Niagara Mohawk Power Corporation
d/b/a National Grid

PROCEEDING ON MOTION OF THE COMMISSION AS TO THE RATES, CHARGES, RULES AND REGULATIONS OF NIAGARA MOHAWK POWER CORPORATION FOR ELECTRIC AND GAS SERVICE

Corrections and Updates Testimony and Exhibits of:

Maureen P. Heaphy
Joseph F. Gredder
Elizabeth Arangio
Management Audit Panel
Shared Services and Customer Panel

Book 1

July 16, 2012

Submitted to:
New York State Public Service Commission
Case 12-E-0201
Case 12-G-0202

Submitted by:
Niagara Mohawk Power Corporation

C&U Testimony of
Maureen P. Heaphy

Before The New York Public Service Commission

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Corrections and Updates Testimony

of

Maureen P. Heaphy

Q. Please state your name and business address.

A. My name is Maureen P. Heaphy. My business address is One MetroTech Center, Brooklyn, New York 11201.

Q. Are you the same Maureen Heaphy who previously submitted prepared direct testimony as part of the Human Resources Panel ("HRP") in this proceeding?

A. Yes. I am.

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

A. The purpose of my corrections and updates testimony is to provide certain corrections and updates to the direct testimony of the HRP. Specifically, I will address the level of management and union vacancies at the end of the Test Year ended December 31, 2011, as well as the projection of vacancies to be filled between that date and the start of the Rate Year – April 1, 2013. I will also update the amount of variable pay included in the Company's revenue requirements in these proceedings and clarify the Company's variable pay proposal. Finally, I will provide an update to the investment strategy employed for the Company's pension plan assets and discuss the impact of that strategy on the pension expense the Company proposes to include in its revenue requirements for the Rate Year.

Q. Do you sponsor any exhibits as part of your corrections and updates testimony?

A. Yes. I sponsor Exhibit __ (HRP-2CU), which was prepared under my direction and supervision. This Exhibit corrects and updates the status of the vacant management positions identified in the HRP's direct testimony as of December 31, 2011 and reflects the number of those vacant positions filled as of July 1, 2012. Exhibit __ (HRP-2CU) replaces Exhibit __ (HRP-2) to the HRP's direct testimony.

Q. The HRP's direct testimony (at page 11) indicated that the Company had 118 vacant management positions as of December 31, 2011 that were expected to be filled by the start of the Rate Year. Has this number of vacancies been revised?

A. Yes. The number of vacant management positions expected to be filled between December 31, 2011 and April 1, 2013 has been revised from 118 to 111. This revision is attributable to the fact that (i) two positions – one in finance and one in operations – were actually filled as of December 31, 2011, and (ii) it has been determined that five positions – three in customer service, one in finance and one in human resources – will not be filled. The status of the Company's efforts to fill the 118 vacant positions identified in the HRP's direct testimony as of July 1, 2012 is set forth on

Exhibit __ (HRP-2CU). The impact of these adjustments on the Company's revenue requirements is discussed in the corrections and updates testimony of the Revenue Requirements Panel.

Q. In its direct testimony, the HRP also stated (at page 13) that the Company had 61 vacant union positions at the end of the Test Year that would be filled by the beginning of the Rate Year. Has this total been revised as well?

A. Yes. The actual number of union vacancies as of December 31, 2011 was 55. 28 of these positions are included in the minimum staffing levels required under the Company's collective bargaining agreement, while the additional 27 positions reflect incremental positions that the Company plans to fill. Once again, the revenue requirement impacts of this decrease in the number of vacant positions are discussed in the corrections and updates testimony of the Revenue Requirements Panel.

Q. In its direct testimony (at page 32), the HRP sets forth the amount of variable compensation expense that the Company was including in its revenue requirements for the Rate Year ending March 31, 2014 and the Data Years ending March 31, 2015 and March 31, 2016. Have these amounts been revised?

A. Yes. The Company's initial filing reflected total variable pay amounts of $21.1 million for the Rate Year, $21.7 million for the Data Year ending March 31, 2015 and $22.2 million for the Data Year ending March 31, 2016. As revised, the Company is proposing to include approximately $17.4 million of variable compensation expense in its electric revenue requirement in this proceeding for the Rate Year and $3.2 million in the gas revenue requirement for the Rate Year, for a total of $20.6 million; approximately $21.2 million in the revenue requirement for the Data Year ending March 31, 2015, split $17.8 million for electric and $3.3 million for gas; and approximately $21.8 million in the revenue requirement for the Data Year ending March 31, 2016, split $18.3 million for electric and $3.4 million for gas. The adjustments to arrive at the amounts included in the Data Years reflect the application of an inflation factor, as discussed in the corrections and updates testimony of the Revenue Requirements Panel. The $20.6 million of variable pay included in the Rate Year revenue requirements assumes that the Company will attain target levels of performance and payout.

Q. Why did the amount of variable compensation expense reflected in the Company's revenue requirements change since the initial filing?

A. The amount of variable compensation expense reflected in the Company's revenue requirements changed as a result of (i) the reduction in the number of management and union vacancies that would be filled between the end of the Test Year and the beginning of the Rate Year as I described above (ii) the increase in the number of non-enduring management positions as discussed in the corrections and updates testimony of the Information Systems Panel and (iii) changes in the allocation of variable pay compensation from service companies to Niagara Mohawk, and between expense and capital. These adjustments are addressed in the corrections and updates testimony of the Revenue Requirements Panel.

Q. The HRP in its direct testimony (at page 24) stated that the Company did not include variable compensation paid to top officers, referred to as Band A employees, in the proposed revenue requirements. Did the Company exclude any other employee group's variable compensation expense from the proposed revenue requirements?

A. Yes. As discussed on page 27 of the HRP's testimony, 40 percent of the variable compensation paid to Band B and C employees is based on the attainment of financial objectives. The Company did not include variable pay amounts associated with the attainment of these financial objectives for Band B and C employees in its revenue requirements.

Q. In its direct testimony (at pages 58-59), the HRP indicated that based on the current favorable funding status of the Company's pension plan, it was anticipated that the investment in return seeking assets such as equities would be reduced to 45 percent by the beginning of the Rate Year and further reduced to 40 percent by the Second Data Year. Has this investment strategy been modified?

A. Yes. As discussed in the HRP's direct testimony (at page 59), at the time of the Company's filing, 50 percent of its pension plan assets were invested in return seeking assets such as equities and 50 percent were invested in liability hedging assets such as bonds. Upon further review of the investment strategy, it was determined that this investment mix should be maintained for the foreseeable future. At this time, the Company believes that this investment mix achieves an appropriate investment balance that recognizes that (i) the plan currently has assets that exceed its expected liabilities, and (ii) the plan is expected to pay out 70 percent of its liabilities during the next ten years. The current investment strategy reduces the possibility that investments in more volatile return seeking assets will drop in value and cause the plan's liabilities to exceed its assets in the future as compared to an investment mix in which a greater percentage of the plan's assets is invested in return seeking assets.

Q. What is the impact of this change on the level of pension expense included in the Company's filings?

A. The change in investment strategy reduces the level of pension expense included in the Company's revenue requirements by $2.45 million in the Rate Year. This impact is discussed further in the corrections and updates testimony of the Revenue Requirements Panel.

Q. Does this conclude your corrections and updates testimony?

A. Yes, it does.

Exhibit __ (HRP-2CU)

Exhibit __ (HRP-2CU)

Vacant Positions as of December 31, 2011

	Vacant Positions as of December 31, 2011				
Number	**Position Code**	**Title**	**Salary Band**	**Function**	**Open at 7/1/2012**
1	A-2A-3A-4I	Specialist, Internal Audit	E	Audit	
2	A-2A-3A-4J	Specialist, Internal Audit	E	Audit	
3	A-2A-3A-4N	Associate Specialist, Internal Audit	E	Audit	
4	A-2A-3C-4B-5D	Sr. Specialist, SHE Audit	E	Audit	
5	C-3A-4A-5B-6B	Business Partner, Customer & Product Experience, New Products & Services	E	Customer	Canceled
6	C-3A-4A-5C-6A-7A	Vendor Specialist, Customer Communications, Commercial	E	Customer	
7	C-3A-4A-5C-6D	Manager, Customer Communications, Internet Experience	D	Customer	Open
8	C-3A-4A-5C-6E-7B	Sr. Specialist-Graphic Designer- Communications Development & Production	E	Customer	
9	C-3A-4A-5E-6C	Program Manager, Customer Insights	D	Customer	
10	C-3A-4B-5C-6B	EE Program Strategy Analyst, Program Strategy, LIPA, C&I	F	Customer	
11	C-3A-4B-5C-6L-7I	Analyst, LIPA Business, Project Management	F	Customer	
12	C-3A-4B-5C-6M-7G	Analyst, LIPA Residential	F	Customer	
13	C-3A-4B-5C-6N-7E	Analyst, LIPA Evaluation	F	Customer	Canceled
14	C-3A-4B-5E	Director, Alliance / Vendor Strategy	C	Customer	
15	C-3A-4B-5H-6C	Program Manager, Market Strategy, Energy Efficiency Strategy	D	Customer	
16	C-3A-4B-5H-6D	Program Manager, Market Strategy, Customer Technology & Sustainability	E	Customer	
17	C-3A-4C-5A-6I	Quantitative Analyst, Analytics, Modeling & Energy Forecasting	E	Customer	Open
18	C-3A-4D-5A-6B-7M	Representative, Account Development, Lg. Commercial Sales, Upstate NY	E	Customer	
19	C-3A-4D-5A-6C-7F	Representative, Inside Sales, Gas, SMB Gas Sales	E	Customer	Canceled
20	C-3A-4D-5A-6D-7I	Technical Support Consultant, Technical Sales & Engineering Support, NE	F	Customer	
21	C-3A-4D-5A-6E-7I	Representative, Inside Sales, Gas, SMB Gas Sales	E	Customer	
22	C-3A-4D-5F-6B-7H	Sales Support Representative, Gas Sales Support, NE	F	Customer	
23	C-3A-4D-5F-6B-7I	Sales Support Representative, Gas Sales Support, NE	F	Customer	
24	C-3A-4D-5F-6E-7B	Sales Support Representative, Sales Support, Albany	F	Customer	
25	C-3A-4D-5F-6E-7D	Sales Processing Assoc Analyst, Sales Support, Albany	F	Customer	
26	C-3A-4E-5B-6C-7G	Gas Scheduler, Gas Scheduling	E	Customer	
27	C-3A-4E-5C-6C	Financial / Multi Commodity Trader, Origination & Price Volatility Mgmt	D	Customer	
28	C-3A-4E-5G-6B-7B	Electric Trader, Wholesale Electric Supply, NE	D	Customer	
29	CA-2A-3E-4C	Senior Government Relations Representative, Long Island	E	Corporate Affairs	
30	F-2A-3A-4A-5A-6A-7A-8C	Accountant, KEDLI	E	Finance	
31	F-2A-3A-4A-5A-6E-7B-8B	Analyst, Plant Accounting	E	Finance	Filled Prior to 12/31/2011
32	F-2A-3A-4G-5C	Program Manager, Performance Analysis	D	Finance	
33	F-2A-3A-4G-5C-6B	Analyst, Performance Analytics	E	Finance	Canceled
34	HR-2A-3A-4A-5A-6A	Analyst, Compensation & Benefits	E	Human Resources	
35	HR-2A-3A-4G-5C-6C	Instructor, Gas, New England	E	Human Resources	Open
36	HR-2A-3A-4G-5C-6F	Instructor, Gas, New England	E	Human Resources	
37	HR-2A-3A-4G-5E-6I	Instructor, Electric, Upstate NY	E	Human Resources	Canceled
38	HR-2A-3A-4G-5E-6K	Sr. Instructor, Electric, Upstate NY	E	Human Resources	
39	L-2A-3A-4A-5C-6E	Associate Counsel, Upstate NY Regulatory	E	Legal	
40	L-2A-3A-4B-5C-6A	Senior Counsel I, MA Regulatory	C	Legal	
41	NS-3A-4E-5D-6A-7E	Engineer, Utility of the Future, Advanced Engineering	E	Network Strategy	Open
42	NS-3A-4E-5I-6G	Analyst, Asset Data & Analytics	E	Network Strategy	
43	NS-3A-4E-5I-6H	Sr. Analyst, Asset Data & Analytics	E	Network Strategy	
44	NS-3A-4E-5K-6C	Vegetation Strategy Engineer, Vegetation Strategy	D	Network Strategy	
45	NS-3A-4F-5F-6C-7D	Engineer, Project Engineering & Design, NE Public Works	E	Network Strategy	

Exhibit __ (HRP-2CU)
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	Vacant Positions as of December 31, 2011				
Number	**Position Code**	**Title**	**Salary Band**	**Function**	**Open at 7/1/2012**
46	NS-3A-4G-5B-6A-7K	Engineer, Electric Transmission Planning, NE	E	Network Strategy	
47	NS-3A-4G-5B-6B-7I	Engineer, Electric Transmission Planning, NY	E	Network Strategy	
48	NS-3A-4G-5D-6F-7J	Designer, Substation Eng. & Design, Design, NE	E	Network Strategy	
49	NS-3A-4G-5E-6A-7E	Engineer, Transmission Engineering, Project Engineering	E	Network Strategy	
50	NS-3A-4G-5E-6N	Engineer, Transmission Engineering	E	Network Strategy	
51	NS-3A-4G-5F-6H-7F	Coordinator, Protection & Telecom, Policy & Support	D	Network Strategy	
52	NS-3A-4G-5G-6B-7D	Supervisor Lead Engineer, Electric Distribution Design, Design, MA, Western MA	D	Network Strategy	
53	NS-3A-4G-5G-6E-7I	Design Engineer, Electric Distribution Design, External Design	D	Network Strategy	
54	NS-3A-4G-5H-6H	Engineer, Electric Operations, NE	E	Network Strategy	
55	OPS-3A-4A-5F-6B	Associate Estimating Analyst, Estimating Center of Excellence	E	Operations	
56	OPS-3A-4A-5F-6F-7C	Estimator, Estimating Center of Excellence, NE	E	Operations	Open
57	OPS-3A-4A-5G-6A	Lead Program Manager, Long Term Planning, Electric Distribution, Mass/RI/NY	E	Operations	
58	OPS-3A-4B-5D-6K-7K	Supervisor, Construction, Distribution Lines & Substation Contracting, NY	E	Operations	Open
59	OPS-3A-4B-5E-6A-7I	Project Manager, Complex Project Management, NE	E	Operations	
60	OPS-3A-4B-5M-6A-7A-8C	Supervisor, Vegetation Management & Inspections, T&D Forestry, NE	E	Operations	
61	OPS-3A-4B-5M-6A-7B-8D	Supervisor, Vegetation Management & Inspections, T&D Forestry, NE	E	Operations	
62	OPS-3A-4B-5M-6B-7A-8D	Supervisor, Vegetation Management & Inspections, T&D Forestry, NY	E	Operations	
63	OPS-3A-4B-5M-6B-7B-8C	Supervisor, Vegetation Management & Inspections, T&D Forestry, NY	E	Operations	
64	OPS-3A-4C-5A-6A-7D	Supervisor, Damage Prevention, NE	E	Operations	
65	OPS-3A-4C-5A-6B-7F	Supervisor, Gas Field Operations, Boston	E	Operations	
66	OPS-3A-4C-5A-6C-7A	Lead Supervisor, Gas Field Operations, Malden/Beverly	E	Operations	
67	OPS-3A-4C-5B-6B-7C	Supervisor, Gas Field Operations, LI East	E	Operations	
68	OPS-3A-4C-5B-6B-7E	Supervisor, Gas Field Operations, LI East	E	Operations	
69	OPS-3A-4C-5B-6C-7H	Supervisor, Gas Field Operations, NYC East	E	Operations	
70	OPS-3A-4C-5B-6G-7C-8I	Supervisor, Construction, NY - In House Downstate	E	Operations	
71	OPS-3A-4C-5B-6G-7C-8J	Supervisor, Construction, NY - In House Downstate	E	Operations	
72	OPS-3A-4C-5B-6G-7D-8C	Supervisor, Construction, NY - Aux Ops	E	Operations	
73	OPS-3A-4C-5B-6G-7M	Engineer, Construction, NY	E	Operations	
74	OPS-3A-4C-5B-6I-7F	Supervisor, Instrumentation & Regulation, NY	E	Operations	
75	OPS-3A-4C-5C	VP, New England Electric	B	Operations	Filled Prior to 12/31/2011
76	OPS-3A-4C-5C-6B-7C	Supervisor, Overhead Lines, Lincoln	E	Operations	
77	OPS-3A-4C-5C-6B-7F	Supervisor, Overhead Lines, Providence	E	Operations	Open
78	OPS-3A-4C-5C-6B-7K	Supervisor, I&M Compliance, Providence	E	Operations	
79	OPS-3A-4C-5C-6C-7A-8D	Supervisor, Overhead Lines, East NE, Brockton	E	Operations	
80	OPS-3A-4C-5C-6C-7F	Supervisor, Overhead Lines, East NE, Hopedale	E	Operations	
81	OPS-3A-4C-5C-6C-7G	Supervisor, Overhead Lines, East NE, Hopedale	E	Operations	
82	OPS-3A-4C-5C-6D-7C	Supervisor, Underground Lines, East NE	E	Operations	
83	OPS-3A-4C-5C-6F-7B-8F	Supervisor, Overhead Lines, West NE, Monson	E	Operations	
84	OPS-3A-4C-5C-6F-7I	Supervisor, Overhead Lines, West NE, Trouble	E	Operations	
85	OPS-3A-4C-5C-6F-7J	Supervisor, Overhead Lines, West NE, Trouble	E	Operations	
86	OPS-3A-4C-5C-6H-7J	Supervisor, Substation, West NE	E	Operations	
87	OPS-3A-4C-5D-6B-7A-8G	OH Line Supervisor - Western Division	E	Operations	
88	OPS-3A-4C-5D-6B-7B-8I	OH Line Supervisor - Western Division	E	Operations	
89	OPS-3A-4C-5D-6B-7G	OH Line Supervisor - Western Division	E	Operations	
90	OPS-3A-4C-5D-6B-7H	OH Line Supervisor - Western Division	E	Operations	

Exhibit __ (HRP-2CU)
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	Vacant Positions as of December 31, 2011				
Number	**Position Code**	**Title**	**Salary Band**	**Function**	**Open at 7/1/2012**
91	OPS-3A-4C-5D-6E-7F	Underground Supervisor	E	Operations	
92	OPS-3A-4C-5D-6F-7B-8H	OH Line Supervisor - Rome	E	Operations	
93	OPS-3A-4C-5D-6F-7G	OH Line Supervisor - Pulaski	E	Operations	
94	OPS-3A-4C-5D-6G-7C	Station Supervisor - Western Division	E	Operations	
95	OPS-3A-4C-5D-6H-7F	Stations Supervisor - Eastern Division	E	Operations	
96	OPS-3A-4C-5E-6C-7A-8K	Supervisor, Customer Meter Services, Downstate NY, Meter Reading, Suffolk	E	Operations	
97	OPS-3A-4C-5E-6C-7B-8H	Supervisor, Customer Meter Services, Downstate NY, Greenpoint & Staten Island	E	Operations	
98	OPS-3A-4C-5E-6E-7F	Supervisor, Customer Meter Services, Central NE	E	Operations	
99	OPS-3A-4C-5E-6E-7G	Associate Supervisor, Customer Meter Services, Central NE	E	Operations	
100	OPS-3A-4C-5F-6B-7A-8H	Technician, Protection, North Andover	E	Operations	
101	OPS-3A-4C-5F-6B-7B-8G	Technician, Protection, Worcester	E	Operations	
102	OPS-3A-4C-5F-6B-7B-8H	Technician, Protection, Worcester	E	Operations	
103	OPS-3A-4C-5F-6C-7B	Protection Ops Supervisor - NY West Buffalo	E	Operations	Open
104	OPS-3A-4D-5C-6E	Shift Supervisor, Control Center NY West	E	Operations	
105	OPS-3A-4D-5E-6O	Power Ops Engineer / Coordinator, Transmission Control Center	E	Operations	
106	OPS-3A-4D-5G-6F	Outage Coordinator, Control Center, NE	D	Operations	
107	OPS-3A-4D-5G-6H-7D	Shift Supervisor, Control Center, NE	D	Operations	
108	OPS-3A-4D-5G-6H-7J	Shift Supervisor, Control Center, NE	D	Operations	
109	OPS-3A-4D-5K-6F	Senior Network Operator, HVDC	E	Operations	
110	OPS-3A-4D-5K-6G	Senior Network Operator, HVDC	E	Operations	
111	OPS-3A-4E-5F-6L	Quality Inspector, Field QA / QC	E	Operations	
112	RP-3A-4C-5L	Director, Federal Regulatory Affairs	C	Regulation & Pricing	
113	RP-3A-4H-5I	Senior Analyst, LIPA	E	Regulation & Pricing	
114	SHE-3A-4A-5D	Manager, Regulation Compliance/Incident Prevention Manager	D	SHE	
115	SHE-3A-4A-5F-6D	Safety Representative, New England	E	SHE	
116	SHE-3A-4A-5F-6F	Safety Representative, New England	E	SHE	
117	SS-3A-4D-5G-6B	Sr. Supervisor, Facility Operations, Upstate NY	E	Shared Services	
118	SS-3A-4F-5B-6K	Analyst, Training & Support	E	Shared Services	

Exhibit __ (HRP-2CU)
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C&U Testimony of
Joseph F. Gredder

Before the New York State Public Service Commission

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Corrections and Updates Testimony

of

Joseph F. Gredder

Corrections and Updates Testimony of Joseph F. Gredder

Q. Are you the same Joseph F. Gredder who testified previously in this proceeding?

A. Yes. I submitted direct testimony and exhibits as part of the Company's April 27, 2012 filing.

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

A. My corrections and updates testimony explains and supports certain corrections to Niagara Mohawk's April 27, 2012 filing in this proceeding. As part of this corrections and updates testimony, I am sponsoring the following Exhibits, all of which were prepared either by me or under my direction and supervision:

1. Exhibit __ (JFG-7CU) – Sales Forecast by Rate Class (with actual historicals);

2. Exhibit __ (JFG-8CU) – Sales Forecast by Rate Class (with weather-adjusted historicals);

3. Exhibit __ (JFG-13CU) – Sales Forecast by Rate Class, Net of EE Reductions;

4. Exhibit __ (JFG-17CU) - Information Request DPS-120 (GPS-5).

I have started with the exhibits submitted on April 27, 2012 to prepare these corrected and/or updated exhibits. I have only included exhibits where corrections and/or updates were made with the exception of the new Exhibit __ (JFG-17CU).

Q. Please describe the corrections that you have made to Exhibits __ (JFG-7, 8 and 13).

A. Upon preparing the response to Information Request DPS-120 (GPS-5), provided herein as Exhibit __(JFG-17CU), a minor inaccuracy in the calculation of the industrial growth trends was discovered and a correction tab was provided. This issue is shown on tab "Attachment_1a_ind" of that response where the 2011 sales volumes were inadvertently repeats of the 2010 values. "Attachment_2a_ind" to that response showed the corrected values and growth percents. "Attachment 3a_diff" to that response showed the updated monthly forecast by rate code as well as the differences from the initial forecast. The changes have been incorporated in this filing in Exhibits __ (JFG-7CU, 8CU, and 13CU), which reflect the appropriate industrial growth trends. The revenue impact of this modification to the forecast is reflected in the corrections and updates testimony of the Electric Rate Design Panel.

Q. Does this conclude your corrections and updates testimony?

A. Yes it does.

Exhibits of
Joseph F. Gredder

Corrections and Updates Testimony of Joseph F. Gredder

List of Exhibits

Exhibit __ (JFG-7CU)	Sales Forecast by Rate Class (actual)
Exhibit __ (JFG-8CU)	Sales Forecast by Rate Class (weather-adjusted)
Exhibit __ (JFG-13CU)	Sales Forecast by Rate Class, Net of EE Reductions
Exhibit __ (JFG-17CU)	Response to Information Request DPS-120 (GPS-5)

Corrections and Updates Testimony of Joseph F. Gredder

Exhibit __ (JFG-7CU)

Sales Forecast by Rate Class (actual)

SALES FORECAST by RATE CLASS (Fiscal Year, GWH)

(Historicals: *Actuals* , Projections: *Weather-Normal)*

BEFORE ENERGY EFFICIENCY IMPACTS

FISCAL YEAR	SC1		SC2ND		SC2D		SC3		SC3A		SC4		SC7		SC11_12		NYPA R&E		NYPA PFJ & EDP		Border		S_Lighting		TOTAL	
1997	9,961		701		3,863		6,403		3,472		597		46		3,368		4,331		251		-		257		33,252	
1998	9,744	-2.2%	634	-9.6%	3,923	1.6%	6,315	-1.4%	3,295	-5.1%	319	-46.6%	32	-29.3%	4,101	21.7%	4,597	6.1%	216	-13.9%	-	0.0%	257	0.1%	33,434	0.5%
1999	10,101	3.7%	667	5.2%	4,057	3.4%	6,319	0.1%	3,429	4.1%	444	39.0%	42	29.9%	3,550	-13.4%	4,366	-5.0%	387	78.7%	-	0.0%	270	4.8%	33,631	0.6%
2000	10,062	-0.4%	665	-0.3%	4,045	-0.3%	6,578	4.1%	3,541	3.3%	423	-4.6%	22	-48.6%	3,812	7.4%	4,565	4.6%	651	68.4%	-	0.0%	236	-12.4%	34,600	2.9%
2001	10,125	0.6%	714	7.4%	4,077	0.8%	6,038	-8.2%	3,901	10.1%	439	3.7%	0	-100.0%	3,513	-7.9%	4,354	-4.6%	938	44.1%	-	0.0%	225	-4.6%	34,324	-0.8%
2002	10,094	-0.3%	681	-4.6%	4,058	-0.4%	5,730	-5.1%	3,857	-1.1%	203	-53.8%	0	-75.0%	2,715	-22.7%	4,521	3.8%	1,314	40.1%	2	0.0%	226	0.4%	33,401	-2.7%
2003	10,925	8.2%	715	4.9%	4,239	4.4%	5,771	0.7%	3,864	0.2%	288	41.8%	156	0.0%	2,700	-0.6%	4,243	-6.2%	1,404	6.9%	5	120.5%	223	-1.2%	34,532	3.4%
2004	10,936	0.1%	698	-2.4%	4,234	-0.1%	5,842	1.2%	3,885	0.5%	296	3.0%	176	1.0%	2,497	-7.5%	3,917	-7.7%	1,512	7.7%	5	0.5%	223	-0.3%	34,220	-0.9%
2005	10,940	0.0%	682	-2.2%	4,309	1.8%	6,054	3.6%	3,811	-1.9%	312	5.3%	632	259.8%	2,452	-1.8%	3,718	-5.1%	1,254	-17.0%	5	1.0%	218	-2.2%	34,386	0.5%
2006	11,484	5.0%	676	-0.9%	4,478	3.9%	6,331	4.6%	3,976	4.3%	312	0.0%	420	-33.6%	2,247	-8.3%	3,898	4.9%	1,062	-15.3%	5	2.5%	214	-1.8%	35,105	2.1%
2007	11,229	-2.2%	643	-4.9%	4,377	-2.3%	6,252	-1.2%	3,865	-2.8%	261	-16.2%	443	5.5%	2,298	2.2%	3,764	-3.4%	866	-18.5%	5	6.9%	215	0.6%	34,220	-2.5%
2008	11,331	0.9%	650	1.0%	4,462	1.9%	6,459	3.3%	4,111	6.4%	288	10.2%	390	-12.0%	2,200	-4.3%	3,760	-0.1%	729	-15.9%	5	-7.1%	210	-2.6%	34,593	1.1%
2009	11,315	-0.1%	640	-1.5%	4,399	-1.4%	6,374	-1.3%	4,202	2.2%	301	4.4%	455	16.8%	1,851	-15.9%	3,700	-1.6%	530	-27.3%	5	2.7%	208	-0.7%	33,979	-1.8%
2010	11,079	-2.1%	623	-2.6%	4,290	-2.5%	6,176	-3.1%	4,215	0.3%	339	12.9%	394	-13.5%	1,396	-24.6%	3,456	-6.6%	380	-28.2%	5	-0.5%	207	-0.5%	32,561	-4.2%
2011	11,575	4.5%	634	1.8%	4,347	1.3%	6,361	3.0%	4,427	5.0%	610	79.6%	330	-16.3%	1,023	-26.7%	3,662	6.0%	365	-4.0%	5	1.5%	204	-1.4%	33,543	3.0%
2012	11,624	0.4%	640	0.8%	4,340	-0.2%	6,383	0.3%	4,441	0.3%	590	-3.1%	327	-0.8%	1,033	0.9%	3,643	-0.5%	353	-3.3%	6	9.6%	204	-0.3%	33,582	0.1%
2013	11,584	-0.3%	639	0.0%	4,371	0.7%	6,441	0.9%	4,502	1.4%	604	2.3%	324	-0.9%	980	-5.1%	3,514	-3.6%	346	-2.0%	6	0.9%	203	-0.2%	33,512	-0.2%
2014	11,643	0.5%	642	0.3%	4,420	1.1%	6,529	1.4%	4,595	2.1%	622	3.1%	326	0.5%	935	-4.6%	3,426	-2.5%	342	-1.1%	6	0.9%	203	0.0%	33,688	0.5%
2015	11,746	0.9%	656	2.2%	4,554	3.0%	6,738	3.2%	4,757	3.5%	649	4.3%	336	3.1%	905	-3.2%	3,380	-1.4%	342	0.0%	6	0.9%	203	0.0%	34,272	1.7%
2016	11,852	0.9%	670	2.2%	4,691	3.0%	6,952	3.2%	4,917	3.4%	675	4.0%	348	3.7%	875	-3.3%	3,326	-1.6%	341	-0.3%	6	0.8%	203	0.0%	34,857	1.7%
Compound Annual Growth Rates:																										
1998 to 2012 Fifteen-Year		1.0%		-0.6%		0.8%		0.0%		1.7%		-0.1%		14.0%		-7.6%		-1.1%		2.3%		0.0%		-1.5%		0.1%
2003 to 2012 Ten-Year		1.4%		-0.6%		0.7%		1.1%		1.4%		11.3%		582.1%		-9.2%		-2.1%		-12.3%		10.0%		-1.0%		0.1%
2008 to 2012 Five-Year		0.7%		-0.1%		-0.2%		0.4%		2.8%		17.7%		-5.9%		-14.8%		-0.7%		-16.4%		1.1%		-1.1%		-0.4%
2013 to 2016 Four -Year		0.5%		1.2%		2.0%		2.2%		2.6%		3.4%		1.6%		-4.0%		-2.3%		-0.9%		0.9%		0.0%		0.9%

Notes:
Fiscal Year 2012 has actuals through December, 2011 and projections post-December.
Years prior to FY 2012 are "actuals".

Exhibit __ (JFG-7CU)
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Exhibits __ (JFG-8CU)

Corrections and Updates Testimony of Joseph F. Gredder

Exhibit __ (JFG-8CU)

Sales Forecast by Rate Class (weather-adjusted)

SALES FORECAST by RATE CLASS (Fiscal Year, GWH)

(Historicals: *Weather-Normal* , Projections: *Weather-Normal)*

BEFORE ENERGY EFFICIENCY IMPACTS

FISCAL YEAR	SC1		SC2ND		SC2D		SC3		SC3A		SC4		SC7		SC11_12		NYPA R&E		NYPA PFJ & EDP		Border		Street Lighting		TOTAL	
1997	10,016		705		3,885		6,426		3,472		597		46		3,368		4,331		251		-		257		33,355	
1998	9,910	-1.1%	644	-8.6%	3,989	2.7%	6,384	-0.7%	3,295	-5.1%	319	-46.6%	32	-29.3%	4,101	21.7%	4,597	6.1%	216	-13.9%	-	0.0%	257	0.1%	33,745	1.2%
1999	10,234	3.3%	674	4.7%	4,070	2.1%	6,348	-0.6%	3,429	4.1%	444	39.0%	42	29.9%	3,550	-13.4%	4,366	-5.0%	387	78.7%	-	0.0%	270	4.8%	33,813	0.2%
2000	10,038	-1.9%	663	-1.7%	4,006	-1.6%	6,548	3.2%	3,541	3.3%	423	-4.6%	22	-48.6%	3,812	7.4%	4,565	4.6%	651	68.4%	-	0.0%	236	-12.4%	34,506	2.0%
2001	10,214	1.8%	720	8.6%	4,131	3.1%	6,088	-7.0%	3,901	10.1%	439	3.7%	0	-100.0%	3,513	-7.9%	4,354	-4.6%	938	44.1%	-	0.0%	225	-4.6%	34,523	0.1%
2002	10,284	0.7%	691	-4.0%	4,074	-1.4%	5,769	-5.2%	3,857	-1.1%	203	-53.8%	0	-75.0%	2,715	-22.7%	4,521	3.8%	1,314	40.1%	2	0.0%	226	0.4%	33,656	-2.5%
2003	10,606	3.1%	696	0.7%	4,135	1.5%	5,654	-2.0%	3,864	0.2%	288	41.8%	156	0.0%	2,700	-0.6%	4,243	-6.2%	1,404	6.9%	5	120.5%	223	-1.2%	33,974	0.9%
2004	10,927	3.0%	698	0.2%	4,245	2.7%	5,847	3.4%	3,885	0.5%	296	3.0%	176	1.0%	2,497	-7.5%	3,917	-7.7%	1,512	7.7%	5	0.5%	223	-0.3%	34,227	0.7%
2005	11,053	1.2%	689	-1.2%	4,354	2.6%	6,101	4.3%	3,811	-1.9%	312	5.3%	632	259.8%	2,452	-1.8%	3,718	-5.1%	1,254	-17.0%	5	1.0%	218	-2.2%	34,600	1.1%
2006	11,315	2.4%	665	-3.5%	4,371	0.4%	6,233	2.2%	3,976	4.3%	312	0.0%	420	-33.6%	2,247	-8.3%	3,898	4.9%	1,062	-15.3%	5	2.5%	214	-1.8%	34,719	0.3%
2007	11,276	-0.3%	645	-2.9%	4,370	0.0%	6,256	0.4%	3,865	-2.8%	261	-16.2%	443	5.5%	2,298	2.2%	3,764	-3.4%	866	-18.5%	5	6.9%	215	0.6%	34,266	-1.3%
2008	11,290	0.1%	647	0.2%	4,424	1.2%	6,428	2.7%	4,111	6.4%	288	10.2%	390	-12.0%	2,200	-4.3%	3,760	-0.1%	729	-15.9%	5	-7.1%	210	-2.6%	34,481	0.6%
2009	11,274	-0.1%	638	-1.4%	4,397	-0.6%	6,368	-0.9%	4,202	2.2%	301	4.4%	455	16.8%	1,851	-15.9%	3,700	-1.6%	530	-27.3%	5	2.7%	208	-0.7%	33,929	-1.6%
2010	11,266	-0.1%	634	-0.6%	4,365	-0.7%	6,244	-1.9%	4,215	0.3%	339	12.9%	394	-13.5%	1,396	-24.6%	3,456	-6.6%	380	-28.2%	5	-0.5%	207	-0.5%	32,901	-3.0%
2011	11,374	1.0%	626	-1.2%	4,279	-2.0%	6,309	1.0%	4,427	5.0%	610	79.6%	330	-16.3%	1,023	-26.7%	3,662	6.0%	365	-4.0%	5	1.5%	204	-1.4%	33,213	0.9%
2012	11,384	0.1%	640	2.3%	4,268	-0.2%	6,327	0.3%	4,441	0.3%	590	-3.1%	327	-0.8%	1,033	0.9%	3,643	-0.5%	353	-3.3%	6	9.6%	204	-0.3%	33,216	0.0%
2013	11,584	1.8%	639	-0.1%	4,371	2.4%	6,441	1.8%	4,502	1.4%	604	2.3%	324	-0.9%	980	-5.1%	3,514	-3.6%	346	-2.0%	6	0.9%	203	-0.2%	33,512	0.9%
2014	11,643	0.5%	642	0.3%	4,420	1.1%	6,529	1.4%	4,595	2.1%	622	3.1%	326	0.5%	935	-4.6%	3,426	-2.5%	342	-1.1%	6	0.9%	203	0.0%	33,688	0.5%
2015	11,746	0.9%	656	2.2%	4,554	3.0%	6,738	3.2%	4,757	3.5%	649	4.3%	336	3.1%	905	-3.2%	3,380	-1.4%	342	0.0%	6	0.9%	203	0.0%	34,272	1.7%
2016	11,852	0.9%	670	2.2%	4,691	3.0%	6,952	3.2%	4,917	3.4%	675	4.0%	348	3.7%	875	-3.3%	3,326	-1.6%	341	-0.3%	6	0.8%	203	0.0%	34,857	1.7%
Compound Annual Growth Rates:																										
1998 to 2012 Fifteen-Year		0.9%		-0.6%		0.6%		-0.1%		1.7%		-0.1%		14.0%		-7.6%		-1.1%		2.3%		0.0%		-1.5%		0.0%
2003 to 2012 Ten-Year		1.0%		-0.8%		0.5%		0.9%		1.4%		11.3%		582.1%		-9.2%		-2.1%		-12.3%		10.0%		-1.0%		-0.1%
2008 to 2012 Five-Year		0.2%		-0.2%		-0.5%		0.2%		2.8%		17.7%		-5.9%		-14.8%		-0.7%		-16.4%		1.1%		-1.1%		-0.6%
2013 to 2016 Four -Year		1.0%		1.1%		2.4%		2.4%		2.6%		3.4%		1.6%		-4.0%		-2.3%		-0.9%		0.9%		0.0%		1.2%

Notes:
Fiscal Year 2012 has actuals through December, 2011 and projections post-December.
Years prior to FY 2012 are "weather-normals".

