	-0.5	-1		0	-1.5
		RESERVE 036_015 SUB	Reserve for Reliability Unidentified Specifics & Schedule Changes (substation)	34	-0.3	-0.5		0	-0.8
	TBD Total				**-0.8**	**-1.5**		**0**	**-2.3**
	URD Primary	C28814	Arbor Hill URD - Riverside 28858	23	0.2	0	0	0	0.2
		C28826	Stonehenge URD	23	0	0	0	0	0
	URD Primary Total				**0.2**	**0**	**0**	**0**	**0.2**

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
Distribution Total					**65.1**	**50.3**	**52.8**	**59.6**	**227.7**
Sub-Transmission	Blanket	CNC076	CNY Sub Trans-Line Reliability	50	0.1	0.1	0.1	0.1	0.5
		CNE076	ENY Sub Trans-Line Reliability	50	0.1	0.1	0.1	0.1	0.4
		CNW076	WNY Sub Trans-Line Reliability	50	0.3	0.3	0.3	0.3	1.2
	Blanket Total				**0.5**	**0.5**	**0.5**	**0.6**	**2.1**
	Distribution & Sub-T Automation	CLINESEC	Sub-Transmission Line Sectionalizing	(blank)	0.5	1	2	4	7.5
	Distribution & Subtransmssion Automation Total				**0.5**	**1**	**2**	**4**	**7.5**
	New Business	C31665	Buffalo Niagara Medical Campus-Sub	47	2.7		0	0	2.7
		C31666	Buffalo Niagara Medical Campus-Line	47	4.6		0	0	4.6
	New Business Total				**7.3**		**0**	**0**	**7.3**
	Planning Criteria	C08154	NY SubT PS&I Activity	36	0.1	0.1	0.1	0.1	0.4
		C26419	Reynolds - Add M/C & Equip	36	0	1.1	0	0	1.1
		C28892	Buffalo 23kV Reconductor - Huntley	36	0.2	1	6.2	0	7.4
		C28893	Buffalo 23kV Reconductor - Huntley2	36	0.2	1	1.2	0	2.4
		C28894	Buffalo 23kV Reconductor - Kensing.	30	0	0.5	2.3	0	2.8
		C28903	Buffalo 23kV Reconductor - Kens2	30	0	0.8	1.3	0	2.1
		C29100	Seneca - Replace Series Reactors	44	1.1		0	0	1.1
		C31951	Beth-AveA #10 - reconductor	30	0	0.3	2	0	2.3
		C31952	Delaware-Bethlehem 14 - Reconductor	30	0	0.3	1.3	0	1.6
		CNC077	CNY Sub Trans-Line Load Relief	50	0	0.1	0.1	0.1	0.2
		CNE077	ENY Sub Trans-Line Load Relief	50	0	0	0	0	0.1
		CNW077	WNY Sub Trans-Line Load Relief	50	0	0	0	0	0.1
		RESERVE 036_016 LINE	TxD RESERVE for Load Relief Unidentified Specifics & Schedule Changes	34	0		-2.9	6	3.1
		RESERVE 036_016 SUB	TxD RESERVE for Load Relief Unidentified Specifics & Schedule Changes (substation)	34	-0.5	0.4	1.6	1.8	3.3
	Planning Criteria Total				**1.2**	**5.6**	**13.3**	**8**	**28**
	Substation Relay/ Protection	C07808	Teall Ave Upgrade 34.5kV Protection	24	0	0.6	0	0	0.6
	Substation Relay/Protection Total				**0**	**0.6**	**0**	**0**	**0.6**
	Sub-T Line Overarching	C32216	Alder Creek 46kV Sta Bypass	34	0	0.3	0	0	0.3
	Subtransmission Line Overarching Total				**0**	**0.3**	**0**	**0**	**0.3**
	TBD	RESERVE 036_015 LINE	TxD RESERVE for Reliability Unidentified Specifics & Schedule Changes	0	-1.2	0	0.3	2.4	1.5
		RESERVE 036_015 SUB	TxD RESERVE for Reliability Unidentified Specifics & Schedule Changes (substation)	34	-0.6	0.3	1.1	1.2	2
	TBD Total				**-1.8**	**0.3**	**1.4**	**3.6**	**3.5**
Sub-Transmission Total					**7.6**	**8.3**	**17.2**	**16.1**	**49.3**
Transmission	Frontier Region	C11496	Refurbishment of Huntley 230kV Station	22	0	0	0.1	2.3	2.4
	Frontier Region Total				**0**	**0**	**0.1**	**2.3**	**2.4**

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
	Load	C30744	Frankhauser New Station - T Line Work	41	0.2	0.4	0	0	0.6
		C30765	Install Second Transformer - Inman Rd	39	0.9	0.9	0	0	1.7
		C30824	Replace TB#1 - Everett Rd	30	1	0.6	0	0	1.6
	Load Total				**2.1**	**1.8**	**0**	**0**	**3.9**
	Other System Capacity & Performance	C22071	Albany Steam - Add 2nd Station svc	16	0.2	0.2	0	0	0.4
		C33744	BlackRiver-LHHX5-2 LB Attachment	49	0	0.1	0	0	0.1
		C33742	BlackRiver-Taylorville#2 New Switch	43	0	0.3	0	0	0.3
		CNYPL4	Boonville-Rome #4 Reconductoring	40	0	0	0.1	5	5.1
		C21353	Dewitt 345kV Breaker Install	6	0	0.8	0.6	0	1.5
		C32337	East Watertown 115 Mobile tap	49	0	0.1	0.2	0	0.3
		CNYPL7	Eastern NY 115kV Capacitor Additions	35	0	0	0.1	2	2.1
		C28384	Farmington 11 Line Rearrangement	49	1.5	0	0	0	1.5
		C28384R	Farmington 11 Line Rearrangement - Reimb portion	49	-1.5	0	0	0	-1.5
		CNYPL14	Fourth Elm 230-23kV Bank (N-1-1)	28	0	0	0	0.1	0.1
		CNYPL13	Fourth Sawyer 230-23kV Bank (N-1-1)	26	0	0	0	0.1	0.1
		CNYPL11-1	Huntley-Capacitor Banks Ground Grid	39	0.1	0.4	2.6	0.9	4
		CNYPL34	Install Capacitance/TRV	33	0	0	0.3	0.7	1
		C30806	Install new Alps Site Sub- Nassau	27	1.1	0.8	0	0	1.9
		C33619	Install new Alps Site Sub-Line Work	49	0.1	0.2	0.2	0	0.4
		CNYPL29	Lake Colby - Spare SVC Transformer and Thyristor Reactor	28	0.1	1.7	0	0	1.8
		C32259	Lowville Automated 115 kV Switches	49	0.1	0.2	0	0	0.3
		C24064	LTC Filtration Systems NY	21	0.1	0	0	0	0.1
		CNYPL33	Reconductor 24 & 25 Line - Hogan Taps to Panell Road	35	0	0	0.1	1.5	1.6
		CNYPL1	Reconductor Black River LHH	40	0	0	0.1	5	5.1
		C27163	Replace N. Angola 115:34.5kV Banks	36	0	0.4	5.3	0	5.7
		CNYPL26	Replace overdutied 115kV breakers at Central and Mohawk Valley	39	0	0.2	1	1.8	3
		CNYPL25	Replace overdutied 115kV breakers at Maplewood	39	0	0.2	1	1.8	3
		CNYPL24	Replace three 115kV breakers at ALCOA	39	0	0	0.3	0.6	0.9
		C29964	Reynolds Road - Cap Blocking Scheme	28	0	0	0	0	0
		C30826	Spier West 9 115kv Switch Add	34	0	0	0.1	0.2	0.3
		C10705	Sta Homer Hill Transformers	20	0	0	0	0.2	0.2
		CNYPL28	Syracuse Area Reconductoring	19	0	0	0.3	1.6	1.9
		C08376	Transmission Study Budgetary Reserve -NY	49	0.2	0.2	0.2	0.2	0.8
		C28708	Upgrade Breakers at Scriba	40	2	1.5	0	0	3.5
		C33252	Upgrade Breakers at Volney	49	2	0.5	0	0	2.5
		C29945	Upgrade Niagara-Pakard #195	40	0	0	0	0.2	0.2
	Other System Capacity & Performance Total				**5.9**	**7.7**	**12.5**	**21.9**	**48.1**
	Overhead Line Refurbishment Program	C24359	Browns Falls - Taylorville 4 Lightning Enhancements	37	4.6	0	0	0	4.6
		C24360	Coffeen - LH 5, T2120 Lightning Enhancement	37	0.8	0	0	0	0.8
	Overhead Line Refurbishment Program Total				**5.4**	**0**	**0**	**0**	**5.4**

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
	Reliability Criteria Compliance	C24014	Andover Cap Bank, part of SG075	39	0.4	0	0	0	0.4
		C31478	Batavia Second 115kV Cap Bank, part of SG077	34	0.1	0.1	1.1	0	1.3
		C24016	Construct Southwest Station (Line Station), part of SG075	39	0.6	1.5	0.8	0	2.8
		C24015	Construct Southwest Station, part of SG075	39	5	18	2	0	25
		C24629	Conversion of #109 to 115kV-part of SG077	34	0.2	1.6	9.2	0	10.9
		C31460	Dunkirk Second Bus Tie- Line, part of SG075	19	0	0.1	0.1	1.1	1.2
		C31459	Dunkirk Second Bus Tie- Station, part of SG075	19	0	0.1	0.3	1	1.4
		C24631	Golah work for #109 Conversion - part of SG077	34	0.5	2	3	0	5.5
		C31457	Homer Hill 115kV Capacitor Banks, part of SG075	28	1	0.2	0	0	1.2
		C24630	Mortimer Work for #109 Conversion - part of SG077	34	0.3	1.6	2.1	0	4
		C31463	Reconductor portions of 54 and 181, part of SG075	19	0	0.2	0	0	0.2
		C24017	Reconductoring of #171, part of SG075	39	0.8	2.3	0.2	0	3.2
		C31458	Replace HH Ckt #157 Connections, part of SG075	28	0.1	0	0	0	0.1
		C33884	Replacement of #171 connections, part of SG075	49	0	0.1	0	0	0.1
		C31482	Second 115kV bus tie at Lockport, part of SG077	34	0.7	0	0	0	0.7
		C31479	Upgrade Batavia South 115kV busring, part of SG077	28	0.1	0.2	0	0	0.3
		C31481	Upgrade capability of L107, part of SG077	34	0.2	0	0	0	0.2
	Reliability Criteria Compliance Total				**9.9**	**27.7**	**18.8**	**2.1**	**58.5**
	Reserve	CNYX33	Reserve	49	-7.4	-12	-4.4	-2.5	-26.3
	Reserve Total				**-7.4**	**-12**	**-4.4**	**-2.5**	**-26.3**
Transmission Total					**15.9**	**25.2**	**27**	**23.8**	**92**
Total System Capacity & Performance					**88.6**	**83.8**	**97**	**99.5**	**369**

Planned T&D Infrastructure Investment Levels For Asset Condition Category by Network Segment, Program and Project ($Millions)