Exhibit __ (JFG-8CU)
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Exhibit __ (JFG-13CU)

Corrections and Updates Testimony of Joseph F. Gredder

Exhibit __ (JFG-13CU)

Sales Forecast by Rate Class, Net of EE Reductions

SALES FORECAST by RATE CLASS (Fiscal Year, GWH)

(Historicals: *Weather-Normal* , Projections: *Weather-Normal)*

AFTER ENERGY EFFICIENCY IMPACTS

FISCAL YEAR	SC1		SC2ND		SC2D		SC3		SC3A		SC4		SC7		SC11_12		NYPA R&E		NYPA PFJ & EDP		Border		Street Lighting		TOTAL	
2012	11,381		640		4,267		6,321		4,438		590		327		1,033		3,643		353		6		203		33,202	
2013	11,508	1.1%	634	-0.9%	4,339	1.7%	6,301	-0.3%	4,437	0.0%	604	2.3%	324	-0.9%	980	-5.1%	3,514	-3.6%	346	-2.0%	6	0.9%	203	0.3%	33,196	0.0%
2014	11,470	-0.3%	631	-0.6%	4,348	0.2%	6,211	-1.4%	4,447	0.2%	622	3.1%	326	0.5%	935	-4.6%	3,426	-2.5%	342	-1.1%	6	0.9%	203	0.0%	32,967	-0.7%
2015	11,484	0.1%	639	1.3%	4,445	2.2%	6,252	0.7%	4,531	1.9%	649	4.3%	336	3.1%	905	-3.2%	3,380	-1.4%	342	0.0%	6	0.9%	203	0.0%	33,171	0.6%
2016	11,506	0.2%	648	1.4%	4,546	2.3%	6,305	0.8%	4,616	1.9%	675	4.0%	348	3.7%	875	-3.3%	3,326	-1.6%	341	-0.3%	6	0.8%	203	0.0%	33,395	0.7%
Compound Annual Growth Rates:																										
2013 to 2016 Four -Year		0.3%		0.3%		1.6%		-0.1%		1.0%		3.4%		1.6%		-4.0%		-2.3%		-0.9%		0.9%		0.1%		0.1%

Exhibit __ (JFG-13CU)
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Corrections and Updates Testimony of Joseph F. Gredder

Exhibit __ (JFG-17CU)

Response to Information Request DPS-120 (GPS-5)

Date of Request: May 24, 2012 Request No. DPS-120 (GPS-5)
Due Date: June 4, 2012 NMPC Req. No. NM-120

NIAGARA MOHAWK POWER CORPORATION
Case No. 12-E-0201 and 12-G-0202 - Niagara Mohawk Power Corporation d/b/a National Grid - Electric and Gas Rates

Request for Information

FROM: Gregory Stella

TO: Joseph Gredder

SUBJECT: Follow-up to IR DPS-17(GPS-4)

Request: In reference to the response provided to part 2 – "Rate class specific trended values by month for the period January, 2012 to December, 2016 are provided on Attachment 2. The trended future kwh for each rate class and its percentage share of the total is shown." – provide the derivation of the monthly historical and forecast percentage shares.

Response:

Rate Class specific trends were derived for each revenue class - residential, commercial and industrial. Historical rate class sales from January 2005 to December 2011 were used to determine growth rate percents used to trend each rate class into future years. These historical values and their corresponding growth percents are shown in Attachment 1 (DPS_120_GPS_5_May2012_JFG_rev0.xls) as tabs "Attachment_1a_res", "Attachment_1a_com" and "Attachment_1a_ind", The excel "growth" function was used to produce these percents. Each tab shows the historical monthly kWh and the historical share of the revenue class for each rate class. (Several exceptions to the January 2005 to December 2011 are noted on the spreadsheets and were incorporated based on billing data consistency).

Upon preparing this data request, a minor inaccuracy in the calculation of the industrial growth trends was discovered and a correction tab is provided. This issue is shown on tab "Attachment_1a_ind" where the 2011 sales volumes were repeats of the 2010 values. "Attachment_2a_ind" shows the corrected values and growth percents. "Attachment 3a_diff" shows the updated monthly forecast by rate code as well as the differences from the existing forecast. It is important to note that this update results in no change to either the total for the industrial class or the total for the Company and instead only results in minor reallocations of rate class sales within the industrial revenue class. These changes are not material to the forecast and will be incorporated into the "Corrections and Update" filing.

Name of Respondent:	Date of Reply:
Joseph F. Gredder	June 1, 2012

Growth Percent		-0.06%	1.44%	7.02%	-3.69%						
Year	Month	sc1_pct	sc2nd_pct	sc2d_pct	sl_pct	SC1	SC2ND	SC2D	SL	SC7	TOTAL
2005	1	99.88%	0.06%	0.04%	0.03%	1,145,683,676	692,260	403,131	305,253	-	1,147,084,320
2005	2	99.88%	0.06%	0.03%	0.03%	1,030,308,117	590,877	355,255	305,909	-	1,031,560,158
2005	3	99.87%	0.06%	0.04%	0.03%	983,981,268	632,428	374,755	309,592	844	985,298,887
2005	4	99.87%	0.05%	0.04%	0.03%	886,307,110	459,221	352,477	307,069	999	887,426,876
2005	5	99.85%	0.06%	0.05%	0.04%	765,634,859	462,819	370,926	307,038	88	766,775,730
2005	6	99.86%	0.06%	0.04%	0.04%	829,321,534	523,226	317,014	310,770	456	830,473,000
2005	7	99.87%	0.06%	0.04%	0.03%	1,150,216,380	681,254	491,207	308,375	472	1,151,697,688
2005	8	99.88%	0.06%	0.04%	0.03%	1,097,405,453	666,496	393,876	306,688	381	1,098,772,894
2005	9	99.84%	0.07%	0.06%	0.03%	1,038,208,262	737,078	586,410	306,362	327	1,039,838,439
2005	10	99.83%	0.07%	0.06%	0.04%	804,289,534	600,782	495,625	305,728	208	805,691,877
2005	11	99.84%	0.07%	0.06%	0.04%	814,400,406	553,652	457,268	309,161	334	815,720,821
2005	12	99.85%	0.06%	0.05%	0.03%	1,053,382,823	682,732	562,288	301,221	494	1,054,929,558
2006	1	99.85%	0.07%	0.05%	0.03%	1,118,958,506	755,620	608,805	305,804	598	1,120,629,333
2006	2	99.84%	0.07%	0.06%	0.03%	947,399,078	650,686	573,183	308,064	457	948,931,468
2006	3	99.83%	0.07%	0.07%	0.03%	978,718,769	650,560	660,722	307,609	347	980,338,007
2006	4	99.83%	0.06%	0.07%	0.03%	870,962,321	539,996	609,048	302,084	62	872,413,511
2006	5	99.82%	0.06%	0.08%	0.04%	739,014,857	430,356	589,202	304,027	151	740,338,593
2006	6	99.83%	0.06%	0.08%	0.04%	852,998,848	535,038	648,981	303,298	194	854,486,359
2006	7	99.83%	0.07%	0.07%	0.03%	1,020,098,862	685,886	727,224	301,947	149	1,021,814,068
2006	8	99.82%	0.07%	0.08%	0.03%	1,101,800,438	742,876	860,084	300,491	226	1,103,770,675
2006	9	99.82%	0.08%	0.07%	0.03%	900,730,750	692,258	643,837	301,777	232	902,368,854
2006	10	99.81%	0.08%	0.07%	0.04%	781,323,475	601,749	584,888	301,091	216	782,811,419
2006	11	99.83%	0.07%	0.07%	0.03%	848,890,180	578,622	587,832	295,599	293	850,352,526
2006	12	99.83%	0.07%	0.07%	0.03%	966,390,522	661,487	687,127	291,876	497	968,031,509
2007	1	99.85%	0.06%	0.06%	0.03%	1,059,169,918	675,877	659,759	294,249	425	1,060,800,228
2007	2	99.82%	0.07%	0.08%	0.03%	1,042,255,247	771,831	790,235	293,619	626	1,044,111,558
2007	3	99.82%	0.07%	0.08%	0.03%	1,045,783,212	703,866	864,476	294,924	622	1,047,647,100
2007	4	99.83%	0.06%	0.08%	0.03%	911,214,387	568,505	715,712	293,336	264	912,792,204
2007	5	99.82%	0.07%	0.08%	0.04%	792,110,399	517,228	608,414	291,312	198	793,527,551

1. All growth percents derived from Jan 2005 to Dec 2011.

Growth Percent		-0.06%	1.44%	7.02%	-3.69%						
Year	Month	sc1_pct	sc2nd_pct	sc2d_pct	sl_pct	SC1	SC2ND	SC2D	SL	SC7	TOTAL
2007	6	99.82%	0.06%	0.09%	0.03%	878,249,018	561,521	768,144	288,408	124	879,867,215
2007	7	99.82%	0.08%	0.07%	0.03%	957,966,060	761,870	704,156	289,768	-	959,721,854
2007	8	99.83%	0.06%	0.08%	0.03%	1,016,717,650	563,802	848,997	287,250	-	1,018,417,699
2007	9	99.82%	0.07%	0.08%	0.03%	957,398,729	686,861	797,717	287,380	-	959,170,687
2007	10	99.80%	0.07%	0.09%	0.04%	807,040,956	542,930	752,218	285,806	-	808,621,910
2007	11	99.81%	0.07%	0.08%	0.03%	845,991,112	603,475	715,331	284,446	-	847,594,364
2007	12	99.83%	0.07%	0.07%	0.03%	1,033,634,488	740,240	732,277	277,022	-	1,035,384,027
2008	1	99.83%	0.07%	0.08%	0.02%	1,137,441,245	838,394	860,004	278,993	-	1,139,418,636
2008	2	99.80%	0.08%	0.09%	0.03%	1,014,510,928	822,126	917,422	279,596	-	1,016,530,072
2008	3	99.82%	0.07%	0.08%	0.03%	978,304,105	677,537	813,795	277,670	-	980,073,107
2008	4	99.81%	0.07%	0.09%	0.03%	878,687,182	602,163	766,328	275,179	-	880,330,852
2008	5	99.81%	0.07%	0.09%	0.04%	728,519,660	494,969	649,092	274,825	-	729,938,546
2008	6	99.80%	0.07%	0.10%	0.03%	833,175,385	593,809	800,433	273,782	-	834,843,409
2008	7	99.82%	0.07%	0.09%	0.03%	982,471,711	657,707	887,271	271,505	-	984,288,194
2008	8	99.82%	0.06%	0.09%	0.03%	1,045,159,547	676,169	974,154	270,655	-	1,047,080,525
2008	9	99.80%	0.07%	0.10%	0.03%	938,288,563	692,918	952,241	270,784	-	940,204,506
2008	10	99.82%	0.07%	0.08%	0.03%	769,116,485	505,131	586,032	267,679	-	770,475,327
2008	11	99.83%	0.07%	0.07%	0.03%	852,309,770	594,492	588,156	267,882	-	853,760,300
2008	12	99.84%	0.07%	0.06%	0.03%	1,013,588,552	688,055	658,101	265,650	-	1,015,200,358
2009	1	99.84%	0.07%	0.06%	0.02%	1,221,417,552	878,615	755,628	266,383	-	1,223,318,178
2009	2	99.83%	0.07%	0.07%	0.02%	1,075,324,750	759,377	787,219	266,893	-	1,077,138,239
2009	3	99.83%	0.07%	0.07%	0.03%	976,885,511	682,738	696,609	265,858	-	978,530,716
2009	4	99.83%	0.07%	0.07%	0.03%	895,303,580	641,728	653,318	266,623	-	896,865,249
2009	5	99.81%	0.07%	0.08%	0.03%	763,769,436	546,459	639,222	264,833	-	765,219,950
2009	6	99.80%	0.08%	0.08%	0.03%	773,172,518	618,857	633,468	263,763	-	774,694,846
2009	7	99.81%	0.08%	0.08%	0.03%	896,329,183	734,639	702,604	262,360	-	898,028,786
2009	8	99.82%	0.07%	0.08%	0.03%	940,689,658	663,806	771,089	262,847	-	942,387,400
2009	9	99.82%	0.07%	0.08%	0.03%	963,575,669	690,139	756,882	262,274	-	965,284,964
2009	10	99.81%	0.07%	0.08%	0.03%	804,924,648	596,881	641,345	263,039	-	806,425,913

1. All growth percents derived from Jan 2005 to Dec 2011.

Growth Percent		-0.06%	1.44%	7.02%	-3.69%						
Year	Month	sc1_pct	sc2nd_pct	sc2d_pct	sl_pct	SC1	SC2ND	SC2D	SL	SC7	TOTAL
2009	11	99.83%	0.07%	0.06%	0.03%	819,157,708	600,709	510,765	262,331	-	820,531,513
2009	12	99.83%	0.08%	0.07%	0.03%	981,002,417	741,802	661,151	261,974	-	982,667,344
2010	1	99.84%	0.07%	0.06%	0.02%	1,216,139,252	900,219	773,862	261,178	-	1,218,074,511
2010	2	99.82%	0.09%	0.07%	0.03%	1,029,550,678	885,378	673,588	261,277	-	1,031,370,921
2010	3	99.82%	0.08%	0.07%	0.03%	995,810,554	809,805	702,209	263,827	-	997,586,395
2010	4	99.82%	0.08%	0.07%	0.03%	844,879,277	644,041	597,827	263,952	-	846,385,097
2010	5	99.81%	0.08%	0.08%	0.03%	749,199,788	591,552	568,801	262,480	-	750,622,621
2010	6	99.82%	0.07%	0.08%	0.03%	857,290,414	617,990	670,189	260,489	-	858,839,082
2010	7	99.84%	0.07%	0.07%	0.02%	1,107,129,817	733,291	753,312	258,466	-	1,108,874,886
2010	8	99.84%	0.07%	0.07%	0.02%	1,150,407,840	812,989	811,399	256,118	-	1,152,288,346
2010	9	99.83%	0.08%	0.07%	0.03%	989,562,612	757,963	720,511	254,532	-	991,295,618
2010	10	99.81%	0.08%	0.08%	0.03%	781,912,427	602,882	600,625	252,910	-	783,368,844
2010	11	99.81%	0.08%	0.07%	0.03%	820,131,064	691,656	581,760	252,896	-	821,657,376
2010	12	99.83%	0.08%	0.07%	0.02%	1,019,952,486	816,018	682,711	249,254	-	1,021,700,469
2011	1	99.83%	0.08%	0.07%	0.02%	1,154,611,842	874,903	781,513	252,337	-	1,156,520,595
2011	2	99.83%	0.08%	0.07%	0.02%	1,075,318,329	873,661	729,989	261,910	-	1,077,183,889
2011	3	99.82%	0.08%	0.08%	0.02%	1,024,982,234	837,989	783,121	234,143	-	1,026,837,487
2011	4	99.82%	0.07%	0.08%	0.03%	937,650,872	695,893	740,643	249,088	-	939,336,496
2011	5	99.81%	0.07%	0.08%	0.03%	804,294,236	600,707	674,799	247,214	-	805,816,956
2011	6	99.80%	0.07%	0.09%	0.03%	856,293,965	635,967	801,680	247,907	-	857,979,519
2011	7	99.87%	0.01%	0.09%	0.02%	1,022,415,506	89,790	959,695	246,652	-	1,023,711,643
2011	8	99.82%	0.07%	0.09%	0.02%	1,168,711,834	838,848	995,826	246,845	-	1,170,793,353
2011	9	99.81%	0.08%	0.09%	0.03%	966,194,306	745,965	889,683	246,262	-	968,076,216
2011	10	99.80%	0.08%	0.10%	0.03%	823,325,671	650,025	783,811	244,810	-	825,004,317
2011	11	99.81%	0.08%	0.09%	0.03%	852,559,836	677,055	738,840	244,930	-	854,220,661
2011	12	99.82%	0.08%	0.08%	0.03%	961,609,779	726,207	807,116	245,476	-	963,388,578

1. All growth percents derived from Jan 2005 to Dec 2011.

Growth Percent		-1.43%	-0.58%	-2.42%	-0.05%	-0.82%	5.69%	2.05%	-8.51%								
Year	Month	sc2nd_pct	sc2d_pct	sl_pct	sc3_pct	sc3a_pct	sc4_pct	sc7_pct	sc11_12_pct	SC2ND	SC2D	SL	SC3	SC3A	SC4	SC7	SC11_12	TOTAL
2005	1	5.76%	33.37%	0.17%	42.01%	11.26%	0.00%	2.15%	5.29%	65,647,047	379,971,375	1,924,572	478,365,599	128,189,628	-	24,482,011	60,225,366	1,138,805,598
2005	2	5.72%	33.47%	0.18%	40.81%	12.82%	0.00%	1.95%	5.06%	61,814,828	361,976,492	1,938,006	441,311,806	138,589,560	-	21,055,232	54,710,073	1,081,395,997
2005	3	5.67%	33.22%	0.18%	40.44%	12.33%	0.00%	1.96%	6.20%	62,027,791	363,268,762	1,933,651	442,226,282	134,815,140	-	21,421,706	67,846,618	1,093,539,950
2005	4	4.95%	32.46%	0.21%	42.50%	13.32%	0.00%	1.68%	4.88%	54,394,481	356,407,677	2,330,311	466,752,501	146,242,616	-	18,425,791	53,576,875	1,098,130,252
2005	5	4.78%	32.87%	0.19%	42.46%	12.69%	0.00%	1.60%	5.41%	48,355,611	332,460,372	1,932,279	429,523,308	128,315,947	-	16,148,718	54,762,396	1,011,498,631
2005	6	4.91%	32.78%	0.19%	39.48%	14.23%	0.00%	1.67%	6.74%	48,670,095	324,746,728	1,929,749	391,195,948	140,945,335	-	16,522,162	66,746,083	990,756,100
2005	7	4.88%	34.52%	0.15%	41.00%	13.00%	0.00%	1.45%	5.00%	61,344,077	434,323,009	1,921,530	515,874,139	163,546,191	-	18,294,200	62,917,192	1,258,220,338
2005	8	4.91%	34.73%	0.16%	40.26%	13.18%	0.00%	1.54%	5.22%	59,766,249	422,882,257	1,922,502	490,266,652	160,455,219	-	18,790,489	63,516,967	1,217,600,335
2005	9	4.98%	34.29%	0.16%	41.49%	12.65%	0.00%	1.27%	5.17%	59,650,553	411,055,490	1,916,709	497,436,992	151,622,664	-	15,183,925	62,005,536	1,198,871,869
2005	10	4.59%	33.39%	0.18%	41.35%	13.12%	0.00%	1.95%	5.41%	47,946,519	348,711,454	1,917,367	431,755,813	137,000,383	-	20,407,095	56,480,204	1,044,218,835
2005	11	4.81%	32.59%	0.19%	42.20%	12.60%	0.00%	1.90%	5.70%	47,296,908	320,561,598	1,904,446	415,112,203	123,946,206	-	18,727,362	56,036,533	983,585,256
2005	12	5.20%	33.65%	0.17%	41.35%	13.23%	0.00%	2.28%	4.11%	57,555,098	372,326,604	1,902,453	457,494,959	146,366,116	-	25,271,129	45,493,737	1,106,410,096
2006	1	5.49%	33.54%	0.16%	42.09%	10.49%	0.00%	2.23%	5.99%	62,672,859	383,236,730	1,845,805	480,939,227	119,908,454	-	25,486,139	68,451,346	1,142,540,560
2006	2	5.41%	32.21%	0.18%	39.98%	12.44%	0.00%	3.80%	5.98%	56,362,134	335,876,583	1,891,341	416,843,670	129,677,392	-	39,590,980	62,400,635	1,042,642,735
2006	3	5.48%	32.52%	0.17%	41.40%	14.11%	0.00%	2.04%	4.28%	60,739,025	360,505,275	1,892,836	458,887,903	156,410,453	-	22,628,644	47,421,817	1,108,485,953
2006	4	4.93%	33.62%	0.19%	40.81%	12.75%	0.00%	1.94%	5.77%	49,408,089	336,628,079	1,890,441	408,615,227	127,667,657	-	19,391,595	57,749,234	1,001,350,322
2006	5	4.64%	31.90%	0.19%	42.91%	12.75%	0.00%	1.74%	5.87%	45,603,662	313,743,549	1,876,422	421,953,833	125,334,054	-	17,141,137	57,745,083	983,397,740
2006	6	4.57%	33.05%	0.17%	41.91%	13.74%	0.00%	1.59%	4.97%	48,985,661	354,419,807	1,876,320	449,503,047	147,364,332	-	17,064,602	53,296,007	1,072,509,776
2006	7	4.66%	34.01%	0.16%	41.60%	12.94%	0.00%	1.62%	5.02%	54,705,646	399,584,433	1,880,538	488,863,264	152,028,557	-	19,038,782	58,948,180	1,175,049,400
2006	8	4.71%	33.77%	0.16%	41.01%	13.09%	0.00%	1.60%	5.66%	56,720,673	406,871,669	1,875,656	494,099,719	157,762,866	-	19,334,738	68,232,469	1,204,897,790
2006	9	4.62%	34.09%	0.17%	41.51%	12.93%	0.00%	1.66%	5.02%	52,120,500	384,849,052	1,869,247	468,623,647	146,016,200	-	18,769,991	56,724,884	1,128,973,521
2006	10	4.77%	33.82%	0.19%	41.85%	9.22%	0.00%	4.02%	6.13%	46,807,019	332,148,774	1,889,398	410,912,256	90,540,239	-	39,469,070	60,214,618	981,981,374
2006	11	4.59%	31.30%	0.17%	42.13%	12.77%	0.00%	3.71%	5.33%	48,148,324	328,643,844	1,831,567	442,383,943	134,137,761	-	38,950,410	55,988,963	1,050,084,812
2006	12	4.97%	32.96%	0.17%	43.01%	12.28%	0.00%	2.14%	4.47%	53,372,175	353,962,452	1,846,488	461,911,797	131,837,909	-	23,013,263	47,984,278	1,073,928,362
2007	1	5.22%	32.84%	0.17%	42.49%	11.89%	0.00%	1.98%	5.40%	56,055,691	352,492,087	1,843,920	456,054,124	127,596,394	-	21,287,503	57,989,340	1,073,319,059
2007	2	5.50%	33.50%	0.17%	42.34%	11.99%	0.00%	2.62%	3.87%	59,332,953	361,241,228	1,847,778	456,606,446	129,321,744	-	28,218,777	41,759,423	1,078,328,349
2007	3	5.45%	33.53%	0.16%	41.61%	12.33%	0.00%	2.05%	4.86%	60,907,347	374,515,619	1,839,166	464,703,039	137,755,556	-	22,868,110	54,269,441	1,116,858,278
2007	4	5.02%	32.78%	0.17%	42.89%	12.27%	0.00%	1.91%	4.95%	53,697,054	350,556,885	1,855,827	458,656,842	131,162,380	-	20,409,703	52,976,213	1,069,314,904
2007	5	4.64%	32.26%	0.18%	42.30%	13.95%	0.00%	1.85%	4.82%	46,948,836	326,234,355	1,856,060	427,787,653	141,075,328	-	18,703,692	48,791,912	1,011,397,836
2007	6	4.58%	34.64%	0.17%	43.34%	11.87%	0.00%	0.62%	4.78%	49,996,357	378,175,029	1,872,562	473,226,111	129,547,052	-	6,777,447	52,204,758	1,091,799,316
2007	7	4.56%	33.84%	0.16%	42.09%	13.91%	0.00%	1.51%	3.94%	52,486,894	389,338,513	1,842,577	484,287,176	160,004,290	-	17,418,046	45,305,301	1,150,682,797
2007	8	4.78%	34.97%	0.16%	41.72%	11.10%	0.00%	1.57%	5.70%	54,444,388	398,715,379	1,832,309	475,709,596	126,545,560	-	17,930,268	64,985,872	1,140,163,372
2007	9	4.48%	33.37%	0.16%	41.23%	14.72%	0.00%	1.68%	4.36%	52,399,813	390,466,144	1,849,646	482,356,862	172,253,490	-	19,705,267	50,998,510	1,170,029,732
2007	10	4.35%	32.56%	0.17%	41.52%	13.75%	0.00%	2.82%	4.83%	47,371,129	354,471,290	1,840,451	451,968,340	149,716,194	-	30,643,329	52,541,296	1,088,552,029
2007	11	4.71%	32.74%	0.18%	43.34%	13.52%	0.00%	0.71%	4.79%	49,075,292	341,308,550	1,832,318	451,834,627	140,968,991	-	7,445,938	49,960,882	1,042,426,598
2007	12	5.12%	32.50%	0.17%	42.27%	12.19%	0.00%	3.35%	4.41%	56,418,332	358,158,895	1,849,644	465,858,613	134,353,172	-	36,910,946	48,575,177	1,102,124,779
2008	1	5.35%	33.39%	0.16%	43.11%	12.24%	0.00%	2.08%	3.67%	61,453,367	383,385,458	1,842,671	495,031,683	140,560,302	-	23,902,376	42,084,822	1,148,260,679
2008	2	5.32%	33.07%	0.17%	41.90%	12.04%	0.00%	2.22%	5.29%	58,587,916	364,292,429	1,818,790	461,648,211	132,679,362	-	24,409,045	58,300,864	1,101,736,617
2008	3	5.48%	34.26%	0.18%	43.43%	11.22%	0.00%	0.77%	4.66%	55,845,794	349,275,925	1,818,476	442,775,275	114,356,741	-	7,879,650	47,531,517	1,019,483,378
2008	4	4.81%	32.58%	0.17%	42.25%	12.67%	0.00%	3.26%	4.26%	51,131,180	346,441,925	1,815,221	449,254,396	134,745,911	-	34,638,907	45,260,513	1,063,288,053
2008	5	4.51%	32.65%	0.19%	42.65%	12.92%	0.00%	1.95%	5.14%	44,452,507	321,862,833	1,826,781	420,453,229	127,409,524	-	19,227,701	50,697,548	985,930,123
2008	6	4.44%	32.92%	0.17%	42.70%	13.35%	0.00%	1.66%	4.76%	47,186,421	349,618,078	1,819,431	453,435,697	141,822,202	-	17,600,865	50,531,254	1,062,013,948
2008	7	4.45%	33.88%	0.16%	41.99%	13.37%	0.00%	1.56%	4.58%	50,890,283	387,722,455	1,818,148	480,536,727	153,020,548	-	17,866,770	52,459,718	1,144,314,649
2008	8	4.66%	34.49%	0.15%	41.75%	12.87%	0.00%	1.65%	4.44%	55,830,539	413,171,335	1,789,471	500,157,420	154,142,144	-	19,706,961	53,137,175	1,197,935,045

1. All growth percents derived from Jan 2005 to Dec 2011.
2. Exception: SC4 from Jan 2009 to Jun 2010.

Growth Percent		-1.43%	-0.58%	-2.42%	-0.05%	-0.82%	5.69%	2.05%	-8.51%									
Year	Month	sc2nd_pct	sc2d_pct	sl_pct	sc3_pct	sc3a_pct	sc4_pct	sc7_pct	sc11_12_pct	SC2ND	SC2D	SL	SC3	SC3A	SC4	SC7	SC11_12	TOTAL
2008	9	4.47%	34.23%	0.16%	42.35%	12.26%	0.00%	1.79%	4.73%	51,226,995	392,006,910	1,808,651	484,993,683	140,362,241	-	20,489,360	54,180,698	1,145,068,538
2008	10	4.34%	31.90%	0.17%	42.83%	14.08%	0.00%	1.93%	4.74%	44,635,606	327,884,411	1,793,014	440,217,549	144,691,122	-	19,794,555	48,702,783	1,027,719,040
2008	11	4.77%	33.07%	0.18%	43.06%	11.55%	0.00%	2.27%	5.10%	48,480,314	335,910,285	1,789,715	437,393,281	117,363,113	-	23,044,613	51,826,837	1,015,808,158
2008	12	5.18%	32.72%	0.17%	42.76%	12.51%	0.00%	2.44%	4.23%	54,971,990	347,519,305	1,779,372	454,111,192	132,818,340	-	25,907,886	44,893,357	1,062,001,442
2009	1	5.35%	32.50%	0.15%	42.09%	12.63%	0.01%	2.62%	4.65%	63,930,993	388,460,540	1,778,699	503,149,273	150,928,059	146,134	31,321,170	55,589,672	1,195,304,540
2009	2	6.27%	33.82%	0.16%	42.11%	11.33%	0.01%	2.56%	3.74%	67,939,650	366,443,775	1,777,425	456,277,530	122,751,854	138,060	27,711,829	40,498,893	1,083,539,016
2009	3	4.76%	34.49%	0.17%	42.25%	10.75%	0.02%	2.67%	4.89%	48,648,988	352,370,036	1,774,400	431,610,779	109,840,870	154,036	27,307,243	49,913,293	1,021,619,645
2009	4	4.75%	31.93%	0.16%	42.73%	13.89%	0.01%	2.60%	3.92%	51,125,908	343,505,496	1,768,591	459,740,484	149,439,870	160,549	28,001,615	42,163,918	1,075,906,431
2009	5	4.68%	32.93%	0.18%	42.98%	12.56%	0.02%	2.52%	4.13%	44,952,788	316,608,208	1,772,403	413,194,153	120,725,632	172,588	24,266,725	39,727,455	961,419,952
2009	6	4.58%	33.86%	0.18%	43.33%	11.04%	0.02%	2.42%	4.57%	45,630,334	337,698,734	1,764,182	432,159,124	110,108,366	174,568	24,115,225	45,603,792	997,254,325
2009	7	4.53%	34.30%	0.16%	41.45%	12.72%	0.02%	2.29%	4.53%	49,810,983	377,033,375	1,763,380	455,599,637	139,829,187	176,355	25,135,325	49,757,367	1,099,105,609
2009	8	4.72%	34.61%	0.16%	40.72%	12.98%	0.02%	2.46%	4.33%	50,904,909	373,033,331	1,747,321	438,788,365	139,889,655	181,840	26,472,107	46,666,638	1,077,684,166
2009	9	4.65%	34.88%	0.16%	42.61%	11.47%	0.02%	2.32%	3.90%	51,344,584	385,514,269	1,784,689	470,947,781	126,832,481	170,150	25,643,317	43,082,077	1,105,319,348
2009	10	4.45%	32.77%	0.17%	41.56%	14.20%	0.02%	2.58%	4.25%	45,217,095	332,634,806	1,760,578	421,835,685	144,175,431	167,995	26,183,596	43,123,170	1,015,098,356
2009	11	4.67%	32.66%	0.18%	42.99%	13.26%	0.02%	2.56%	3.66%	44,703,001	312,628,678	1,749,182	411,471,997	126,910,612	157,282	24,528,179	35,007,192	957,156,123
2009	12	4.81%	32.66%	0.17%	42.11%	12.67%	0.02%	2.61%	4.96%	51,251,967	347,927,724	1,766,646	448,518,186	134,972,518	162,275	27,765,600	52,832,813	1,065,197,729
2010	1	5.53%	34.32%	0.16%	42.35%	10.33%	0.01%	2.92%	4.38%	62,741,443	389,653,379	1,760,160	480,801,639	117,263,435	162,374	33,134,306	49,763,127	1,135,279,863
2010	2	5.55%	34.07%	0.17%	42.28%	12.30%	0.01%	2.55%	3.08%	57,608,549	353,631,899	1,757,735	438,811,789	127,620,149	148,166	26,456,920	31,942,135	1,037,977,342
2010	3	5.21%	32.66%	0.16%	42.58%	13.00%	0.01%	2.72%	3.65%	56,381,498	353,311,348	1,756,808	460,693,647	140,658,786	160,924	29,428,097	39,508,682	1,081,899,790
2010	4	4.88%	33.40%	0.17%	44.01%	11.19%	0.02%	2.82%	3.51%	48,886,817	334,894,678	1,754,569	441,288,504	112,238,677	162,176	28,234,296	35,168,760	1,002,628,477
2010	5	4.67%	33.60%	0.19%	44.12%	12.14%	0.02%	2.06%	3.21%	43,131,643	310,407,920	1,749,363	407,603,321	112,107,534	178,747	19,000,675	29,631,830	923,811,033
2010	6	4.46%	33.65%	0.17%	42.87%	13.19%	0.02%	1.83%	3.82%	46,310,077	349,551,868	1,742,085	445,219,216	136,953,366	170,706	19,018,091	39,684,452	1,038,649,861
2010	7	4.56%	34.34%	0.14%	43.24%	12.49%	-0.03%	1.82%	3.44%	55,324,883	416,428,292	1,745,022	524,380,751	151,528,140	(348,201)	22,063,817	41,706,593	1,212,829,297
2010	8	4.74%	34.81%	0.15%	40.97%	14.08%	0.06%	1.95%	3.24%	56,227,902	412,666,500	1,738,612	485,698,938	166,852,837	702,001	23,167,159	38,365,528	1,185,419,477
2010	9	4.76%	35.39%	0.16%	41.74%	12.22%	0.02%	1.91%	3.81%	52,234,547	388,538,331	1,744,257	458,301,912	134,168,788	172,224	20,924,033	41,850,887	1,097,934,979
2010	10	4.53%	33.18%	0.17%	45.18%	13.03%	0.02%	0.88%	3.01%	44,699,226	327,376,836	1,712,995	445,738,567	128,504,904	164,300	8,655,545	29,693,205	986,545,578
2010	11	4.63%	31.97%	0.18%	42.12%	13.73%	0.02%	3.11%	4.23%	45,397,902	313,261,721	1,720,828	412,673,290	134,562,727	156,039	30,508,489	41,436,592	979,717,588
2010	12	5.07%	33.35%	0.16%	43.47%	11.57%	0.02%	2.70%	3.65%	53,057,064	348,977,635	1,726,246	454,898,551	121,111,739	161,861	28,270,777	38,184,988	1,046,388,861
2011	1	5.43%	33.41%	0.16%	41.93%	13.57%	0.00%	2.27%	3.23%	60,079,039	369,722,181	1,724,663	463,997,353	150,206,806	-	25,146,930	35,743,702	1,106,620,674
2011	2	5.69%	33.87%	0.17%	43.19%	11.17%	0.00%	2.30%	3.60%	59,231,332	352,327,304	1,792,161	449,249,997	116,159,358	-	23,926,034	37,427,577	1,040,113,763
2011	3	5.44%	33.00%	0.15%	42.76%	13.00%	0.05%	2.22%	3.38%	58,204,093	353,301,970	1,651,238	457,772,952	139,199,889	485,524	23,780,846	36,205,995	1,070,602,507
2011	4	5.22%	33.42%	0.10%	43.85%	11.96%	0.02%	2.10%	3.33%	53,419,361	342,082,096	1,028,931	448,832,629	122,384,179	169,513	21,541,623	34,134,990	1,023,593,322
2011	5	4.62%	32.31%	0.18%	43.30%	13.68%	0.02%	1.99%	3.90%	45,102,159	315,117,164	1,724,205	422,292,656	133,405,798	170,375	19,380,535	38,060,601	975,253,493
2011	6	4.44%	33.06%	0.16%	43.36%	14.05%	0.02%	1.65%	3.26%	46,671,331	347,852,298	1,724,112	456,151,349	147,841,436	175,899	17,327,167	34,304,387	1,052,047,979
2011	7	4.65%	34.86%	0.15%	43.88%	11.09%	0.02%	2.19%	3.16%	51,920,583	389,653,051	1,721,301	490,484,339	124,006,508	185,795	24,432,988	35,348,696	1,117,753,261
2011	8	4.81%	34.76%	0.15%	42.19%	13.31%	0.01%	1.73%	3.03%	56,746,351	410,418,097	1,721,236	498,118,667	157,185,083	176,281	20,400,207	35,815,162	1,180,581,084
2011	9	4.54%	33.59%	0.15%	42.25%	14.07%	0.01%	2.49%	2.88%	50,810,314	375,910,036	1,716,504	472,806,706	157,448,222	167,164	27,867,859	32,273,377	1,119,000,182
2011	10	4.52%	33.07%	0.17%	44.04%	13.65%	0.02%	1.10%	3.43%	45,623,029	333,661,952	1,714,619	444,403,028	137,766,012	159,891	11,122,168	34,644,784	1,009,095,483
2011	11	4.77%	32.66%	0.17%	43.10%	12.57%	0.01%	3.30%	3.41%	47,348,969	324,038,187	1,715,966	427,624,156	124,669,957	144,572	32,696,481	33,815,607	992,053,895
2011	12	5.20%	33.61%	0.17%	44.52%	10.95%	0.02%	2.11%	3.42%	51,482,489	333,013,982	1,715,667	441,084,109	108,537,121	156,988	20,899,006	33,872,796	990,762,158

1. All growth percents derived from Jan 2005 to Dec 2011.
2. Exception: SC4 from Jan 2009 to Jun 2010.

Growth Percent		-3.22%	-2.78%	0.58%	3.76%	4.28%	-19.64%	-1.94%	-1.55%	0.00%										
Year	Month	sc2nd_pct	sc2d_pct	sc3_pct	sc3a_pct	sc4_pct	sc7_pct	sc11_12_pct	nypa_re_pct	nypa_oth_pct	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	TOTAL
2005	1	0.02%	0.66%	8.18%	22.11%	3.09%	1.73%	15.77%	37.16%	11.29%	209,876	5,704,301	70,628,141	190,951,890	26,671,049	14,958,222	136,246,225	320,961,738	97,501,987	863,833,429
2005	2	0.04%	0.73%	8.78%	24.46%	3.12%	1.57%	15.78%	35.84%	9.68%	290,648	6,018,181	72,129,234	200,882,702	25,644,609	12,858,110	129,544,087	294,245,750	79,494,160	821,107,481
2005	3	0.04%	0.64%	9.13%	26.86%	2.63%	1.62%	17.06%	32.83%	9.20%	298,178	5,110,243	73,215,429	215,275,877	21,067,693	12,960,324	136,743,627	263,155,060	73,734,868	801,561,299
2005	4	0.03%	0.62%	8.50%	23.40%	3.59%	1.49%	14.55%	39.98%	7.82%	309,412	5,675,100	77,491,332	213,243,939	32,719,236	13,534,267	132,605,013	364,299,313	71,257,124	911,134,736
2005	5	0.04%	0.64%	9.15%	24.35%	1.87%	1.92%	15.41%	36.27%	10.36%	294,204	5,347,223	76,465,069	203,530,331	15,614,602	16,020,547	128,811,918	303,111,144	86,569,577	835,764,615
2005	6	0.03%	0.58%	8.01%	24.46%	3.35%	1.68%	14.76%	36.73%	10.41%	232,341	4,958,139	67,910,750	207,423,299	28,403,841	14,263,805	125,165,468	311,540,693	88,254,628	848,152,964
2005	7	0.03%	0.73%	8.48%	22.43%	3.11%	1.72%	13.00%	39.31%	11.21%	251,364	6,760,656	79,054,103	209,120,072	28,980,427	15,994,056	121,172,614	366,504,452	104,507,472	932,345,216
2005	8	0.03%	0.75%	8.94%	20.54%	2.52%	1.98%	17.39%	36.48%	11.38%	252,997	6,304,355	74,981,595	172,245,840	21,094,740	16,564,398	145,850,688	305,973,588	95,401,031	838,669,232
2005	9	0.03%	0.70%	8.81%	21.33%	2.58%	1.35%	18.47%	35.67%	11.07%	238,930	6,204,948	78,175,610	189,350,119	22,887,289	11,980,966	163,964,274	316,668,246	98,323,010	887,793,392
2005	10	0.03%	0.67%	8.46%	20.13%	2.85%	1.50%	13.52%	41.15%	11.70%	213,554	5,586,775	70,972,859	168,935,973	23,941,600	12,574,146	113,404,331	345,273,946	98,170,706	839,073,890
2005	11	0.03%	0.62%	8.68%	22.61%	3.04%	1.34%	14.84%	38.13%	10.71%	218,900	5,049,007	70,652,935	184,030,971	24,721,010	10,916,606	120,785,457	310,313,057	87,145,624	813,833,567
2005	12	0.03%	0.75%	9.05%	19.04%	3.11%	1.46%	14.83%	39.76%	11.96%	268,451	6,068,326	73,002,049	153,575,129	25,096,805	11,805,173	119,585,274	320,724,169	96,440,355	806,565,731
2006	1	0.14%	0.75%	8.81%	24.69%	2.68%	1.53%	14.45%	38.13%	8.82%	1,116,125	6,171,440	72,642,918	203,531,151	22,112,466	12,626,182	119,120,055	314,281,006	72,699,335	824,300,678
2006	2	0.03%	0.61%	8.40%	22.34%	5.12%	1.46%	14.20%	37.56%	10.28%	253,567	5,016,833	69,100,267	183,891,232	42,102,457	11,996,642	116,879,585	309,142,714	84,633,002	823,016,299
2006	3	0.03%	0.71%	8.11%	21.57%	2.86%	1.87%	16.55%	38.99%	9.32%	239,927	6,022,582	68,723,400	182,860,550	24,253,450	15,834,522	140,330,540	330,593,628	79,028,199	847,886,798
2006	4	0.03%	0.66%	8.04%	21.25%	0.33%	1.78%	19.81%	38.40%	9.70%	245,397	5,294,816	64,396,378	170,280,781	2,656,154	14,228,387	158,752,857	307,734,657	77,715,930	801,305,357
2006	5	0.05%	0.62%	8.46%	19.85%	2.69%	1.79%	17.49%	39.28%	9.78%	359,129	4,942,678	67,320,590	157,843,427	21,361,987	14,221,522	139,121,397	312,387,147	77,801,431	795,359,308
2006	6	0.03%	0.68%	8.36%	24.15%	2.70%	1.44%	16.72%	36.72%	9.20%	250,062	5,932,896	72,957,403	210,688,419	23,533,784	12,523,018	145,847,747	320,352,684	80,226,575	872,312,588
2006	7	0.03%	0.68%	8.58%	22.38%	2.65%	1.44%	18.53%	36.91%	8.79%	261,935	5,748,175	72,372,070	188,743,829	22,319,946	12,178,845	156,256,128	311,195,443	74,137,733	843,214,104
2006	8	0.03%	0.72%	8.37%	22.99%	3.13%	1.22%	17.73%	37.25%	8.56%	264,250	6,405,046	74,732,628	205,162,252	27,963,305	10,859,256	158,201,843	332,397,071	76,383,624	892,369,275
2006	9	0.03%	0.83%	8.90%	22.48%	3.55%	1.43%	18.35%	35.11%	9.31%	251,660	6,694,617	71,952,365	181,618,889	28,714,768	11,595,484	148,291,230	283,691,410	75,240,754	808,051,177
2006	10	0.02%	0.69%	7.83%	21.68%	2.74%	1.73%	16.54%	39.99%	8.77%	207,851	5,812,522	65,782,342	182,180,230	23,010,922	14,572,910	138,923,908	335,984,500	73,682,541	840,157,726
2006	11	0.03%	0.74%	8.60%	23.39%	2.81%	1.76%	15.18%	39.07%	8.42%	273,599	5,906,848	68,209,906	185,583,964	22,279,119	13,933,910	120,452,570	309,933,559	66,770,735	793,344,210
2006	12	0.04%	0.74%	8.37%	23.85%	2.66%	1.57%	15.19%	38.85%	8.73%	304,992	5,877,307	66,940,636	190,665,800	21,296,796	12,542,140	121,480,298	310,572,943	69,827,105	799,508,017
2007	1	0.03%	0.67%	8.39%	24.64%	3.04%	1.49%	15.40%	37.97%	8.37%	244,547	5,264,342	66,159,055	194,259,799	23,949,657	11,757,341	121,419,310	299,404,450	66,007,937	788,466,438
2007	2	0.04%	0.91%	8.86%	24.72%	2.80%	1.64%	11.59%	41.37%	8.08%	284,784	7,077,474	69,068,606	192,667,608	21,830,793	12,748,705	90,298,431	322,405,997	62,971,065	779,353,463
2007	3	0.03%	0.56%	8.31%	24.07%	2.74%	2.06%	15.55%	38.71%	7.97%	282,167	4,580,591	68,279,436	197,869,875	22,538,311	16,925,961	127,814,086	318,163,431	65,513,258	821,967,116
2007	4	0.03%	0.68%	9.02%	22.87%	2.79%	1.54%	18.10%	37.16%	7.81%	255,227	5,577,438	74,424,471	188,713,252	22,989,431	12,692,724	149,311,576	306,609,107	64,464,688	825,037,914
2007	5	0.03%	0.64%	8.29%	23.84%	4.10%	1.56%	17.77%	35.87%	7.89%	240,304	5,341,931	69,147,202	198,775,562	34,166,378	13,026,704	148,179,373	299,063,771	65,808,095	833,749,320
2007	6	0.03%	0.72%	9.06%	23.94%	1.72%	1.38%	17.09%	37.96%	8.10%	257,693	5,922,067	74,631,938	197,237,932	14,147,364	11,348,805	140,796,569	312,662,116	66,744,030	823,748,514
2007	7	0.03%	0.79%	8.87%	24.06%	2.90%	1.29%	17.07%	38.16%	6.82%	250,937	6,546,001	73,533,357	199,383,551	24,028,539	10,704,308	141,464,822	316,142,053	56,504,761	828,558,329
2007	8	0.03%	0.74%	9.52%	24.13%	3.03%	1.46%	17.07%	36.50%	7.52%	239,620	6,399,172	81,895,177	207,559,631	26,074,743	12,584,321	146,829,456	314,048,714	64,718,633	860,349,467
2007	9	0.03%	0.72%	9.10%	26.02%	2.80%	1.24%	14.20%	37.71%	8.18%	237,097	6,038,401	76,277,963	218,098,854	23,504,770	10,434,966	119,036,093	316,150,053	68,561,350	838,339,547
2007	10	0.02%	0.68%	8.49%	23.37%	2.88%	1.70%	18.78%	36.37%	7.71%	211,525	5,914,752	74,402,566	204,745,481	25,241,303	14,868,908	164,486,558	318,573,556	67,544,875	875,989,524
2007	11	0.03%	0.78%	10.26%	20.45%	2.13%	2.69%	17.19%	39.10%	7.38%	233,365	5,759,989	76,115,769	151,630,544	15,787,326	19,934,457	127,501,032	289,939,161	54,695,967	741,597,610
2007	12	0.03%	0.61%	8.14%	27.34%	3.21%	1.53%	12.81%	39.37%	6.96%	263,561	5,321,212	71,318,379	239,490,043	28,098,964	13,405,139	112,226,125	344,836,683	60,919,095	875,879,201
2008	1	0.04%	0.69%	9.26%	24.60%	3.08%	1.45%	13.88%	39.39%	7.61%	293,276	5,638,409	76,178,436	202,395,419	25,349,405	11,939,245	114,178,641	324,034,486	62,604,075	822,611,392
2008	2	0.04%	0.66%	9.11%	28.49%	3.04%	1.50%	13.77%	37.82%	5.56%	277,057	5,213,713	71,900,251	224,858,603	24,029,256	11,862,460	108,708,258	298,458,192	43,876,840	789,184,630
2008	3	0.04%	0.60%	8.43%	25.59%	3.09%	1.83%	14.10%	39.81%	6.52%	289,645	4,772,295	67,555,721	205,095,576	24,754,704	14,695,403	113,048,991	319,054,712	52,244,492	801,511,539

1. All growth percents derived from Jan 2005 to Dec 2011.
2. Exceptions: SC4 from Jan 2005 to Feb 2010. SC11_12 from Jan 2005 to Oct 2008. NYPA_OTH percent was reset to zero.
3. Data for 2011 is the same as year 2010.

Growth Percent		-3.22%	-2.78%	0.58%	3.76%	4.28%	-19.64%	-1.94%	-1.55%	0.00%										
Year	Month	sc2nd_pct	sc2d_pct	sc3_pct	sc3a_pct	sc4_pct	sc7_pct	sc11_12_pct	nypa_re_pct	nypa_oth_pct	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	TOTAL
2008	4	0.03%	0.60%	9.23%	25.50%	2.97%	1.89%	14.68%	38.18%	6.91%	265,255	4,858,240	74,913,304	207,064,984	24,137,674	15,372,902	119,226,936	310,059,106	56,102,543	812,000,944
2008	5	0.03%	0.53%	8.38%	26.02%	3.09%	1.28%	14.59%	38.50%	7.57%	215,376	4,318,395	67,874,940	210,843,186	25,060,081	10,367,720	118,205,064	311,937,016	61,344,609	810,166,387
2008	6	0.02%	0.57%	8.31%	26.68%	3.11%	1.22%	15.24%	37.78%	7.07%	208,544	4,729,257	69,512,093	223,203,762	26,004,262	10,234,555	127,557,773	316,120,065	59,178,720	836,749,031
2008	7	0.03%	0.69%	9.20%	25.51%	3.39%	1.62%	14.39%	39.57%	5.59%	210,788	5,545,425	73,758,230	204,445,984	27,179,366	12,941,623	115,344,651	317,088,701	44,817,499	801,332,267
2008	8	0.03%	0.60%	9.06%	27.05%	3.17%	1.76%	14.67%	38.95%	4.70%	221,914	5,202,010	78,119,310	233,219,455	27,333,111	15,198,396	126,496,435	335,848,501	40,562,526	862,201,658
2008	9	0.03%	0.67%	9.22%	25.20%	3.24%	1.47%	18.36%	36.70%	5.12%	212,127	5,621,346	77,717,979	212,346,735	27,296,695	12,391,008	154,707,681	309,273,117	43,109,713	842,676,401
2008	10	0.02%	0.67%	8.24%	25.75%	2.97%	1.44%	14.51%	41.69%	4.71%	201,907	5,757,519	70,337,097	219,817,470	25,314,671	12,290,034	123,830,322	355,795,179	40,159,156	853,503,355
2008	11	0.03%	0.74%	10.16%	26.45%	3.58%	1.81%	11.98%	40.46%	4.80%	210,204	5,274,345	72,247,270	187,979,460	25,417,490	12,841,556	85,135,968	287,573,499	34,102,590	710,782,382
2008	12	0.03%	0.67%	9.48%	25.92%	3.18%	2.19%	11.41%	41.49%	5.63%	220,587	4,861,415	68,874,392	188,358,111	23,133,269	15,928,797	82,904,882	301,457,784	40,913,571	726,652,808
2009	1	0.03%	0.64%	9.09%	32.62%	2.82%	2.78%	9.24%	37.93%	4.83%	249,855	5,063,001	71,872,451	257,764,350	22,310,288	22,004,027	73,044,742	299,762,324	38,204,748	790,275,786
2009	2	0.04%	0.71%	10.16%	31.32%	3.35%	2.59%	9.20%	37.83%	4.81%	252,136	4,874,287	70,247,361	216,557,592	23,158,678	17,870,869	63,607,627	261,521,872	33,237,047	691,327,469
2009	3	0.03%	0.67%	9.35%	29.44%	3.36%	1.80%	8.87%	41.16%	5.32%	239,310	4,760,298	66,761,068	210,095,708	23,976,521	12,868,539	63,286,432	293,732,840	37,933,845	713,654,561
2009	4	0.03%	0.64%	10.02%	31.93%	2.99%	1.32%	9.59%	38.47%	5.01%	229,030	4,427,334	69,834,677	222,464,783	20,821,255	9,223,492	66,789,476	268,054,963	34,935,999	696,781,009
2009	5	0.03%	0.57%	9.37%	30.43%	3.65%	1.41%	9.22%	40.32%	4.99%	204,489	4,010,118	65,807,834	213,659,639	25,623,774	9,933,546	64,703,820	283,081,310	35,062,196	702,086,726
2009	6	0.03%	0.68%	9.90%	29.89%	3.62%	1.43%	10.59%	38.96%	4.91%	203,314	4,599,928	67,426,051	203,593,093	24,683,374	9,718,412	72,126,566	265,377,106	33,477,373	681,205,217
2009	7	0.03%	0.66%	8.86%	32.52%	3.72%	1.67%	10.27%	37.31%	4.97%	207,558	4,979,562	66,698,207	244,765,013	27,987,258	12,553,283	77,268,694	280,857,981	37,381,140	752,698,696
2009	8	0.03%	0.69%	9.81%	30.31%	3.82%	1.55%	10.61%	38.26%	4.93%	182,077	5,003,446	71,175,383	219,888,701	27,706,705	11,255,250	76,971,514	277,620,357	35,755,040	725,558,473
2009	9	0.03%	0.75%	10.56%	30.76%	3.52%	1.25%	12.08%	36.75%	4.31%	209,639	5,648,076	79,404,362	231,328,710	26,447,778	9,393,421	90,819,315	276,374,415	32,391,842	752,017,558
2009	10	0.03%	0.74%	10.55%	25.75%	3.64%	0.41%	11.94%	43.12%	3.82%	206,431	5,234,654	75,006,072	183,001,499	25,837,966	2,938,725	84,831,213	306,437,915	27,130,338	710,624,813
2009	11	0.03%	0.67%	8.22%	33.24%	3.90%	0.10%	8.68%	40.90%	4.25%	200,796	4,919,925	60,708,459	245,393,978	28,802,886	720,139	64,069,528	301,928,790	31,402,015	738,146,516
2009	12	0.03%	0.62%	11.14%	29.34%	4.25%	0.09%	9.51%	41.61%	3.41%	241,817	4,541,688	81,155,389	213,649,690	30,918,546	632,725	69,252,277	303,032,731	24,864,877	728,289,740
2010	1	0.04%	0.73%	10.60%	30.10%	4.10%	0.09%	9.34%	40.86%	4.14%	277,519	5,442,222	78,621,531	223,326,088	30,458,009	688,654	69,282,900	303,184,350	30,749,400	742,030,673
2010	2	0.04%	0.75%	10.00%	29.49%	4.88%	0.52%	9.49%	40.71%	4.11%	281,875	5,374,282	71,491,631	210,803,638	34,893,959	3,722,696	67,838,016	290,967,934	29,405,827	714,779,858
2010	3	0.07%	0.63%	7.75%	31.25%	4.61%	0.25%	10.14%	41.46%	3.84%	470,349	4,552,607	55,828,261	225,113,827	33,232,780	1,808,713	73,077,367	298,651,702	27,640,609	720,376,215
2010	4	0.02%	0.63%	10.52%	29.77%	6.84%	0.27%	6.96%	40.78%	4.21%	153,010	4,547,233	75,779,601	214,398,280	49,238,849	1,948,401	50,110,931	293,669,862	30,323,666	720,169,833
2010	5	0.04%	0.57%	11.55%	31.92%	8.40%	0.71%	5.13%	37.68%	4.00%	252,319	4,041,865	82,108,852	226,949,466	59,720,049	5,055,650	36,475,591	267,901,585	28,404,767	710,910,144
2010	6	0.03%	0.69%	11.91%	29.83%	6.57%	0.69%	7.89%	42.28%	0.11%	223,692	4,750,892	81,844,798	205,015,482	45,152,465	4,761,599	54,207,114	290,632,556	763,555	687,352,153
2010	7	0.02%	0.98%	15.96%	38.81%	9.52%	0.86%	7.40%	25.55%	0.90%	118,202	6,186,248	100,984,781	245,569,453	60,272,443	5,470,598	46,820,060	161,662,735	5,709,494	632,794,014
2010	8	0.03%	0.51%	7.51%	28.45%	5.67%	0.55%	5.89%	49.10%	2.28%	323,665	5,236,327	76,442,807	289,581,155	57,760,848	5,647,476	60,003,258	499,768,531	23,168,581	1,017,932,648
2010	9	0.03%	0.67%	9.10%	26.69%	7.02%	0.70%	6.36%	38.54%	10.89%	224,301	5,341,927	72,946,756	213,889,303	56,242,719	5,589,606	50,951,795	308,759,113	87,292,713	801,238,233
2010	10	0.03%	0.70%	10.58%	29.78%	5.50%	0.70%	6.79%	40.65%	5.27%	225,119	5,254,004	79,313,287	223,258,177	41,247,365	5,275,498	50,945,096	304,815,783	39,480,943	749,815,272
2010	11	0.03%	0.68%	8.76%	33.14%	5.20%	0.65%	6.72%	40.82%	3.99%	202,971	4,821,158	62,339,795	235,841,383	36,995,158	4,640,409	47,850,091	290,486,525	28,367,324	711,544,814
2010	12	0.03%	0.69%	9.66%	34.00%	4.86%	0.60%	5.67%	40.38%	4.11%	255,364	5,238,443	72,844,192	256,365,519	36,620,649	4,530,322	42,769,590	304,535,895	30,963,868	754,123,842
2011	1	0.04%	0.70%	8.96%	30.96%	7.10%	0.59%	5.84%	41.74%	4.06%	277,995	5,471,423	69,639,353	240,530,762	55,120,123	4,607,104	45,328,078	324,261,491	31,566,095	776,802,424
2011	2	0.04%	0.72%	9.88%	31.72%	6.92%	0.61%	5.98%	40.30%	3.82%	294,542	5,164,625	70,570,385	226,562,342	49,403,801	4,388,602	42,752,786	287,901,465	27,300,847	714,339,395
2011	3	0.04%	0.75%	10.00%	29.49%	4.88%	0.52%	9.49%	40.71%	4.11%	281,875	5,374,282	71,491,631	210,803,638	34,893,959	3,722,696	67,838,016	290,967,934	29,405,827	714,779,858
2011	4	0.07%	0.63%	7.75%	31.25%	4.61%	0.25%	10.14%	41.46%	3.84%	470,349	4,552,607	55,828,261	225,113,827	33,232,780	1,808,713	73,077,367	298,651,702	27,640,609	720,376,215

1. All growth percents derived from Jan 2005 to Dec 2011.
2. Exceptions: SC4 from Jan 2005 to Feb 2010. SC11_12 from Jan 2005 to Oct 2008. NYPA_OTH percent was reset to zero.
3. Data for 2011 is the same as year 2010.

Growth Percent		-3.22%	-2.78%	0.58%	3.76%	4.28%	-19.64%	-1.94%	-1.55%	0.00%										
Year	Month	sc2nd_pct	sc2d_pct	sc3_pct	sc3a_pct	sc4_pct	sc7_pct	sc11_12_pct	nypa_re_pct	nypa_oth_pct	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	TOTAL
2011	5	0.02%	0.63%	10.52%	29.77%	6.84%	0.27%	6.96%	40.78%	4.21%	153,010	4,547,233	75,779,601	214,398,280	49,238,849	1,948,401	50,110,931	293,669,862	30,323,666	720,169,833
2011	6	0.04%	0.57%	11.55%	31.92%	8.40%	0.71%	5.13%	37.68%	4.00%	252,319	4,041,865	82,108,852	226,949,466	59,720,049	5,055,650	36,475,591	267,901,585	28,404,767	710,910,144
2011	7	0.03%	0.69%	11.91%	29.83%	6.57%	0.69%	7.89%	42.28%	0.11%	223,692	4,750,892	81,844,798	205,015,482	45,152,465	4,761,599	54,207,114	290,632,556	763,555	687,352,153
2011	8	0.02%	0.98%	15.96%	38.81%	9.52%	0.86%	7.40%	25.55%	0.90%	118,202	6,186,248	100,984,781	245,569,453	60,272,443	5,470,598	46,820,060	161,662,735	5,709,494	632,794,014
2011	9	0.03%	0.51%	7.51%	28.45%	5.67%	0.55%	5.89%	49.10%	2.28%	323,665	5,236,327	76,442,807	289,581,155	57,760,848	5,647,476	60,003,258	499,768,531	23,168,581	1,017,932,648
2011	10	0.03%	0.67%	9.10%	26.69%	7.02%	0.70%	6.36%	38.54%	10.89%	224,301	5,341,927	72,946,756	213,889,303	56,242,719	5,589,606	50,951,795	308,759,113	87,292,713	801,238,233
2011	11	0.03%	0.70%	10.58%	29.78%	5.50%	0.70%	6.79%	40.65%	5.27%	225,119	5,254,004	79,313,287	223,258,177	41,247,365	5,275,498	50,945,096	304,815,783	39,480,943	749,815,272
2011	12	0.03%	0.68%	8.76%	33.14%	5.20%	0.65%	6.72%	40.82%	3.99%	202,971	4,821,158	62,339,795	235,841,383	36,995,158	4,640,409	47,850,091	290,486,525	28,367,324	711,544,814

1. All growth percents derived from Jan 2005 to Dec 2011.
2. Exceptions: SC4 from Jan 2005 to Feb 2010. SC11_12 from Jan 2005 to Oct 2008. NYPA_OTH percent was reset to zero.
3. Data for 2011 is the same as year 2010.

Growth	Percent	-3.20%	-2.51%	0.28%	3.92%	4.28%	-20.29%	-1.94%	-1.37%	0.00%										
Year	Month	sc2nd_pct	sc2d_pct	sc3_pct	sc3a_pct	sc4_pct	sc7_pct	sc11_12_pct	nypa_re_pct	nypa_oth_pct	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	TOTAL
2005	1	0.02%	0.66%	8.18%	22.11%	3.09%	1.73%	15.77%	37.16%	11.29%	209,876	5,704,301	70,628,141	190,951,890	26,671,049	14,958,222	136,246,225	320,961,738	97,501,987	863,833,429
2005	2	0.04%	0.73%	8.78%	24.46%	3.12%	1.57%	15.78%	35.84%	9.68%	290,648	6,018,181	72,129,234	200,882,702	25,644,609	12,858,110	129,544,087	294,245,750	79,494,160	821,107,481
2005	3	0.04%	0.64%	9.13%	26.86%	2.63%	1.62%	17.06%	32.83%	9.20%	298,178	5,110,243	73,215,429	215,275,877	21,067,693	12,960,324	136,743,627	263,155,060	73,734,868	801,561,299
2005	4	0.03%	0.62%	8.50%	23.40%	3.59%	1.49%	14.55%	39.98%	7.82%	309,412	5,675,100	77,491,332	213,243,939	32,719,236	13,534,267	132,605,013	364,299,313	71,257,124	911,134,736
2005	5	0.04%	0.64%	9.15%	24.35%	1.87%	1.92%	15.41%	36.27%	10.36%	294,204	5,347,223	76,465,069	203,530,331	15,614,602	16,020,547	128,811,918	303,111,144	86,569,577	835,764,615
2005	6	0.03%	0.58%	8.01%	24.46%	3.35%	1.68%	14.76%	36.73%	10.41%	232,341	4,958,139	67,910,750	207,423,299	28,403,841	14,263,805	125,165,468	311,540,693	88,254,628	848,152,964
2005	7	0.03%	0.73%	8.48%	22.43%	3.11%	1.72%	13.00%	39.31%	11.21%	251,364	6,760,656	79,054,103	209,120,072	28,980,427	15,994,056	121,172,614	366,504,452	104,507,472	932,345,216
2005	8	0.03%	0.75%	8.94%	20.54%	2.52%	1.98%	17.39%	36.48%	11.38%	252,997	6,304,355	74,981,595	172,245,840	21,094,740	16,564,398	145,850,688	305,973,588	95,401,031	838,669,232
2005	9	0.03%	0.70%	8.81%	21.33%	2.58%	1.35%	18.47%	35.67%	11.07%	238,930	6,204,948	78,175,610	189,350,119	22,887,289	11,980,966	163,964,274	316,668,246	98,323,010	887,793,392
2005	10	0.03%	0.67%	8.46%	20.13%	2.85%	1.50%	13.52%	41.15%	11.70%	213,554	5,586,775	70,972,859	168,935,973	23,941,600	12,574,146	113,404,331	345,273,946	98,170,706	839,073,890
2005	11	0.03%	0.62%	8.68%	22.61%	3.04%	1.34%	14.84%	38.13%	10.71%	218,900	5,049,007	70,652,935	184,030,971	24,721,010	10,916,606	120,785,457	310,313,057	87,145,624	813,833,567
2005	12	0.03%	0.75%	9.05%	19.04%	3.11%	1.46%	14.83%	39.76%	11.96%	268,451	6,068,326	73,002,049	153,575,129	25,096,805	11,805,173	119,585,274	320,724,169	96,440,355	806,565,731
2006	1	0.14%	0.75%	8.81%	24.69%	2.68%		14.45%	38.13%	8.82%	1,116,125	6,171,440	72,642,918	203,531,151	22,112,466	12,626,182	119,120,055	314,281,006	72,699,335	824,300,678
2006	2	0.03%	0.61%	8.40%	22.34%	5.12%	1.46%	14.20%	37.56%	10.28%	253,567	5,016,833	69,100,267	183,891,232	42,102,457	11,996,642	116,879,585	309,142,714	84,633,002	823,016,299
2006	3	0.03%	0.71%	8.11%	21.57%	2.86%	1.87%	16.55%	38.99%	9.32%	239,927	6,022,582	68,723,400	182,860,550	24,253,450	15,834,522	140,330,540	330,593,628	79,028,199	847,886,798
2006	4	0.03%	0.66%	8.04%	21.25%	0.33%	1.78%	19.81%	38.40%	9.70%	245,397	5,294,816	64,396,378	170,280,781	2,656,154	14,228,387	158,752,857	307,734,657	77,715,930	801,305,357
2006	5	0.05%	0.62%	8.46%	19.85%	2.69%	1.79%	17.49%	39.28%	9.78%	359,129	4,942,678	67,320,590	157,843,427	21,361,987	14,221,522	139,121,397	312,387,147	77,801,431	795,359,308
2006	6	0.03%	0.68%	8.36%	24.15%	2.70%	1.44%	16.72%	36.72%	9.20%	250,062	5,932,896	72,957,403	210,688,419	23,533,784	12,523,018	145,847,747	320,352,684	80,226,575	872,312,588
2006	7	0.03%	0.68%	8.58%	22.38%	2.65%	1.44%	18.53%	36.91%	8.79%	261,935	5,748,175	72,372,070	188,743,829	22,319,946	12,178,845	156,256,128	311,195,443	74,137,733	843,214,104
2006	8	0.03%	0.72%	8.37%	22.99%	3.13%	1.22%	17.73%	37.25%	8.56%	264,250	6,405,046	74,732,628	205,162,252	27,963,305	10,859,256	158,201,843	332,397,071	76,383,624	892,369,275
2006	9	0.03%	0.83%	8.90%	22.48%	3.55%	1.43%	18.35%	35.11%	9.31%	251,660	6,694,617	71,952,365	181,618,889	28,714,768	11,595,484	148,291,230	283,691,410	75,240,754	808,051,177
2006	10	0.02%	0.69%	7.83%	21.68%	2.74%	1.73%	16.54%	39.99%	8.77%	207,851	5,812,522	65,782,342	182,180,230	23,010,922	14,572,910	138,923,908	335,984,500	73,682,541	840,157,726
2006	11	0.03%	0.74%	8.60%	23.39%	2.81%	1.76%	15.18%	39.07%	8.42%	273,599	5,906,848	68,209,906	185,583,964	22,279,119	13,933,910	120,452,570	309,933,559	66,770,735	793,344,210
2006	12	0.04%	0.74%	8.37%	23.85%	2.66%	1.57%	15.19%	38.85%	8.73%	304,992	5,877,307	66,940,636	190,665,800	21,296,796	12,542,140	121,480,298	310,572,943	69,827,105	799,508,017
2007	1	0.03%	0.67%	8.39%	24.64%	3.04%	1.49%	15.40%	37.97%	8.37%	244,547	5,264,342	66,159,055	194,259,799	23,949,657	11,757,341	121,419,310	299,404,450	66,007,937	788,466,438
2007	2	0.04%	0.91%	8.86%	24.72%	2.80%	1.64%	11.59%	41.37%	8.08%	284,784	7,077,474	69,068,606	192,667,608	21,830,793	12,748,705	90,298,431	322,405,997	62,971,065	779,353,463
2007	3	0.03%	0.56%	8.31%	24.07%	2.74%	2.06%	15.55%	38.71%	7.97%	282,167	4,580,591	68,279,436	197,869,875	22,538,311	16,925,961	127,814,086	318,163,431	65,513,258	821,967,116
2007	4	0.03%	0.68%	9.02%	22.87%	2.79%	1.54%	18.10%	37.16%	7.81%	255,227	5,577,438	74,424,471	188,713,252	22,989,431	12,692,724	149,311,576	306,609,107	64,464,688	825,037,914
2007	5	0.03%	0.64%	8.29%	23.84%	4.10%	1.56%	17.77%	35.87%	7.89%	240,304	5,341,931	69,147,202	198,775,562	34,166,378	13,026,704	148,179,373	299,063,771	65,808,095	833,749,320
2007	6	0.03%	0.72%	9.06%	23.94%	1.72%	1.38%	17.09%	37.96%	8.10%	257,693	5,922,067	74,631,938	197,237,932	14,147,364	11,348,805	140,796,569	312,662,116	66,744,030	823,748,514
2007	7	0.03%	0.79%	8.87%	24.06%	2.90%	1.29%	17.07%	38.16%	6.82%	250,937	6,546,001	73,533,357	199,383,551	24,028,539	10,704,308	141,464,822	316,142,053	56,504,761	828,558,329
2007	8	0.03%	0.74%	9.52%	24.13%	3.03%	1.46%	17.07%	36.50%	7.52%	239,620	6,399,172	81,895,177	207,559,631	26,074,743	12,584,321	146,829,456	314,048,714	64,718,633	860,349,467
2007	9	0.03%	0.72%	9.10%	26.02%	2.80%	1.24%	14.20%	37.71%	8.18%	237,097	6,038,401	76,277,963	218,098,854	23,504,770	10,434,966	119,036,093	316,150,053	68,561,350	838,339,547
2007	10	0.02%	0.68%	8.49%	23.37%	2.88%	1.70%	18.78%	36.37%	7.71%	211,525	5,914,752	74,402,566	204,745,481	25,241,303	14,868,908	164,486,558	318,573,556	67,544,875	875,989,524
2007	11	0.03%	0.78%	10.26%	20.45%	2.13%	2.69%	17.19%	39.10%	7.38%	233,365	5,759,989	76,115,769	151,630,544	15,787,326	19,934,457	127,501,032	289,939,161	54,695,967	741,597,610
2007	12	0.03%	0.61%	8.14%	27.34%	3.21%	1.53%	12.81%	39.37%	6.96%	263,561	5,321,212	71,318,379	239,490,043	28,098,964	13,405,139	112,226,125	344,836,683	60,919,095	875,879,201

1. All growth percents derived from Jan 2005 to Dec 2011.
2. Exceptions: SC4 from Jan 2005 to Feb 2010. SC11_12 from Jan 2005 to Oct 2008. NYPA_OTH was reset to zero.
3. SC4 and NYPA_RE data from Aug Sep 2011 was corrected to a weighted average.