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
Distribution	Blanket	CNC017	Cent NY-Dist-Asset Replace Blanket	50	2.3	2.3	2	1.8	8.3
		CNE017	East NY-Dist-Asset Replace Blanket	50	1	1	0.9	0.8	3.7
		CNW017	West NY-Dist-Asset Replace Blanket	50	2.5	2.5	2.3	2	9.3
	Blanket Total				**5.8**	**5.8**	**5.2**	**4.6**	**21.3**
	Distribution Line Transformer	C26977	Doghouse Replacement - Central Div	28	0.1	0	0	0	0.1
	Distribution Line Transformer Total				**0.1**	**0**	**0**	**0**	**0.1**
	Duct	C32091	IE-NC Duct Replac Placeholder	34	0.1	0	0	0.1	0.2
		C32093	IE-NE_-Duct Replace Placeholder	34	0.1	0	0	0.1	0.2
		C32095	IE-NW_Duct replace Placeholder	34	0.1	0	0	0.1	0.2
	Duct Total				**0.3**	**0**	**0**	**0.3**	**0.6**
	Engineering Reliability Review	C26902	Lape - Snyders Lake Tie	30	0.1	0	0	0	0.1
	Engineering Reliability Review Total				**0.1**	**0**	**0**	**0**	**0.1**
	Manhole/Vault	C32101	IE- NC- MH Program Placeholder	34	0.1	0.1	0.1	0.2	0.5
		C32102	IE-NW-MH Program Placeholder	34	0.1	0.1	0.1	0.2	0.5
		C32103	IE-NE-MH-Program-Placeholder	34	0.1	0.1	0.1	0.2	0.5
		C32693	V-72 Howard St Replace Vault Roof	45	0.2	0	0	0	0.2
		C33908	V2325 Albany NY Roof Replacement	35	0.2	0	0	0	0.2
		C33909	V2326 Albany NY Roof Replacement	35	0.2	0	0	0	0.2
		C33910	V2327 Albany NY Roof Replacement	35	0.2	0	0	0	0.2
		C33911	V-6 Albany NY Roof Replacement	35	0.2	0	0	0	0.2
		C33912	V5825 Schenectady NY Roof Repl	35	0.2	0	0	0	0.2
		C33913	V573 Troy NY Roof Replacement	35	0.2	0	0	0	0.2
		C33914	V-500 Troy NY Roof Replacement	35	0.2	0	0	0	0.2
		C33915	V-198 Albany NY Roof Replacement	35	0.2	0	0	0	0.2
	Manhole/Vault Total				**1.7**	**0.3**	**0.3**	**0.6**	**2.9**
	Miscellaneous Underground Equipment	C29214	LV Neutral Cable Replacement	27	0.1	0	0	0	0.1
	Miscellaneous Underground Equipment Total				**0.1**	**0**	**0**	**0**	**0.1**
	Networks	C29205	Network Transformer Replacement	27	0.3	0.3	0	0	0.6
		C29206	Network Protector Replacement	27	0.3	0.3	0	0	0.6
		C33173	Albany Network Equipment	50	1.5	1.5	0	0	3
		CNYNET	Network	50	0	0	2	2.3	4.3
	Networks Total				**2.1**	**2.1**	**2**	**2.3**	**8.5**

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
	Open Wire Primary	C10164	Schuylerville 12- Reconductor Rt 29	50	0.2	0	0	0	0.2
		C28590	Gilbert Mills 51 Rebuild due to QRS	31	0.6	0	0	0	0.6
		C31860	IE - NE Replace open wire primary	27	0	0	0	0	0
		C31861	IE - NC Replace open wire primary	27	0	0	0	0	0
		C31862	IE - NW Replace open wire primary	27	0	0	0	0	0
	Open Wire Primary Total				**0.8**	**0**	**0**	**0**	**0.8**
	Overhead Secondary	C27864	Replace Open Wire Secondary-NY East	16	0.1	0	0	0.1	0.2
		C27884	Replace open wire secondary-NY Cent	16	0.1	0	0	0.1	0.2
		C27886	Replace open wire secondary-NY West	16	0.1	0	0	0.1	0.2
	Overhead Secondary Total				**0.3**	**0**	**0**	**0.3**	**0.7**
	Planning Criteria	C08435	White Lake Station Upgrades	30	0.8	0	0	0	0.8
		C28688	Brunswick 52 New feeder getaway	27	0	0	0	0	0
		C28788	Alps - new dist sub - add feeder	36	0.1	1.5	1.4	0	3
		C28790	Alps - new dist sub - D Line work	27	0	0	0	0	0
		C31598	North Troy - Install Feeder Getaway	36	0.4	0	0	0	0.4
	Planning Criteria Total				**1.3**	**1.5**	**1.4**	**0**	**4.2**
	Potted Porcelain Cutout	C10960	IE - NE Cutout Replacement	41	0.1	0.1	0.1	0	0.3
		C12967	IE - NC Cutout Replacement	41	0.1	0.1	0.1	0	0.3
		C12968	IE - NW Cutout Replacement	41	0.1	0.1	0.1	0	0.3
	Potted Porcelain Cutout Total				**0.3**	**0.3**	**0.3**	**0**	**0.9**
	Primary Underground Cable	C11099	IE-NE Cable Replacements	36	1	1	1	1.5	4.5
		C13282	IE-NW Cable Replacements	36	1	2	1	1.5	5.5
		C13822	IE-NC Cable Replacements	36	1	1.5	1	1.5	5
		C29113	Brook Road 36954 Getaway cable replacement	30	0.4	0	0	0	0.4
	Primary Underground Cable Total				**3.4**	**4.5**	**3**	**4.5**	**15.4**
	Substation Battery and Related	C24240	Battery Strategy FY09 CO36 DxT	35	0.1	0.1	0.1	0.1	0.5
		C32012	Batts/Charg--NY East	35	0	0	0	0	0
		C32013	Batts/Charg- NY Central	35	0	0	0	0.4	0.4
		C32014	Batts/Charg- NY West	35	0.4	0	0.3	0.3	0.9
	Substation Battery and Related Total				**0.5**	**0.2**	**0.4**	**0.8**	**1.9**
	Substation Circuit Breaker/ Recloser	C32252	NE ARP Breakers & Reclosers	35	1	0.5	1	2	4.5
		C32253	NC ARP Breakers & Reclosers	35	1.5	0.8	1.5	3	6.8
		C32261	NW ARP Breakers & Reclosers	35	1	0.5	1	2	4.5
	Substation Circuit Breaker/Recloser Total				**3.5**	**1.8**	**3.5**	**7**	**15.8**
	Substation Circuit Switcher	C18850	Circuit Switcher Strategy Co:36 DxT	34	0.9	0	0	0	0.9
	Substation Circuit Switcher Total				**0.9**	**0**	**0**	**0**	**0.9**

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
	Substation Indoor Substation	C06722	Buffalo Indoor Sub. #29 Refurb.	37	1.5	0	0	0	1.5
		C06723	Buffalo Station 29 Rebuild - Fdrs	41	1	0	0	0	1
		C25639	Buffalo Indoor Sub. #23 Refurb.	50	0.7	0	0	0	0.7
		C25659	Buffalo Indoor Sub. #52 Refurb.	50	1.1	0	0	0	1.1
		C25660	Buffalo Indoor Sub. #43 Refurb.	50	1	0	0	0	1
		C27947	Buffalo Station 23 Rebuild - Fdrs	41	0.7	0	0	0	0.7
		C27948	Buffalo Station 43 Rebuild - Fdrs	41	0.7	0	0	0	0.7
		C27949	Buffalo Station 52 Rebuild - Fdrs	41	1	0	0	0	1
		C33473	Buffalo Station 27 Rebuild - Sta	50	0.3	3.5	1.5	0	5.3
		C33474	Buffalo Station 37 Rebuild - Sub	50	0.3	3.5	1.5	0	5.3
		C33475	Buffalo Station 59 Rebuild - Sub	50	0.3	3.5	1.5	0	5.3
		C33476	Buffalo Station 27 Rebuild - Line	50	0.1	0.8	0	0	0.9
		C33477	Buffalo Station 37 Rebuild - Line	50	0.1	0.8	0	0	0.9
		C33478	Buffalo Station 59 Rebuild - Line	50	0.1	0.8	0	0	0.9
		CBUF25-2	Buffalo Station 25 Rebuild - Line	41	0	0.1	0.5	0	0.6
		CBUF25-3	Buffalo Station 25 Rebuild - Sub	41	0	0.3	3.5	1.5	5.3
		CBUF30-2	Buffalo Station 30 Rebuild - Line	41	0	0	0	0.1	0.1
		CBUF30-3	Buffalo Station 30 Rebuild - Sub	41	0	0	0	0.3	0.3
		CBUF31-2	Buffalo Station 31 Rebuild - Line	41	0	0	0.1	0.5	0.6
		CBUF31-3	Buffalo Station 31 Rebuild - Sub	41	0	0	0.3	3.5	3.8
		CBUF32-2	Buffalo Station 32 Rebuild - Line	41	0	0.1	0.5	0	0.6
		CBUF32-3	Buffalo Station 32 Rebuild - Sub	41	0	0.3	3.5	1.5	5.3
		CBUF34-2	Buffalo Station 34 Rebuild - Line	41	0	0	0.1	0.5	0.6
		CBUF34-3	Buffalo Station 34 Rebuild - Sub	41	0	0	0.3	3.5	3.8
		CBUF35-2	Buffalo Station 35 Rebuild - Line	41	0	0	0	0.1	0.1
		CBUF35-3	Buffalo Station 35 Rebuild - Sub	41	0	0	0	0.3	0.3
		CBUF38-2	Buffalo Station 38 Rebuild - Line	41	0	0	0	0	0
		CBUF38-3	Buffalo Station 38 Rebuild - Sub	41	0	0	0	0	0
		CBUF41-2	Buffalo Station 41 Rebuild - Line	41	0	0	0	0.1	0.1
		CBUF41-3	Buffalo Station 41 Rebuild - Sub	41	0	0	0	0.3	0.3
		CBUF45-2	Buffalo Station 45 Rebuild - Line	41	0	0	0	0	0
		CBUF45-3	Buffalo Station 45 Rebuild - Sub	41	0	0	0	0	0
		CBUF51-2	Buffalo Station 51 Rebuild - Line	41	0	0	0.1	0.5	0.6
		CBUF51-3	Buffalo Station 51 Rebuild - Sub	41	0	0	0.3	3.5	3.8
		CBUF53-2	Buffalo Station 53 Rebuild - Line	41	0	0.1	0.5	0	0.6
		CBUF53-3	Buffalo Station 53 Rebuild - Sub	41	0	0.3	3.5	1.5	5.3
		CBUF68-2	Buffalo Station 68 Rebuild - Line	41	0	0	0	0	0
		CBUF68-3	Buffalo Station 68 Rebuild - Sub	41	0	0	0	0	0
	Substation Indoor Substation Total				**8.6**	**14**	**17.7**	**17.7**	**57.9**
	Substation Metal Clad Switchgear	C26054	NY ARP MetalClad Equipment	35	0.3	1.9	2.2	3	7.4
		C32296	Altamont Sub Metalclad Replacement	35	0.9	1.5	1.4	0	3.8