Growth Percent		-3.20%	-2.51%	0.28%	3.92%	4.28%	-20.29%	-1.94%	-1.37%	0.00%										
Year	Month	sc2nd_pct	sc2d_pct	sc3_pct	sc3a_pct	sc4_pct	sc7_pct	sc11_12_pct	nypa_re_pct	nypa_oth_pct	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	TOTAL
2008	1	0.04%	0.69%	9.26%	24.60%	3.08%	1.45%	13.88%	39.39%	7.61%	293,276	5,638,409	76,178,436	202,395,419	25,349,405	11,939,245	114,178,641	324,034,486	62,604,075	822,611,392
2008	2	0.04%	0.66%	9.11%	28.49%	3.04%	1.50%	13.77%	37.82%	5.56%	277,057	5,213,713	71,900,251	224,858,603	24,029,256	11,862,460	108,708,258	298,458,192	43,876,840	789,184,630
2008	3	0.04%	0.60%	8.43%	25.59%	3.09%	1.83%	14.10%	39.81%	6.52%	289,645	4,772,295	67,555,721	205,095,576	24,754,704	14,695,403	113,048,991	319,054,712	52,244,492	801,511,539
2008	4	0.03%	0.60%	9.23%	25.50%	2.97%	1.89%	14.68%	38.18%	6.91%	265,255	4,858,240	74,913,304	207,064,984	24,137,674	15,372,902	119,226,936	310,059,106	56,102,543	812,000,944
2008	5	0.03%	0.53%	8.38%	26.02%	3.09%	1.28%	14.59%	38.50%	7.57%	215,376	4,318,395	67,874,940	210,843,186	25,060,081	10,367,720	118,205,064	311,937,016	61,344,609	810,166,387
2008	6	0.02%	0.57%	8.31%	26.68%	3.11%	1.22%	15.24%	37.78%	7.07%	208,544	4,729,257	69,512,093	223,203,762	26,004,262	10,234,555	127,557,773	316,120,065	59,178,720	836,749,031
2008	7	0.03%	0.69%	9.20%	25.51%	3.39%	1.62%	14.39%	39.57%	5.59%	210,788	5,545,425	73,758,230	204,445,984	27,179,366	12,941,623	115,344,651	317,088,701	44,817,499	801,332,267
2008	8	0.03%	0.60%	9.06%	27.05%	3.17%	1.76%	14.67%	38.95%	4.70%	221,914	5,202,010	78,119,310	233,219,455	27,333,111	15,198,396	126,496,435	335,848,501	40,562,526	862,201,658
2008	9	0.03%	0.67%	9.22%	25.20%	3.24%	1.47%	18.36%	36.70%	5.12%	212,127	5,621,346	77,717,979	212,346,735	27,296,695	12,391,008	154,707,681	309,273,117	43,109,713	842,676,401
2008	10	0.02%	0.67%	8.24%	25.75%	2.97%	1.44%	14.51%	41.69%	4.71%	201,907	5,757,519	70,337,097	219,817,470	25,314,671	12,290,034	123,830,322	355,795,179	40,159,156	853,503,355
2008	11	0.03%	0.74%	10.16%	26.45%	3.58%	1.81%	11.98%	40.46%	4.80%	210,204	5,274,345	72,247,270	187,979,460	25,417,490	12,841,556	85,135,968	287,573,499	34,102,590	710,782,382
2008	12	0.03%	0.67%	9.48%	25.92%	3.18%	2.19%	11.41%	41.49%	5.63%	220,587	4,861,415	68,874,392	188,358,111	23,133,269	15,928,797	82,904,882	301,457,784	40,913,571	726,652,808
2009	1	0.03%	0.64%	9.09%	32.62%	2.82%	2.78%	9.24%	37.93%	4.83%	249,855	5,063,001	71,872,451	257,764,350	22,310,288	22,004,027	73,044,742	299,762,324	38,204,748	790,275,786
2009	2	0.04%	0.71%	10.16%	31.32%	3.35%	2.59%	9.20%	37.83%	4.81%	252,136	4,874,287	70,247,361	216,557,592	23,158,678	17,870,869	63,607,627	261,521,872	33,237,047	691,327,469
2009	3	0.03%	0.67%	9.35%	29.44%	3.36%	1.80%	8.87%	41.16%	5.32%	239,310	4,760,298	66,761,068	210,095,708	23,976,521	12,868,539	63,286,432	293,732,840	37,933,845	713,654,561
2009	4	0.03%	0.64%	10.02%	31.93%	2.99%	1.32%	9.59%	38.47%	5.01%	229,030	4,427,334	69,834,677	222,464,783	20,821,255	9,223,492	66,789,476	268,054,963	34,935,999	696,781,009
2009	5	0.03%	0.57%	9.37%	30.43%	3.65%	1.41%	9.22%	40.32%	4.99%	204,489	4,010,118	65,807,834	213,659,639	25,623,774	9,933,546	64,703,820	283,081,310	35,062,196	702,086,726
2009	6	0.03%	0.68%	9.90%	29.89%	3.62%	1.43%	10.59%	38.96%	4.91%	203,314	4,599,928	67,426,051	203,593,093	24,683,374	9,718,412	72,126,566	265,377,106	33,477,373	681,205,217
2009	7	0.03%	0.66%	8.86%	32.52%	3.72%	1.67%	10.27%	37.31%	4.97%	207,558	4,979,562	66,698,207	244,765,013	27,987,258	12,553,283	77,268,694	280,857,981	37,381,140	752,698,696
2009	8	0.03%	0.69%	9.81%	30.31%	3.82%	1.55%	10.61%	38.26%	4.93%	182,077	5,003,446	71,175,383	219,888,701	27,706,705	11,255,250	76,971,514	277,620,357	35,755,040	725,558,473
2009	9	0.03%	0.75%	10.56%	30.76%	3.52%	1.25%	12.08%	36.75%	4.31%	209,639	5,648,076	79,404,362	231,328,710	26,447,778	9,393,421	90,819,315	276,374,415	32,391,842	752,017,558
2009	10	0.03%	0.74%	10.55%	25.75%	3.64%	0.41%	11.94%	43.12%	3.82%	206,431	5,234,654	75,006,072	183,001,499	25,837,966	2,938,725	84,831,213	306,437,915	27,130,338	710,624,813
2009	11	0.03%	0.67%	8.22%	33.24%	3.90%	0.10%	8.68%	40.90%	4.25%	200,796	4,919,925	60,708,459	245,393,978	28,802,886	720,139	64,069,528	301,928,790	31,402,015	738,146,516
2009	12	0.03%	0.62%	11.14%	29.34%	4.25%	0.09%	9.51%	41.61%	3.41%	241,817	4,541,688	81,155,389	213,649,690	30,918,546	632,725	69,252,277	303,032,731	24,864,877	728,289,740
2010	1	0.04%	0.73%	10.60%	30.10%	4.10%	0.09%	9.34%	40.86%	4.14%	277,519	5,442,222	78,621,531	223,326,088	30,458,009	688,654	69,282,900	303,184,350	30,749,400	742,030,673
2010	2	0.04%	0.75%	10.00%	29.49%	4.88%	0.52%	9.49%	40.71%	4.11%	281,875	5,374,282	71,491,631	210,803,638	34,893,959	3,722,696	67,838,016	290,967,934	29,405,827	714,779,858
2010	3	0.07%	0.63%	7.75%	31.25%	4.61%	0.25%	10.14%	41.46%	3.84%	470,349	4,552,607	55,828,261	225,113,827	33,232,780	1,808,713	73,077,367	298,651,702	27,640,609	720,376,215
2010	4	0.02%	0.63%	10.52%	29.77%	6.84%	0.27%	6.96%	40.78%	4.21%	153,010	4,547,233	75,779,601	214,398,280	49,238,849	1,948,401	50,110,931	293,669,862	30,323,666	720,169,833
2010	5	0.04%	0.57%	11.55%	31.92%	8.40%	0.71%	5.13%	37.68%	4.00%	252,319	4,041,865	82,108,852	226,949,466	59,720,049	5,055,650	36,475,591	267,901,585	28,404,767	710,910,144
2010	6	0.03%	0.69%	11.91%	29.83%	6.57%	0.69%	7.89%	42.28%	0.11%	223,692	4,750,892	81,844,798	205,015,482	45,152,465	4,761,599	54,207,114	290,632,556	763,555	687,352,153
2010	7	0.02%	0.98%	15.96%	38.81%	9.52%	0.86%	7.40%	25.55%	0.90%	118,202	6,186,248	100,984,781	245,569,453	60,272,443	5,470,598	46,820,060	161,662,735	5,709,494	632,794,014
2010	8	0.03%	0.51%	7.51%	28.45%	5.67%	0.55%	5.89%	49.10%	2.28%	323,665	5,236,327	76,442,807	289,581,155	57,760,848	5,647,476	60,003,258	499,768,531	23,168,581	1,017,932,648
2010	9	0.03%	0.67%	9.10%	26.69%	7.02%	0.70%	6.36%	38.54%	10.89%	224,301	5,341,927	72,946,756	213,889,303	56,242,719	5,589,606	50,951,795	308,759,113	87,292,713	801,238,233
2010	10	0.03%	0.70%	10.58%	29.78%	5.50%	0.70%	6.79%	40.65%	5.27%	225,119	5,254,004	79,313,287	223,258,177	41,247,365	5,275,498	50,945,096	304,815,783	39,480,943	749,815,272
2010	11	0.03%	0.68%	8.76%	33.14%	5.20%	0.65%	6.72%	40.82%	3.99%	202,971	4,821,158	62,339,795	235,841,383	36,995,158	4,640,409	47,850,091	290,486,525	28,367,324	711,544,814
2010	12	0.03%	0.69%	9.66%	34.00%	4.86%	0.60%	5.67%	40.38%	4.11%	255,364	5,238,443	72,844,192	256,365,519	36,620,649	4,530,322	42,769,590	304,535,895	30,963,868	754,123,842
2011	1	0.04%	0.70%	8.96%	30.96%	7.10%	0.59%	5.84%	41.74%	4.06%	277,995	5,471,423	69,639,353	240,530,762	55,120,123	4,607,104	45,328,078	324,261,491	31,566,095	776,802,424
2011	2	0.04%	0.72%	9.88%	31.72%	6.92%	0.61%	5.98%	40.30%	3.82%	294,542	5,164,625	70,570,385	226,562,342	49,403,801	4,388,602	42,752,786	287,901,465	27,300,847	714,339,395
2011	3	0.03%	0.61%	8.76%	30.92%	7.53%	0.64%	6.29%	41.25%	3.97%	239,706	4,807,745	69,562,174	245,473,665	59,741,482	5,063,766	49,962,120	327,502,869	31,551,919	793,905,446
2011	4	0.03%	0.65%	9.79%	31.03%	7.05%	0.73%	6.92%	42.53%	1.27%	244,755	4,718,154	71,013,077	224,978,272	51,099,995	5,281,154	50,175,846	308,323,060	9,197,259	725,031,572
2011	5	0.03%	0.56%	8.45%	28.55%	7.98%	0.68%	6.75%	41.38%	5.60%	220,755	4,439,439	66,711,830	225,452,042	63,044,038	5,406,425	53,326,809	326,721,881	44,221,464	789,544,683
2011	6	0.03%	0.63%	9.07%	30.89%	8.21%	0.62%	6.79%	39.47%	4.28%	217,603	5,057,722	72,528,940	246,947,608	65,610,529	4,943,239	54,301,171	315,505,371	34,243,753	799,355,936
2011	7	0.03%	0.77%	9.73%	27.91%	7.39%	0.65%	7.07%	42.76%	3.69%	229,263	5,934,644	74,560,279	213,917,881	56,668,950	5,001,154	54,176,314	327,761,842	28,302,918	766,553,245

1. All growth percents derived from Jan 2005 to Dec 2011.
2. Exceptions: SC4 from Jan 2005 to Feb 2010. SC11_12 from Jan 2005 to Oct 2008. NYPA_OTH was reset to zero.
3. SC4 and NYPA_RE data from Aug Sep 2011 was corrected to a weighted average.

Growth Percent		-3.20%	-2.51%	0.28%	3.92%	4.28%	-20.29%	-1.94%	-1.37%	0.00%										
Year	Month	sc2nd_pct	sc2d_pct	sc3_pct	sc3a_pct	sc4_pct	sc7_pct	sc11_12_pct	nypa_re_pct	nypa_oth_pct	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	TOTAL
2011	8	0.03%	0.64%	9.22%	30.10%	5.26%	0.61%	5.84%	44.42%	3.88%	220,321	5,484,118	79,276,364	258,829,658	**45,237,569**	5,228,355	50,240,862	**381,989,882**	33,376,299	**859,883,428**
2011	9	0.03%	0.77%	10.57%	35.87%	6.28%	0.76%	7.82%	33.66%	4.23%	227,058	5,405,929	74,096,366	251,445,228	**44,048,589**	5,315,698	54,826,307	**235,994,965**	29,669,447	**701,029,587**
2011	10	0.03%	0.67%	10.43%	31.59%	6.21%	0.64%	6.98%	39.37%	4.09%	220,304	5,143,351	79,574,716	241,046,300	47,367,386	4,877,536	53,284,817	300,448,442	31,182,434	763,145,286
2011	11	0.04%	0.89%	11.72%	38.16%	5.56%	0.76%	7.90%	30.25%	4.71%	223,454	5,329,466	69,818,255	227,265,143	33,120,169	4,527,906	47,041,554	180,151,420	28,036,245	595,513,612
2011	12	0.04%	0.71%	9.61%	27.59%	4.61%	0.58%	5.66%	47.97%	3.24%	263,265	5,136,289	69,898,872	200,729,588	33,548,257	4,192,782	41,170,324	348,927,793	23,576,188	727,443,358
2012	1	0.03%	0.68%	8.93%	31.95%	7.35%	0.47%	5.68%	40.88%	4.03%	269,090	5,333,846	69,835,158	249,964,465	57,477,769	3,672,167	44,448,543	319,808,524	31,566,095	782,375,657
2012	2	0.04%	0.70%	9.83%	32.71%	7.16%	0.49%	5.82%	39.45%	3.79%	285,107	5,034,763	70,768,808	235,448,198	51,516,944	3,498,007	41,923,221	283,947,818	27,300,847	719,723,712
2012	3	0.04%	0.73%	9.98%	30.49%	5.06%	0.42%	9.26%	39.94%	4.09%	272,846	5,239,148	71,692,644	219,071,432	36,386,474	2,967,235	66,521,703	286,972,176	29,405,827	718,529,485
2012	4	0.03%	0.63%	9.76%	32.03%	7.30%	0.58%	6.74%	41.66%	1.26%	236,915	4,599,518	71,212,744	233,802,000	53,285,689	4,209,430	49,202,246	304,088,970	9,197,259	729,834,771
2012	5	0.03%	0.54%	8.42%	29.49%	8.27%	0.55%	6.58%	40.55%	5.57%	213,684	4,327,811	66,899,404	234,294,352	65,740,613	4,309,279	52,292,068	322,235,127	44,221,464	794,533,801
2012	6	0.03%	0.61%	9.03%	31.86%	8.49%	0.49%	6.61%	38.63%	4.25%	210,633	4,930,548	72,732,870	256,632,982	68,416,880	3,940,089	53,247,524	311,172,649	34,243,753	805,527,926
2012	7	0.03%	0.75%	9.70%	28.84%	7.67%	0.52%	6.89%	41.93%	3.67%	221,919	5,785,420	74,769,920	222,307,817	59,092,844	3,986,251	53,125,089	323,260,806	28,302,918	770,852,985
2012	8	0.02%	0.62%	9.19%	31.10%	5.45%	0.49%	5.70%	43.56%	3.86%	213,264	5,346,222	79,499,265	268,981,050	47,172,510	4,167,345	49,266,000	376,744,152	33,376,299	864,766,107
2012	9	0.03%	0.74%	10.50%	36.93%	6.49%	0.60%	7.60%	32.90%	4.19%	219,785	5,269,999	74,304,703	261,307,000	45,932,674	4,236,964	53,762,470	232,754,131	29,669,447	707,457,172
2012	10	0.03%	0.65%	10.38%	32.59%	6.43%	0.51%	6.80%	38.55%	4.06%	213,247	5,014,023	79,798,456	250,500,222	49,393,425	3,887,719	52,250,891	296,322,491	31,182,434	768,562,910
2012	11	0.04%	0.86%	11.64%	39.26%	5.74%	0.60%	7.67%	29.53%	4.66%	216,296	5,195,459	70,014,563	236,178,563	34,536,814	3,609,041	46,128,771	177,677,465	28,036,245	601,593,217
2012	12	0.03%	0.69%	9.60%	28.56%	4.79%	0.46%	5.53%	47.12%	3.23%	254,832	5,007,139	70,095,407	208,602,274	34,983,212	3,341,925	40,371,465	344,136,093	23,576,188	730,368,535
2013	1	0.03%	0.66%	8.88%	32.93%	7.60%	0.38%	5.53%	39.99%	4.00%	260,471	5,199,729	70,031,513	259,768,160	59,936,259	2,926,961	43,586,073	315,416,709	31,566,095	788,691,970
2013	2	0.04%	0.68%	9.78%	33.71%	7.40%	0.39%	5.66%	38.58%	3.76%	275,975	4,908,165	70,967,788	244,682,561	53,720,472	2,788,143	41,109,753	280,048,464	27,300,847	725,802,168
2013	3	0.04%	0.71%	9.94%	31.49%	5.25%	0.33%	9.02%	39.15%	4.07%	264,106	5,107,411	71,894,222	227,663,492	37,942,828	2,365,083	65,230,931	283,031,290	29,405,827	722,905,192
2013	4	0.03%	0.61%	9.71%	33.04%	7.56%	0.46%	6.56%	40.78%	1.25%	229,326	4,483,865	71,412,973	242,971,798	55,564,871	3,355,194	48,247,537	299,913,025	9,197,259	735,375,850
2013	5	0.03%	0.53%	8.38%	30.42%	8.57%	0.44%	6.41%	39.71%	5.53%	206,839	4,218,990	67,087,505	243,483,460	68,552,528	3,434,781	51,277,405	317,809,987	44,221,464	800,292,959
2013	6	0.03%	0.59%	8.98%	32.82%	8.78%	0.39%	6.43%	37.77%	4.21%	203,886	4,806,571	72,937,373	266,698,219	71,343,267	3,140,512	52,214,321	306,899,427	34,243,753	812,487,328
2013	7	0.03%	0.73%	9.66%	29.77%	7.94%	0.42%	6.71%	41.09%	3.65%	214,811	5,639,948	74,980,151	231,026,809	61,620,415	3,177,306	52,094,263	318,821,582	28,302,918	775,878,202
2013	8	0.02%	0.60%	9.16%	32.11%	5.65%	0.39%	5.55%	42.68%	3.83%	206,433	5,211,793	79,722,793	279,530,583	49,190,214	3,321,650	48,310,054	371,570,460	33,376,299	870,440,279
2013	9	0.03%	0.72%	10.43%	38.00%	6.70%	0.48%	7.38%	32.12%	4.15%	212,745	5,137,487	74,513,625	271,555,554	47,897,347	3,377,141	52,719,276	229,557,802	29,669,447	714,640,423
2013	10	0.03%	0.63%	10.33%	33.60%	6.65%	0.41%	6.61%	37.72%	4.02%	206,417	4,887,948	80,022,825	260,324,930	51,506,124	3,098,770	51,237,027	292,253,201	31,182,434	774,719,677
2013	11	0.03%	0.83%	11.54%	40.34%	5.92%	0.48%	7.44%	28.80%	4.61%	209,368	5,064,821	70,211,423	245,441,571	36,014,053	2,876,645	45,233,699	175,237,484	28,036,245	608,325,309
2013	12	0.03%	0.67%	9.58%	29.54%	4.97%	0.37%	5.39%	46.24%	3.21%	246,670	4,881,236	70,292,494	216,783,730	36,479,545	2,663,736	39,588,106	339,410,195	23,576,188	733,921,901
2014	1	0.03%	0.64%	8.83%	33.92%	7.85%	0.30%	5.37%	39.09%	3.97%	252,128	5,068,984	70,228,421	269,956,360	62,499,905	2,332,982	42,740,339	311,085,204	31,566,095	795,730,418
2014	2	0.04%	0.65%	9.71%	34.71%	7.65%	0.31%	5.50%	37.70%	3.73%	267,135	4,784,751	71,167,328	254,279,098	56,018,251	2,222,335	40,312,068	276,202,659	27,300,847	732,554,473
2014	3	0.04%	0.68%	9.90%	32.50%	5.44%	0.27%	8.79%	38.35%	4.04%	255,647	4,978,988	72,096,367	236,592,536	39,565,752	1,885,128	63,965,206	279,144,523	29,405,827	727,889,973
2014	4	0.03%	0.59%	9.66%	34.04%	7.81%	0.37%	6.38%	39.88%	1.24%	221,981	4,371,120	71,613,765	252,501,239	57,941,541	2,674,312	47,311,353	295,794,427	9,197,259	741,626,997
2014	5	0.02%	0.51%	8.34%	31.36%	8.86%	0.35%	6.23%	38.85%	5.48%	200,214	4,112,905	67,276,135	253,032,968	71,484,717	2,737,748	50,282,430	313,445,617	44,221,464	806,794,198
2014	6	0.02%	0.57%	8.92%	33.79%	9.07%	0.31%	6.24%	36.90%	4.17%	197,355	4,685,711	73,142,451	277,158,218	74,394,824	2,503,196	51,201,167	302,684,887	34,243,753	820,211,563
2014	7	0.03%	0.70%	9.62%	30.71%	8.22%	0.33%	6.54%	40.23%	3.62%	207,930	5,498,133	75,190,972	240,087,763	64,256,098	2,532,524	51,083,438	314,443,319	28,302,918	781,603,095
2014	8	0.02%	0.58%	9.12%	33.13%	5.85%	0.31%	5.40%	41.79%	3.81%	199,820	5,080,745	79,946,950	290,493,872	51,294,221	2,647,576	47,372,657	366,467,816	33,376,299	876,879,956
2014	9	0.03%	0.69%	10.34%	39.05%	6.91%	0.38%	7.15%	31.33%	4.11%	205,930	5,008,307	74,723,135	282,206,060	49,946,054	2,691,805	51,696,323	226,405,367	29,669,447	722,552,429
2014	10	0.03%	0.61%	10.27%	34.61%	6.87%	0.32%	6.43%	36.88%	3.99%	199,805	4,765,042	80,247,826	270,534,967	53,709,189	2,469,925	50,242,835	288,239,793	31,182,434	781,591,817
2014	11	0.03%	0.80%	11.43%	41.42%	6.10%	0.38%	7.20%	28.07%	4.55%	202,662	4,937,468	70,408,836	255,067,877	37,554,478	2,292,877	44,355,995	172,831,011	28,036,245	615,687,448
2014	12	0.03%	0.64%	9.55%	30.52%	5.15%	0.29%	5.26%	45.35%	3.19%	238,768	4,758,500	70,490,135	225,286,066	38,039,880	2,123,174	38,819,948	334,749,197	23,576,188	738,081,856
2015	1	0.03%	0.61%	8.76%	34.91%	8.11%	0.24%	5.22%	38.18%	3.93%	244,052	4,941,526	70,425,882	280,544,146	65,173,206	1,859,541	41,911,016	306,813,183	31,566,095	803,478,646
2015	2	0.03%	0.63%	9.64%	35.71%	7.89%	0.25%	5.34%	36.81%	3.69%	258,578	4,664,441	71,367,430	264,252,015	58,414,313	1,771,348	39,529,863	272,409,667	27,300,847	739,968,502

1. All growth percents derived from Jan 2005 to Dec 2011.
2. Exceptions: SC4 from Jan 2005 to Feb 2010. SC11_12 from Jan 2005 to Oct 2008. NYPA_OTH was reset to zero.
3. SC4 and NYPA_RE data from Aug Sep 2011 was corrected to a weighted average.

Growth Percent		-3.20%	-2.51%	0.28%	3.92%	4.28%	-20.29%	-1.94%	-1.37%	0.00%										
Year	Month	sc2nd_pct	sc2d_pct	sc3_pct	sc3a_pct	sc4_pct	sc7_pct	sc11_12_pct	nypa_re_pct	nypa_oth_pct	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	TOTAL
2015	3	0.03%	0.66%	9.86%	33.52%	5.62%	0.21%	8.55%	37.53%	4.01%	247,458	4,853,793	72,299,080	245,871,780	41,258,093	1,502,572	62,724,040	275,311,131	29,405,827	733,473,774
2015	4	0.03%	0.57%	9.59%	35.05%	8.07%	0.29%	6.20%	38.97%	1.23%	214,870	4,261,210	71,815,121	262,404,428	60,419,867	2,131,604	46,393,334	291,732,389	9,197,259	748,570,083
2015	5	0.02%	0.49%	8.29%	32.30%	9.16%	0.28%	6.06%	37.97%	5.43%	193,801	4,009,488	67,465,295	262,957,012	74,542,324	2,182,167	49,306,762	309,141,181	44,221,464	814,019,492
2015	6	0.02%	0.55%	8.85%	34.75%	9.36%	0.25%	6.06%	36.02%	4.13%	191,034	4,567,891	73,348,105	288,028,463	77,576,904	1,995,213	50,207,671	298,528,224	34,243,753	828,687,259
2015	7	0.03%	0.68%	9.57%	31.66%	8.50%	0.26%	6.36%	39.35%	3.59%	201,270	5,359,885	75,402,387	249,504,091	67,004,516	2,018,589	50,092,227	310,125,182	28,302,918	788,011,064
2015	8	0.02%	0.56%	9.07%	34.14%	6.05%	0.25%	5.25%	40.88%	3.78%	193,420	4,952,991	80,171,737	301,887,146	53,488,222	2,110,293	46,453,449	361,435,245	33,376,299	884,068,802
2015	9	0.03%	0.67%	10.25%	40.11%	7.12%	0.30%	6.93%	30.54%	4.06%	199,334	4,882,375	74,933,234	293,274,282	52,082,391	2,145,547	50,693,220	223,296,224	29,669,447	731,176,054
2015	10	0.02%	0.59%	10.20%	35.62%	7.10%	0.26%	6.24%	36.02%	3.95%	193,405	4,645,227	80,473,458	281,145,446	56,006,486	1,968,694	49,267,935	284,281,499	31,182,434	789,164,584
2015	11	0.03%	0.77%	11.32%	42.50%	6.28%	0.30%	6.97%	27.33%	4.49%	196,170	4,813,317	70,606,805	265,071,731	39,160,791	1,827,575	43,495,321	170,457,585	28,036,245	623,665,539
2015	12	0.03%	0.62%	9.52%	31.51%	5.34%	0.24%	5.12%	44.44%	3.17%	231,120	4,638,849	70,688,332	234,121,866	39,666,955	1,692,310	38,066,695	330,152,206	23,576,188	742,834,522
2016	1	0.03%	0.59%	8.70%	35.91%	8.37%	0.19%	5.06%	37.27%	3.89%	236,234	4,817,273	70,623,899	291,547,187	67,960,851	1,482,177	41,097,784	302,599,827	31,566,095	811,931,329
2016	2	0.03%	0.61%	9.57%	36.71%	8.14%	0.20%	5.18%	35.91%	3.65%	250,296	4,547,155	71,568,093	274,616,074	60,912,861	1,411,882	38,762,834	268,668,763	27,300,847	748,038,805
2016	3	0.03%	0.64%	9.80%	34.54%	5.82%	0.17%	8.32%	36.71%	3.98%	239,532	4,731,746	72,502,364	255,514,959	43,022,821	1,197,649	61,506,957	271,530,382	29,405,827	739,652,237

1. All growth percents derived from Jan 2005 to Dec 2011.
2. Exceptions: SC4 from Jan 2005 to Feb 2010. SC11_12 from Jan 2005 to Oct 2008. NYPA_OTH was reset to zero.
3. SC4 and NYPA_RE data from Aug Sep 2011 was corrected to a weighted average.

		ACTUAL												
Year	Month	SC1	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	SL	BORDERS	TOTAL
2012	1	1,132	61	380	541	400	57	30	78	318	31	21	0.7	3,050
2012	2	1,058	61	364	529	352	51	28	77	282	27	21	0.5	2,851
2012	3	1,040	61	371	554	385	41	28	108	317	33	16	0.4	2,952
2012	4	926	55	351	513	357	35	24	103	294	28	16	0.6	2,701
2012	5	817	47	328	517	377	56	22	89	313	33	14	0.4	2,613
2012	6	821	46	347	541	403	68	22	70	289	31	14	0.4	2,653
2012	7	1,019	52	399	588	358	52	30	91	314	1	13	0.4	2,917
2012	8	1,070	57	418	622	463	76	26	88	192	7	14	0.5	3,034
2012	9	953	51	380	531	376	44	32	73	360	17	17	0.5	2,833
2012	10	840	47	344	522	347	55	16	79	284	82	17	0.6	2,634
2012	11	846	47	325	487	303	34	36	70	234	31	19	0.5	2,432
2012	12	1,033	54	352	524	358	39	26	79	287	28	22	0.3	2,803
2013	1	1,161	62	389	555	408	59	30	74	307	31	21	0.7	3,099
2013	2	1,066	61	367	535	357	52	29	73	273	27	21	0.6	2,859
2013	3	1,034	60	369	554	389	42	28	103	307	32	16	0.4	2,934
2013	4	937	55	356	521	363	36	24	99	285	27	16	0.6	2,719
2013	5	801	46	324	513	380	57	22	84	303	32	14	0.4	2,576
2013	6	827	46	350	546	409	70	22	67	280	31	14	0.4	2,662
2013	7	1,025	52	402	594	365	53	30	87	305	1	13	0.4	2,927
2013	8	1,076	57	421	628	470	78	26	84	185	7	14	0.5	3,046
2013	9	958	51	384	538	384	46	32	69	351	17	17	0.5	2,848
2013	10	846	47	349	530	354	57	15	76	277	81	17	0.6	2,651
2013	11	852	48	329	495	310	35	37	67	228	31	19	0.5	2,451
2013	12	1,040	54	357	534	367	40	26	76	280	28	22	0.3	2,825

		ACTUAL												
Year	Month	SC1	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	SL	BORDERS	TOTAL
2014	1	1,168	63	395	566	418	61	31	71	300	31	21	0.7	3,125
2014	2	1,073	62	374	547	366	54	29	70	267	27	21	0.6	2,890
2014	3	1,042	61	377	567	401	44	29	99	302	32	16	0.4	2,968
2014	4	946	56	364	535	374	37	25	96	280	27	16	0.6	2,757
2014	5	809	46	333	528	393	60	23	81	298	32	14	0.4	2,617
2014	6	835	47	359	562	422	73	22	64	275	31	14	0.4	2,705
2014	7	1,033	53	413	611	377	56	30	84	301	1	13	0.4	2,973
2014	8	1,084	58	432	645	484	81	26	81	181	7	14	0.5	3,093
2014	9	967	52	395	555	398	48	33	67	347	17	17	0.5	2,897
2014	10	855	48	360	549	368	60	15	73	274	81	17	0.6	2,702
2014	11	860	49	341	514	322	37	39	65	226	31	19	0.5	2,503
2014	12	1,049	56	370	553	381	42	27	74	277	28	22	0.3	2,879
2015	1	1,176	64	408	585	433	63	32	69	296	31	21	0.7	3,180
2015	2	1,082	63	387	567	380	57	31	67	263	27	21	0.6	2,944
2015	3	1,050	62	389	587	416	46	30	97	298	32	16	0.4	3,023
2015	4	954	57	377	555	389	39	27	93	276	27	16	0.6	2,812
2015	5	818	48	345	548	407	62	24	79	294	32	14	0.4	2,671
2015	6	844	48	372	582	437	76	23	62	270	31	14	0.4	2,759
2015	7	1,042	54	426	631	390	58	31	82	296	1	13	0.4	3,026
2015	8	1,093	59	445	663	498	83	27	78	177	7	14	0.5	3,146
2015	9	976	54	407	574	411	50	35	65	342	17	17	0.5	2,948
2015	10	864	49	372	568	380	62	16	71	270	81	17	0.6	2,751
2015	11	869	50	352	531	334	38	41	63	223	31	19	0.5	2,550
2015	12	1,057	57	380	571	393	44	28	71	272	28	22	0.3	2,924
2016	1	1,185	65	418	601	445	66	33	66	290	31	21	0.7	3,223
2016	2	1,090	64	396	582	391	59	32	65	258	26	21	0.6	2,985
2016	3	1,059	63	398	602	428	47	31	93	292	32	16	0.4	3,062

		UPDATED												
Year	Month	SC1	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	SL	BORDERS	TOTAL
2012	1	1,132	61	380	541	400	57	30	77	318	31	21	0.7	3,050
2012	2	1,058	61	364	529	352	51	28	77	282	27	21	0.5	2,851
2012	3	1,040	61	371	553	385	41	28	108	317	32	16	0.4	2,952
2012	4	926	55	351	527	355	53	27	81	301	9	16	0.6	2,701
2012	5	817	47	328	501	368	65	25	88	318	44	14	0.4	2,613
2012	6	821	46	347	521	395	67	21	83	304	33	14	0.4	2,653
2012	7	1,019	52	400	571	343	58	29	85	318	28	13	0.4	2,917
2012	8	1,070	57	415	571	397	42	25	77	336	30	14	0.5	3,034
2012	9	953	51	382	553	433	49	33	86	246	31	17	0.5	2,833
2012	10	840	47	345	532	385	49	15	84	290	31	17	0.6	2,634
2012	11	846	47	326	493	353	34	37	76	173	27	19	0.5	2,432
2012	12	1,033	54	352	530	318	35	26	72	339	23	22	0.3	2,803
2013	1	1,161	62	389	555	409	59	30	74	308	31	21	0.7	3,099
2013	2	1,066	61	367	535	357	52	29	73	273	27	21	0.6	2,859
2013	3	1,034	60	369	553	390	42	28	102	308	32	16	0.4	2,934
2013	4	937	55	356	535	361	54	27	77	292	9	16	0.6	2,719
2013	5	801	46	323	496	371	67	24	82	309	43	14	0.4	2,576
2013	6	827	46	350	527	402	69	21	79	295	33	14	0.4	2,662
2013	7	1,025	52	403	577	350	60	29	81	309	27	13	0.4	2,927
2013	8	1,076	57	419	578	404	44	25	73	328	29	14	0.5	3,046
2013	9	958	51	385	559	441	50	33	82	239	31	17	0.5	2,848
2013	10	846	47	349	540	393	50	15	80	283	30	17	0.6	2,651
2013	11	852	48	330	501	361	35	37	72	169	27	19	0.5	2,451
2013	12	1,040	54	357	540	326	36	26	69	332	23	22	0.3	2,825

		UPDATED												
Year	Month	SC1	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	SL	BORDERS	TOTAL
2014	1	1,168	63	396	565	419	61	31	71	301	31	21	0.7	3,125
2014	2	1,073	62	374	546	367	54	29	70	267	26	21	0.6	2,890
2014	3	1,042	61	377	566	401	43	29	99	302	32	16	0.4	2,968
2014	4	946	56	364	548	373	56	27	74	287	9	16	0.6	2,757
2014	5	809	46	332	511	383	70	24	80	304	43	14	0.4	2,617
2014	6	835	47	360	542	415	71	21	76	290	33	14	0.4	2,705
2014	7	1,033	53	414	594	362	63	30	78	305	27	13	0.4	2,973
2014	8	1,084	58	430	594	418	45	25	71	323	29	14	0.5	3,093
2014	9	967	52	397	576	455	52	34	80	235	31	17	0.5	2,897
2014	10	855	48	360	558	408	52	15	77	279	30	17	0.6	2,702
2014	11	860	49	342	519	374	36	39	70	166	27	19	0.5	2,503
2014	12	1,049	56	370	559	339	38	27	67	329	23	22	0.3	2,879
2015	1	1,176	64	408	584	434	63	32	68	297	31	21	0.7	3,180
2015	2	1,082	63	387	566	381	57	30	67	264	26	21	0.6	2,944
2015	3	1,050	62	390	586	416	45	30	96	299	32	16	0.4	3,023
2015	4	954	57	377	569	387	59	28	72	283	9	16	0.6	2,812
2015	5	818	48	345	531	398	73	25	77	300	43	14	0.4	2,671
2015	6	844	48	372	562	430	74	22	74	285	33	14	0.4	2,759
2015	7	1,042	54	427	614	375	65	31	76	301	27	13	0.4	3,026
2015	8	1,093	59	443	613	432	47	26	68	319	29	14	0.5	3,146
2015	9	976	54	408	594	470	54	35	77	231	31	17	0.5	2,948
2015	10	864	49	372	577	422	54	15	75	275	30	17	0.6	2,751
2015	11	869	50	353	536	386	38	41	68	163	27	19	0.5	2,550
2015	12	1,057	57	381	577	351	39	28	65	324	23	22	0.3	2,924
2016	1	1,185	65	418	599	446	65	33	66	291	30	21	0.7	3,223
2016	2	1,090	64	396	581	392	59	32	65	259	26	21	0.6	2,985
2016	3	1,059	63	398	600	429	47	31	93	293	32	16	0.4	3,062

		DIFFERENCE												
Year	Month	SC1	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	SL	BORDERS	TOTAL
2012	1	0	(0)	0	(0)	0	(0)	(0)	(0)	0	(0)	0	0	-
2012	2	0	(0)	0	(0)	0	(0)	(0)	(0)	0	(0)	0	0	-
2012	3	0	(0)	0	(0)	0	(0)	(0)	(0)	0	(0)	0	0	-
2012	4	0	(0)	0	14	(2)	18	3	(23)	8	(18)	0	0	-
2012	5	0	0	(1)	(16)	(9)	9	3	(2)	5	11	0	0	-
2012	6	0	(0)	1	(20)	(8)	(2)	(1)	13	14	2	0	0	-
2012	7	0	(0)	1	(17)	(15)	6	(0)	(6)	4	27	0	0	-
2012	8	0	0	(2)	(51)	(67)	(34)	(2)	(11)	144	23	0	0	-
2012	9	0	0	2	22	56	4	1	14	(114)	14	0	0	-
2012	10	0	0	0	10	38	(6)	(0)	4	6	(51)	0	0	-
2012	11	0	0	1	6	50	0	0	6	(60)	(3)	0	0	-
2012	12	0	0	0	6	(40)	(4)	(0)	(7)	52	(5)	0	0	-
2013	1	0	(0)	0	(1)	0	(0)	(0)	(0)	1	(0)	0	0	-
2013	2	0	(0)	0	(1)	0	(0)	(0)	(0)	0	(0)	0	0	-
2013	3	0	(0)	0	(1)	0	(0)	(0)	(0)	1	(0)	0	0	-
2013	4	0	(0)	0	14	(2)	19	2	(22)	7	(18)	0	0	-
2013	5	0	0	(0)	(17)	(9)	10	2	(2)	6	11	0	0	-
2013	6	0	(0)	0	(20)	(8)	(2)	(1)	12	14	2	0	0	-
2013	7	0	(0)	1	(17)	(15)	7	(0)	(6)	4	27	0	0	-
2013	8	0	0	(2)	(51)	(66)	(34)	(1)	(11)	142	23	0	0	-
2013	9	0	0	2	21	57	4	1	13	(112)	14	0	0	-
2013	10	0	0	0	9	39	(7)	(0)	4	6	(51)	0	0	-
2013	11	0	0	1	6	51	0	0	6	(60)	(4)	0	0	-
2013	12	0	0	0	6	(41)	(4)	(0)	(7)	52	(5)	0	0	-

		DIFFERENCE												
Year	Month	SC1	SC2ND	SC2D	SC3	SC3A	SC4	SC7	SC11_12	NYPA_R_E	NYPA_OTHER	SL	BORDERS	TOTAL
2014	1	0	(0)	0	(1)	0	(0)	(0)	(0)	1	(0)	0	0	-
2014	2	0	(0)	0	(1)	0	(0)	(0)	(0)	1	(0)	0	0	-
2014	3	0	(0)	0	(1)	1	(0)	(0)	(0)	1	(0)	0	0	-
2014	4	0	(0)	0	14	(2)	19	2	(22)	7	(18)	0	0	-
2014	5	0	0	(0)	(17)	(9)	10	2	(1)	6	11	0	0	-
2014	6	0	(0)	0	(20)	(7)	(2)	(0)	12	15	2	0	0	-
2014	7	0	(0)	1	(17)	(15)	7	(0)	(6)	5	27	0	0	-
2014	8	0	0	(2)	(50)	(66)	(35)	(1)	(10)	142	23	0	0	-
2014	9	0	0	2	21	58	4	1	13	(112)	14	0	0	-
2014	10	0	0	0	9	40	(7)	(0)	4	5	(51)	0	0	-
2014	11	0	0	1	5	52	(0)	0	5	(60)	(4)	0	0	-
2014	12	0	0	0	6	(42)	(4)	(0)	(7)	52	(5)	0	0	-
2015	1	0	(0)	0	(1)	1	(0)	(0)	(0)	1	(0)	0	0	-
2015	2	0	(0)	0	(1)	1	(0)	(0)	(0)	1	(0)	0	0	-
2015	3	0	(0)	0	(1)	1	(0)	(0)	(0)	1	(0)	0	0	-
2015	4	0	(0)	0	13	(2)	20	1	(21)	7	(18)	0	0	-
2015	5	0	0	(0)	(17)	(9)	10	1	(1)	6	11	0	0	-
2015	6	0	(0)	0	(20)	(7)	(2)	(0)	12	15	2	0	0	-
2015	7	0	(0)	1	(18)	(16)	7	(0)	(6)	5	27	0	0	-
2015	8	0	0	(2)	(50)	(66)	(36)	(1)	(10)	142	23	0	0	-
2015	9	0	(0)	2	20	59	4	1	12	(111)	14	0	0	-
2015	10	0	0	0	8	41	(8)	(0)	4	5	(51)	0	0	-
2015	11	0	0	1	5	53	(0)	0	5	(59)	(4)	0	0	-
2015	12	0	0	0	6	(42)	(5)	(0)	(7)	53	(5)	0	0	-
2016	1	0	(0)	0	(1)	1	(0)	(0)	(0)	1	(0)	0	0	-
2016	2	0	(0)	0	(1)	1	(0)	(0)	(0)	1	(0)	0	0	-
2016	3	0	(0)	0	(2)	1	(0)	(0)	(0)	1	(0)	0	0	-

C&U Testimony of
Elizabeth D. Arangio

Before the New York State Public Service Commission

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Corrections and Updates Testimony

of

Elizabeth D. Arangio

Q. Please state your full name and business address.

A. My name is Elizabeth D. Arangio. My business address is 40 Sylvan Road, Waltham, MA 02451.

Q. Are you the same Elizabeth D. Arangio who previously submitted prepared testimony in this proceeding?

A. Yes.

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

A. The purpose of my testimony is to provide an update to Exhibit __ (EDA-2). In the table, listed under Winter Peaking Service, the Cogen 2 peaking supply service shows an expiration date of April 30, 2012. This contract has been extended and the new expiration date is April 30, 2017. Attached is Exhibit __ (EDA-2CU), which sets forth the current status of the contract. The extension of this contract has no impact on the Company's forecast of gas costs for the Rate Year ending March 31, 2014 or the Data Years ending March 31, 2015 and March 31, 2016.

Q. Does this conclude your corrections and updates testimony?

A. Yes.

Exhibit __ (EDA-2CU)

Niagara Mohawk Power Corporation Pipeline Transportation Contracts

Niagara Mohawk Power Corporation
2013/14 Capacity Portfolio
Pipeline Transportation Contracts

Pipeline Company Name	Contract Number	Rate Schedule	Daily Quanity (DT)	Expiration Date
Flowing Gas To Citygate				
Dominion Transmission Inc.	100001	FTNN	340,122	03/31/2016
Iroquois Gas Transmission	73005	RTS	51,596	10/31/2016
Dominion Transmission Inc.	200558	FT	17,700	03/31/2025
Dominion Transmission Inc.	200290	FT	10,000	03/31/2016
Upstream Pipeline Support 1/				
Transcontinental Gas Pipeline	1006514	FT	8,306	10/31/2013
Texas Gas Transmission	T003945	FT	52,194	10/31/2013
Tennessee Gas Pipeline	65075	FT	14,000	10/31/2014
Winter Peaking Service				
Cogen 1			25,500	08/31/2014
Cogen 2			14,000	04/30/2017
Industrial 1			3,000	Evergreen

1/ Capacity used to deliver gas to pipelines that deliver to the citygate.

C&U Testimony of
Management Audit Panel

Before the New York State Public Service Commission

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Corrections and Updates Testimony

of the

Management Audit Panel

Q. Please identify the members of the Management Audit Panel.

A. The Panel consists of Peter T. Zschokke, Director of Regulatory Strategy and Margaret M. Janzen, Director of Wholesale Electric Supply.

Q. Is this the same panel that provided direct testimony and sponsored associated exhibits in the Company's April 27, 2012 filing in this proceeding?

A. Yes, this is the same Panel that submitted direct testimony and sponsored the following two exhibits:

Exhibit __ (MAP-1) – Table summarizing the Management Audit recommendations and their implementation status as of March 2012; and

Exhibit __ (MAP-2) – January 31, 2012 Management Audit Implementation Plan Update Report.

Q. What is the purpose of the Panel's corrections and updates testimony?

A. The purpose of the Panel's testimony is to identify and explain certain corrections and/or updates to the Panel's direct testimony and exhibits in the April 27, 2012 filing.

Q. Please describe the corrections and updates to the Panel's direct testimony and associated exhibits submitted on April 27, 2012.

A. The Panel has two corrections to Exhibit __ (MAP-1). First, the Panel is correcting a typographical error on page 9 of that exhibit so that the Evidence Submitted date for the KAT-13 Supplement associated with Recommendation V-2 properly reflects the date April 26, 2011. Second, the March 2012 Status for Recommendation X-1 reflected on page 25 of that exhibit should be changed from "Implemented" to "Pending Review." As a result of this change, and to correctly reflect the total count of Implemented and Pending Review recommendations as of March 31, 2012, the Panel amends its direct testimony at page 6, lines 19-20 as follows: "As of March 31, 2012, the Company identified 16 recommendations as "Implemented," 17 recommendations as "Pending Review" and 11 recommendations as "In Progress."

Q. Is the Panel sponsoring any exhibits as part of its corrections and updates testimony?

A. Yes. In addition to the corrected Exhibit __ (MAP-1CU), the Panel is sponsoring the following supplemental exhibit:

Exhibit __ (MAP-3CU) - May 31, 2012 Management Audit Implementation Plan Update Report.

Q. Please describe why Exhibit __ (MAP-3CU) is being provided.

A. At the time of the April 27, 2012 filing, the January 31, 2012 Management Audit Implementation Plan Update Report reflected in Exhibit __ (MAP-2) was the Company's latest formal report to the Commission on the status of its Management Audit implementation efforts. Since then, the Company has submitted a subsequent report on its implementation efforts. Thus, the Company is providing the Commission with this more current update as a supplemental exhibit.

Q. Does this conclude the Panel's corrections and updates testimony?

A. Yes.

Exhibits of
Management Audit Panel

List of Exhibits

Exhibit __ (MAP-1CU)	Summary of Implementation Status, Costs, and Benefits
Exhibit __ (MAP-3CU)	May 31, 2012 Management Audit Implementation Plan Update Report

Exhibit __ (MAP-1CU)

Exhibit __ (MAP-1CU)

Summary of Implementation Status, Costs, and Benefits

Niagara Mohawk Power Corporation d/b/a National Grid
Comprehensive Management Audit Recommendations – Case 08-E-0827
Summary of Implementation Status, Costs, and Benefits

Rec. No.	Recommendation	March 2012 Status	Evidence Submitted	Summary of Implementation Actions / Deliverables	Summary of Implementation Costs and Benefits	Rate Case Panel or Witness
III-1	Revise the corporate vision and objectives statements to more explicitly articulate the company's obligation to provide low cost, reliable and safe electric service to its customers. The revised statement should reflect the need to mitigate volatility and produce lower costs relative to some benchmark and could include a reflection of the total bill rather than the unit price. (Refers to Finding III-1)	Implemented	KAT-1 (06/11/10)	A new vision statement has been adopted for Niagara Mohawk Power Corporation's electric business: "We will be the foremost electric company, delivering unparalleled safety, reliability and efficiency, vital to the well-being of our customers and communities. We are committed to being an innovative leader in energy efficiency and management, and to mitigate total energy costs in the most reasonable manner, through minimizing energy cost volatility and achieving delivery performance efficiency."	Nominal incremental implementation costs. The primary benefits are to more clearly communicate and elevate the visibility of the Company's focus on providing safe, reliable, and efficient service and mitigating price volatility (including supply costs) for the benefit of customers.	Kenneth D. Daly
III-2	Consolidate the management of U.S. electric transmission and electric distribution into one LOB to provide greater visibility over NMPC electric transmission and distribution operations while maintaining NG's ability to achieve synergies and economies of scale. (Refers to Finding III-4)	Implemented	KAT-2 (06/11/10)	In 2010 National Grid consolidated U.S electric transmission and distribution into one LOB. Beginning in January 2011, National Grid restructured its entire US Gas and Electric businesses and moved away from a line of business model to a jurisdictional model that designated jurisdictional presidents with responsibility and accountability by operating company. The jurisdictional model	Nominal incremental implementation costs. National Grid estimated achievable annual savings of $11 million from consolidation of the LOBs and any achieved savings are reflected in the Historic Test Year. These savings are a combination of capital and O&M savings for the total US Electric T&D business. The primary benefits to Niagara Mohawk's electric business from the organizational realignment include improved visibility, a clear line of	Electric Infrastructure and Operations Panel

Niagara Mohawk Power Corporation d/b/a National Grid
Comprehensive Management Audit Recommendations – Case 08-E-0827
Summary of Implementation Status, Costs, and Benefits

Rec. No.	Recommendation	March 2012 Status	Evidence Submitted	Summary of Implementation Actions / Deliverables	Summary of Implementation Costs and Benefits	Rate Case Panel or Witness
				is designed to facilitate greater visibility over the operations of each operating company. For Niagara Mohawk, this includes greater visibility over transmission and distribution operations.	responsibility, and greater coordination to drive solutions tailored to the needs of the Company's customers and other stakeholders. For example, improved investment plan coordination and cost management, and greater reflection of external stakeholder input into T&D system planning. The jurisdictional model also enables the Company to continue to benefit from the economies of scale and capabilities that National Grid's combined shared services function delivers.	
III-3	Prepare a business plan document for NMPC electric operations that combines strategic and operating activities with capital and O&M budgets, and ensures that the resulting plan documents the scope of business planning for the benefit of NMPC electric ratepayers. (Refers to Finding III-14)	Pending Review	KAT-3 (06/11/10) KAT-3 Supplement (06/08/11)	The Company prepares an annual business plan.	Nominal incremental implementation costs. The primary benefits include a more formal focus on Company-specific customer and financial performance.	Service Company Panel
III-4	Integrate supply procurement and energy portfolio management into the business planning	Implemented	KAT-4 (08/13/10)	The Company has integrated energy supply procurement into the Niagara Mohawk business planning process. In 2011, the	Nominal incremental implementation costs. Primary benefits include a more holistic approach to business planning, which integrates the role of	Management Audit Panel

Rec. No.	Recommendation	March 2012 Status	Evidence Submitted	Summary of Implementation Actions / Deliverables	Summary of Implementation Costs and Benefits	Rate Case Panel or Witness
	processes. (Refers to Finding III-17)			Electric Procurement team was reorganized with a NY Electric Supply group in order to have a more jurisdictional focus to support the NY commodity portfolio.	energy supply procurement in the process, for the benefit of customers.	
III-5	Specify how the company is going to monitor and measure the benefits to ratepayers arising from the investment in Smart Grid technology for the pilot projects. When applying for authorization for further Smart Grid technology, include a cost benefit analysis demonstrating how the results of the project will provide a net benefit to all ratepayers. (Refers to Finding III-20)	Pending Review	KAT-5 (06/11/10) KAT-5 Supplement (03/10/11)	Implementation of the Smart Grid pilots has been withdrawn. The Company's electric infrastructure plan does include investment associated with the U.S. Department of Energy's ("DOE") Smart Grid Implementation Grant ("SGIG") program. Under the SGIG program, the Company will invest approximately $19 million to deploy switched capacitors and Phasor Measurement Units ("PMUs"), with 50% of the investment being reimbursed by the DOE.	In February 2011, the Company withdrew the NY Smart Grid Pilot proposed in Case 09-E-310 and thus has not incurred any incremental costs for a Smart Grid Pilot in New York. The Company is a sub-recipient to the NYISO for a DOE SGIG. National Grid's share of the NYISO SGIG is a $19 million project ($17 million for capacitors and $2 million for PMUs). Under the terms of the DOE grant, the Company will receive reimbursement for 50% of allowable costs up to $9.5 million. The Commission approved the Company's investment in the SGIG project in Case 09-E-0310, finding that the PMU and capacitor investments provide statewide benefits, and would be reasonable investment in technology that improves the efficient and intelligent operation of the state's electric grid. In Case 10-E-0500, ("2010 Electric Rate Case"), the Order stated the	Electric Infrastructure and Operations Panel

Niagara Mohawk Power Corporation d/b/a National Grid
Comprehensive Management Audit Recommendations – Case 08-E-0827
Summary of Implementation Status, Costs, and Benefits

Rec. No.	Recommendation	March 2012 Status	Evidence Submitted	Summary of Implementation Actions / Deliverables	Summary of Implementation Costs and Benefits	Rate Case Panel or Witness
					following with respect to the project costs: "…the deferral accounting approach must be used and the costs can be included in rates in the Company's next rate proceeding." (Order at 56)	
III-6	Recruit and appoint an independent member to NG's Board of Directors who is experienced in US utility operations and/or regulation. (Refers to Finding III-27)	Pending Review	KAT-50 (08/30/10)	On April 3, 2012, National Grid announced the appointment of Nora Mead Brownell to the National Grid plc Board of Directors effective June 1, 2012. Ms. Brownell has extensive US utility and regulatory experience, having served as a Commissioner with the Pennsylvania Public Utility Commission and Federal Energy Regulatory Commission.	Nominal incremental implementation costs. The benefits will include enhanced Board focus on, and understanding of, U.S. operations and regulatory issues.	Kenneth D. Daly
III-7	Dissolve Niagara Mohawk Holdings, Inc. ("NMHI") (Refers to Finding III-29)	Pending Review	KAT-7 (06/11/10 KAT-49 (07/12/10)	This recommendation is not being implemented based on an analysis of the tax effect of such a dissolution and the conclusion that, due to the manner in which NMHI was acquired, the dissolution of NMHI could cause a significantly higher federal income tax liability for National Grid if at some future point Niagara Mohawk were sold.	The Company has determined that the potential costs of implementing this recommendation would be significant, and any corresponding customer benefit would be negligible. Therefore, the Company will not be implementing this recommendation.	Management Audit Panel

Niagara Mohawk Power Corporation d/b/a National Grid
Comprehensive Management Audit Recommendations – Case 08-E-0827
Summary of Implementation Status, Costs, and Benefits

Rec. No.	Recommendation	March 2012 Status	Evidence Submitted	Summary of Implementation Actions / Deliverables	Summary of Implementation Costs and Benefits	Rate Case Panel or Witness
III-8	Consolidate the two service companies as soon as possible and as planned. (Refers to Finding III-30)	In Progress *(Dependency on US Foundation Program)*		The Company will move forward with service company consolidation following implementation of the US Foundation Program which will consolidate legacy National Grid and legacy KeySpan financial, HR, supply chain, and fleet IS applications onto a single SAP platform. Implementation of SAP is scheduled for October 2012. Revision to the National Grid US Service Company agreement was filed on March 30, 2012 to consolidate National Grid Corporate Services LLC (formerly KeySpan Corporate Services LLC) and National Grid Utility Services (formerly KeySpan Utility Services LLC) into a consolidated service company ("ServeCo") at the time US Foundation is implemented.	The US Foundation Program implementation has significant incremental cost and is a critical path to consolidating the service companies. The benefits of consolidating the service companies include common cost allocation methodologies, greater transparency, and improved controls. Any savings facilitated by the US Foundation Program are identified in the Company's US Restructuring Program.	Service Company Panel Revenue Requirements Panel
III-9	Replace the current membership of the NMPC BOD and the NG USA BOD with members who are representative of NG's senior US management of all of its LOBs operating in the US. (Refers to Findings	Pending Review	KAT-9 (03/03/11) KAT-9 Supplement (06/23/11)	In early 2010, the National Grid USA Board elected the most seniors executives in the US as members, consistent with the recommendation. The Board remains comprised of the most senior executives in the US.	Nominal incremental implementation costs. The primary benefits include increased focus on, and visibility of, Company issues by members responsible and accountable for the performance of Niagara Mohawk for the benefit of customers.	Kenneth D. Daly

Niagara Mohawk Power Corporation d/b/a National Grid
Comprehensive Management Audit Recommendations – Case 08-E-0827
Summary of Implementation Status, Costs, and Benefits

Rec. No.	Recommendation	March 2012 Status	Evidence Submitted	Summary of Implementation Actions / Deliverables	Summary of Implementation Costs and Benefits	Rate Case Panel or Witness
	III-31 and II-32)			In the 2010 Electric Rate Case, the Commission directed the Company, Staff and interested parties to collaborate to determine which provisions from the prior rate plan would continue in the current rate plan. An agreement was reached on, among other things, the structure and composition of the Niagara Mohawk Board of Directors, which is different from the structure recommended in the Management Audit. That agreement was filed in the Report on Rate Plan Provisions ("Report") dated January 31, 2012. In 2011, the Company elected a new Board consistent with the Report. If the Report is approved as filed, the Company will consider this recommendation complete. If the requirements of the Company's Board composition change as a result of the Commission's actions on the Report, the Company will re-evaluate this Recommendation.		

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IV-1	Revise the performance management process for the US Country and NMPC operating company level to include KPIs currently missing. The performance management process should include KPIs for the: Effect of company performance on ratepayers; Effectiveness of the Energy Portfolio Management Group in acquiring reliable, low cost supply or minimizing the volatility of electric prices; Development or implementation of comprehensive system plans; Effectiveness in estimating the cost of projects or performance in managing projects to completion; Effectiveness of centralization of US electric operations on ratepayers. (Refers to Findings IV-6 and IV-12)	In Progress *(Dependency on history with new System Plan, US Foundation Program and, the US Cost estimating tool)*	KAT-10 (03/03/11)	National Grid has implemented several of the recommended Key Performance Indicators ("KPIs") and continues to work toward developing others. The Company has implemented certain KPIs relating to reliability, safety, and customer satisfaction, which directly benefit customers. Other previously implemented field force productivity metrics are currently under review as noted in Recommendation X-1. In addition, the Energy Procurement group has implemented appropriate metrics to assess performance in the acquisition of energy supply as part of its actions to address Recommendation VI-1. A high-level scorecard for the estimating accuracy target has been developed, as indicated in Recommendation VIII-3, as well as a scorecard to track project cost estimating. The project management performance scorecard is nearly in place as part of the End-to-End Project Management initiative. Finally, the Company has begun a process	The incremental costs to implement this recommendation have been nominal. The primary benefit of implementation is improved visibility of Company performance including the effectiveness of procuring reliable, low cost power for Niagara Mohawk's Standard Rate Service customers.	Electric Infrastructure and Operations Panel

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				and methodology to evaluate performance of the 15-Year System Plan as described in Recommendation VII-3.		
IV-2	Utilize benchmarking in setting performance targets and establishing NG's current position against the targets. (Refers to Finding IV-14)	Implemented	KAT-11 (03/03/11)	The Company has developed a comprehensive operations benchmarking plan as a means to inform target setting efforts in certain areas (for example, reliability, safety, and operations).	The incremental implementation costs of this effort have been nominal. The primary benefits of implementing this recommendation include better performance tracking, assessment, and valuation against industry peer groups; identification and adoption of best practices, as appropriate; and opportunities for improved performance for the benefit of customers.	Electric Infrastructure and Operations Panel
V-1	Develop energy sales forecasts and peak demand forecasts that are specific to Upstate New York and the sub-areas within NMPC service territory. (Refers to Finding V-2)	Implemented	KAT-12 (06/11/10)	The Company has developed new energy and peak demand forecasts with regional detail. The sub-area regional forecasts are then provided to system planners for use in the planning processes.	The incremental implementation costs of this effort have been nominal as this work was subsumed within the Customer – Electric Sales group. Primary benefits of implementing this recommendation include improved system planning, better tailored capital investment plans, and more efficient use of capital funds in the future.	Joseph F. Gredder

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V-2	Implement end-use data collection activities to support meaningful implementation of the SMART GRID program, enhance the development of Energy Efficiency (EE) programs and initiate efforts toward end-use modeling. (Refers to Findings V-5 and V- 6)	In Progress *(Dependency on the NYSERDA End-Use Customer Survey)*	KAT-13 (03/10/11) KAT-13 Supplement (04/26/11) KAT-13 Suppl 2 (06/23/11)	The Company implemented end-use metering as part of its small business program beginning in the third quarter of 2011. End-use metering for residential cooling will not be implemented because the Company's proposal for a modified electric HVAC program in 2010-2011 was not approved by the Commission. The Company's Residential High Efficiency Central Air Conditioning Program closed on March 31, 2010. The NYSERDA RFP, required for the EE End Use Customer Survey, has been conducted, bids have been reviewed and a consensus recommendation for procuring a contractor for the project has been made. Based on "best practices" research, the Company is not using end-use modeling at this time. The Company continues to explore the most appropriate, cost-effective means of incorporating new technologies and efficiency measures into the forecast,	Nominal incremental costs to implement as existing studies were leveraged for end-use data collection. The primary benefits of implementing this recommendation include: providing the Energy Efficiency planning team additional information regarding end uses to facilitate the selection of measures and targeting of programs, as well as evaluation of program results.	Joseph F. Gredder

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				including the potential adoption of end-use modeling in the future. As reflected in the update for Recommendation III-5, the Company withdrew its Modified New York Smart Program Proposal on Smart Grid on February 11, 2011. Therefore, Smart Grid data collection will not be implemented as part of this recommendation.		
V-3	Coordinate load forecasting activities with the customer markets group to support development of EE and Distributed Generation programs and system/supply planning, and to incorporate the projected results of those programs into the load forecasting models and results. (Refers to Findings V-10 and V-11)	In Progress *(Dependency on the NYSERDA End-Use Customer Survey)*	KAT-14 (04/26/11)	A load forecast model that integrates adjustments for customer energy efficiency initiatives and other customer-side measures has been completed.	Nominal incremental implementation costs. The primary benefits of implementing this recommendation include improved system planning and capital investment plans, more efficient use of capital funds, and more accurate procurement of supply for customers.	Joseph F. Gredder
VI-1	Establish a comprehensive framework of performance metrics for the supply procurement and risk	Implemented	KAT-15 (06/22/10)	New performance metrics for supply procurement and risk management functions have been implemented. Performance	The incremental implementation costs of this effort have been nominal. The primary benefits of implementing this recommendation are enhanced	Management Audit Panel

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	management functions. The metrics should build on NG's corporate vision and goals and need to reflect the changing electric supply procurement market and NG's preferred strategy in that market. (Refers to Findings VI-7 and VI-14)			metrics regarding daily load bidding have been incorporated into personal performance objectives. Supply portfolio performance metrics on price and volatility have also been incorporated into the Company's KPIs. In addition, a metric on hedging activity was added to a scorecard that is reported monthly to senior management.	visibility of Company performance and personal accountability for supply procurement activities for the benefit of customers.	
VI-2a	Continue activities to develop a long-term strategy and short-term tactical supply procurement plan as laid out in the Collaborative meetings and incorporate these plans into the corporate business plan. (Refers to Findings VI-10, VI-11, VI-13 and VI-14)	Pending Review	KAT-16 (06/14/10)	A revised long-term strategy and short-term tactical implementation plan for supply procurement has been completed. Also, the Electric Supply team is developing process improvements to increase the accuracy of the daily electric load forecast.	The incremental implementation costs of this effort have been nominal. The primary benefits of implementing this recommendation are improved supply risk management strategies and processes.	Management Audit Panel
VI-3	Define and restructure the risk management policies, procedures and functions to assure appropriate monitoring of risk factors as the transition and long-term supply procurement plans are implemented.	Pending Review	KAT-17 (06/21/10)	The revised risk management framework for supply procurement is complete. Also, the Energy Procurement Risk Management Committee and expanded Commodity Management Committee have been restructured. These two committees review and	The incremental implementation costs of this effort have been nominal. The primary benefits of implementing this recommendation are improved supply risk management strategies.	Management Audit Panel

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	The risk management tools should incorporate appropriate market monitoring to know when contingencies are needed. (Refers to Finding VI-12)			approve the Electric Supply procurement strategies. The Energy Procurement Risk Management Committee continues to meet approximately monthly and includes senior management from Regulatory, Legal and Treasury. The Commodity Management Committee also continues to meet approximately monthly, and is comprised of management staff from Regulatory Pricing, Risk Management, Legal, Supplier Services, Credit and Accounting.		
VII-1	Develop an integrated NMPC Transmission and Distribution system-wide plan. (Refers to Findings VII -4,VII-8, VII-14, VII-15, VII-16, VII-17, VII-18, and VII-31)	Pending Review	KAT-18 (06/18/10) KAT-18 Supplement (06/08/11)	Coordinated, combined long-term T&D system plan produced on a periodic basis.	Nominal incremental implementation costs. The primary benefits of an integrated T&D system plan include consolidate results of near- and long-term planning processes and activities including coordinated process changes and improvements that affect the Company's integrated transmission and distribution system. The ultimate objective of the plan is to develop new, and strengthen existing, integrated plans to provide customers with safe, reliable and efficient service. The integrated system	Electric Infrastructure and Operations Panel

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					planning process has resulted in reductions to the capital investment plan compared to prior year levels. The capital plan has been reduced approximately $1.3 billion over three years (FY12-FY14) from the 2009 Capital Investment Plan.	
VII-2	Utilize annual operational reports such as the Transmission System Reliability Performance Report and the Distribution Reliability Report as inputs to asset health/strategy and subsequently recommended projects. Demonstrate how the annual integrated system plans directly address reliability issues raised in the two reports. Show progress against known system deficiencies such as "worst-performing circuits" and outage causal factors. Identify and relate capital programs and projects to specific reliability performance issues and measure effect.	Pending Review		The Company utilizes the Transmission System Reliability Performance Report as an input into the development of capital projects and programs. The data from this report is a driver in developing asset refurbishment projects. The Company also considers the number of customers impacted in its review for a complete assessment of the reliability impact. The Distribution Reliability Report is utilized in developing actions for the worst performing feeder list, Engineering Reliability Review and recloser selection, and for identifying opportunities to create feeder tie benefits. The transmission and distribution sources are widely used in project and program planning.	The incremental implementation costs associated with this effort are nominal. The primary benefit in utilizing the data in these reviews is improved planning, which may improve reliability and customer service performance.	Electric Infrastructure and Operations Panel

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	(Refers to Findings VII -3, VII-4, VII-5, VII-25, and VII-26)					
VII-3	Evaluate the effectiveness of system plans each year to determine how well they are meeting system planning objectives such as reliability goals, and directing capital resources to specific issue areas and performance trends. (Refers to Findings VII-8,VII -11, VII-18, and VII-29)	In Progress *(Dependency on history with new System Plan)*		The Company is developing a process and methodology to evaluate the performance of the 15-Year System Plan (to be prepared every two years) and Capital Investment Plan (prepared annually) which will be focused on metrics related to reliability, plan adherence / performance, spending rationale review, etc. This review will take place upon the completion of the fiscal year plan and be incorporated into the annual Capital Investment Plan submitted in January. The Company recognizes that in some cases evaluation may be focused on trending data.	Nominal incremental implementation costs. The primary benefit of implementing this recommendation is to improve the long-term planning process by incorporating lessons learned from the previous fiscal year.	Electric Infrastructure and Operations Panel
VII-4	Evaluate the causal factors and impact on capital budgets and system planning of projects "walked in" and "walked out" of the system plans. Identify why the projects walked in were not initially	Pending Review	KAT-21 (09/02/10)	The Company produces a quarterly report and analysis of emergent and deferred projects as part of its quarterly capital investment plan updates.	Nominal incremental implementation costs. The primary benefits of implementing this recommendation include improved understanding of the drivers and impacts of intra-year changes in the capital investment plan, and more effective management of the capital budget.	Electric Infrastructure and Operations Panel