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C32298	Market Hill Sub Metalclad Replacement	35	0.2	1.5	1.4	0	3.1
	Substation Metal Clad Switchgear Total				**1.3**	**4.9**	**5**	**3**	**14.2**
	Substation Non-transformer Reactor	C31994	Reactor Repl-NY Central	19	0	0	0	0.3	0.3
	Substation Non-transformer Reactor Total				**0**	**0**	**0**	**0.3**	**0.3**
	Substation Overarching	C26760	NY Small Capital Items	50	0.1	0.1	0.1	0.1	0.4
		C32003	Mobile Readiness-NY East	34	0	0	0	0	0
		C32004	Mobile Readiness-NY Central	34	0.2	0	0	0.2	0.4
		C32005	Mobile Readiness-NY West	34	0.4	0	0	0.2	0.6
	Substation Overarching Total				**0.7**	**0.1**	**0.1**	**0.5**	**1.4**
	Substation Power Transformer	C25801	IE - NY ARP Transformers	34	1.5	1.5	1.5	2	6.5
	Substation Power Transformer Total				**1.5**	**1.5**	**1.5**	**2**	**6.5**
	Substation Relay/ Protection	C28042	East NWP Relay Replacements	34	0.2	0.2	0	0	0.4
	Substation Relay/Protection Total				**0.2**	**0.2**	**0**	**0**	**0.4**
	Substation Voltage Regulator	C32340	Ellicott Regulator Replacement	48	0.5	0	0	0	0.5
	Substation Voltage Regulator Total				**0.5**	**0**	**0**	**0**	**0.5**
	Sub-T Line Overarching	C31633	208 Line Refurbishment	40	0	0	0	0	0
		C32292	Lowville-Boonville #22 Dist Underbuild	42	0.1	0	0	0	0.1
	Subtransmission Line Overarching Total				**0.1**	**0**	**0**	**0**	**0.1**
	TBD	RESERVE 036_017 LINE	Reserve for Asset Replacement Unidentified Specifics & Schedule Changes	34	-0.5	-1	1.8	0	0.3
		RESERVE 036_017 SUB	Reserve for Asset Replacement Unidentified Specifics & Schedule Changes (substation)	34	-0.3	-0.5	-3	-2.7	-6.5
	TBD Total				**-0.8**	**-1.5**	**-1.3**	**-2.7**	**-6.2**
	Wood Pole	C00194	NR-Distr-8043.08-CuNapth(sole owned)	50	0.1	0	0	0	0.1
	Wood Pole Total				**0.1**	**0**	**0**	**0**	**0.1**
	(blank)	C32255	Frontier 25 Hz Dist Sta Retirement	39	0	0	0	0	0
	(blank) Total				**0**	**0**	**0**	**0**	**0**
Distribution Total					**33.1**	**35.3**	**39.1**	**41.2**	**148.9**
Sub-Transmission	Blanket	CNC075	CNY Sub Trans-Line Asset Replace	50	0.3	0.3	0.3	0.3	1.1
		CNE075	ENY Sub Trans-Line Asset Replace	50	0.3	0.3	0.3	0.3	1.1
		CNW075	WNY Sub Trans-Line Asset Replace	50	0.4	0.4	0.4	0.5	1.8
	Blanket Total				**0.9**	**1**	**1**	**1**	**3.9**
	Open Wire Primary	C28771	Trenton Whitesboro 25 Reconductor	39	2	0	0	0	2
	Open Wire Primary Total				**2**	**0**	**0**	**0**	**2**
	Primary Underground Cable	C06817	23kV Cable & Conduit Rebuild	50	2.5		0	0	2.5
		C16079	Riv-Part #9 and #37 repl cable	37	0.5		0	0	0.5

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C31608	McBride-Brighton Cable Replacement	34	0	0.8	0.8	0	1.6
	Primary Underground Cable Total				**3**	**0.8**	**0.8**	**0**	**4.6**
	Substation Capacitor & Switch	C15660	Homer Hill Sta - Rep Cap Bank & Bkr	24	0	0.2	0	0	0.2
		C26382	Brockport 74-Cap banks to sta bus	36	0.2	0	0	0	0.2
	Substation Capacitor & Switch Total				**0.2**	**0.2**	**0**	**0**	**0.4**
	Substation Circuit Breaker/ Recloser	C3B&R	ARP Breakers & Reclosers - Sub-T sub	(blank)	0	0.3	2.6	2.8	5.7
	Substation Circuit Breaker/Recloser Total				**0**	**0.3**	**2.6**	**2.8**	**5.7**
	Substation Indoor Substation	C06724	Buffalo Station 29 Rebuild - 23 kV	41	0.1		0	0	0.1
		C27945	Buffalo Station 43 Rebuild - 23kV	41	0.1	0.1	0	0	0.2
		C27946	Buffalo Station 52 Rebuild - 23 kV	41	0.2		0	0	0.2
		C33470	Buffalo Station 27 Rebuild - 23 kV	50	0.1	0.5	0	0	0.6
		C33471	Buffalo Station 37 Rebuild - 23 kV	50	0.1	0.5	0	0	0.6
		C33472	Buffalo Station 59 Rebuild - 23 kV	50	0.1	0.5	0	0	0.6
		CBUF25-1	Buffalo Station 25 Rebuild - 23 kV	41	0	0.1	0.5	0	0.6
		CBUF30-1	Buffalo Station 30 Rebuild - 23 kV	41	0		0	0.1	0.1
		CBUF31-1	Buffalo Station 31 Rebuild - 23 kV	41	0		0.1	0.5	0.6
		CBUF32-1	Buffalo Station 32 Rebuild - 23 kV	41	0	0.1	0.5	0	0.6
		CBUF34-1	Buffalo Station 34 Rebuild - 23 kV	41	0		0.1	0.5	0.6
		CBUF35-1	Buffalo Station 35 Rebuild - 23 kV	41	0		0	0.1	0.1
		CBUF38-1	Buffalo Station 38 Rebuild - 23 kV	41	0		0	0	0
		CBUF41-1	Buffalo Station 41 Rebuild - 23 kV	41	0		0	0.1	0.1
		CBUF45-1	Buffalo Station 45 Rebuild - 23 kV	41	0		0	0	0
		CBUF51-1	Buffalo Station 51 Rebuild - 23 kV	41	0		0.1	0.5	0.6
		CBUF53-1	Buffalo Station 53 Rebuild - 23 kV	41	0	0.1	0.5	0	0.6
		CBUF68-1	Buffalo Station 68 Rebuild - 23 kV	41	0		0	0	0
	Substation Indoor Substation Total				**0.7**	**1.9**	**1.8**	**1.8**	**6.2**
	Substation Metal Clad Switchgear	C25139	Replace/Relocate 13.8kV SG @Oneida	50	0.3	1.9	0	0	2.2
		C28485	North Troy Metal Clad Repl.	39	1		0	0	1
	Substation Metal Clad Switchgear Total				**1.3**	**1.9**	**0**	**0**	**3.2**
	Substation Power Transformer	C03831	Buffalo Shunt Reactors	50	0.4	0	0	0	0.4
	Substation Power Transformer Total				**0.4**	**0**	**0**	**0**	**0.4**
	Sub-T and Distribution Tower	C31852	IE - NE SubT Towers	40	0.3	0.8	1.3	1.8	4
		C31853	IE - NC SubT Towers	40	0.3	0.8	1.3	1.8	4
		C31855	IE - NW SubT Towers	40	0.3	0.8	1.3	1.8	4
	Subtransmission and Distribution Tower Total				**0.8**	**2.3**	**3.8**	**5.3**	**12**
	Sub-T Line Overarching	C00413	Schuyler-Valley 21/24	20	1		0	0	1

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C06739	Charlton-Ballston #9 Rebuild/Recnfg	22	0	1	0	0	1
		C07519	Greenbush-Defreesville 7 Rebuild	27	0	1	0	0	1
		C07804	Rathbun-Labrador #39 Rebuild	43	1	1	0	0	2
		C07811	Tilden-Tully #24 34.5kV Rebuild	42	1		0	0	1
		C07814	Lowville-Boonville #22 Rebuild	50	1.5		0	0	1.5
		C11818	McClellan-Bevis #11 34.5kV Rebuild	30	0.7		0	0	0.7
		C12678	Marshville-Cherry Vly LN4 Retirement	50	0		0	0	0
		C13046	Lake Clear-Tupper Lake #38 Rebuild	50	1	2	1	0	4
		C16072	Maplewood-Latham #9 Refurb	30	0.4		0	0	0.4
		C16073	Newtonville-Patroon #16 Refurb	30	0	1.3	0	0	1.3
		C16234	Vischer - Woodlawn #3 refurbish	40	0.1		0	0	0.1
		C16236	Gloversville - Canaj. #6 Refurbish	27	0	1	1	0	2
		C16237	Gloversville-Hill St #3 Refurbish	23	0.1		0	0	0.1
		C25940	Batavia-Attica 206-34.5kv	34	2.5	0.5	0	0	3
		C26636	Greenbush-Rensselaer#10&#11 Rebuild	50	0.1		0	0	0.1
		C26969	Bombay-Spencer's Corners#22 Recond	34	0.5		0	0	0.5
		C27223	General Mills-Ridge 611/612 Ohio Sw	30	0	0.5	0	0	0.5
		C27438	Oakfield-Caledonia 201-34.5kv Rbld.	40	0	0	0	0	0
		C27502	N Angola - Bagdad 862 Refurbishment	34	0.2	0	0	0	0.2
		C27562	N Leroy - Attica 208 Refurbishment	50	1.1	1	0	0	2.1
		C27563	Medina-Albion 305 Refurbishment	34	0.1	0	0	0	0.1
		C27564	Battenkill-Cambridge 2/5 Refurbish	34	1.1	1	0	0	2.1
		C27582	Beth-Voorheesville-Retire Callanan	50	0.1	0.3	0	0	0.4
		C27583	Spier-Glens Falls 8-pls	34	0	0.8	0.5	0	1.3
		C27586	Caledonia-Golah 213-refurbish	50	1.8		0	0	1.8
		C28017	Trenton-Deerfield 21/27-46kv	34	0.8	0	0	0	0.8
		C28018	Market Hill-Amsterdam 11,Tap Mohasc	26	0	0	0	0	0
		C28942	WHTESBR-SCHUYLER 29/YAH-WHITSBRO 23	45	0.5		0	0	0.5
		C29441	Carthage-N.Carthage 24/28 Refurbish	34	0	0.5	0	0	0.5
		C29443	Norfolk-Norwood 23kv	34	0	0.5	0	0	0.5
		C29450	Hartfield-Sherman 855-refurbish	42	0.1	0.7	0	0	0.8
		C29451	W. Salamanca-Homer Hill 805 ref	42	0.1	0.7	0	0	0.8
		C29452	Crescent -School St/N. Troy 17/20	50	0.1		0	0	0.1
		C29485	Relocate and tap Line 856 to ECWA	50	0.1		0	0	0.1
		C29768	Lines 611,612,613 Arrestors-34.5kv	27	0	0.7	0	0	0.7
		C31263	Alder Creek-Old Forge #23 46kV	42	0		0	0	0
		C33131	Albion - Brockport 308 Rebuild	34	0.1	1.5	0	0	1.6
		C33174	Yahnundasis-Schuyler 25/26 Rebuild	42	0	0.1	1.5	0	1.6
		C33178	Youngmann 605/606 Rebuild	42	0.1	1	0	0	1.1
		C33180	Hartfield-S. Dow 859 Rebuild	42	0	0.1	1	0	1.1
		C33181	Ransom-Phillips Rd 402 Rebuild	42	0	0.1	1.5	0	1.6
		C33182	Amsterdam-Rotterdam 3/4 Relocation	34	0	0.3	2	0	2.3