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	planned, what will be done in future planning cycles to remediate these issues and how projects displaced into future planning periods will be accommodated. (Refers to Findings VII -11 and VII-29)					
VII-5	Perform economic studies to identify more efficient system modifications that can reduce the costs of service and increase utilization of resources. (Refers to Findings VII -26 and VII-29)	Implemented	KAT-22 (05/19/11)	The Company has adopted a formal process for evaluating non-wires alternatives to meet system needs. Additionally, the review of wire projects has been enhanced to promote a broader scope of possible solutions to ensure that low cost solutions are utilized where feasible.	Nominal incremental implementation costs. The primary benefits of implementing this recommendation are optimizing the use of existing assets, more effectively managing the capital budget, and reducing capital costs.	Electric Infrastructure and Operations Panel
VII-6	Evaluate outages that were avoidable due to improved system planning (capital) and preventive maintenance (O&M) such as vegetation and failed equipment. Determine the budget necessary to provide the level of maintenance that would have prevented the outages and compare against the current maintenance	Pending Review	KAT-23 (07/01/11)	Because of the relatively limited number of transmission outages that occur and the potential impact of each outage, a process for weekly evaluation of outages on the transmission system has been established. Information from these discussions is utilized by asset management in development of asset strategies and projects where needed. For Distribution, several reviews are completed throughout the year. On a daily	Nominal incremental implementation costs. The primary benefit of implementing this recommendation is an enhanced process for identifying avoidable outages. This information is then used to identify opportunities to improve reliability performance through efficient system planning and maintenance efforts for the benefit of customers.	Electric Infrastructure and Operations Panel

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	budget. Analyze the costs associated with the outages with incremental increases in maintenance programs. (Refers to Findings VII -3, VII-4, VII-5 and VII-25)			basis the Chair of the Divisional Reliability Council reviews all Interruption Disturbance System ("IDS") morning report outages to determine if further investigation is necessary into an event. Any lessons learned or action plans from these reviews are discussed at monthly reliability meetings. Also monthly, Field engineering reviews IDS events for accuracy and then annually analyze all the reliability information in developing the reliability report filed each March. The reliability information maintained in IDS forms the basis for the justification of many strategies and programs, as well as the action plans on Poor Performing Circuits and associated Engineering Reliability Reviews.		
VII-7	Establish a traditional transmission utility system planning function that results in industry accepted planning products such as: system-wide studies not just area studies; five-year, ten-year, 15-year and 20-year system layouts;	Pending Review	KAT-24 (06/08/11)	Incorporation of traditional transmission utility planning function into integrated T&D planning function is in place. The results of this effort are included in the Capital Investment Plan (current to five years) and 15-Year System Plans (current to fifteen years). The Company's review	Nominal incremental implementation costs. The primary benefit of implementing this recommendation is that the integration of transmission planning into a broader T&D system plan may lead to more effective management of capital budgets.	Electric Infrastructure and Operations Panel

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	integrated ten to twenty year system plans; and timelines of system needs. (Refers to Findings VII-8, VII-11, VII-13, VII-24, and VII-26)			includes not only smaller area studies, but also takes into account summarizing these studies across the service territory, state studies (New York ISO), and discussion with other utilities.		
VII-8	Evaluate the boundaries for continuity between the integrated transmission and the integrated distribution plans to assess whether the entire "wires" business is adequately planned. (Refers to Finding VII-8, VII-10, VII-13, and VII-25)	Implemented	KAT-25 (02/23/11)	The Company has established eight transmission planning study areas and 43 distribution planning areas within those transmission study areas to facilitate performance of system studies and project plans. The Company implements plans that support appropriate solutions to regional study concerns on a T&D system review basis.	Nominal incremental implementation costs. The primary benefit of implementing this recommendation is that it facilitates the Company's system studies.	Electric Infrastructure and Operations Panel
VII-9	Adopt a results oriented approach to drive the development and implementation of asset management strategies by their relationship to equipment failure causal factors and system performance: • Prioritize asset management strategies by their relationship to outage causal factors	Pending Review		The Company continues to review existing asset strategies and has included many of these in the existing 15-Year System Plan, such as replacement of certain types and vintage of breakers based on known reliability concerns by performance to ensure reliability of the system. Some strategies are being or have been revised based on the requirement to ensure value is achieved by the investment. Longer term asset strategies such	Nominal incremental implementation costs. Proper asset management requires timely reviews and revisions to ensure proper planning. The primary benefit of implementing this recommendation is improved asset management strategies. Many of these strategies are incorporated in the Company's integrated system planning process, which has resulted in a reduction in the capital investment plan compared to prior year levels, as noted in VII-1.	Electric Infrastructure and Operations Panel

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	and their ability to directly affect reliability performance measures; • Evaluate this stratification annually to maintain focus; • Differentiate long term asset strategies from those dealing with specific reliability problems and their incorporation into the annual system plans; • Evaluate the effectiveness of asset management strategies in terms of the number of capital projects and maintenance programs actually executed. (Refers to Findings VII-18 and VII-25)			as transmission asset refurbishment, provide improved recognition and definition in identifying current needs for replacement while utilizing assets in place if in good condition while under refurbishment review. Asset strategies will be reviewed on a two year cycle to ensure they are current with plan needs, conditions and objectives. Additionally, the Company, in developing the annual Capital Investment Plan, will be determining the value by inclusion or exclusion to the plan.		
VII-10	Initiate or partner with NYISO on appropriate studies regarding the effect and needed response to increased application of Distributed Generation, Renewable Resources,	Implemented	KAT-27 (06/21/10) KAT-27 Supplement (07/09/10)	The Company participates with the NYISO, as well as other transmission owning utilities, on the NY State Transmission Assessment and Reliability Study ("STARS") study and other planning processes, such as the	Nominal incremental implementation costs. The primary benefits of implementing this recommendation include planning coordination with within the state and shared knowledge among the utilities and system operator.	Electric Infrastructure and Operations Panel

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	SMART GRID and other trends in utility system operations. (Refers to Finding VII-19)			Comprehensive System Planning Process ("CSPP"), Reliability Needs Assessment ("RNA"), Congestion Analysis and Resource Integration Study ("CARIS"), as well as other specialized studies (e.g., NYISO Wind Study).		
VIII-1	Ensure that projects are managed in accordance with PMP requirements, including: making Quality Assurance an integral part of the project management process for both in-house and regional delivery venture work forces; having project managers actively monitor overall project progress against the baseline schedule and review cost versus progress and budget; adhering to policies and procedures regarding project cost control and re-sanctioning requirements; and maintaining comprehensive project management files; (Refers to Findings VIII-4, VIII-10, VIII-11, and VIII-	In Progress *(Dependency on US Foundations, US Cost estimating tool and E2E efforts)*	KAT-29 (05/04/11) KAT-31 (02/23/11) KAT-32 (02/23/11)	The Company has revised its Project Management Playbook ("PMP") as part of its comprehensive End-to-End ("E2E") Project Management process review, and is developing a framework for application of the PMP to different project levels based on complexity. Quality assurance is integrated in the PMP process, and the Company has improved its formal project documentation process. The revised PMP process includes a role for active management of projects above a certain threshold level.	Nominal incremental implementation costs associated with revision of the PMP, re-sanctioning training, or maintaining comprehensive project management files. Total non-recurring consultancy costs associated with National Grid's E2E Project were $4.3 million, including costs in calendar years 2010-2011. The E2E process is applicable to the management of all projects (i.e., electric and gas) in all jurisdictions. All E2E-related consultancy costs allocated to Niagara Mohawk have been removed from the Historic Test Year. The primary benefits of implementing this recommendation include better processes for managing capital investment projects which enhance our ability to deliver projects to scope, schedule and cost, as well as greater visibility with improved project controls and records. For	Electric Infrastructure and Operations Panel

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	19)				example, of the twenty-three quality assurance Project Management Desk Audits conducted for capital projects in New York over the twelve-month period ending November 2011, the Quality Assurance team identified only three instances of non-conformance with the PMP within the first six months and zero non-conformances identified in the second six months. The E2E project also facilitated the Company restructuring its Operations and Network Strategy functions as a part of the US Restructuring Program.	
VIII-2	Implement a WBS to organize and manage projects. Use of a WBS should improve project cost and schedule management, monitoring, reporting and feedback. (Refers to Finding VIII-13)	In Progress *(Dependency on US Foundation Program)*	KAT-33 (07/09/10) KAT-33 Supplement (06/08/11)	A WBS has been implemented into the Company's Primavera P6 system for future projects. Other elements of this recommendation (e.g., capturing costs for lower level WBS and work force time reporting, etc.) will be implemented following deployment of the US Foundation Program.	Nominal incremental costs are attributed to implementing this recommendation because these initiatives were planned prior to the findings / recommendations of the audit. The primary benefits from implementing this recommendation include better visibility of projects, more detailed cost estimates, improved work management controls, enhanced capital program decision-making, and more efficient use of capital funds.	Electric Infrastructure and Operations Panel

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VIII-3	Complete implementation of ECoE roles and responsibilities including establishing estimating tools, metrics and policies, creating estimating units and identifying and resolving areas of estimating deviations. (Refers to Findings VIII-16, VIII-18, and, VIII-26)	In Progress *(Dependency on US Foundation Program and US Cost estimating tool)*		Various elements of the Estimating Center of Excellence ("ECOE") have been implemented. For example, the ECOE is staffed, as noted in Recommendation VIII-4; the US Cost estimating application (US Cost) is being used; and a high-level scorecard for the estimating accuracy target is currently in use. The estimating unit libraries are being standardized, US Cost is being reconfigured to a unit-based system, and an interface with Primavera P6 is in the testing stages. Additional metrics will be developed as data and reports become available from the new systems.	The capital cost for the US Cost estimating application is approximately $0.972 million (original cost plus modifications and interfaces). These costs are included in the Historic Test Year as they are not incremental and were planned prior to the Management Audit recommendations. The primary benefits from implementing this recommendation are more effective management of electric capital project estimates, better capital estimates, and more efficient use of capital funds.	Electric Infrastructure and Operations Panel
VIII-4	Establish groups of professional estimators for U.S. transmission and distribution that will develop estimates for planning, engineering and construction. Use these internal estimators to set and validate baseline estimates established for the RDV contractors.	In Progress *(Dependency on US Cost estimating tool)*	KAT-35 (09/02/10) KAT-35 Supplement (02/23/11)	Professional estimators were hired between October 2009 and June 2010 for substation and transmission line capital projects, and other staffing selections became effective September 26, 2011 as part of the US Restructuring Program. The ECOE is currently staffed with one Director, two Managers, four Analysts, and sixteen Estimators	The total estimated staffing cost of the ECOE is $2.8 million. The cost of the Manager and eight estimators dedicated to NY is $1.2 million. Because of the dates of hire, the costs of the estimators and other ECOE staff are embedded in the Historic Test Year. The primary benefits of implementing this recommendation include improved capital estimates, and more efficient use of capital	Electric Infrastructure and Operations Panel

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	(Refers to Findings VIII-16, VIII-17, VIII-18, VIII-23 and VIII-26)			with responsibility for developing estimates for all electric and gas capital projects in New York and New England. A Manager and eight of the Estimators are located in and dedicated to New York.	funds.	
VIII-5	Have Internal Audit or an outside firm audit the RDV joint venture parent entities on a regular basis. (Refers to Finding VIII-23)	Implemented	KAT-36 (06/18/10)	The Company has completed the recommended audit and has also moved away from the RDV capital plan delivery model.	There are no incremental implementation costs associated with this recommendation as the audit was conducted as part of Internal Audit's annual audit plan.	Electric Infrastructure and Operations Panel
VIII-6	Ensure that all capital work orders are closed to plant in-service (FERC Account 101) within 90-days of equipment being energized. (Refers to Finding VIII-25)	In Progress *(Dependency on US Foundation Program)*	KAT-37 (06/15/11)	The Company dedicated resources to reduce the existing backlog of open work orders and has developed monthly reporting on the backlog status. Additionally, short term system and process improvements have been implemented, and related training has been rolled out. Implementation of the US Foundation Program / SAP is expected to improve work order processing and reduce close out delays. The Company is profiling its work order types to determine whether the mandated closeout of all work orders from FERC Account 106 to Account 101 within 90 days from energization	Approximately $0.136 million was spent in 2010 for PowerPlant system modifications to address unitization issues. The primary benefits of implementing this recommendation include more timely close out of work orders and improved accuracy in reporting fixed assets and depreciation expense in the Company's accounting records.	Revenue Requirements Panel Electric Infrastructure and Operations Panel

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				can be accommodated in all cases.		
IX-1	Conduct formal reviews of a sample of projects monthly for overall project cost control. The review should include the project manager, system planner, construction supervisor, and appropriate LOB management and include a review of estimates, cost tracking by work break down structure, progress versus cost, and forecast cost. (Refers to Finding IX-9)	Implemented	KAT-38 (06/21/10)	A formal process for review of sample projects is in place.	Nominal incremental implementation costs. The primary benefits from implementing this recommendation include improved project visibility and work management controls.	Electric Infrastructure and Operations Panel
IX-2	Reconcile the differences between planned work identified in the Resource Allocation Committee (RAC) reports and expenditures proposed in the January 2009 Transmission and Distribution Capital Investment Plan. (refers to Finding IX-10)	Implemented	KAT-39 (06/18/10)	The reconciliation was provided to the Commission as an Appendix to the Implementation Plan Update filed on May 27, 2010.	Nominal incremental implementation costs.	Electric Infrastructure and Operations Panel

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IX-3	Revise capital investment levels for projects and programs planned as part of the NMPC Transmission and Distribution Capital Investment Plan filed in January 2009 and obtain the necessary commitment for the funds required by NMPC. (Refers to Finding IX-11)	Implemented	KAT-40 (06/22/10)	The capital investment plan was revised and filed on January 29, 2010.	Nominal incremental implementation costs. The Company's 2010 Capital Investment Plan filing in January 2010 reflected aggregate 5-year capital investment of $2.86 billion, a reduction of $710 million compared to the 5-year aggregate investment reflected in the 2009 Capital Investment Plan.	Electric Infrastructure and Operations Panel Management Audit Panel
IX-4	Set specific target dates and complete the development and execution of Service Level Agreements between the U.S. Transmission and ED&G LOBs and each of the organizational groups and departments that provide shared services to these LOBs as outlined by NG in the collaborative process. (Refers to Findings IX-13 and IX-15)	Pending Review		Service Level Agreements ("SLAs") between Niagara Mohawk and internal service providers have been agreed and executed. In addition, a supporting SLA governance framework has been developed and implemented.	A one-time incremental cost to achieve of approximately $1 million was incurred over a one-year period to develop and implement the SLA governance framework, and was removed from the Historic Test Year. The primary benefits are that SLAs provide a tool to evaluate services provided to Niagara Mohawk and establish ways of working under the new jurisdictional model. The SLAs and supporting governance framework formalize communication between the Service Provider and the Service Recipient and provide visibility into the performance of the service providers.	Service Company Panel
IX-5	Amend the service contracts so as to refer to	Pending Review		Work is currently underway to align service descriptions between	Nominal incremental implementation costs. The primary benefits of	Service Company

Niagara Mohawk Power Corporation d/b/a National Grid
Comprehensive Management Audit Recommendations – Case 08-E-0827
Summary of Implementation Status, Costs, and Benefits

Rec. No.	Recommendation	March 2012 Status	Evidence Submitted	Summary of Implementation Actions / Deliverables	Summary of Implementation Costs and Benefits	Rate Case Panel or Witness
	and incorporate as appropriate, the master SLAs and the functional SLAs, which will provide full disclosure about the service levels and costs as well as the types of services provided and the cost methodologies for services provided. (Refers to Finding IX-17)			service company contracts, National Grid's Cost Allocation Manual and SLAs. The revised National Grid USA Service Company Agreement ("Service Agreement") was filed with the Commission on March 30, 2012. In addition, revisions to the Company's cost allocation methodologies and the general allocator were filed with the Commission on March 30, 2012, as noted in Recommendation III-8.	implementing this recommendation include alignment between the three documents as well as increased transparency and ability to manage services provided to Niagara Mohawk.	Panel
IX-6	Include applicable master and functional SLAs with the annual update of service contracts filed with the PSC. (Refers to Finding IX-17)	In Progress *(Dependency on US Foundation Program)*		The Company will implement this recommendation with the annual filing of the service contracts (after the service companies are consolidated).	Nominal incremental implementation costs. The primary benefit of implementing this recommendation is alignment of documents.	Service Company Panel
X-1	Complete implementation of improvements to the work management program for field forces as identified in the collaborative process. Improvements required include establishing an internal distribution construction workforce, completing the remaining	Pending Review	KAT-44 (04/07/11)	The Company's internal Distribution Line Construction pilot was completed and subsequently dissolved per agreement between the Company and IBEW Local Union 97. In addition, substation on-site reporting was completed, distribution design roles and the creation of the customer order fulfillment group were rolled out,	The incremental implementation costs of this effort have been nominal. The primary benefits include improved construction estimates, more efficient use of capital funds and resources, and improved ability to track and manage field force productivity.	Electric Infrastructure and Operations Panel

Niagara Mohawk Power Corporation d/b/a National Grid
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Summary of Implementation Status, Costs, and Benefits

Rec. No.	Recommendation	March 2012 Status	Evidence Submitted	Summary of Implementation Actions / Deliverables	Summary of Implementation Costs and Benefits	Rate Case Panel or Witness
	three elements in the EDOT work management initiative, improving its work time standards, and tracking all 29 value metrics for measuring field force productivity. (Refers to Findings X-1, X-22, and X-24)			and the strategic planning tool, Primavera Portfolio Management, which is integrated with the work management application, Primavera P6, was deployed. Lastly, the Company undertook a review of the initially identified 29 value metrics for measuring field force productivity and had implemented a sub-set of those metrics. The Company regularly reviews its metrics and revises them where appropriate to produce KPIs that provide value and transparency. As such, the original field force metrics discussed at the time of the audit have been modified after actual experience indicated the metrics were not effective in reporting actual performance. A full review of appropriate metrics to measure and enhance field force productivity is currently underway.		
X-2	Deliver preliminary annual work plans, especially for mandatory projects, to the construction work forces 90 days prior to the start of the fiscal year so that	Implemented	KAT-45 (07/09/10)	A process is in place to deliver preliminary annual work plans at least 90 days prior to the start of the fiscal year.	Additional training for users of the PPM tool occurred in 2010 and the one-time incremental cost is estimated to be $0.070 million. In 2010, one additional Program Manager was added for the Stations Work Plan	Electric Infrastructure and Operations Panel

Niagara Mohawk Power Corporation d/b/a National Grid
Comprehensive Management Audit Recommendations – Case 08-E-0827
Summary of Implementation Status, Costs, and Benefits

Rec. No.	Recommendation	March 2012 Status	Evidence Submitted	Summary of Implementation Actions / Deliverables	Summary of Implementation Costs and Benefits	Rate Case Panel or Witness
	materials can be ordered and staffing/resource schedules prepared in a timely manner. (Refers to Finding X-10)				build and implementation, and another for Transmission Lines and Stations at a total estimated cost of $0.4 million, which is a recurring cost and included in the Historic Test Year. The primary benefits of this recommendation are more timely visibility of annual construction work plans and improved resource planning.	
X-3	Eliminate the remaining in-house tree trimmer positions. (Refers to Finding X-11)	Implemented	KAT-46 (07/09/10) KAT-46 Supplement (04/27/11)	The Company has eliminated the remaining in-house tree trimmer positions.	Nominal incremental costs. The primary benefit of this recommendation is a reduction in the overall cost associated with the vegetation management function. The positions were eliminated prior to April 1, 2011. The Company estimated annual O&M savings of approximately $0.100 million, which is 20% of total estimated annual savings (O&M and capital). During the 2010 timeframe, all cycle trimming activity was outsourced to contractors.	Electric Infrastructure and Operations Panel
X-4	Separate the EDOT project into elements and evaluate them as individual projects in the business planning process, rather than treating them as an on-going mega project. At a	Pending Review	KAT-47 (07/27/10)	The Company has separated the evaluation of EDOT projects and has integrated EDOT into the business planning and performance management process.	Nominal incremental implementation costs. The primary benefit of implementing this recommendation is improved visibility of individual initiatives within the EDOT project.	Electric Infrastructure and Operations Panel

Niagara Mohawk Power Corporation d/b/a National Grid
Comprehensive Management Audit Recommendations – Case 08-E-0827
Summary of Implementation Status, Costs, and Benefits

Rec. No.	Recommendation	March 2012 Status	Evidence Submitted	Summary of Implementation Actions / Deliverables	Summary of Implementation Costs and Benefits	Rate Case Panel or Witness
	minimum, integrate the current EDOT into the business planning and performance management process. (Refers to Finding X-18)					
X-5	Review the practicality of the new storm response plans to ensure that NMPC ratepayers will be provided with timely and qualified services in the event of a storm emergency. (Refers to Finding X-23)	Implemented	KAT-48 (07/26/10)	The Company has reviewed and validated the storm response procedures for New York. The Company has a long standing Electric Emergency Procedure ("EEP") that is updated periodically as necessary. Employees are assigned storm duties within the structure of the EEP and train / drill annually so that they may respond in a timely and effective manner to major storm events.	There are no incremental implementation costs. The primary benefits of implementing this recommendation are additional scrutiny of the Company's storm response procedures and appropriate adjustments and improvements as a result. Additionally, the annual training and drills for employees assigned storm response roles ensure that the Company is effectively prepared to respond to major storm events.	Electric Infrastructure and Operations Panel

Exhibit __ (MAP-3CU)

May 31, 2012 Management Audit Implementation Plan Update Report

Carlos Gavilondo
Senior Counsel II

VIA ELECTRONIC DELIVERY

May 31, 2012

Honorable Jaclyn Brilling, Secretary
New York State Department of Public Service
3 Empire State Plaza
Albany, New York 12223-1350

Re: Case 08-E-0827, Comprehensive Management Audit of Niagara Mohawk Power Corporation d/b/a National Grid's Electric Business; Implementation Plan Update 7 Report.

Dear Secretary Brilling:

In accordance with the Commission's December 18, 2009 Order in Case 08-E-0827, attached please find the Implementation Plan Update 7 report of Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid" or "the Company"). Implementation updates for individual Recommendations are grouped into three status categories: (1) "In Progress"; (2) "Pending Review"; and (3) "Implemented." In addition, the report highlights implementation progress from the prior update report. To the extent additional background information on particular Recommendations or implementation actions is desired, readers are referred to previously submitted reports.

A copy of this filing is being provided directly to Kate Tallmadge of Department of Public Service Staff.

Thank you for your attention to this matter.

Very truly yours,

/s/ Carlos Gavilondo

Carlos Gavilondo
Senior Counsel II

Enc.

cc: K. Tallmadge, DPS

Comprehensive Management Audit of Niagara Mohawk Power Corporation d/b/a National Grid Electric Business

IMPLEMENTATION PLAN

UPDATE 7

PREPARED FOR:

THE STATE OF NEW YORK PUBLIC SERVICE COMMISSION

THREE EMPIRE STATE PLAZA

ALBANY, NY 12223

MAY 31, 2012

TABLE OF CONTENTS

CHAPTER 1—INTRODUCTION

A. Background

In accordance with the Commission's December 18, 2009 order in this proceeding,[1] Niagara Mohawk Power Corporation, d/b/a National Grid ("National Grid" or "the Company"), submits this update report on the status of the Company's efforts to implement the audit recommendations included in the Report on the Comprehensive Management Audit of Niagara Mohawk Power Corporation, d/b/a National Grid Electric Business.[2] This is the Company's seventh update report since the Implementation Plan was submitted January 29, 2010. The goal of the Implementation Plan is to help the Company improve its ability to provide safe, reliable and efficient service to customers. The Company has made significant headway on the Implementation Plan. It has successfully completed actions to implement several recommendations, and is making good progress on implementing the remaining recommendations.

B. Implementation Plan Progress Summary

The Company continues to make progress on implementing the recommendations in the Audit Report. Table 1 provides a snapshot of implementation progress:[3]

Table 1—Implementation Progress--Aggregate

Total Recommendations	**44**
Implemented	16
Pending Review	17
In Progress	11

[1] Case 08-E-0827, *Comprehensive Management Audit of Niagara Mohawk Power Corporation d/b/a National Grid's Electric Business*, Order Directing the Submission of an Implementation Plan (issued December 18, 2009) ("Management Audit Order").
[2] Case 08-E-0827, *Comprehensive Management Audit of Niagara Mohawk Power Corporation d/b/a National Grid's Electric Business*, Final Report by NorthStar Consulting Group, dated December 3, 2009.
[3] In the Audit Report, Recommendation VI-2 was deemed no longer needed as a result of progress made during the collaborative process. Although Staff has indicated this recommendation is "Completed & Accepted," the Company does not include progress updates for this recommendation. Therefore, the Company's count of 44 total recommendations and count of implemented recommendations are each one less than the Staff's counts.

The three implementation status categories in Table 1, above, are defined as follows:

- **Implemented** – Action steps associated with implementing a recommendation have been completed, reviewed and accepted by Staff.

- **Pending Review** - Action steps associated with implementing a recommendation have been completed, and are pending review by Staff. Acceptance of a recommendation as complete will be determined following Staff's review.

- **In Progress** – Actions associated with implementing a recommendation are on-going or on hold pending other decisions or activities.[4]

Table 2 provides a status summary for each individual recommendation.[5]

Table 2—Implementation Progress—Individual Recommendations

Rec Number	Recommendation	May 2012 Status
III-1	Revise the corporate vision and objectives statements to more explicitly articulate the company's obligation to provide low cost, reliable and safe electric service to its customers. The revised statement should reflect the need to mitigate volatility and produce lower costs relative to some benchmark and could include a reflection of the total bill rather than the unit price. (Refers to Finding III-1)	Implemented
III-2	Consolidate the management of U.S. electric transmission and electric distribution into one LOB to provide greater visibility over NMPC electric transmission and distribution operations while maintaining NG's ability to achieve synergies and economies of scale. (Refers to Finding III-4)	Implemented
III-3	Prepare a business plan document for NMPC electric operations that combines strategic and operating activities with capital and O&M budgets, and ensures that the resulting plan documents the scope of business planning for the benefit of NMPC electric ratepayers. (Refers to Finding III-14)	Pending Review
III-4	Integrate supply procurement and energy portfolio management into the business planning processes. (Refers to Finding III-17)	Implemented
III-5	Specify how the company is going to monitor and measure the benefits to ratepayers arising from the investment in Smart Grid technology for the pilot projects. When applying for authorization for further Smart Grid technology, include a cost benefit analysis demonstrating how the results of the project will provide a net benefit to all ratepayers. (Refers to Finding III-20)	Pending Review

[4] This category also includes implementation steps that require action by Staff or the Commission in order to progress the recommendation.
[5] In two instances, implementation of recommendations has been indefinitely postponed, or action steps associated with implementation will not be undertaken; i.e., Recommendations III-5 (relating to Smart Grid implementation) and III-7 (Dissolution of Niagara Mohawk Holdings, Inc.).

III-6	Recruit and appoint an independent member to NG's Board of Directors who is experienced in US utility operations and/or regulation. (Refers to Finding III-27)	Pending Review *(new status)*
III-7	Dissolve Niagara Mohawk Holdings, Inc. (Refers to Finding III-29)	Pending Review
III-8	Consolidate the two service companies as soon as possible and as planned. (Refers to Finding III-30)	In Progress
III-9	Replace the current membership of the NMPC BOD and the NG USA BOD with members who are representative of NG's senior US management of all of its LOBs operating in the US. (Refers to Findings III-31 and II-32)	Pending Review
IV-1	Revise the performance management process for the US Country and NMPC operating company level to include KPIs currently missing. The performance management process should include KPIs for the: Effect of company performance on ratepayers; Effectiveness of the Energy Portfolio Management Group in acquiring reliable, low cost supply or minimizing the volatility of electric prices; Development or implementation of comprehensive system plans; Effectiveness in estimating the cost of projects or performance in managing projects to completion; Effectiveness of centralization of US electric operations on ratepayers. (Refers to Findings IV-6 and IV-12)	In Progress
IV-2	Utilize benchmarking in setting performance targets and establishing NG's current position against the targets. (Refers to Finding IV-14)	Implemented
V-1	Develop energy sales forecasts and peak demand forecasts that are specific to Upstate New York and the sub-areas within NMPC service territory. (Refers to Finding V-2)	Implemented
V-2	Implement end-use data collection activities to support meaningful implementation of the SMART GRID program, enhance the development of Energy Efficiency (EE) programs and initiate efforts toward end-use modeling. (Refers to Findings V-5 and V- 6)	In Progress
V-3	Coordinate load forecasting activities with the customer markets group to support development of EE and Distributed Generation programs and system/supply planning, and to incorporate the projected results of those programs into the load forecasting models and results. (Refers to Findings V-10 and V-11)	In Progress
VI-1	Establish a comprehensive framework of performance metrics for the supply procurement and risk management functions. The metrics should build on NG's corporate vision and goals and need to reflect the changing electric supply procurement market and NG's preferred strategy in that market. (Refers to Findings VI-7 and VI-14)	Implemented
VI-2a	Continue activities to develop a long-term strategy and short-term tactical supply procurement plan as laid out in the Collaborative meetings and incorporate these plans into the corporate business plan. (Refers to Findings VI-10, VI-11, VI-13 and VI-14)	Pending Review

VI-3	Define and restructure the risk management policies, procedures and functions to assure appropriate monitoring of risk factors as the transition and long-term supply procurement plans are implemented. The risk management tools should incorporate appropriate market monitoring to know when contingencies are needed. (Refers to Finding VI-12)	Pending Review
VII-1	Develop an integrated NMPC Transmission and Distribution system-wide plan. (Refers to Findings VII -4,VII-8, VII-14, VII-15, VII-16, VII-17, VII-18, and VII-31)	Pending Review
VII-2	Utilize annual operational reports such as the Transmission System Reliability Performance Report and the Distribution Reliability Report as inputs to asset health/strategy and subsequently recommended projects. Demonstrate how the annual integrated system plans directly address reliability issues raised in the two reports. Show progress against known system deficiencies such as "worst-performing circuits" and outage causal factors. Identify and relate capital programs and projects to specific reliability performance issues and measure effect. (Refers to Findings VII -3, VII-4, VII-5, VII-25, and VII-26)	Pending Review
VII-3	Evaluate the effectiveness of system plans each year to determine how well they are meeting system planning objectives such as reliability goals, and directing capital resources to specific issue areas and performance trends. (Refers to Findings VII-8,VII -11, VII-18, and VII-29)	In Progress
VII-4	Evaluate the causal factors and impact on capital budgets and system planning of projects "walked in" and "walked out" of the system plans. Identify why the projects walked in were not initially planned, what will be done in future planning cycles to remediate these issues and how projects displaced into future planning periods will be accommodated. (Refers to Findings VII -11 and VII-29)	Pending Review
VII-5	Perform economic studies to identify more efficient system modifications that can reduce the costs of service and increase utilization of resources. (Refers to Findings VII -26 and VII-29)	Implemented
VII-6	Evaluate outages that were avoidable due to improved system planning (capital) and preventive maintenance (O&M) such as vegetation and failed equipment. Determine the budget necessary to provide the level of maintenance that would have prevented the outages and compare against the current maintenance budget. Analyze the costs associated with the outages with incremental increases in maintenance programs. (Refers to Findings VII -3, VII-4, VII-5 and VII-25)	Pending Review
VII-7	Establish a traditional transmission utility system planning function that results in industry accepted planning products such as: system-wide studies not just area studies; five-year, ten-year, 15-year and 20-year system layouts; integrated ten to twenty year system plans; and timelines of system needs. (Refers to Findings VII-8, VII-11, VII-13, VII-24, and VII-26)	Pending Review

VII-8	Evaluate the boundaries for continuity between the integrated transmission and the integrated distribution plans to assess whether the entire "wires" business is adequately planned. (Refers to Finding VII-8, VII-10, VII-13, and VII-25)	Implemented
VII-9	Adopt a results oriented approach to drive the development and implementation of asset management strategies by their relationship to equipment failure causal factors and system performance: Prioritize asset management strategies by their relationship to outage causal factors and their ability to directly affect reliability performance measures; Evaluate this stratification annually to maintain focus; Differentiate long term asset strategies from those dealing with specific reliability problems and their incorporation into the annual system plans; Evaluate the effectiveness of asset management strategies in terms of the number of capital projects and maintenance programs actually executed. (Refers to Findings VII-18 and VII-25)	Pending Review
VII-10	Initiate or partner with NYISO on appropriate studies regarding the effect and needed response to increased application of Distributed Generation, Renewable Resources, SMART GRID and other trends in utility system operations. (Refers to Finding VII-19)	Implemented
VIII-1	Ensure that projects are managed in accordance with PMP requirements, including: making Quality Assurance an integral part of the project management process for both in-house and regional delivery venture work forces; having project managers actively monitor overall project progress against the baseline schedule and review cost versus progress and budget; adhering to policies and procedures regarding project cost control and re-sanctioning requirements; and maintaining comprehensive project management files; (Refers to Findings VIII-4, VIII-10, VIII-11, and VIII-19)	In Progress
VIII-2	Implement a WBS to organize and manage projects. Use of a WBS should improve project cost and schedule management, monitoring, reporting and feedback. (Refers to Finding VIII-13)	In Progress
VIII-3	Complete implementation of ECoE roles and responsibilities including establishing estimating tools, metrics and policies, creating estimating units and identifying and resolving areas of estimating deviations. (Refers to Findings VIII-16, VIII-18, and, VIII-26)	In Progress
VIII-4	Establish groups of professional estimators for U.S. transmission and distribution that will develop estimates for planning, engineering and construction. Use these internal estimators to set and validate baseline estimates established for the RDV contractors. (Refers to Findings VIII-16, VIII-17, VIII-18, VIII-23 and VIII-26)	In Progress
VIII-5	Have Internal Audit or an outside firm audit the RDV joint venture parent entities on a regular basis. (Refers to Finding VIII-23)	Implemented
VIII-6	Ensure that all capital work orders are closed to plant in-service (FERC Account 101) within 90-days of equipment being energized. (Refers to Finding VIII-25)	In Progress

IX-1	Conduct formal reviews of a sample of projects monthly for overall project cost control. The review should include the project manager, system planner, construction supervisor, and appropriate LOB management and include a review of estimates, cost tracking by work break down structure, progress versus cost, and forecast cost. (Refers to Finding IX-9)	Implemented
IX-2	Reconcile the differences between planned work identified in the Resource Allocation Committee (RAC) reports and expenditures proposed in the January 2009 Transmission and Distribution Capital Investment Plan. (refers to Finding IX-10)	Implemented
IX-3	Revise capital investment levels for projects and programs planned as part of the NMPC Transmission and Distribution Capital Investment Plan filed in January 2009 and obtain the necessary commitment for the funds required by NMPC. (Refers to Finding IX-11)	Implemented
IX-4	Set specific target dates and complete the development and execution of Service Level Agreements between the U.S. Transmission and ED&G LOBs and each of the organizational groups and departments that provide shared services to these LOBs as outlined by NG in the collaborative process. (Refers to Findings IX-13 and IX-15)	Pending Review
IX-5	Amend the service contracts so as to refer to and incorporate as appropriate, the master SLAs and the functional SLAs, which will provide full disclosure about the service levels and costs as well as the types of services provided and the cost methodologies for services provided. (Refers to Finding IX-17)	Pending Review *(new status)*
IX-6	Include applicable master and functional SLAs with the annual update of service contracts filed with the PSC. (Refers to Finding IX-17)	In Progress
X-1	Complete implementation of improvements to the work management program for field forces as identified in the collaborative process. Improvements required include establishing an internal distribution construction workforce, completing the remaining three elements in the EDOT work management initiative, improving its work time standards, and tracking all 29 value metrics for measuring field force productivity. (Refers to Findings X-1, X-22, and X-24)	Pending Review *(correction)*
X-2	Deliver preliminary annual work plans, especially for mandatory projects, to the construction work forces 90 days prior to the start of the fiscal year so that materials can be ordered and staffing/resource schedules prepared in a timely manner. (Refers to Finding X-10)	Implemented
X-3	Eliminate the remaining in-house tree trimmer positions. (Refers to Finding X-11)	Implemented

X-4	Separate the EDOT project into elements and evaluate them as individual projects in the business planning process, rather than treating them as an on-going mega project. At a minimum, integrate the current EDOT into the business planning and performance management process. (Refers to Finding X-18)	Pending Review *(correction)*
X-5	Review the practicality of the new storm response plans to ensure that NMPC ratepayers will be provided with timely and qualified services in the event of a storm emergency. (Refers to Finding X-23)	Implemented

C. Update 7 Report Highlights

Highlights of activities appearing in this update report include:

- **Changes in Implementation Status:** The following changes in implementation status have taken place since the last update report:
  From "*Implemented*" to "*Pending Review*":
  - Recommendations X-1 and X-4 *(Corrections*)

  From "*In Progress*" to "*Pending Review*":
  - Recommendations III-6 and IX-5

- **Work Management and Electric Transformation Initiatives:** In the January 31, 2012 Implementation Plan Update 6 Report, the Company had indicated that Recommendation X-1 relating to the Company's work management program and Recommendation X-4 dealing with the segregation of previously combined efficiency initiatives were accepted by Staff as Implemented. However, upon further review, the Company has determined that Staff has not yet accepted these recommendations and, thus, the status of these recommendations has been revised to Pending Review.

- **Recruit and appoint an independent member to National Grid's Board of Directors**: On April 3, 2012, National Grid announced the appointment of Nora Mead Brownell to the National Grid plc Board of Directors effective June 1, 2012. The appointment of Ms. Brownell meets the criterion set forth in Recommendation III-6.

- **Amend the service contracts and incorporate as appropriate the master SLAs and the functional SLAs:** The Company submitted filings with the Commission on March 30, 2012 which revised the National Grid USA Service Company Agreement, and the Company's cost allocation methodologies and general allocator.

In addition to these highlights, the Company continues to make strides towards implementing open audit recommendations. Progress summaries for several recommendations are provided in Table 3 in the "Recommendations In Progress" chapter of this report. More detailed progress descriptions are presented in the recommendation-specific reports. The Company is committed to continuous improvement as part of our culture and appreciates the on-going dialog with Staff as we progress through implementation of the audit recommendations.

D. Format of Report

The remainder of this Update 7 Report contains further information regarding the implementation status of individual recommendations: Chapter 2 describes recommendations whose implementation is "In Progress"; Chapter 3 provides detail on recommendations that are "Pending Review"; and Chapter 4 describes recommendations that have been "Implemented" to date.

CHAPTER 2 - RECOMMENDATIONS IN PROGRESS

Currently, there are eleven (11) of the forty-four (44) Management Audit recommendations for which Company Actions associated with implementing a recommendation are on-going or on hold pending other decisions or activities.[6] The individual recommendations in the "In Progress" status category are indicated in Table 3.

Table 3--Update 7 Recommendations In Progress

Rec Number	Recommendation/Progress Summary	May 2012 Status
III-8	Consolidate the two service companies as soon as possible and as planned. (Refers to Finding III-30) *Filings that revise the Service Company Agreement, and proposed common allocation methodology and general allocators were filed on March 30, 2012. Service company consolidation and adoption of a common allocation approach will ultimately be achieved through the implementation of the US Foundation Program in 2012.*	In Progress
IV-1	Revise the performance management process for the US Country and NMPC operating company level to include KPIs currently missing. The performance management process should include KPIs for the: Effect of company performance on ratepayers; Effectiveness of the Energy Portfolio Management Group in acquiring reliable, low cost supply or minimizing the volatility of electric prices; Development or implementation of comprehensive system plans; Effectiveness in estimating the cost of projects or performance in managing projects to completion; Effectiveness of centralization of US electric operations on ratepayers. (Refers to Findings IV-6 and IV-12) *Several of the recommended KPIs have been implemented and work continues on developing others. Full completion targeted with the implementation of the US Foundation Program in 2012.*	In Progress
V-2	Implement end-use data collection activities to support meaningful implementation of the SMART GRID program, enhance the development of Energy Efficiency (EE) programs and initiate efforts toward end-use modeling. (Refers to Findings V-5 and V- 6) *The NYSERDA RFP, required for the EE End Use Customer Survey, has been conducted, bids have been reviewed and a contractor for the project has been selected.*	In Progress
V-3	Coordinate load forecasting activities with the customer markets group to support development of EE and Distributed Generation programs and system/supply planning, and to incorporate the projected results of those programs into the load forecasting models and results. (Refers to Findings V-10 and V-11) *The final component of this recommendation is tied to completion of the EE End-Use Customer Survey noted in Recommendation V-2 above. All other components are complete.*	In Progress

[6] This category also includes implementation steps that require action by Staff or the Commission in order for further progress to occur.

VII-3	Evaluate the effectiveness of system plans each year to determine how well they are meeting system planning objectives such as reliability goals, and directing capital resources to specific issue areas and performance trends. (Refers to Findings VII-8,VII -11, VII-18, and VII-29)	In Progress
	The Company has provided its 15-Year Plan to Staff and has begun a process and methodology to evaluate performance of the plan.	
VIII-1	Ensure that projects are managed in accordance with PMP requirements, including: making Quality Assurance an integral part of the project management process for both in-house and regional delivery venture work forces; having project managers actively monitor overall project progress against the baseline schedule and review cost versus progress and budget; adhering to policies and procedures regarding project cost control and re-sanctioning requirements; and maintaining comprehensive project management files; (Refers to Findings VIII-4, VIII-10, VIII-11, and VIII-19)	In Progress
	The majority of sub-recommendations to implement this recommendation are completed. Complete implementation targeted with finalization of the PMP; deployment of the US Foundation Program, full functionality of the estimating tool; and End-to-End Project Management efforts.	
VIII-2	Implement a WBS to organize and manage projects. Use of a WBS should improve project cost and schedule management, monitoring, reporting and feedback. (Refers to Finding VIII-13)	In Progress
	The WBS has been implemented into the Company's Primavera P6 system for future projects. Other elements of this recommendation will be implemented following deployment of the US Foundation Program.	
VIII-3	Complete implementation of ECoE roles and responsibilities including establishing estimating tools, metrics and policies, creating estimating units and identifying and resolving areas of estimating deviations. (Refers to Findings VIII-16, VIII-18, and, VIII-26)	In Progress
	The ECoE has been staffed effective September 2011; the estimating tool (Success Enterprise) is in use; and a high-level scorecard for the estimating accuracy target has been developed. Additional metrics will be developed as data and reports become available from the new systems.	
VIII-4	Establish groups of professional estimators for U.S. transmission and distribution that will develop estimates for planning, engineering and construction. Use these internal estimators to set and validate baseline estimates established for the RDV contractors. (Refers to Findings VIII-16, VIII-17, VIII-18, VIII-23 and VIII-26)	In Progress
	The ECoE has been staffed effective September 2011; A Success Enterprise to Primavera P6 interface solution has been developed and implementation is targeted for July 2012.	
VIII-6	Ensure that all capital work orders are closed to plant in-service (FERC Account 101) within 90-days of equipment being energized. (Refers to Finding VIII-25)	In Progress
	The Company continues to finalize the long term process and application configurations and anticipates implementation by October 2012 as part of the US Foundation Program integration.	
IX-6	Include applicable master and functional SLAs with the annual update of service contracts filed with the PSC. (Refers to Finding IX-17)	In Progress
	The Company will be implementing this recommendation with the annual filing of service contracts that occurs after the service company consolidation and implementation of the US Foundation Program.	

A. Corporate Mission, Objectives, Goals and Planning

Recommendation III-8

Consolidate the two service companies as soon as possible and as planned.

Implementation Plan Leads

Executive Sponsor	Alan Foster, SVP US Financial Services
Team Lead	Sharon Partridge, VP Service Company and Regulatory Accounting

Current Status

The Company will move forward with service company consolidation following implementation of the US Foundation Program which will consolidate legacy National Grid and legacy KeySpan financial, HR, supply chain, and fleet IS applications onto a single SAP platform. Implementation of the US Foundation Program is scheduled for October 2012. Revision to the National Grid US Service Company agreement was filed on March 30, 2012 to consolidate National Grid Corporate Services LLC (formally KeySpan Corporate Services LLC) and National Grid Utility Services (formally KeySpan Utility Services LLC) into a consolidated service company ("ServeCo") at the time the US Foundation Program is implemented. Revisions to the Company's cost allocation methodologies and the general allocator were also filed with the Commission on March 30, 2012.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Implementation of a common accounting system	Feb 2010	Fall 2012		In Progress
Develop a recommended common allocation methodology	Feb 2010	Jan 2012	Mar 2012	Pending Review
Obtain regulatory approvals as may be needed for single allocation methodology	Fall 2011	Target filing Mar 2012	Mar 2012	Pending Review

B. Performance and Results Measurement

Recommendation IV-1

Revise the performance management process for the US Country and NMPC operating company level to include KPIs currently missing. The performance management process should include KPIs for the:

- **Effect of company performance on ratepayers,**
- **Effectiveness of the Energy Portfolio Management Group in acquiring reliable, low cost supply or minimizing the volatility of electric prices,**
- **Development or implementation of comprehensive system plans,**
- **Effectiveness in estimating the cost of projects or performance in managing projects to completion,**
- **Effectiveness of centralization of US electric operations on ratepayers. (Refers to Findings IV-6 and IV-12).**

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Mallikarjun Angalakudati, Director Operations Performance

Current Status

National Grid has implemented several of the recommended Key Performance Indicators (KPIs) and continues to work towards development of others.

- The Company has implemented certain KPIs relating to reliability, safety, and customer satisfaction, which directly benefit customers.
- Appropriate metrics have been implemented by the Energy Portfolio Management group to assess its performance in the acquisition of energy supply as part of its actions to address Recommendation VI-1.
- With regard to metrics associated with system plans, the Company provided Staff with its 15-Year System Plan (see Recommendation VII-1) and has begun a process and methodology to evaluate performance of the 15-Year System Plan as described in Recommendation VII-3.
- A high-level scorecard for the estimating accuracy target has been developed, as indicated in Recommendation VIII-3, as well as a scorecard to track project costs estimating. The project management performance scorecard is nearly in place as part of the End-to-End Project Management initiative.
- The previously implemented field force productivity metrics are currently under review as noted in Recommendation X-1.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Kick-off session to identify desired performance measures	Apr 2010	Apr 2010	May 2010	Complete
Develop detailed delivery plans for each major area	May 2010	May 2010	May 2010	Complete
Develop and implement recommended KPIs in alignment with Audit recommendations	Jun 2010	Summer 2012		In Progress / Substantially Complete

C. Load Forecasting

Recommendation V-2

Implement end-use data collection activities to support implementation of the SMART GRID program, enhance the development of Energy Efficiency (EE) programs and initiate efforts toward end-use modeling.

Implementation Plan Leads

Executive Sponsor	James Madej, SVP Chief Customer Officer
Team Lead	James Cross, Jr., VP Customer Analytics and Risk Management

Current Status

This recommendation is in progress, with several aspects already completed. The Company implemented end-use metering as part of its small business program beginning in the third quarter of 2011, and installation of end-use metering technologies began in October 2011. Information collected from this program will be evaluated pursuant to the work plan and the final evaluation report will be prepared following the accumulation of twelve months of data and billing analysis; this report is expected in the January 2013 timeframe. In addition, energy efficiency targets have been established pursuant to Commission mandate. The Company's approach to achievement of these targets may be further refined based on the evaluation results.

The NYSERDA RFP, required for the "EE End Use Customer Survey," has been conducted, bids have been reviewed and a consensus recommendation for procuring a contractor for the project has been made.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Option 1: "Planned" EE End-Use Metering Implement and collect end-use small commercial lighting data per EE plan.	Jun 2010	TBD	Oct 2011	Complete
Implement and collect end-use residential cooling data per EE plan.	May 2010		N/A	No action to be taken
Incorporate information into EE program	Nov 2010	TBD		Complete and on-going

evaluation and projected future targets.				
Incorporate EE targets into forecasts.	Jan 2011	Oct 2010	Oct 2010	Complete
Option 2: End-Use Customer Survey Collect end-use customer survey information	Apr 2010	TBD		In Progress
Use survey data to inform / update models, if appropriate	Jan 2011	Jun 2012		Pending collection of data above
Option 3: "Best Practices" Conduct research on alternative models and methods	Apr 2010	Sep 2010	Sep 2010	Complete
Cost / Benefit Assessment	Oct 2010	Oct 2010	Oct 2010	Complete
Software/Training (if go)	Apr 2010	Apr 2010	Apr 2010	Complete
Implement (if go)	Oct 2011	Apr 2010	Apr 2010	Complete

Recommendation V-3

Coordinate load forecasting activities with the Customer Markets group to support development of EE and Distributed Generation programs and system/supply planning, and to incorporate the projected results of those programs into the load forecasting models and results.

Implementation Plan Leads

Executive Sponsor	James Madej, SVP Chief Customer Officer
Team Lead	James Cross, Jr., VP Customer Analytics and Risk Management

Current Status

This recommendation is substantially complete with one aspect pending. The Option 3: "Customer Usage Trends" action noted below is tied to the Option 2: "EE End Use Customer Survey" action for Recommendation V-2 – i.e., that survey will also be used for purposes of meeting the requirements under this recommendation. As indicated in Recommendation V-2, the NYSERDA RFP has been conducted, bids have been reviewed and a consensus recommendation for procuring a contractor for the survey has been made.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Option 1: "Post Model Adjustments" Collect projections from customer groups	Jan 2010	Jun 2010	Feb 2010	Complete
Implement "below the line" adjustments to modeled forecasts to capture EE/DG projections.	Jul 2010	Dec 2010	Feb 2010	Complete
Option 2: "Alternative Model / Methods" Conduct research on alternative models and methods	Apr 2010	Dec 2010	Oct 2010	Complete
Cost / Benefit Assessment	Jan 2011	Jun 2011	Oct 2010	Complete
Software/Training (if go)	Jul 2011	Sep 2011	Apr 2010	Complete

Implement (if go)	Oct 2011		Apr 2010	Complete
Option 3: "Customer Usage Trends" Analyze customer use trends	Apr 2010	Sep 2010	Sep 2010	Complete
Collect end-use customer survey information (can use the same survey as in rec'd 2, option 3 above)	Apr 2010	TBD		In Progress
Use survey data to inform / update models, if appropriate	Jan 2011	TBD		Pending collection of data above

D. System Planning

Recommendation VII-3

Evaluate the effectiveness of system plans each year to determine how well they are meeting system planning objectives such as reliability goals, and directing capital resources to specific issue areas and performance trends.

Implementation Plan Leads

Executive Sponsor	Christopher E. Root, SVP Network Strategy
Team Lead	Cheri Warren, VP Asset Management

Current Status

Asset Management strategies are reviewed and revised periodically or as assumptions change. The Company also undertakes a number of annual system studies (e.g., Asset Condition Report and Five-Year Capital Investment Plan) that each involve the evaluation of the Company's Asset Management strategies. The Company submitted its first 15-Year System Plan in draft form to the Staff in April 2011, and had a series of meetings with Staff to discuss plan revisions. Changes were made to the 15-Year Plan based on Staff's feedback, and a revised plan was submitted on February 28, 2012.

The Company is developing a process and methodology to evaluate the performance of the 15-Year System Plan (to be prepared every two years) and Capital Investment Plan (prepared annually) which will be focused on metrics related to reliability, plan adherence / performance, spending rationale review, etc. This review will take place upon the completion of the fiscal year plan and be incorporated into the next annual Capital Investment Plan submitted in January.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Asset Management Strategies will be reviewed and revised accordingly over a two-year period beginning in January 2010. (VII-3)	Jan 2010	Jan 2013		In Progress and on-going

E. Program and Project Planning and Management

Recommendation VIII-1

Ensure that projects are managed in accordance with PMP requirements.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	David Way, VP Project Management and Complex Construction

Current Status

The Project Management Playbook ("PM Playbook" or "PMP") has been revised as part of the End-to-End Project Management initiative to define the level of management and oversight provided to projects of various complexities. The Project Complexity Action Team has established specific criteria for the method and process of managing projects whereby projects will be scored based on numerous factors that drive complexity including: cost, project components, outages, project duration, community outreach, land/rights requirements, etc. Most projects undertaken by National Grid will fall under one of three levels: Levels 1, 2 and 3, with Level 1 projects being the most complex and Level 3 being the least complex. Each project will follow a set of Project Management guidelines specific to its complexity as defined in the PM Playbook.

Version 5.0 of the combined PM Playbook, including documentation of the process for non-PMP managed projects (i.e., Level 3), has been developed. The PMP managed projects (Level 1 & Level 2) are finalized and approved with the PM Playbook, while non-PMP managed projects (Level 3) are in beta status. The redefined role and associated procedures for the management of Level 3 projects will be implemented in the Spring 2012 timeframe This implementation is primarily dependent on the continued training and rollout of the Company's complexity scoring model, which determines whether a project is Level 1, 2, or 3. Also, Level 3 Step 0, which are activities leading up to a Level 3 project's first delegation of authority approval for preliminary engineering, is still in development. Established roles and responsibilities within this step are required to fully implement the Level 3 procedures.

In order to manage implementation, the Company has broken down this overarching recommendation to ensure projects are managed in accordance with PMP requirements into four "sub-recommendations"; i.e., Recommendations VIII-1-1, VIII-1-2, VIII-1-3, and VIII-1-4. The progress for the sub-recommendations is reported separately and Recommendation VIII-1 will only be deemed "Implemented" at such time as all its elements and associated sub-elements have been completed. At this time, the Company considers sub-Recommendations VIII-1-1, VIII-1-3, and VIII-1-4 completed, and only sub-Recommendation VIII-1-2 remains in-progress.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Publish criteria document that defines the level of project management discipline that will be applied to a project.	Apr 2010	Mar 2011	Mar 2011	Complete
Fully document process for non PMP managed projects.	Jan 2010	Spring 2012		In Progress

Recommendation VIII-1-1

Make Quality Assurance an integral part of the project management process for both in-house and regional delivery venture work forces.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	David Way, VP Project Management and Complex Construction

Current Status

National Grid has taken steps necessary to make Quality Assurance an integral part of the project management process. For example, Quality Assurance conducts Project Management Desk Audits on a monthly basis to review the Project Manager's adherence to the steps in the PM Playbook with the goal of verifying conformance with the PM Playbook and identifying any non-conformances, opportunities for improvement, corrective/preventive actions, etc. A Quality Manual defining the scope, requirements, authorities, responsibilities and documentation of the Quality Management System ("QMS") for Operations Performance has been developed, and QMS testing and gap analysis conducted in early 2010 helped identify gaps in the process versus the PM Playbook. In addition, a Quality Council Manual has been established which describes the Quality Council's scope, the Quality Council Management System ("QCMS"), including the processes needed for the QCMS; as well as the monitoring of the operation, control and resource management of these processes through bi-monthly Quality Council meetings.

This recommendation and associated activities are part of the overarching recommendation to ensure that projects are managed in accordance with PMP requirements (Recommendation VIII-1). Details supporting the implementation of this "sub"-recommendation have been provided to Staff for review and will be deemed "Implemented" at such time as all elements and sub-elements associated with Recommendation VIII-1 have been completed.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Project Management Quality System				
Quality Manual	Jul 2009	Mar 2010	Mar 2010	Complete

PM Playbook Work & Sub-work Instructions	Jul 2009	May 2011	Mar 2011	Complete and on-going (PM Playbook Work & Subwork Instructions are updated as needed
Project Mgmt Audits	Mar 2010	On-going	Apr 2010	Complete and on-going
QMS Testing & Gap Analysis	Apr 2010	Dec 2010	Jun 2010	Complete
Quality Council				
Bi-Monthly Quality Council Meetings	Apr 2009	On-going	Apr 2010	Complete and on-going
Construction Audits				Complete and on-going

Recommendation VIII-1-2

Have project managers actively monitor overall project progress against the baseline schedule and review cost versus progress and budget. (Refers to Finding VIII-11)

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	David Way, VP Project Management and Complex Construction

Current Status

Based on a review of National Grid governance boards and project review committees, the Company has established a framework whereby one committee will be responsible for monitoring progress of capital projects with respect to cost and schedule. The Portfolio Calibration Meeting ("PCM") meets monthly, with the first meeting held May 31, 2011. The PCM also conducts a monthly review of sample projects for overall costs and schedule adherence. The PCM replaces the Transmission Resource Allocation Committee ("TRAC") and the System Resource Allocation Committee ("SRAC"), and will promote greater coordination in project development and management.

The implementation of formal monitoring of non-PMP projects is currently underway. Project management responsibility of all non-PMP projects was assigned to Operations Resource Planning in the fall 2011. Distribution Line non-PMP projects have been converted into the new Level 3 complexity Work Breakdown Structure. Conversion to the new templates for Transmission Line and Distribution and Transmission substation projects are currently underway, with an anticipated completion date of summer 2012. The last component of the formal monitoring of these projects will be implementation of the Level 3 Complexity non-PMP Playbook, as noted in Recommendation VIII-1.

National Grid's efforts to develop a Work Breakdown Structure ("WBS"), establish an Estimating Center of Excellence ("ECoE"), including a centralized estimating group, and implement a common estimating tool will assist project managers to actively monitor and manage projects with respect to schedule, scope, and budget. Additional detail regarding the WBS and the estimating group and tools are described in Recommendation VIII-2 and VIII-3, respectively.

Details supporting implementation of this "sub"-recommendation VIII-1-2 will be provided to Staff for review when available. "Parent" Recommendation VIII-1 will be deemed "Implemented" when all associated elements and sub-elements are completed.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Formal project reviews at governance boards	Apr 2010	Jul 2011	May 2011	Complete & on-going
Formal monitoring of non PMP projects	Jun 2011	Summer 2012		In Progress

Recommendation VIII-1-3

Adhere to policies and procedures regarding project cost control and re-sanctioning requirements. (Refers to Finding VIII-19).

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	David Way, VP Project Management and Complex Construction

Current Status

Training sessions associated with the sanctioning and re-sanctioning of transmission and distribution projects were held in June and July 2010 for staff members that are involved in the management of project delivery. Additional training sessions on sanctioning and re-sanctioning will be delivered as part of the End to End Project Management rollout and revised Project Management Playbook distribution.

This recommendation is also part of the overarching recommendation to ensure that projects are managed in accordance with PMP requirements (Recommendation VIII-1). Details supporting the implementation of this "sub"-recommendation have been provided to Staff for review and will be deemed "Implemented" at such time as all elements and sub-elements associated with Recommendation VIII-1 have been completed.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Roll out training for all staff involved in management of project delivery (for re-sanctioning of projects).	Apr 2010	Jun 2010	Jul 2010	Complete

Recommendation VIII-1-4

Maintain comprehensive project management files. (Refers to Finding VIII-4)

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	David Way, VP Project Management and Complex Construction

Current Status

National Grid has developed a Project Management Project Planner which provides the requirements on the project documentation required to be retained and the location for such document retention. Additionally, a Document Control Job Aid has been prepared to train staff on the new policy. This training was rolled-out to Project Managers as part of the Company's overall Quality Management System training.

This recommendation is also part of the overarching recommendation to ensure that projects are managed in accordance with PMP requirements (Recommendation VIII-1). Details supporting the implementation of this "sub"-recommendation have been provided to Staff for review and will be deemed "Implemented" at such time as all elements and sub-elements associated with Recommendation VIII-1 have been completed.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Complete review and develop policy for retention requirements for project documentation.	Apr 2010	Oct 2010	May 2010	Complete
Training staff on the new policy	Jan 2011	Jun 2011	Jun 2010	Complete

Recommendation VIII-2

Implement a Work Breakdown Structure (WBS) system to organize and manage projects. Use of a WBS should improve project cost and schedule management, monitoring, reporting, and feedback. (Refers to Finding VIII-13)

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Thomas Bennett, Director Resource Planning

Current Status

This recommendation is in progress, with several aspects already completed. A WBS has been implemented into the Company's Primavera P6 system for future projects. Other elements of this recommendation (e.g., capturing costs for lower level WBS and workforce time reporting) will be implemented following deployment of the US Foundation Program.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Continue with existing P6 rollout schedule.	On-going	Jul 2010	Jul 2010	Complete
Best Practices & System Assessment	Jan 2010	Feb 2010	Mar 2010	Complete
Process and Systems Specification Requirements	Feb 2010	Mar 2010	Mar 2010	Complete
Implementation Plan	May 2010	Jun 2010	Jun 2010	Complete
Detail Design & Project Type/WBS Matrix	Jun 2010	Feb 2011	Mar 2011	Complete
Systems Modification Plan	Aug 2010	Feb 2011	Mar 2011	Complete
Training Plan and Job Aids	Aug 2010	Mar 2011	Feb 2011	Complete and on-going
System Modification and Testing	Sep 2010	Jun 2011	Jul 2011	Complete
User Training (PgM & PM)	Oct 2010	Sept 2011	Sept 2011	Complete and On-Going
Final Documentation & Close Out	Jan 2011	TBD		Pending

Recommendation VIII-3

Complete implementation of ECoE roles and responsibilities including establishing estimating tools, metrics and policies, creating estimating units and identifying and resolving areas of estimating deviations. (Refers to Findings VIII-16, VIII-18, and, and VIII-26).

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Thomas Bennett, Director Resource Planning

Current Status

Estimating Center of Excellence ("ECoE") roles and responsibilities have been defined and further definition will occur as part of the End-to-End Project Management initiative and transition to the new jurisdictional organization model. Appropriate performance metrics and KPIs in connection with project estimating are also being developed in conjunction with this initiative. A high level scorecard for the estimating accuracy target is currently in use. Additional metrics will be developed as data and reports become available from the new systems.

The US Cost estimating application (i.e., Success Enterprise) is available for use and being used by the substation, transmission line, and planning groups; its use in distribution line is limited and will evolve as the Company further develops the End-to-End process and procedures. A STORMS data extract has been developed to help facilitate the use of Success Enterprise for distribution line estimating. An Estimating Procedures Team has been established within the ECoE and is meeting regularly to discuss systems interface details and testing, to develop estimating units, and to create process and procedure documentation, from which training will follow. The Transmission Line and Substation unit cost libraries have been standardized and updated. The new libraries will be implemented in June 2012 in conjunction with other system enhancements. These enhancements include new standardized estimating templates and an updated version of Success Enterprise (Version 10.2) that is currently in the testing phase. A Success Enterprise to Primavera P6 interface solution has been developed and is scheduled for testing in June 2012 and implementation in July 2012. Continued system enhancement and systems interface alignment is on-going and needed (along with supplemental resources as noted in Recommendation VIII-4) to achieve adequate configuration, functionality, and full implementation of the estimating tool.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
US Cost Estimating Application	In progress	Mar 2011	Mar 2011	Complete (available for use)
Transmission Line Estimating Process	In progress	Sep 2010	May 2010	Complete
Implement US Cost application (including start of estimating variance analysis)	Apr 2010	Jul 2012		In Progress (in use by substation, transmission line, and planning groups; distribution line use pending)

Recommendation VIII-4

Establish groups of professional estimators for US transmission and distribution that will develop estimates for planning, engineering and construction. Use these internal estimators to set and validate baseline estimates established for the RDV contractors.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Thomas E. Bennett, Director Resource Planning

Current Status

The Estimating Center of Excellence ("ECoE") staff includes a group of professional estimators to support estimation of capital projects. The team has been focused on system interfaces, developing the policies and procedures documentation, developing metrics, and the continued development of estimating units in order to achieve adequate configuration, functionality, and full implementation of the estimating tool.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Issue transmission estimating process	In progress	Sep 2010	May 2010	Complete
Hire professional estimators for substation and transmission line projects	In progress	Sep 2010	Jun 2010	Complete
Implement US Cost application	In progress	Jul 2012		In Progress – See VIII-3
Determine Distribution line estimator requirements	Sep 2010	Jun 2011	Sept 2011	Complete

Recommendation VIII-6

Ensure that all capital work orders are closed to plant in-service (FERC Account 101) within 90 days of equipment being energized. (Refers to Finding VIII-25).

Implementation Plan Leads

Executive Sponsor	Christopher E. Root, SVP Network Strategy
Team Leads	Marie Jordan, VP Electric Systems Engineering

Current Status

The Company has taken several actions to address work order closeout issues. These include: (1) an effort to reduce the backlog of outstanding work orders, including identifying factors that lead to prolonged open work orders and developing process improvements to reduce such work orders; (2) education and training of personnel on factors that affect timely work order processing; and (3) development of metrics to measure work order processing performance. In addition, the Company is developing: (i) validation guidelines that the business will follow to avoid future backlogs; (ii) prototype reporting to identify work orders that fall outside the aforementioned guidelines; and (iii) profiles of work order types to determine whether the mandated closeout of all work orders from FERC Account 106 to Account 101 within 90 days from energization can be accommodated in all cases.

Importantly, many of the factors leading to prolonged open work orders relate to interfaces between personnel and the Company's work management and plant accounting systems and the functionality of those systems. As part of the implementation of the US Foundation Program, many of the work management system characteristics that can lead to prolonged open work orders are being addressed. Thus, following implementation of the US Foundation Program, the Company anticipates that the prolonged open work order issue will be significantly mitigated.

The Company continues to finalize the long term process and application configurations and anticipates implementing the associated recommendations by October 2012 as part of the US Foundation Program integration.

Major Activities and Schedule

Major Activities / Milestones	Estimated Start Date	Estimated Completion Date	Actual Completion Date	Current Status
Short Term cross functional team initiatives	In progress	Jul 2011	July 2011	Complete
Initiate Long Term Solutions Study	Feb 2010	Jul 2011	July 2011	Complete
Present LT Study Recommendations and secure approvals	June 2010	Oct 2012		In Progress

F. Capital and Operating & Maintenance Budgeting

Recommendation IX-6

Include applicable master and functional SLAs with the annual update of service contracts filed with the PSC. (Refers to Finding IX-17)

Implementation Plan Leads

Executive Sponsor	Rudy Wynter, SVP Shared Services
Team Lead	Michael Ioanilli, Project Manager

Current Status

The Company will implement this recommendation with the annual filing of the service contracts after the service companies are consolidated (following implementation of the US Foundation Program).

CHAPTER 3—IMPLEMENTED RECOMMENDATIONS PENDING REVIEW

Currently, there are seventeen (17) of the forty-four (44) Management Audit recommendations for which the Company has completed action steps associated with full implementation, but for which Staff review and acceptance is not yet completed. The individual recommendations in this status category are indicated in Table 4.

Table 4 --Update 7 Implemented Recommendations Pending Review

Rec Number	Recommendation	May 2012 Status
III-3	Prepare a business plan document for NMPC electric operations that combines strategic and operating activities with capital and O&M budgets, and ensures that the resulting plan documents the scope of business planning for the benefit of NMPC electric ratepayers. (Refers to Finding III-14)	Pending Review
III-5	Specify how the company is going to monitor and measure the benefits to ratepayers arising from the investment in Smart Grid technology for the pilot projects. When applying for authorization for further Smart Grid technology, include a cost benefit analysis demonstrating how the results of the project will provide a net benefit to all ratepayers. (Refers to Finding III-20)	Pending Review
III-6	Recruit and appoint an independent member to NG's Board of Directors who is experienced in US utility operations and/or regulation. (Refers to Finding III-27)	Pending Review *(new status)*
III-7	Dissolve Niagara Mohawk Holdings, Inc. (Refers to Finding III-29)	Pending Review
III-9	Replace the current membership of the NMPC BOD and the NG USA BOD with members who are representative of NG's senior US management of all of its LOBs operating in the US. (Refers to Findings III-31 and II-32)	Pending Review
VI-2a	Continue activities to develop a long-term strategy and short-term tactical supply procurement plan as laid out in the Collaborative meetings and incorporate these plans into the corporate business plan. (Refers to Findings VI-10, VI-11, VI-13 and VI-14)	Pending Review
VI-3	Define and restructure the risk management policies, procedures and functions to assure appropriate monitoring of risk factors as the transition and long-term supply procurement plans are implemented. The risk management tools should incorporate appropriate market monitoring to know when contingencies are needed. (Refers to Finding VI-12)	Pending Review

VII-1	Develop an integrated NMPC Transmission and Distribution system-wide plan. (Refers to Findings VII-4,VII-8, VII-14, VII-15, VII-16, VII-17, VII-18, and VII-31)	Pending Review
VII-2	Utilize annual operational reports such as the Transmission System Reliability Performance Report and the Distribution Reliability Report as inputs to asset health/strategy and subsequently recommended projects. Demonstrate how the annual integrated system plans directly address reliability issues raised in the two reports. Show progress against known system deficiencies such as "worst-performing circuits" and outage causal factors. Identify and relate capital programs and projects to specific reliability performance issues and measure effect. (Refers to Findings VII -3, VII-4, VII-5, VII-25, and VII-26)	Pending Review
VII-4	Evaluate the causal factors and impact on capital budgets and system planning of projects "walked in" and "walked out" of the system plans. Identify why the projects walked in were not initially planned, what will be done in future planning cycles to remediate these issues and how projects displaced into future planning periods will be accommodated. (Refers to Findings VII -11 and VII-29)	Pending Review
VII-6	Evaluate outages that were avoidable due to improved system planning (capital) and preventive maintenance (O&M) such as vegetation and failed equipment. Determine the budget necessary to provide the level of maintenance that would have prevented the outages and compare against the current maintenance budget. Analyze the costs associated with the outages with incremental increases in maintenance programs. (Refers to Findings VII -3, VII-4, VII-5 and VII-25)	Pending Review
VII-7	Establish a traditional transmission utility system planning function that results in industry accepted planning products such as: system-wide studies not just area studies; five-year, ten-year, 15-year and 20-year system layouts; integrated ten to twenty year system plans; and timelines of system needs. (Refers to Findings VII-8, VII-11, VII-13, VII-24, and VII-26)	Pending Review
VII-9	Adopt a results oriented approach to drive the development and implementation of asset management strategies by their relationship to equipment failure causal factors and system performance: Prioritize asset management strategies by their relationship to outage causal factors and their ability to directly affect reliability performance measures; Evaluate this stratification annually to maintain focus; Differentiate long term asset strategies from those dealing with specific reliability problems and their incorporation into the annual system plans; Evaluate the effectiveness of asset management strategies in terms of the number of capital projects and maintenance programs actually executed. (Refers to Findings VII-18 and VII-25)	Pending Review

IX-4	Set specific target dates and complete the development and execution of Service Level Agreements between the U.S. Transmission and ED&G LOBs and each of the organizational groups and departments that provide shared services to these LOBs as outlined by NG in the collaborative process. (Refers to Findings IX-13 and IX-15)	Pending Review
IX-5	Amend the service contracts so as to refer to and incorporate as appropriate, the master SLAs and the functional SLAs, which will provide full disclosure about the service levels and costs as well as the types of services provided and the cost methodologies for services provided. (Refers to Finding IX-17)	Pending Review (*new status)*
X-1	Complete implementation of improvements to the work management program for field forces as identified in the collaborative process. Improvements required include establishing an internal distribution construction workforce, completing the remaining three elements in the EDOT work management initiative, improving its work time standards, and tracking all 29 value metrics for measuring field force productivity. (Refers to Findings X-1, X-22, and X-24)	Pending Review *(correction)*
X-4	Separate the EDOT project into elements and evaluate them as individual projects in the business planning process, rather than treating them as an on-going mega project. At a minimum, integrate the current EDOT into the business planning and performance management process. (Refers to Finding X-18)	Pending Review *(correction)*

Information regarding the implementation status of these recommendations appears below, with further details and specifics available in the Company's previously submitted Update Reports.