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C33191	Niagara Falls Remove 12kV Lines	42	0	0	0.5	0	0.5
		C33294	Hartfield-Ashvile 854 Refurbish	42	0	0.8	0.8	0	1.5
	Subtransmission Line Overarching Total				**16**	**18.1**	**9.7**	**0**	**43.8**
	Sub-T Underground Cable	C32146	IE - NE Sub-T UG Cable Replacement	36	0.3	0.9	0.5	1.2	2.8
		C32147	IE - NC Sub-T UG Cable Replacement	36	0		1	0.9	1.9
		C32148	IE - NW Sub-T UG Cable Replacement	36	0.3	5	5.5	9.5	20.3
	Subtransmission Underground Cable Total				**0.5**	**5.9**	**7**	**11.6**	**25**
	TBD	RESERVE 036_017 LINE	TxD RESERVE for Asset Replacement Unidentified Specifics & Schedule Changes	0	-1.1	-3	-1.7	10	4.2
		RESERVE 036_017 SUB	TxD RESERVE for Asset Replacement Unidentified Specifics & Schedule Changes (substation)	34	-0.3	0	0	0	-0.3
	TBD Total				**-1.3**	**-3**	**-1.7**	**10**	**4**
	Underground/Padmounted Switch	C17668	L630 & 631 Hendrix Ca + LBSwitches	36	0.5	0.5	0	0	1
	Underground/Padmounted Switch Total				**0.5**	**0.5**	**0**	**0**	**1**
	Wood Pole	C31577	Tonawanda 601/603 Pole Replacements	42	0.2	0.3	0	0	0.4
	Wood Pole Total				**0.2**	**0.3**	**0**	**0**	**0.4**
Sub-Transmission Total					**25**	**30.1**	**25**	**32.3**	**112.4**
Transmission	3A/3B Tower Strategy	C08017	Leeds - Pleasant Valley 91/92 Tower Reinforcement - includes public safety	49	0	0	0.1	0.1	0.2
		C07918	New Scotland - Leeds 93/94 Tower Reinforcement - Public Safety	49	0	0.1	0.1	6	6.2
	3A/3B Tower Strategy Total				**0**	**0.1**	**0.2**	**6.1**	**6.3**
	Battery Strategy	C24239	Battery Strategy FY09 Co. 36 Txt	22	0.3	0.3	0	0	0.7
		C32957	Battery System Replacement Program	34	0.3	0.3	0	0	0.5
		C33847	BatteryRplStrategyCo36TxT	39	0.6	0.6	0.6	0.6	2.5
	Battery Strategy Total				**1.2**	**1.2**	**0.6**	**0.6**	**3.7**
	Circuit Breaker Replacement Strategy	C31661	Inghams-replace 115kv OCB	35	0.1	0.2	1	5	6.3
		CNYAS24	Meco - Replace 115kV PTs and circuit breakers	35	0	0	0.3	1	1.3
		CNYAS39	Mortimer 115kV - refurbish / replace circuit breakers	35	0	0	0	0.3	0.3
		CNYAS07	NY Circuit Breaker Replacement (Priority 4)	35	0.1	0.9	6	8	15
		CNYAS06	NY Circuit Breaker Replacement Priority 3)	26	0	0	0	0.2	0.2
	Circuit Breaker Replacement Strategy Total				**0.1**	**1.1**	**7.3**	**14.5**	**22.9**
	Flying Ground Strategy	CNYX30	Strategy to Replace Flying Ground Switches	22	0	0	0.3	1	1.3
	Flying Ground Strategy Total				**0**	**0**	**0.3**	**1**	**1.3**
	Other Asset Condition	C28304	Alps #188 Obsolete Circuit Switcher	16	0.2	0.7	0	0	0.9
		C27082	Ash to Teall Cathodic Protection Upgrade	28	0	0.1	0	0	0.1
		C31005	Bristol Hill Repl SWs 46 & 47	28	0	0.2	0	0	0.2
		C31950	Butler Sta 64 -RPL LN182	43	0.6	0	0	0	0.6
		C29844	Colton Replace CBs and disconnects	34	0.9	0.9	0.9	0	2.8
		C31867	Dewitt-Rebuild 345kv	49	0.3	0	0	0	0.3

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C27845	Dunkirk 230kV Control Cable TB1	34	0.8	0	0	0	0.8
		C31025	Edic Station - Replace TB2, 3, 4 Metering	40	0	0.1	0	0	0.1
		C03383	EJ West-Warrensburg 9 115kV Cross Bracing	16	0	0	0	0.1	0.1
		C30528	Elm Terminal Station - HPFF Alarms	35	0	0.1	0	0	0.1
		C03384	Elnora 115kV Tap Cross Bracing	16	0	0	0	0.1	0.1
		C03281	Fenner-Cortland 3 Cross Braces.	21	0	0	0	0.1	0.1
		C27829	Gardenville Control Cables	34	0.3	0	0	0	0.3
		C30530	Gardenville Station - HPFF Alarms	35	0	0.1	0	0	0.1
		C31004	Gibson Sta - Repl SW1602,03, R1617,18	28	0.1	0.3	0.3	0	0.6
		C31663	Greenbush- Replace TB3	39	0	0.6	1	0	1.6
		C29950	Harper Station - Replace 2023 & 2033 MODs	22	0	0.1	0.3	0	0.5
		C30531	Huntley Station - HPFF Alarming	35	0	0.1	0	0	0.1
		C28044	Lafayette - Replace Line 4 Relaying	39	0.1	0	0	0	0.1
		C03748	Leeds SVC-Refurbishment/Replacement	36	5.9	0	0	0	5.9
		C27042	New Gardenville - TB3 &TB#4	34	3.7	0	2.8	2.8	9.3
		C31658	NY Surge Arrester Replacement	36	0	0	2.7	2.6	5.3
		C29216	Oswego - Replace Special	35	0	0.7	0	0	0.7
		C27006	Packard Replace TB3 &TB4	41	6.4	0	0	0	6.4
		CNYX72	PIW Prospective Projects	49	1	1.5	1.5	3	7
		C20912	Porter Replace 11 GE 230kV RF2 Discs	28	0.5	0.4	0	0	0.9
		C30532	Rochester Generator and HPFF Alarms	39	0	0.1	0	0	0.1
		C15988	Rochester HPFF Cable Plant	44	0	0	0.9	0.1	1.1
		C29946	Rochester Pump - LPFF Trip Scheme	35	0	0	0.4	0	0.4
		CNYAS11-2	Refurbishment Line #180 and #181	40	0.2	0.5	15	15	30.7
		CNYAS11-1	Frontier Region Shield Wire project	40	0	0.1	2	0	2.1
		CNYAS38	Silver Creek switch structure - replace 115kV disconnects	21	0	0	0	0.3	0.3
		C31044	Taylorville Repl SW #23	34	0	0.1	0	0	0.1
		CNYX26	Temple Pressuring Plant	28	0	0	0	0	0
		C32309	Ticonderoga-Sanford T6410R Removal	43	0	0.1	0.2	0	0.2
		C11318	Trinity UG Pumphouse Redesign	49	0.7	0.3	0	0	1
		C29951	Youngmann Terminal Station - Replace Switch #310	19	0.1	0	0	0	0.1
	Other Asset Condition Total				**21.8**	**7**	**28**	**24**	**80.9**
	Overhead Line Refurbishment Program	CNYAS62	Dunkirk - Falconer #161	40	0	0	0.1	0.1	0.2
		CNYAS49	Dunkirk - Falconer #162	44	0.1	0.1	0.2	1	1.4
		C27422	Falconer-HH 153-154, T1160-T1170 ACR	39	0	0.1	0.2	1	1.3
		C03389	Gard-Dun 141-142 T1260-1270 ACR	44	0.5	9	27	15	51.5
		CNYAS60	Gardenville - Buffalo Sw #146 [145]	18	0			0.1	0.1
		CNYAS75	Gardenville - Dunkirk #74	40	0	0	0.1	0.1	0.2
		C27425	Gardenville -HH 151-152, T1950-T1280-S ACR	39	0.1	0.1	1	1	2.2
		C27436	Gardenville Lines 180-182, T1660-T1780 ACR	44	0.1	0.1	0.1	12.5	12.7

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C04718	Gard-HHl 151-152, T1950-T1280 N ACR	49	9.9	6.7	0	0	16.6
		C27429	Homer Hill Bennett Rd 157, T1340 ACR	39	0.1	0.1	0.1	0.1	0.3
		CNYAS53	Huntley - Lockport #37	44	0.1	0.1	0.1	0.1	0.3
		CNYAS51	Huntley - Praxair #46	18	0	0.1	0.1	0.1	0.3
		CNYAS63	Huntley-Gardenville 38 [& 39] (refurb)	40	0	0	0	0.1	0.1
		CNYAS56	Indeck Oswego - Lighthouse Hill #2	39	0.1	0.1	0.1	6	6.2
		C27432	Lockport 103- 104, T1620-T106 STR	40	0.1	0.1	0.1	0.1	0.3
		C03417	Lockport Mortimer 111 T1530 ACR	49	1.6	12	21	12	46.6
		C03422	Lockport-Batavia 112, T1510 ACR	39	0	0.2	2.5	12.3	15
		C27431	Lockport-Bativa 108 Refurb	29	0	0.1	0.1	0.1	0.2
		C18670	Lockport-Mort 113-114, T1540-T1550 LER	49	1.8	0	0	0	1.8
		C33014	Lockprt-Mort 111 Tap T1530-1 Refurb	39	0	0.1	0.3	0	0.4
		CNYAS65	Mortimer - Pannell Road #24	40	0	0.1	0.1	0.1	0.2
		C30889	Pannell-Geneva 4-4A, T1860 ACR	37	0.1	0.1	0.1	14.1	14.3
		CNYAS77	Porter - Rotterdam #30	40	0	0	0	0.1	0.1
		C30890	Porter Rotterdam 31, T4210 ACR	45	0.1	0.1	0.1	9.9	10.2
		C27437	Taylorville -B 5-6 T3320-T3330 ACR	39	0.1	0.1	0.6	5.4	6.2
		C24361	Taylorville-Moshier 7, T3340 ACR	49	2.4	3.5	0	0	5.9
		CNYAS82	Ticonderoga Lines 2 [& 3] (Complete Line)	40	0	0	0.1	1	1.1
		C19530	Ticonderoga-2-3, T5810-T5830 SXR	49	3.2	0	0	0	3.2
	Overhead Line Refurbishment Program Total				**20.2**	**32.5**	**53.7**	**92**	**198.4**
	Relay Replacement Strategy	CNYAS29	Browns Falls - protection replacement and new control building	19	0	0	0	0	0
		CNYAS31	Edic - Protection replacement	19	0	0	0.1	0.5	0.6
		CNYAS90	Geres lock Control room & Relay Strategy	19	0	0	0	0	0
		CNYAS41	Menands - new control building	28	0	0.3	0.3	1	1.5
		CNYAS26	North Troy - protection replacement	19	0	0	0	0.1	0.1
		CNYAS10	NY Protection & Control Replacement	35	0.1	0.8	3.3	4.3	8.4
		CNYAS32	Oswego - new control building	19	0	0	0.1	0.5	0.6
		CNYAS88	Relay Replacement Strategy - Phase 2	19	0	0	0	0	0
		CNYAS89	Riverside Control room & Relay Strategy	19	0	0	0	0	0
		CNYAS28	Yahnundasis - protection replacement	19	0	0	0	0.1	0.1
	Relay Replacement Strategy Total				**0.1**	**1**	**3.8**	**6.4**	**11.3**
	RHE Breaker Replacement	C24299	Lighthouse Hill Road - Repl R60 RHE PCB	39	0.1	0.2	0	0	0.3
		C18410	Oneida - R/R 115kV FP RHE OCB's	39	0	0.1	0.5	0	0.6
	RHE Breaker Replacement Total				**0.1**	**0.3**	**0.5**	**0**	**0.9**
	Shield Wire Strategy	C28683	Shieldwire: Buffalo 145	40	0.3	1.3	0	0	1.6
		C28709	Shieldwire: Clay-Dewitt 3	40	1.2	1.2	0	0	2.4
		C28706	Shieldwire: Gardenville -Depew 54	40	0	1.1	0	0	1.1
		C28679	Shieldwire: Gardenville Homer 151/152	40	0	3.6	0	0	3.6
		C28676	Shieldwire: Huntley - Gardenville 38	40	2.5	0	0	0	2.5
		C28707	Shieldwire: Huntley-Lockport 36/37	40	1.8	0	0	0	1.8

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
		C28678	Shieldwire: LaFarge Pleasant Vl. 8	40	1.7	0	0	0	1.7
		C28681	Shieldwire: Mountain-Lockport 103	40	1.3	0	0	0	1.3
		C28712	Shieldwire: Walck Rd - Huntley	40	0.6	0.2	0	0	0.8
	Shield Wire Strategy Total				**9.4**	**7.4**	**0**	**0**	**16.8**
	Steel Tower Strategy	C21693	S. Oswego Lighthouse Hill Circuits	49	4.5	0.4	0	0	4.9
	Steel Tower Strategy Total				**4.5**	**0.4**	**0**	**0**	**4.9**
	Substation Rebuilds	CNYAS40	Buffalo 115kV - replace disconnects	21	0	0	0	0.3	0.3
		C05155	Dunkirk Rebuild	35	0	0	0.1	0.5	0.6
		CNYAS91	Elm St. Refurbishment	35	0	0	0.5	1	1.5
		C05156	Gardenville Rebuild	35	0.5	2.7	36.4	23	62.6
		C30084	Gardenville Rebuild Line Location	44	1	1.2	1.3	0.1	3.6
		C31662	LightHH 115kv Yard Repl & cntrl hse	35	0.3	1	5	5	11.3
		CNYAS2	Lockport Rebuild	35	0	0	0.3	1	1.3
		CNYAS44	Mohican - rebuild including transformers and oil circuit breakers	35	0.1	0.2	1	10	11.3
		C29180	N. Leroy Rebuild Station	34	0.1	0	0	0	0.1
		CNYAS36	Porter 230kV - replace disconnects and PTs	28	0	0.3	1	10	11.3
		CNYAS27	Reynolds Road - protection replacement & new control building $ replace. Overduty 115kv Breakers	19	0	0	0.5	1	1.5
		C03778	Rome 115 kV Station	22	0.4	2	8.7	2.1	13.2
		C17849	Rotterdam R/R 230kV FPE RHE CB's	39	0.5	1.6	4	15	21.1
	Substation Rebuilds Total				**2.8**	**8.9**	**58.9**	**68.9**	**139.4**
	Transformer Replacement Strategy	C31656	NY 115kv Transformer Replace (Priority 4)	41	4	7	7	7	25
	Transformer Replacement Strategy Total				**4**	**7**	**7**	**7**	**25**
	U-Series Relay Strategy	C24662	Edic FE1 - Replace U Series Relays	33	0.3	0	0	0	0.3
		C24663	Leeds - Replace U Series Relays	33	0.2	0.7	0	0	0.9
		C24661	LN17- Replace Type U Relays	33	1.4	0	0	0	1.4
		C05150	Westinghouse U Series Relay Strategy	33	0.5	0	0	0	0.5
	U-Series Relay Strategy Total				**2.3**	**0.7**	**0**	**0**	**3**
	Reserve	CNYX31	Reserve	49	-9	-9.2	-14.1	-18.6	-50.9
	Reserve Total				**-9**	**-9.2**	**-14.1**	**-18.6**	**-50.9**
Transmission Total					**57.5**	**58.4**	**146.2**	**201.9**	**463.9**
Total Asset Condition					**116**	**124**	**210**	**275**	**725**

Planned T&D Infrastructure Investment Levels For Non - Infrastructure Category by Network Segment, Program and Project ($Millions)

Network Segment	Program	Project Number	Project Name	Risk Score	FY11	FY12	FY13	FY14	FY11-14
Distribution	General Equipment - Dist	CNC070	Cent NY-General-Genl Equip Blanket	50	0.5	1.1	1.1	1.1	3.8
		CNE070	East NY-Genl Equip Budgetary Reserve	50	0.9	1.9	2	2.1	6.9
		CNW070	West NY-General-Genl Equip Blanket	50	0.5	1.1	1.1	1.1	3.8
		RESERVE 036_070 LINE	Reserve for General Equipment Specifics & Schedule Changes	34	0.3	0.3	0.3	0.3	1.1
	General Equipment - Dist Total				**2.2**	**4.3**	**4.5**	**4.6**	**15.7**
	Telecommunications	C04157	Telecom and Radio Equipment	50	1	1	1.1	1.1	4.2
		CNC021	Cent NY-Dist-Telecomm Blanket	50	0	0	0	0	0
		CNE021	East NY-Dist-Telecomm Blanket	50	0	0	0	0	0
		CNW021	West NY-Dist-Telecomm Blanket	50	0	0	0	0	0
	Telecommunications Total				**1**	**1.1**	**1.1**	**1.1**	**4.3**
Distribution Total					**3.2**	**5.4**	**5.6**	**5.8**	**20**
Sub-Transmission	General Equipment - Dist	RESERVE 036_070 LINE	TxD RESERVE for General Equipment Specifics & Schedule Changes	34	0		0	0	0
	General Equipment - Dist Total				**0**		**0**	**0**	**0**
	Other	RESERVE 036_999 LINE	TxD RESERVE for Other Unidentified Specifics & Schedule Changes	34	0		0	0	0
		RESERVE 036_999 SUB	TxD RESERVE for Other Unidentified Specifics & Schedule Changes (substation)	34	0		0	0	0
	Other Total				**0**		**0**	**0**	**0**
Sub-Transmission Total					**0**		**0**	**0**	**0**
Transmission	Other - Non Infrastructure	CNYAS87	Asset Separation strategy	39	0	0	0	0.1	0.1
		CNYAS46	Flood mitigation	22	0	0	2	1	3
	Other - Non Infrastructure Total				**0**	**0**	**2**	**1.1**	**3.1**
	Physical Security	CNYAS86	Physical Security Strategy	40	0.1	6	3	0	9.1
	Physical Security Total				**0.1**	**6**	**3**	**0**	**9.1**
Transmission Total					**0.1**	**6**	**5**	**1.1**	**12.2**
Total Non-Infrastructure					**3.3**	**11.4**	**10.6**	**6.9**	**32.2**

Exhibit __ (IOP-6CU)

Summary of Information System Projects

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
Company Corrections & Updates
Operating Expenses by Component
Capital Software and Other Information Systems Rent Expense
IS Investment Plan
For the Rate Years ended December 31, 2011, 2012 and 2013

				Data			
Category	IS Exec	INVP	Investment Name	**CY2013 Rent**	**CY2012 Rent**	**CY2011 Rent**	**Total Rate Plan**
Customer Service	ED&G	INVP 1656	Customer Systems Agent Desktop	947,649	1,007,716	728,696	2,684,061
		INVP 2204	Contact Center Operational Efficiencies	160,085	115,760	-	275,845
		INVP 2202	Customer Self Service via IVR - Customer Experience	128,068	92,608	-	220,676
		INVP 2200	Customer Self Service via Web - Customer Experience	111,130	-	-	111,130
		INVP 2201	Customer Self Service via Web - Operational Improvements	111,130	-	-	111,130
		INVP 0980	Increase Customer Self Service activity on the - Web (CC #4a)	97,798	104,556	111,183	313,537
		INVP 1306	IVR Phase 2 - (Interactive Voice Response)	89,648	122,849	128,598	341,094
		INVP 1159	Customer Insights and Analytics	78,542	83,520	60,395	222,457
		INVP 2203	Customer Self Service via IVR - Operational Improvements	76,841	55,565	-	132,406
		INVP 1660	Legacy Grid Web Self Service SW Upgrade	37,890	27,399	-	65,289
		INVP 2205	Contact Center Business Continuity	18,065	19,210	13,891	51,167
		INVP 1255	Contact Centers Call Recording Replacement	16,848	18,012	19,153	54,013
		INVP 1001	CSS ProjectONE Deferred items	2,800	2,993	3,183	8,976
	ED&G Total			**1,876,491**	**1,650,188**	**1,065,099**	**4,591,779**
	Fin, SS & Corp	INVP 1643	Reserve for Future IS Projects - Customer Systems 2012	95,423	69,002	-	164,425
		INVP 1643	Reserve for Future IS Projects - Customer Systems 2011	89,735	95,423	69,002	254,160
		INVP 1643	Reserve for Future IS Projects - Customer Systems 2013	69,002	-	-	69,002
		INVP 1549	Non-Interval Collections Systems Consolidation (ITRON/PP4/MVRS)	63,812	67,856	49,068	180,736
		INVP 1232	Settlement Solution	54,516	57,972	41,920	154,408
		INVP 0937	Purchase of Receivables NY	45,066	48,180	51,234	144,479
		INVP 1235	Account Initiation - Collections Data Hygene Initiatives - Phase 2 & 3	21,603	23,096	24,559	69,258
	Fin, SS & Corp Total			**439,156**	**361,528**	**235,783**	**1,036,468**
Customer Service Total				**2,315,647**	**2,011,717**	**1,300,883**	**5,628,247**
Operations	ED&G	INVP 1185	Distribution/Outage Management System	2,544,251	-	-	2,544,251
		INVP 2155	Mobile - Electric Distribution Legacy Grid Mobile Expansion	1,316,336	-	-	1,316,336
		INVP 1242	Transformation KPIs	671,037	717,407	762,880	2,151,324
		INVP 1642	Radio Console Standardization	436,711	-	-	436,711
		INVP 2195	DECUS13 - URD Optimization Tool - Underground Residential Distribution	189,360	201,363	145,609	536,332
		INVP 0953	Smallworld GIS Upgrade	133,207	141,650	102,429	377,286
		INVP 1363	Substation Equipment Analysis	109,016	116,549	123,937	349,502
		INVP 2182	DECUS02 - Mobile Devices for Field Investigators	70,061	74,501	53,873	198,435
		INVP 2171	Exchange of Notice - Joint Pole - Double Pole	62,355	66,308	47,948	176,611
		INVP 2162	Primavera - Project Management Extensions	61,286	65,171	47,126	173,583
		INVP 1485	Computapole Upgrade	60,119	43,473	-	103,592
		INVP 1484	Cascade Phase II (Substation Equipment Maintenance)	59,073	62,818	45,424	167,315
		INVP 2172	IDS Reliability Reporting & Analysis (Interruption and Disturbance System)	54,635	58,098	42,012	154,745
		INVP 1482	ACIS Target Pricing Model (Automated Contractor Invoicing System)	53,735	57,141	41,319	152,195
		INVP 1488	Remote Access To Fault Recorders	31,096	33,067	23,912	88,075
		INVP 2165	SEAL Upgrade (Storm Emergency Assignment List)	24,942	26,523	19,179	70,644
		INVP 2144	Vegetation Management	21,976	15,891	-	37,868
		INVP 1243	EDO Transformation - Proceed Non Global	1,221	1,305	1,388	3,913
		INVP 1246	Transformation - KPI Reporting	366	391	416	1,173
		No INVP	SMART METERS	176	188	200	563
	ED&G Total			**5,900,958**	**1,681,845**	**1,457,653**	**9,040,456**
	Transmission	INVP 1227	NERC CIP Compliance 2010	193,933	207,334	220,476	621,743
		INVP 1227	NERC CIP Compliance 2012	19,456	14,069	-	33,525
		INVP 1227	NERC CIP Compliance 2011	18,296	19,456	14,069	51,821
		INVP 1227	NERC CIP Compliance 2013	46,896	-	-	46,896
		INVP 1573	Transmission Investment Mgmt System (TIMS)	149,161	107,861	-	257,022
		INVP 2277	NERC-CIP Service Management Toolset/NERC-CIP End-to-End Solution/ITIL Compliance	131,305	94,949	-	226,253
		INVP 2483	Integrated Project & Portfolio Planning	129,705	93,792	-	223,497
		INVP 2270	Transmission Customer System Upgrade	67,999	-	-	67,999
		INVP 1224	TOA Enhancements (Transmission Outage Application)	64,720	69,192	73,578	207,491
		INVP 2276	NY EMS Remote Access Enhancement (Citrix)	29,882	31,776	22,978	84,635
		INVP 2484	Performance and condition Datamart	28,138	-	-	28,138
	Transmission Total			**879,491**	**638,428**	**331,101**	**1,849,020**
Operations Total				**6,780,449**	**2,320,273**	**1,788,753**	**10,889,475**
Shared Services	EPO	INVP 1356	Internet Strategy Implementation	186,962	198,812	143,764	529,538
		INVP 2210	Intranet Design	98,795	105,058	75,969	279,822
		INVP 2210	US - Internet Strategy Implementation	49,082	52,474	55,800	157,356
		INVP 0314	US Intranet Consolidation	42,190	45,106	47,965	135,261
	EPO Total			**377,029**	**401,450**	**323,498**	**1,101,977**
	Fin, SS & Corp	INVP 2391	Regulatory Cost Structure - UI (Utilities International) Planner	68,949	73,320	53,019	195,288
		INVP 1671	US Transaction Delivery Center	40,374	-	-	40,374
		INVP 1367	Group Finance FC - Hyperion Upgrade Replacement	18,442	19,611	14,181	52,233
		INVP 1296	Salary Planning and performance management for Execs and US directors.	13,478	14,409	15,323	43,210
		INVP 0309	Supply Chain Management -ENGAGE VENDOR	10,395	11,114	11,818	33,327
		No INVP	Talent Management	9,463	10,117	10,758	30,337
		No INVP	P11 US National Grid Sales & Use	3,620	3,870	4,115	11,604
		No INVP	Risk Managment Syst	1,009	1,079	1,147	3,236
	Fin, SS & Corp Total			**165,730**	**133,519**	**110,360**	**409,609**
	Overlay	No INVP	US SAP ERP Back Office	5,252,886	3,798,446	-	9,051,332
	Overlay Total			**5,252,886**	**3,798,446**	-	**9,051,332**
Shared Services Total				**5,795,645**	**4,333,415**	**433,859**	**10,562,918**
Shared Infrastructure	ISSO	INVP 1088	Datacenter Rationalization (includes specific storage computing & telecoms) 2011	578,592	615,267	444,909	1,638,768
		INVP 1088	Datacenter Rationalization (includes specific storage computing & telecoms) 2012	577,817	417,829	-	995,647
		INVP 1088	Datacenter Rationalization (includes specific storage computing & telecoms) 2013	417,829	-	-	417,829
		INVP 1129	Employee Remote Access Program	312,279	-	-	312,279
		INVP 1134	Enterprise Content Management and Data Archival Program	254,609	184,112	-	438,720
		INVP 1648	Network Strategy	228,037	-	-	228,037
		INVP 1092	OneNet (common user interface)	200,754	214,626	228,230	643,610
		INVP 1389	US Computing Refresh 2010	92,483	98,345	71,115	261,943
		INVP 1389	US Computing Refresh 2011	73,672	53,273	-	126,945
		INVP 1389	US Computing Refresh 2012	53,273	-	-	53,273
		INVP 1389	Unix Lifecycling	84,152	89,967	95,669	269,788
		INVP 1395	System Management Toolset (includes CMDB Standardization and Commoditization	80,625	-	-	80,625
		INVP 1129	Workplace Enhancements (was Desktop (email, AD & SharePoint))	52,330	55,947	59,493	167,770
		INVP 1393	Desktop Refresh	41,514	44,383	47,196	133,094
		INVP 1404	Network Comms - Voice & Data Normals 2012	31,301	22,634	-	53,936
		INVP 1404	Network Comms - Voice & Data Normals 2011	29,435	31,301	22,634	83,371
		INVP 1404	Network Comms - Voice & Data Normals 2013	22,634	-	-	22,634
		INVP 1404	Normals - Voice Enhancements 2010	17,615	18,833	20,026	56,475

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID (COMPANY 36)
Company Corrections & Updates
Operating Expenses by Component
Capital Software and Other Information Systems Rent Expense
IS Investment Plan
For the Rate Years ended December 31, 2011, 2012 and 2013

				Data			
Category	IS Exec	INVP	Investment Name	**CY2013 Rent**	**CY2012 Rent**	**CY2011 Rent**	**Total Rate Plan**
Shared Infrastructure (cont.)	ISSO	INVP 1646	Data Storage Refresh 2012	27,005	19,528	-	46,533
		INVP 1646	Data Storage Refresh 2011	25,395	27,005	19,528	71,928
		INVP 1646	Data Storage Refresh 2013	19,528	-	-	19,528
		INVP 1391	Wintel Lifecycling	26,529	28,362	30,160	85,052
		INVP 1401	LAN/WAN	24,382	26,067	27,720	78,169
		INVP 0845	DataStage Upgrade/Capacity Planning	21,445	22,927	24,380	68,753
		INVP 0823	Security Enhancement Projects 2012	17,860	12,915	-	30,775
		INVP 0823	Security Enhancement Projects 2013	12,915	-	-	12,915
		INVP 0823	Security Enhancement Projects 2010	10,659	11,395	12,118	34,172
		INVP 0823	Security Enhancement Projects 2011	16,795	17,860	12,915	47,570
		No INVP	SQL - ISS/20 (standard language for accessing databases)	13,307	14,226	15,128	42,661
		INVP 1135	IS Audit Remediation 2012	10,506	7,597	-	18,103
		INVP 1135	IS Audit Remediation 2011	9,880	10,506	7,597	27,982
		INVP 1135	IS Audit Remediation 2013	7,597	-	-	7,597
		INVP 1400	Video Conferencing 2012	10,506	7,597	-	18,103
		INVP 1400	Video Conferencing 2011	9,880	10,506	7,597	27,982
		INVP 1400	Video Conferencing 2010	9,786	10,462	11,125	31,373
		INVP 1400	Video Conferencing 2013	7,597	-	-	7,597
		INVP 1396	Wireless LAN Standardization	6,085	6,506	6,918	19,508
		INVP 0873	MF (Mainframe) Tape Upgrade	3,385	3,618	3,848	10,851
		INVP 1406	Normals - Private Infrastructure	2,065	2,208	2,348	6,620
		INVP 1152	Identity Management	768	821	873	2,462
		INVP 1402	Private Infrastructure	8	8	9	25
	ISSO Total			**3,442,833**	**2,086,631**	**1,171,536**	**6,701,000**
Shared Infrastructure Total				**3,442,833**	**2,086,631**	**1,171,536**	**6,701,000**
Grand Total				**18,334,574**	**10,752,035**	**4,695,031**	**33,781,640**

Exhibit __ (IOP-9CU)

Exhibit __ (IOP-9CU)

Incremental Cost Support for Tower Painting, Comprehensive Aerial Inspections, and Footer Inspections

Niagara Mohawk Power Corp.
Transmission Comprehensive Aerial Patrol Estimate

CY11 TLS NY Aerial Patrol Budget

Activity Desc	Activity	Segment	EXP Type	Orig DEPT	Chrg DEPT	OrigBusUnit	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total CY11 Budget	
Perform Comprehensive Inspectio	TO1180	TRAN		26672	26672		12,000	12,000	24,850	5,531	5,531	8,297	22,124	27,656	27,656	41,483	41,483	41,483	285,734	Note 1
Perform Aerial Patrol-Non Fault	TO1165	TRAN	110	26672	26672	00036	32,494	32,494	55,988	9,679	9,679	14,519	38,718	48,397	48,397	72,596	72,596	72,596	508,153	Note 2
Emergency Patrols-Post Fault	TO1166	TRAN	110	26672	26672	00036	26,850	26,850	53,700	11,062	11,062	16,593	44,249	55,311	55,311	82,967	82,967	82,967	549,888	Note 3
Perform Thermovision Inspection	TO1175	TRAN	110	26672	26672	00036	28,036	28,036	56,072	10,140	10,140	15,211	40,561	50,702	50,702	76,053	76,053	76,053	517,758	Note 4
																	Total CY11 Expenses		1,861,533	

Test Year NY TLS Aerial Patrol Actuals

Activity Desc	Activity	Segment	EXP Type	Orig DEPT	Chrg DEPT	OrigBusUnit	OCT '08	NOV'08	DEC'08	JAN '09	FEB '09	MAR '09	APR '09	MAY '09	JUN '09	JUL '09	AUG '09	SEP'09	Total HTY Actuals	Adjustment to HTY Actuals (Note 6)	Total HTY Actuals (Adjusted)
Perform Comprehensive Inspectio	TO1180	TRAN	110	26672	26672	00036			-	-	-	-	-	-	-	-	-	-	-	107,000	107,100
Perform Aerial Patrol-Non Fault	TO1165	TRAN	110	26672	26672	00036	5,049	-	30,695	(29,726)	3,551	720	8,703	347	-	19,338	12,531	70,086	121,293		121,293
Emergency Patrols-Post Fault	TO1166	TRAN	110	26672	26672	00036	-	-	-	-	-	-	-	8,690	13,091	1,021	15,487	-	38,289		38,289
Perform Thermovision Inspection	TO1175	TRAN	110	26672	26672	00036	-	-	-	-	9,047	13,830	-	-	-	26,220	(26,220)	277,945	300,822	(107,100)	193,722
																	Total Test Year Expenses		460,404		460,404

Incremental Aerial Patrol Expenses	1,401,129

The budget was phased based upon when the work has been historically completed

Note 1 - Projected costs for comprehensive aerial patrols
Note 2 - Costs for Visual Inspection of 6,000 miles of line. Additional costs are projected from the HTY for the use of a contracted helicopter for this function due to limited availabilty of Company helicopter.
Note 3 - Potential 20,000 miles of patrol for post-fault investigation.
Note 4 - Additional 800 miles of patrol to address lines with history of splice failures.
Note 5 - The budget was phased based upon when the work has been historically completed
Note 6 - Comprehensive Aerial Patrols were originally charged to Activity TO1175 when intiated as a pilot project in FY10. New Activity TO1180 has been created to capture future charges for this program.

Exhibit__(IOP-9CU)
Schedule 2
Page 1 of 1

Exhibit __ (IOP-13CU)

Exhibit __ (IOP-13CU)

Planned Research, Development and Demonstration Projects

NIAGARA MOHAWK POWER CORPORATION

Summary Description of Research, Development and Demonstration Projects

The RD&D projects proposed by the Company are summarized below, and arrange according to the State Energy Plan objective they most closely address.

(1) **Assure that New York has reliable energy and transportation systems**

Optimizer

A project has been initiated to create a software tool or model which will take into consideration all of the potential remediation methods available to improve reliability on a circuit, group of circuits or an overall system and balance those solutions with infrastructure investment alternatives in order to develop an optimum set of solutions. The potential solutions developed by this project are key to improving National Grid's reliability performance with maximum efficiency. The annual funding associated with this initiative is CY11 $92,041; CY12 $65,744; CY13 $39,446.

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Circuit Profiling

A circuit profiling project has been developed for vegetation management. Sample data at systematic random sampling points along a circuit will be taken. This program would be a pilot encompassing an entire division. The data collected is expected to provide the company with the ability to rank the circuit's risk relative to actual field conditions. The data can then be analyzed to determine circuit risk relative to identified categories. This would then allow for a more analytical vegetation management strategy based on actual circuit vegetation conditions instead of on a time based plan. Work could be extended or

pulled back based on actual circuit risk ratings. Expected benefits include an enhanced ability to maintain or improve reliability of the electric network based on field assessment and risk ranking, while ensuring the lowest cost for realizing the reliability benefit. The annual funding associated with this initiative is CY11 $62,062; CY12$60,484; CY13 $60,484.

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Forest Health Metrics

Ecological Solutions Inc. has previously worked with National Grid and has been studying trees which cause interruptions on Transmission lines, specifically the impact of trees falling on the lines from outside the right-of-ways. Building on this study and using some of the same state specific forest metrics already created, a forest health metrics study can be implemented, calculating forest mortality levels across our service territory. This can then be used to calculate the quantity of trees that should be removed each year for a determined risk level. The annual funding associated with this initiative is CY11 $44,211; CY12 $35,369; CY13 $35,369.

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Wireless EMS

This project will demonstrate a system of Wireless Energy Management System (EMS) that is easy to install at a lower cost than conventional EMS systems. Wireless EMS is appropriate to investigate for use in those applications when wire line communications to the remote site is prohibitively expensive or it is too time consuming to construct wire line communications. With the advancement in fiber optics, telecomm technology, satellite and Internet services, solutions for wireless EMS monitoring are now emerging. It is anticipated that several different

wireless EMS systems will be demonstrated and the attributes of these assessed. These systems will become part of a best cost solution to assure that National Grid provides customers with the best value in reliable and safe service. The introduction of wireless communications to the control system environment presents new and unique challenges to control system owners/operators. The annual funding associated with this initiative is CY11 $31,557; CY12 $52,595; CY13 $78,893.

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The Advanced Security Acceleration Project (ASAP-SG)

ASAP-SG was created by the SG Security Working Group of the UCA International Users Group (UCAIug) to be a utility-driven, public-private collaborative effort to develop recommendations, and best practices for building, acquiring, integrating, and operating smart grid systems, components, and devices. The current focus is on the development of security requirements that

- utilities can use in their Request For Proposal (RFP) processes,
- vendors can use as reference material in their development processes,
- government can use to understand the measures being taken to secure critical infrastructure, and utility commissions can use to verify the protection of public interests.

By participating in this collaborative process National Grid will have the opportunity to be an early adopter of newly developed technology, while benefiting from the close interaction with equipment vendors, service providers and like minded utilities. The annual funding associated with this initiative is CY11 $22,106; CY12 $22,106; CY13 $22,106.

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Realtime Fault Location

Locating faults is a real time problem that directly effects the time and cost required to restore service and/or avoid service outages. This project will identify, develop and demonstrate methods to identify and locate faults on the system in an accurate, fast and low cost manner. The annual funding associated with this initiative is CY11 $65,744; CY12 $65,744; CY13 $65,744.

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Condition and Life Extension of Substation Assets

This program includes the installation and evaluation of the following projects: oil level monitors, grading capacitor condition evaluation, bus transfer capability, vacuum tap changer, and uneven dynamic voltages. These projects will enhance the ability of National Grid to predict failure and assure life extension of equipment in substations. The annual funding associated with this initiative is CY12 $22,106; CY13 $35,369.

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Integrated communications strategy

As we modernize National Grid's infrastructure with intelligent devices, it is necessary to expand the reach of the company's existing communications infrastructure to connect to those devices. Today's infrastructure consists of a myriad of physical platforms including microwave, fiber, leased lines etc., however the equipment is in many cases antiquated or not capable of supporting the bandwidth needs of today. It is now necessary to envision an enhanced infrastructure that is developed to meet the company's needs both today and into

the foreseeable future. While certain applications require relatively little bandwidth, there are other applications that require significant bandwidth in order to provide real-time, secure, reliable and deterministic communications.

The SmartGrid relies on communications with intelligent devices to enable automated decision making relating to the efficient and safe flow of energy. Without an enabling communications infrastructure, the goals of optimizing energy flow cannot be realized. The annual funding associated with this initiative is CY12 $55,264; CY13 $55,264.

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Transmission/Distribution Roadmap

There are many advantages to a technology assessment that looks at the overall requirements for the future power system communication, control, and data management needs. As many different applications are foreseen, it is important to look at the common requirements and evaluate the potential for a common architecture to provide the basis for these applications. For each of these applications, functional requirements need to be understood as well as requirements for security, reliability, and infrastructure management. The annual funding associated with this initiative is CY12 $110,528; CY13 $110,528.

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DV2010

Equipment/software offerings from vendors often do not satisfy the needs of the utility system. The utility often needs to accommodate the system to meet equipment availability.

DV2010 is an organization of 7 utilities that works with vendors by supplying detailed specifications for equipment that meets the utilities specific needs. The

annual funding associated with this initiative is (Membership fee) CY12 $26,298; CY13 $26,298.

Advanced Distribution Feeder Automation

There are a multitude of methods, devices and companies involved in supplying equipment and software to automate the operation of distribution feeders. This project will identify and test the best two or three methods for distribution automation systems in order to develop a body of knowledge to facilitate the introduction of these technologies into the system. The annual funding associated with this initiative is CY12 $131,488; CY13 $131,488.

Remote equipment surveillance

Utilization of remote means for assessment of equipment condition will be beneficial. The technologies that will be investigated are IR and corona.

The annual funding associated with this initiative is CY12 $67,516; CY13 $135,033.

Infrastructure development for the electricity transmission network for 2020-2030

This project will develop novel/innovative solutions for the /integration of AC/DC solutions and the development of smart transmission systems focused on designing and delivering an economic and efficient transmission system in a coordinated manner to meet the government's renewable target challenges. The annual funding associated with this initiative is CY 12 $35,108; CY13 $94,523.

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***(2)* Support energy and transportation systems that enable the State to significantly reduce greenhouse gas (GHG) emissions, both to do the State's part in responding to the dangers posed by climate change and to position the State to compete in a national and global carbon constrained economy.**

Grid Impacts of Battery Electric Vehicles (BEVs - include Plug-in Hybrid Electric Vehicles (PHEVs) and Electric Vehicles (EVs))

Working with EPRI, NYSERDA and other participating New York utilities, this program will provide actual distribution circuit designs and loading data in the form of computer models so that various BEV implementation scenarios can be studied in order to determine the impacts of increasing BEV penetration on distribution system designs and operation. The scenarios will include a range of PHEVs and EVs over time and geographical area, and a range of charging profiles (kW over time). EPRI has established a framework for this study and determined the types of circuit information required for analysis. Benefits that accrue to customers include the ability to easily accommodate electric vehicles on the grid. Planning along with informed implementation of system upgrades will enable consumers in their adoption of this technology. The annual funding associated with this initiative is CY11 $23,668; CY12 $42,076; CY13 $60,484.

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Electric Business Unit Adaptation Strategies for Climate Change

The purpose of this program is to develop climate change adaptation strategies for the electric distribution and transmission infrastructure. Two studies are envisioned; one focusing on network resilience and the other on flooding. The

results of these studies will provide the basis for the company to potentially modify its system design and operational procedures to mitigate the effect of and to adapt to weather trends going forward and ensure the best siting of new infrastructure and assess the locations of existing infrastructure. The primary benefit will be a more reliable system and/or a more prepared and responsive utility. Adaptation efforts will be aimed at either maintaining or improving existing reliability standards and minimizing any degradation in reliability performance in the face of a harsher environment and in the face of economic constraints. The annual funding associated with this initiative is CY11 $44,211; CY12 $44,211; CY13 $44,211.

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EPRI Reactive Power Management

The byproduct of electric distribution systems using alternating current is reactive power. Reactive power (also called VARs) results when voltage and current are not in phase with each other. Reactive power is required to maintain voltage through transmission lines. Motor loads require VARs to convert the flow of electrons into useful work. Equipment such as transformers, transmission lines, and motors require reactive power. For example, in a customer's facility, electric motors need reactive power to produce magnetic fields for their operations.

The capability to forecast the reactive power demand and resources should enable secure and efficient VAR planning, and allow economic voltage support service and compensation. The project can help the system planner and operators gain insights into the reactive power profile and its characteristics and may provide new planning and operating practices.

The annual funding associated with this initiative is CY11 $42,076; CY12 $42,076; CY13 $42,076.

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SF6

One of National Grid's goals is to mitigate its impact on climate change. Utilities emit carbon dioxide equivalents in many forms including emissions from its vehicle fleet and generating stations. One particularly potent form of emissions is SF6 gas. This gas is used to quench high-energy electric arcs developed during the switching of high voltages. SF6 has a global warming potential of over 20,000 times that of carbon dioxide and is very stable so that it doesn't easily break down. National Grid is taking steps to mitigate the emissions of this potent gas. Research completed to date has not found a commercially viable alternative to SF6 although there has been progress in retarding its release into the atmosphere. National Grid is replacing its older SF6 equipment that have exhibited high leakage rates with new SF6 equipment or deploying low/no leakage SF6 equipment into new substations. The annual funding associated with this initiative is CY12 $135,033; CY13 $135,033.

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(3) **Address affordability concerns of residents and businesses caused by rising energy bills, and improve the State's economic competitiveness**

IEC 61850 Study

This project intends to study and develop functional specifications for IEC 61850-based protection, control, and automation (PCA) technologies and conduct

demonstrations of these specifications. National Grid believes that significant upgrades are needed to their aging protection and control schemes to maintain the current high levels of reliability and performance for these facilities. The IEC61850 protocol is new and the interaction of devices using this protocol and existing protocols needs to be investigated.

There are two main objectives for this program:

• To foster development of IEC 61850 technologies that will enable products from different vendors to interoperate. This problem is especially critical for IEC 61850-9-2 (process bus or sampled values) deployment; and

• To develop functional specifications that will enable National Grid to deploy IEC 61850 technologies at their substations faster and for less cost than the current approach.

Expected benefits include: reduced configuration costs, performance and flexibility improvements, and improved maintainability via use of generic widely available equipment. The annual funding associated with this initiative is CY11 $22,106; CY12 $44,211; CY13 $66,317.

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Clarkson University

This program provides support for testing at the Clarkson High Voltage Lab. Tests performed at this facility enhance the ability of National Grid to provide safe reliable service. Clarkson is the site where we perform acceptance testing on new equipment prior to installation and testing of failed equipment that enhances our ability to determine the mode and effect of failures. The benefits that will

accrue from our work with Clarkson include driving improvements in our safety, customer and operational performance. The annual funding associated with this initiative is CY11 $22,105; CY12 $22,105; CY13 $22,105.

EPRI Smart Distribution Applications and Technologies

This program focuses on the implementation of smart grid technologies at the distribution level. Research is focused on the communications and information infrastructure to support the smart grid. The program provides industry coordination and technology assessment, as well as, a roadmap of a future state for the electric distribution system that is essential to the development of long term plans. Through this collaborative National Grid can remain focused on developments in Smart Distribution technology nation wide and access opportunities to participate with utilities in demonstration programs. National Grid will have the opportunity to evaluate new technology that is being developed by vendors. The annual funding associated with this initiative is CY11 $105,190; CY12 $105,190; CY13 $105,190.

Remote / Unattended Transmission Line Inspection

National Grid periodically inspects its Transmission lines to identify and correct any incipient failures. The company uses a number of inspection techniques ranging from aerial inspections with infrared cameras to detect heat signatures to foot patrols where workers visually inspect the lines looking for the ground. National Grid plans to participate in an EPRI initiative focused on line inspections. This program brings together utilities from across the country so that best practices can be indentified and shared. These best practices can then be

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Deleted: ***Grid Wise Alliance***¶
. This alliance represents a broad range of organizations engaged in the energy supply chain this includes utilities, equipment manufacturers, technical solutions providers and academia. This is a cooperative alliance that is working to interact with funding agencies, and regulators to enhance the success of the members in achieving a vision of a smart enabled electric grid. This group has been very successful in becoming a go-to organization for Federal regulators regarding smart grid issues and regulation. National Grid's participation in this organization is beneficial to the rate payer in that it assures that the information developed and distributed by this group represents initiatives that provide the best value to the customers of New York. The annual funding associated with this initiative is CY11 $20,000; CY12 $20,000; CY13 $20,000.¶
EPRI Reactive Power Management¶
The byproduct of electric distribution systems using alternating current is reactive power. Reactive power (also called VARs) results when voltage and current are not in phase with each other. Reactive power is required to maintain voltage through transmission lines. Motor loads require VARs to convert the flow of electrons into useful work. Equipment such as transformers, transmission lines, and motors require reactive power. For example, in a customer's facility, electric motors need reactive power to produce magnetic field for their operations. The annual funding associated with this initiative is CY11 $80,000; CY12 $80,000; CY13 $80,000.¶

applied to National Grid's infrastructure so failures can be anticipated and correct before an outage can occur. The annual funding associated with this initiative is CY12 $135,033; CY13 $135,033.

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***(4)* Reduce health and environmental risks associated with the production and use of energy across all sectors.**

Characterization of Arc Flash Signatures

Arc flash from faults on distribution circuits is a safety issue that can impact work practices, protection requirements for line and substation workers, and relay and other over-current protection settings and practices. This program evaluates current and develops future industry practices for analyzing and protecting against arc flash hazards. This effort is being done in conjunction with other utility and industry efforts through participating in a EPRI collaborative. Additionally OSHA and NESC are in the process of introducing changes to electrical safety rules that require electric utilities to perform arc flash hazard analysis of all electric facilities operating at and above 1000 volts. The impending changes have potential significant implications for utility work practices, protective schemes, and personal protection. The annual funding associated with this initiative is CY11 $15,779; CY12 $15,779; CY13 $15,779.

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Battery-Less UPS for Substations

This project will demonstrate a battery less alternative in the Substation's Uninterruptible Power Supplies (UPS) system. The UPS protects critical systems from interruptions in the electricity supply and is critical for the operation of the switches, bus etc. The technology from Energetix Group's Pnu Power involves a

new type of UPS and backup power supply based on compressed air. The principle of this back up power system is that when loss of station AC is detected the compressed air is released into a scroll expander where it drives a generator to produce electrical power. Air is stored in DOT approved cylinders. Pnu Power currently offers units sizes 1kW (DC1), 2kW (DC2) and 3kW (DC3).

Current UPS and power quality systems use expensive lead acid batteries. The high cost, short life, unpredictable failure of lead acid batteries and environmental concerns has led to an ongoing search for a realistic alternative. The annual funding associated with this initiative is CY11 $10,519; CY12 $10,519; CY13 $10,519.

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(5) **Improve the State's energy independence and fuel diversity by developing in-state energy supply resources**

EPRI Energy Storage

EPRI research in energy storage will produce important new information, including 1) Strategic intelligence reports and specific technology assessments of energy storage and emerging distributed energy resource options; 2) Industry white papers to inform stakeholders on the role and value of energy storage; 3) On-line database for all energy storage and distributed energy resource (DER) options; 4) Best practices and specifications of transportable energy storage systems for grid asset management applications; and 5) Case studies and testing of emerging energy storage systems.

There are multiple benefits to both the utility and the customer from energy storage: 1) These devices are viewed as key assets which enhance the value of a

"Clean Smart Grid; 2) They can help the environment by enabling renewable integration. Energy storage can help utilities reduce greenhouse gas (GHG) emissions; and 3) They create value to utility. " The program provides the industry with technical and economic information about the options to store energy as a means to manage variability and peak loads while enhancing grid reliability The annual funding associated with this initiative is CY11 $31,557; CY12 $31,557; CY13 $31,557.

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Exhibit __ (IOP-13ACU)

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Planned Research, Development and Demonstration Projects' Allocation Percentages and Funding Levels

RD&D Program	CY11	CY12	CY13	Allocation %	Allocation Type	CY11	CY12	CY13	
Optimizer	175,000	125,000	75,000	52.60%	Distribution	92,041	65,744	39,446	
Circuit Profiling	118,000	115,000	115,000	52.60%	Distribution	62,062	60,484	60,484	
Forest Health Metrics	100,000	80,000	80,000	44.21%	T&D	44,211	35,369	35,369	
Wireless EMS	60,000	100,000	150,000	52.60%	Distribution	31,557	52,595	78,893	
ASAP-SG	50,000	50,000	50,000	44.21%	T&D	22,106	22,106	22,106	
Realtime Fault Location	125,000	125,000	125,000	52.60%	Distribution	65,744	65,744	65,744	
Condition and Life Extension of Substation Assets	-	50,000	80,000	44.21%	T&D	0	22,106	35,369	
Integrated Communications Strategy	-	125,000	125,000	44.21%	T&D	0	55,264	55,264	
Transmission/Distribution Roadmap	-	250,000	250,000	44.21%	T&D	0	110,528	110,528	
DV2010	-	50,000	50,000	52.60%	Distribution	0	26,298	26,298	
Advanced Distribution Feeder Automation	-	250,000	250,000	52.60%	Distribution	0	131,488	131,488	
Remote Equipment Surveillance	-	125,000	250,000	54.01%	Transmission	0	67,516	135,033	
Infrastructure Development of Electricity Transmission network for 2020-2030	-	65,000	175,000	54.01%	Transmission	0	35,108	94,523	
Grid Impacts of BEVs including PHEVs and Evs	45,000	80,000	115,000	52.60%	Distribution	23,668	42,076	60,484	
EBU Adaptation Strategieis for Climate Change	100,000	100,000	100,000	44.21%	T&D	44,211	44,211	44,211	
EPRI Reactive Power Management	80,000	80,000	80,000	52.60%	Distribution	42,076	42,076	42,076	
SF6	-	250,000	250,000	54.01%	Transmission	0	135,033	135,033	
IEC 61850 Study	50,000	100,000	150,000	44.21%	T&D	22,106	44,211	66,317	
Clarkson University	50,000	50,000	50,000	44.21%	T&D	22,105	22,105	22,105	
EPRI Smart Distribution Applications and Technologies	200,000	200,000	200,000	52.60%	Distribution	105,190	105,190	105,190	
Remote/Unattended Transmission Line Inspection	-	250,000	250,000	54.01%	Transmission	0	135,033	135,033	
Characterization of Arc Flash Signatures	30,000	30,000	30,000	52.60%	Distribution	15,779	15,779	15,779	
Battery-Less Ups for Substations	20,000	20,000	20,000	52.60%	Distribution	10,519	10,519	10,519	
EPRI Energy Storage	60,000	60,000	60,000	52.60%	Distribution	31,557	31,557	31,557	
Totals	**1,263,000**	**2,730,000**	**3,080,000**			**634,930**	**1,378,136**	**1,558,844**	
Three-year totals			**7,073,000**					**3,571,910**	

Exhibit __ (IOP-13A-CU)
Page 1 of 1