A. Corporate Mission, Objectives, Goals and Planning

Recommendation III-3

Prepare a business plan document for NMPC electric operations that combines strategic and operating activities with capital and O&M budgets, and ensures that the resulting plan documents the scope of business planning for the benefit of NMPC electric ratepayers. (Refers to Finding III-14).

Implementation Plan Leads

Executive Sponsor	Ken Daly, President New York
Team Lead	David B. Doxsee, VP Finance New York

Implementation of Recommendation

The Company completed the first annual five-year Niagara Mohawk electric operations business plan document in April 2010, and the 2011 business plan document was provided to Staff May 20, 2011.

Major Activities and Schedule

Major Activities and Milestones	Current Status
Initial submission of Business Plan information by legal entity data	Complete
Final submission of the Business Plan detail by legal entity	Complete Apr 2010
Initial draft of the first NMPC Electric 5-year business plan document completed and approved for FY2010/11 though FY2014/15	Complete Apr 2010
Ongoing process for development, review, and completion of the NMPC 5-year business plan agreed with North Star and PSC Staff	Complete May 2010
Kick-off of the NMPC 5-year annual business plan. A full business plan cycle will include development and documentation of: a.) NMPC strategic plan b.) NMPC priorities (near and long term) c.) 5 year financial forecast including: 1.) Profit and loss statements 2.) Capital Investment Plans 3.) Operating and Maintenance expense forecasts 4.) Revenues forecasts	Complete (on-going)
Completion of the annual NMPC business plan	Complete (on-going)

Recommendation III-5

Specify how the company is going to monitor and measure the benefits to ratepayers arising from the investment in Smart Grid technology for the pilot projects. When applying for authorization for further Smart Grid technology, include a cost benefit analysis demonstrating how the results of the project will provide a net benefit to all ratepayers (Refers to Finding III-20).

Implementation Plan Leads

Executive Sponsor	Tom King, Executive Director, US
Team Lead	Cheri Warren, VP, Asset Management

Implementation of Recommendation

National Grid withdrew its Modified New York Smart Program Proposal on February 11, 2011, and is not implementing the Smart Grid pilot projects at this time. To the extent the Company proposes Smart Grid investments or activities in the future, it will include information on the relative benefits of the investment or activity at that time.

Recommendation III-6

Recruit and appoint an independent member to NG's Board of Directors who is experienced in US utility operations and/or regulation.

Implementation Plan Sponsor and Lead

The implementation of this recommendation is the responsibility of the National Grid Board of Directors of National Grid plc.

Current Status

In April 2012, National Grid announced the appointment of Nora Mead Brownell to the National Grid plc Board of Directors effective June 1, 2012. Ms. Brownell has extensive US utility and regulatory experience, having served as a Commissioner with the Pennsylvania Public Utility Commission and Federal Energy Regulatory Commission.

Recommendation III-7

Dissolve Niagara Mohawk Holdings, Inc. (NMHI)

Implementation Plan Leads

Executive Sponsor	Colin Owyang, SVP and US General Counsel
Team Lead	Timothy McAllister, Assistant General Counsel & Director Corporate

Implementation of Recommendation

Significant future potential tax implications do not favor dissolving Niagara Mohawk Holdings at this time. Given the minimal oversight required, customers receive no benefit from dissolution of the company. Accordingly, this recommendation will not be implemented.

Major Activities and Schedule

Major Activities and Milestones	Current Status
Check with Treasury, Tax and Legal regarding ability to eliminate separate entity	Complete
Corporate actions to merge NMHoldings into NGUSA	No action is to be taken based on results of evaluation

Recommendation III-9

Replace the current membership of the NMPC BOD and the NG USA BOD with members who are representative of NG's US senior management of all of its LOBs operating in New York and the US.

Implementation Plan Leads

Executive Sponsor	Colin Owyang, SVP & US General Counsel
Team Lead	Catherine L. Nesser, VP & Deputy General Counsel

Current Status

In early 2010, the National Grid USA Board elected the most senior executives in the US as members, consistent with the recommendation. The Board remains comprised of the most senior executives in the U.S. In the 2010 Electric Rate Case (Case 10-E-0500), the Commission directed the Company, Staff and interested parties to collaborate to determine which provisions from the prior rate plan would be continued in the current rate plan. An agreement was reached on, among other things, the structure and composition of the Niagara Mohawk Board of Directors, which is different from the structure recommended in the Management Audit. That agreement was filed in the Report on Rate Plan Provisions ("Report") dated January 31, 2012. In 2011, the Company elected a new Board consistent with the Report. If the Report is approved as filed, the Company will consider this recommendation complete. If the requirements of the Company's Board composition change as a result of the Commission's actions on the Report, the Company will re-evaluate this Recommendation.

Major Activities and Schedule

Major Activities / Milestones	Estimated Completion Date	Actual Completion Date	Current Status
Exec paper with recommendation	Dec 2009	Dec 2009	Complete
Petition for change in Attachment 23 of MJP	Jun 2010	Jun 2010	Complete (Petition reversed due to MJP Collaborative Process)
Submit report and petition to Commission that addresses composition of NMPC Board of Directors	June 2012	Jan 2012	Complete (Report on Rate Plan Provisions filed)
Appoint/ Elect new Directors (45 days after approval of above)	Only necessary if PSC orders other requirements	Jun & Aug 2011	Complete (new election per MJP Collaborative Process)

B. Supply Procurement

Recommendation VI-2a

Continue activities to develop a long-term strategy and short-term tactical supply procurement plan as laid out in the Collaborative meetings and incorporate these plans into the corporate business plan.

Implementation Plan Leads

Executive Sponsor	James S. Madej, SVP Chief Customer Officer
Team Lead	John V. Vaughn, VP Energy Procurement

Implementation of Recommendation

A revised long-term strategy and short-term tactical implementation plan for supply procurement has been completed. Also, the Electric Supply team is developing process improvements to increase the accuracy of the daily electric load forecast.

Major Activities and Schedule

Major Activities and Milestones	Current Status
Commence Internal Audit of electric supply procurement.	Complete Jan 2010
Receive and review final report from Internal Audit.	Complete Mar 2010
Develop implementation plan to address gaps identified in Internal Audit report.	Complete May 2010
Implement changes to address gaps from the Internal Audit report.	Complete Aug 2010

Recommendation VI-3

Define and restructure the risk management policies, procedures and functions to assure appropriate monitoring of risk factors as the transition and long-term supply procurement plans are implemented. The risk management tools should incorporate appropriate market monitoring to know when contingencies are needed.

Implementation Plan Leads

Executive Sponsor	James S. Madej, SVP Chief Customer Officer
Team Lead	James A. Cross, Jr., VP Customer Analytics and Risk Management

Implementation of Recommendation

The revised risk management framework for supply procurement is complete. In addition, the Energy Procurement Risk Management Committee ("EPRMC") and the expanded Commodity Management Committee ("CMC") have been restructured.

These two committees review and approve the Electric Supply procurement strategies. The EPRMC continues to meet approximately monthly and includes senior management from Regulatory, Legal, and Treasury. The CMC also continues to meet approximately monthly, and is comprised of management staff from Regulatory Pricing, Risk Management, Legal, Supplier Services, Credit and Accounting.

Schedule

Since the elements of the implementation plan are similar, refer to implementation schedule for Recommendation VI-2a.

C. System Planning

Recommendation VII-1 through VII-10, excluding VII-3, VII-5, VII-8, & VII-10

There are six (6) recommendations relating to system planning whose status is "Pending Review." For those six recommendations (see Table 5, below), the Company provides this consolidated response in light of the plan to produce an integrated system plan that addresses all system planning recommendations.

Table 5--System Planning Recommendations Pending Review

VII-1	Develop an integrated NMPC Transmission and Distribution system-wide plan. (Refers to Findings VII -4,VII-8, VII-14, VII-15, VII-16, VII-17, VII-18, and VII-31)
VII-2	Utilize annual operational reports such as the Transmission System Reliability Performance Report and the Distribution Reliability Report as inputs to asset health/strategy and subsequently recommended projects. Demonstrate how the annual integrated system plans directly address reliability issues raised in the two reports. Show progress against known system deficiencies such as "worst-performing circuits" and outage causal factors. Identify and relate capital programs and projects to specific reliability performance issues and measure their effect. (Refers to Findings VII -3, VII-4, VII-5, VII-25, and VII-26)
VII-4	Evaluate the causal factors and impact on capital budgets and system planning of projects "walked in" and "walked out" of the system plans. Identify why the projects walked in were not initially planned, what will be done in future planning cycles to remediate these issues and how projects displaced into future planning periods will be accommodated. (Refers to Findings VII -11 and VII-29)
VII-6	Evaluate outages that were avoidable due to improved system planning (capital) and preventive maintenance (O&M) such as vegetation and failed equipment. Determine the budget necessary to provide the level of maintenance that would have prevented the outages and compare against the current maintenance budget. Analyze the costs associated with the outages with incremental increases in maintenance programs. (Refers to Findings VII -3, VII-4, VII-5 and VII-25)
VII-7	Establish a traditional transmission utility system planning function that results in industry accepted planning products such as: system-wide studies not just area studies; five-year, ten-year, 15-year and 20-year system layouts; integrated ten to twenty year system plans; and timelines of system needs. (Refers to Findings VII-8, VII-11, VII-13, VII-24, and VII-26)
VII-9	Adopt a results oriented approach to drive the development and implementation of asset management strategies by their relationship to equipment failure causal factors and system performance. • Prioritize asset management strategies by their relationship to outage causal factors and their ability to directly affect reliability performance measures. • Evaluate this stratification annually to maintain focus. • Differentiate long term asset strategies from those dealing with specific reliability problems and their incorporation into the annual system plans. • Evaluate the effectiveness of asset management strategies in terms of the number of capital projects and maintenance programs actually executed. (Refers to Findings VII-18 and VII-25)

Implementation Plan Leads

Executive Sponsor	Christopher E. Root, SVP Network Strategy
Team Lead	Cheri Warren, VP Asset Management

Implementation of Recommendation

In April 2011, the Company provided Staff its draft 15-Year System Plan. The integrated System Plan has a 15-year outlook and will be updated annually. It evaluates the present state of the system and technology today and considers possible future state(s) of the system and technology as conditions evolve over the planning timeframe. The scope of the Plan reaches into all parts of National Grid, thus requiring significant and coordinated input from several departments including Transmission and Distribution Planning, Asset Management, Energy Procurement, Customer & Markets, Smart Grid and Regulation. Since the April 2011 submission, the Company and Staff have had a series of meetings to discuss plan revisions. Changes were made to the 15-Year Plan based on Staff's feedback, and a revised plan was submitted on February 28, 2012.

Besides the report itself, there are a number of related individual management audit recommendations which will be addressed either as part of the main report itself or, in some cases, by reference to other documents or procedures. The updated status of those management audit recommendations is reported below.

Major Activities and Schedule

Major Activities and Milestones	Estimated Start Date	Estimate Completion Date	Actual Completion Date	Current Status
Deliver Integrated NMPC Transmission and Distribution Strategic System Plan. (SSP) (VII-1)	Feb 2010	Apr 2011	Apr 2011	Complete
Develop a schedule for completing the Implementation Plan as set forth herein for filing a SSP by April 2011.	Feb 2010	Feb 2010	Mar 2010	Complete
Determine process to review methods to use information derived from annual operational reports. (VII-2)	Feb 2010	Sep 2010	Dec 2010	Complete and on-going
Project Walk-in Report – Addition of Spending Rationale Classification and incorporation of project walkout	Apr 2010	May 2010	May 2010	Complete

information. (VII-4)				
Perform economic studies to identify more efficient system modifications that can reduce the costs of service and increase utilization of resources. (VII-5)		Dec 2010	Dec 2010	Complete and on-going
Develop process in order to evaluate outages that were avoidable due to improved system planning and preventive maintenance. (VII-6)	Feb 2010	Dec 2010	Dec 2010	Complete and on-going
Incorporate the results of a traditional transmission utility system planning function. (VII-7)	Feb 2010	Apr 2011	Apr 2011	Complete
Adopt a results oriented approach to drive the development and implementation of asset management strategies by their relationship to equipment failure causal factors and system performance. (VII-9)	Feb 2010	Sep 2010	Dec 2010	Complete and on-going

D. Capital and Operating & Maintenance Budgeting

Recommendation IX-4

Set specific target dates and complete the development and execution of Service Level Agreements between the US Transmission and ED&G LOBs and each of the organizational groups and departments that provide shared services to these LOBs as outlined by NG in the collaborative process.

Implementation Plan Leads

Executive Sponsor	Rudy Wynter, SVP Shared Services
Team Lead	Michael Ioanilli, Project Manager

Current Status

Service Level Agreements between Niagara Mohawk and internal service providers have been agreed and executed with: Corporate Affairs, Customer, Finance, Human Resources, Insurance, Information Services, Legal, Network Strategy, Operations, Procurement, Regulation and Pricing, Security, Shared Services, SHE (Safety, Health and Environment), Tax and Treasury.

Recommendation IX-5

Amend the service level contracts so as to refer to and incorporate as appropriate, the master SLAs and the functional SLAs, which will provide full disclosure about the service levels and costs as well as the types of services provided and the costs methodologies for services provided. (Refers to Finding IX-17)

Implementation Plan Leads

Executive Sponsor	Rudy Wynter, SVP Shared Services
Team Lead	Michael Ioanilli, Project Manager

Current Status

The revised National Grid USA Service Company Agreement was filed with the Commission on March 30, 2012. In addition, revisions to the Company's cost allocation methodologies and the general allocator were filed with the Commission on March 30, 2012. Work is currently underway to align service descriptions between service company contracts, National Grid's Cost Allocation Manual and SLAs.

E. Work Management

Recommendation X-1

Complete implementation of improvements to the work management program for field forces as identified in the collaborative process. Improvements include establishing an internal distribution construction workforce, completing the remaining three elements in the EDOT work management initiative, improving its work time standards, and tracking all 29 value metrics for measuring field force productivity.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Mallikarjun Angalakudati, Director Operations Performance

Implementation of Recommendation

As part of the July 29, 2009 labor agreement extension, a Memorandum of Agreement was established between Niagara Mohawk Power Corporation and IBEW Local Union 97 regarding a "Pilot on Distribution Line Construction (DLC)." During the term of the pilot, the DLC group constructed larger distribution project and program work, consistent with the type of work done by the contracted workforce, and was measured on the same Key Performance Indicators ("KPIs"). In April 2011, the Company and the Union agreed to dissolve the DLC, and the former DLC workforce returned to the divisions within the Maintenance and Construction function of the new organizational model.

As indicated previously, the Company undertook a review of the initially identified 29 value metrics for measuring field force productivity and implemented a sub-set of those metrics. The Company regularly reviews its metrics and revises them where appropriate to produce KPIs that provide value and transparency. As such, the original field force metrics discussed at the time of the audit have been modified after actual experience indicated the metrics were not effective. A full review of appropriate metrics to measure and enhance field force productivity is currently underway.

Major Activities and Schedule

Major Activities and Milestones	Current Status
Analyze and design the remaining field productivity metrics	Complete Mar 2010
Develop solution and process change requirements and details	Complete Apr 2010
Develop cost and effort estimates to deliver each metrics	Complete Jul 2010
Finalize direction based on costs benefit analysis	Complete Jul 2010

Recommendation X-4

Separate the EDOT project into elements and evaluate them as individual projects in the business planning process, rather than treating them as an on-going mega project. At a minimum, integrate the current EDOT into the business planning and performance management process.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Mallikarjun Angalakudati, Director Operations Performance

Implementation of Recommendation

In March 2010, National Grid announced organizational changes to align the Transformation Program with the overall Operations Performance organization in Electric Operations, with the intent that Transformation and all other projects would be supported through the new Project Office role in Operations Performance. The Project Office responsibilities were expanded to provide a consistent framework for managing ongoing change initiatives and for delivering US Electricity Operations Transformation activities across key value drivers (i.e., safety, efficiency, reliability and customer satisfaction).

National Grid further integrated the EDO Transformation effort into the business planning process by incorporating the initiatives into annual priorities, and including financial planning and visibility within the business planning framework. Costs and benefits anticipated from the EDO Transformation program were incorporated into the financial business planning process for US Electricity Operations.

Major Activities and Schedule

Major Activities and Milestones	Current Status
Align Transformation with Performance Management (organizationally)	Complete Mar 2010
Align Transformation with Business Planning Process	Complete Mar 2010

CHAPTER 4—IMPLEMENTED RECOMMENDATIONS

To date, sixteen (16) of the forty-four (44) recommendations in the Management Audit report have been implemented by the Company and accepted by Staff as complete.[7] The individual recommendations in this status category are indicated in Table 6.

Table 6--Update 7 Implemented Recommendations

Rec Number	Recommendation	May 2012 Status
III-1	Revise the corporate vision and objectives statements to more explicitly articulate the company's obligation to provide low cost, reliable and safe electric service to its customers. The revised statement should reflect the need to mitigate volatility and produce lower costs relative to some benchmark and could include a reflection of the total bill rather than the unit price. (Refers to Finding III-1)	Implemented
III-2	Consolidate the management of U.S. electric transmission and electric distribution into one LOB to provide greater visibility over NMPC electric transmission and distribution operations while maintaining NG's ability to achieve synergies and economies of scale. (Refers to Finding III-4)	Implemented
III-4	Integrate supply procurement and energy portfolio management into the business planning processes. (Refers to Finding III-17)	Implemented
IV-2	Utilize benchmarking in setting performance targets and establishing NG's current position against the targets. (Refers to Finding IV-14)	Implemented
V-1	Develop energy sales forecasts and peak demand forecasts that are specific to Upstate New York and the sub-areas within NMPC service territory. (Refers to Finding V-2)	Implemented
VI-1	Establish a comprehensive framework of performance metrics for the supply procurement and risk management functions. The metrics should build on NG's corporate vision and goals and need to reflect the changing electric supply procurement market and NG's preferred strategy in that market. (Refers to Findings VI-7 and VI-14)	Implemented

[7] In the Audit Report, Recommendation VI-2 was deemed no longer needed as a result of progress made during the collaborative process. Although Staff has indicated this recommendation is "Completed & Accepted," the Company does not include progress updates for this recommendation. Therefore, the Company's total count of 44 recommendations and implemented recommendations are each one less than the Staff's counts.

VII-5	Perform economic studies to identify more efficient system modifications that can reduce the costs of service and increase utilization of resources. (Refers to Findings VII -26 and VII-29)	Implemented
VII-8	Evaluate the boundaries for continuity between the integrated transmission and the integrated distribution plans to assess whether the entire "wires" business is adequately planned. (Refers to Finding VII-8, VII-10, VII-13, and VII-25)	Implemented
VII-10	Initiate or partner with NYISO on appropriate studies regarding the effect and needed response to increased application of Distributed Generation, Renewable Resources, SMART GRID and other trends in utility system operations. (Refers to Finding VII-19)	Implemented
VIII-5	Have Internal Audit or an outside firm audit the RDV joint venture parent entities on a regular basis. (Refers to Finding VIII-23)	Implemented
IX-1	Conduct formal reviews of a sample of projects monthly for overall project cost control. The review should include the project manager, system planner, construction supervisor, and appropriate LOB management and include a review of estimates, cost tracking by work break down structure, progress versus cost, and forecast cost. (Refers to Finding IX-9)	Implemented
IX-2	Reconcile the differences between planned work identified in the Resource Allocation Committee (RAC) reports and expenditures proposed in the January 2009 Transmission and Distribution Capital Investment Plan. (refers to Finding IX-10)	Implemented
IX-3	Revise capital investment levels for projects and programs planned as part of the NMPC Transmission and Distribution Capital Investment Plan filed in January 2009 and obtain the necessary commitment for the funds required by NMPC. (Refers to Finding IX-11)	Implemented
X-2	Deliver preliminary annual work plans, especially for mandatory projects, to the construction work forces 90 days prior to the start of the fiscal year so that materials can be ordered and staffing/resource schedules prepared in a timely manner. (Refers to Finding X-10)	Implemented
X-3	Eliminate the remaining in-house tree trimmer positions. (Refers to Finding X-11)	Implemented
X-5	Review the practicality of the new storm response plans to ensure that NMPC ratepayers will be provided with timely and qualified services in the event of a storm emergency. (Refers to Finding X-23)	Implemented

Information regarding the implementation of these recommendations appears below, with further details and specifics available in the Company's previously submitted Update Reports.

A. Corporate Mission, Objectives, Goals and Planning

Recommendation III-1

Revise the corporate vision and objectives statements to more explicitly articulate the company's obligation to provide low cost, reliable and safe electric service to its customers. The revised statement should reflect the need to mitigate volatility and produce lower costs relative to some benchmark and could include a reflection of the total bill rather than the unit price.

Implementation Plan Leads

Executive Sponsor	Tom King, Executive Director, US
Team Lead	Joel Semel, Executive Advisor

Implementation of Recommendation

National Grid has adopted the following vision statement for Niagara Mohawk Power Corporation (Electric).

> We will be the foremost electric company, delivering unparalleled safety, reliability and efficiency, mitigating total energy costs and minimizing energy cost volatility, all of which are vital to the well-being of our customers and communities. We are committed to being an innovative leader in energy efficiency and management.

Recommendation III-2

Consolidate the management of US electric transmission and electric distribution into one LoB to provide greater visibility over NMPC electric transmission and distribution operations while maintaining NG's ability to achieve synergies and economies of scale.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Thomas Bennett, Director Resource Planning

Implementation of Recommendation

The Company initially combined Distribution and Transmission work delivery and operations under the oversight of the Chief Operating Officer, with budgetary control for all capital and operational activities for Transmission and Distribution. Recently, the Company launched its transition from a Line-of-Business (LoB) model to a jurisdictional model, which is expected to provide improved focus on local needs and regulatory priorities.

Within the new jurisdictional model, the New York President represents the interests of Niagara Mohawk, is accountable for the performance of the New York business, and is focused on the local needs of customers, communities, and regulatory priorities. Under the President, various functions (e.g., Operations, Maintenance and Construction, Network Strategy, etc.) are accountable for New York focus and dedicated support.

Major Activities and Schedule

Major Activities and Milestones	Current Status
Case for Change: Determine if a compelling case exists to change the status quo.	Complete Jun 2009
Gap Analysis: Examine whether NG's US Transmission & Electric Distribution businesses are best positioned to deliver.	Complete Jul 2009
High Level Design: Using a cross functional working team identify whether alternative organizational designs exist that would address objectives.	Complete Sep 2009
Detailed Design	Complete Dec 2009
Implementation	Complete Mar 2010

Recommendation III-4

Integrate supply procurement and energy portfolio management into the business planning processes. (Refers to Finding III-16)

Implementation Plan Leads

Executive Sponsor	Alison Wood, Global Director Strategy and Business Development
Team Lead	James Cross, Jr., VP Customer Analytics and Risk Management David B. Doxsee, VP Finance New York

Implementation of Recommendation

The Energy Portfolio Management ("EPM") team has developed its own five-year Strategic Plan to enhance the supply procurement process. The strategic plan better tracks EPM's objectives, achievements and financial performance related to supply planning and commodity procurement functions.

The EPM Strategic Plan is aligned with corporate objectives and outlines EPM annual priorities as they support the objectives. The plan incorporates EPM strategic drivers and issues, risks and opportunities and an action plan section. As part of the strategic plan, the EPM group will drive specific initiatives such as a long-term commodity procurement plan to protect and promote ratepayer benefits. Key elements of the EPM Strategic Plan have been provided for integration into NMPC's business plan.

Major Activities and Schedule

Major Activities/Milestones	Completion Date
Develop EPM Strategic Plan	Oct 2009
Communicate Plan to ED&G Group for inclusion in Business Plan	Dec 2009
Included in ED&G Business Plan	Mar 2010

B. Performance and Results Measurement

Recommendation IV-2

Utilize benchmarking in setting performance targets and establishing NG's current position against the targets.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Mallikarjun Angalakudati, Director Operations Performance

Implementation of Recommendation

The Company has developed a comprehensive benchmarking plan that describes benchmarking activities in which the Company participates, as well as how they are incorporated into the goal setting processes.

Major Activities and Schedule

Major Activities/Milestones	Completion Date
Develop a draft comprehensive benchmark plan	Dec 2009
Issue draft for comment and feedback	May 2010
Develop final draft of comprehensive benchmark plan	May 2010
Receive business sanction of new plan and process	May 2010
Ensure all performance measure and target setting processes are updated to reflect benchmarking and the plan	May 2010

C. Load Forecasting

Recommendation V-1

Develop energy sales forecasts and peak demand forecasts that are specific to Upstate New York and the sub-areas within NMPC service territory.

Implementation Plan Leads

Executive Sponsor	James S. Madej, SVP Chief Customer Officer
Team Lead	James Cross, Jr., VP Customer Analytics and Risk Management

Implementation of Recommendation

The Company implemented this recommendation using a two-pronged approach: (1) "top-down"; and (2) "bottom-up," The top-down approach primarily used econometric forecasts to inform a "bottom-up" trend analysis of peak/energy data for the sub areas served by the Company. The developed sub-area regional forecasts are then provided to system planners for use in their planning processes. The bottom-up approach uses a combination of sub-area forecasts (e.g., county-level econometric) and bottom-up peak/energy (e.g., substation trend analysis). The Company completed peak load growth forecasts down to the county level for the 36 counties in the Company's service territory, in addition to the information developed for the six NYISO regional areas under the top-down approach.

Major Activities and Schedule

Major Activities / Milestones	Completion Date
"Top-Down" approach Collect available information on a regional basis from existing systems.	Feb 2010
"Top-Down" approach Conduct forecast modeling on a regional basis using existing techniques.	Feb 2010
"Bottom-Up" approach Collect available information on a distribution planning level from existing systems.	Oct 2010
"Bottom-Up" approach Conduct forecast modeling on a regional basis using existing techniques. (if go)	Oct 2010

D. Supply Procurement

Recommendation VI-1

Establish a comprehensive framework of performance metrics for the supply procurement and risk management functions. The metrics should build on NG's corporate vision and goals and need to reflect the changing electric supply procurement market and NG's preferred strategy in that market.

Implementation Plan Leads

Executive Sponsor	James S. Madej, SVP Chief Customer Officer
Team Lead	James Cross, Jr., VP Customer Analytics and Risk Management

Implementation of Recommendation

To implement this recommendation, the Company established a comprehensive framework of performance metrics for the supply procurement and risk management functions. The Electric Supply group has overseen implementation of a Load Bidding Report with metrics to limit exposure to Real Time NYISO price volatility. The metrics are to be measured on a calendar year basis and reported on a fiscal year basis, as described below.

Metric #1: Limit the quantity of Real Time NYISO purchases to +/- 10% of the total Niagara Mohawk Commodity Load.

Metric #2: Limit the net cost of Real Time NYISO purchases to <3% of the total energy (LBMP only) costs.

These metrics were instituted as group and individual goals for the Electric Supply group relating to their variable pay component in the Performance for Growth (P4G) system beginning with fiscal year 2009-2010. The metrics are also reviewed and reported by the Risk Management middle office group, which creates an appropriate check and balance on the metric results. In addition, the Electric Supply front office has begun reporting several other relevant metrics to the Risk Management middle office on a monthly basis.

Performance metrics regarding New York utilities were also incorporated in the Energy Portfolio Management (EPM) department's Key Performance Indicators (KPIs) for fiscal year 2009-10. Niagara Mohawk reports quarterly volatility metrics in compliance with the Commission's Order in Phase II of Case 06-M-1017, and also collects this quarterly data from the other reporting New York utilities for comparison.

The Company is also implementing process improvements on a comprehensive, long term supply procurement policy and plan, has integrated supply procurement planning within the Company's business plan process, and has developed a process for monitoring and updating the long term supply procurement strategy and short term tactical plans.

The Company has also undertaken a consultant review of current procurement strategies and an assessment of different procurement approaches, as well as the development of a systematic framework to facilitate corporate decision-making and better formulation of regulatory strategies. This review and implementation of the resulting recommendations are significant steps towards developing a comprehensive, long term supply procurement policy.

Major Activities and Schedule

Major Activities / Milestones	Completion Date
Develop performance metrics and input them into the P4G system.	Sep 2009
Begin monthly reporting of performance metrics starting Jan 2010.	Feb 2010
Incorporate supply portfolio performance metrics (prices and volatility metrics from the quarterly NYPSC filings, as well as available comparative data on other NY utilities) into KPIs for FY 2009-10.	Feb 2010

E. System Planning

Recommendation VII-5

Perform economic studies to identify more efficient system modifications that can reduce the costs of service and increase utilization of resources. (Refers to Findings VII -26 and VII-29).

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Cheri Warren, VP Asset Management

Implementation of Recommendation

When evaluating system needs, the Company's planning engineers consider alternative solutions to identify the most efficient means to address the need. In addition to evaluating traditional wires-based alternatives, the Company recently (February 2011) adopted a formal process for evaluating "non-wires alternatives" to meet system needs. The goal in each case is to optimize the use of existing assets and satisfy the system needs safely, reliably and in the most efficient manner, for the benefit of customers; and the Company will continue to enhance and apply its alternatives consideration practices to future projects.

Major Activities and Schedule

Major Activities/Milestones	Completion Date
Incorporate formal process for considering "non-wires alternatives" as part of electric system planning	Jul 2011

Recommendation VII-8

Evaluate the boundaries for continuity between the integrated transmission and the integrated distribution plans to assess whether the entire "wires" business is adequately planned.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Cheri Warren, VP Asset Management

Implementation of Recommendation

The boundaries of the Transmission study areas and Distribution study areas for the three operational divisions in New York, as well as specific areas of overlap for continuity between the integrated transmission and distribution plans have been established. As detailed in the draft 15-Year System Plan submitted to Staff in April 2011, the Company has segmented the Company's service territory into eight (8) transmission planning study areas, and within those areas, forty-three (43) distribution planning areas to facilitate the completion of system studies and project plans. Subdividing the system into study areas enables those areas to be studied in parallel, and to more efficiently and quickly complete the task of covering the entire system.

Major Activities and Schedule

Major Activities/Milestones	Completion Date
Establish the boundaries for continuity between the integrated transmission and the integrated distribution plans. (VII-8)	Jun 2010

Recommendation VII-10

Initiate or partner with NYISO on appropriate studies regarding the effect and needed response to increased application of Distributed Generation, Renewable Resources, SMART GRID and other trends in utility system operations.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Cheri Warren, VP Asset Management

Implementation of Recommendation

The Company participates in the NY STARS study and is actively engaged in many of the NYISO planning processes including the CSPP, RNA, CARIS as well as special studies such as the NYISO Wind Study. National Grid is also working with the NYISO and other Transmission Owners on implementing Phasor Measurement Units and installing capacitor banks as part of NYISO's successful stimulus proposal to the DOE. In addition National Grid has provided comments on the NY State Energy Plan. Participation will be ongoing.

Major Activities and Schedule

Major Activities/Milestones	Completion Date
Initiate or partner with NYISO on appropriate studies regarding the effect and needed response to increased application of Distributed Generation, Renewable Resources, SMART GRID and other trends in utility system operations. (VII-10)	Jan 2010 (on-going)

F. Program and Project Planning and Management

Recommendation VIII-5

Have Internal Audit or an outside firm audit the RDV joint venture and parent entities on a regular basis.

Implementation Plan Leads

Executive Sponsor	William J. Akley, SVP Maintenance & Construction
Team Lead	Keith McAfee, VP New York (Electric) Maintenance & Construction

Implementation of Recommendation

The Company completed the indicated RDV audit. As part of the Cap Ex/Op Ex Stipulation adopted in the Company's recent electric rate case (10-E-0050), the Company is transitioning away from the RDV as a means for delivering its Transmission capital investment plan, and ceased releasing new work to the RDV last fall. Accordingly, regular audits of the RDV to assess performance of on-going work are no longer intended.

Major Activities and Schedule

Major Activities/Milestones	Completion Date
Issue terms of reference	Dec 2009
Undertake audit and issue final report	May 2010

G. Capital and Operating & Maintenance Budgeting

Recommendation IX-1

Conduct formal reviews of a sample of projects monthly for overall project cost control. The review should include the project manager, system planner, construction supervisor, and appropriate LOB management and include a review of estimates, cost tracking by work break down structure, progress versus cost, and forecast cost.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	David Way, VP Project Management and Complex Construction

Implementation of Recommendation

The Company began formal reviews of a sample of projects at TRAC (Transmission Resource Allocation Committee) and SRAC (System Resource Allocation Committee) meetings in December 2009, which include monthly reviews of a select sample of projects (as well as deep dive reviews of a set list of Transmission projects). Process updates, including modifications to the respective meeting review templates to identify key project delivery team members that were consulted/provided input, as well as the distribution of TRAC and SRAC meeting minutes (with templates and action items attached) to all meeting attendees, including construction supervisors, are being implemented. Additional review process updates and full implementation of actions to address this recommendation will occur as part of the End-to-End Project Management initiative.

Major Activities and Schedule

Major Activities/Milestones	Completion Date
Short Term AM and PM team initiatives	Dec 2009
Update process documentation	Oct 2010

Recommendation IX-2

Reconcile the differences between planned work identified in the Resource Allocation Committee's reports and expenditures proposed in the January 2009 Transmission and Distribution Capital Investment Plan.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Pat Hogan, Senior Vice President Distribution Asset Management Paul Renaud, VP Transmission Asset Management

Implementation of Recommendation

The Company provided a reconciliation of the information in May 27, 2010 Update 1 report.

Major Activities and Schedule

Major Activities/Milestones	Completion Date
Provide reconciliation files	May 2010

Measures of Success

The PSC Staff and NorthStar agree the January 2009 CIP and the November TRAC files have been reconciled.

Recommendation IX-3

Revise capital investment levels for projects and programs planned as part of the NMPC Transmission and Distribution Capital Investment Plan filed in January 2009 and obtain the necessary commitment for the funds required by NMPC.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Pat Hogan, Senior Vice President Distribution Asset Management Paul Renaud, VP Transmission Asset Management

Implementation of Recommendation

The Company filed a revised Capital Investment Plan on January 29, 2010 which encompassed this review.

Major Activities and Schedule

Major Activities/Milestones	Completion Date
Develop Capital Investment Plan	Jan 2010
File CIP and Rate Case	Jan 2010
Conclude Rate Case	Jan 2011

H. Work Management

Recommendation X-2

Deliver preliminary annual work plans, especially for mandatory projects, to the construction work forces 90 days prior to the start of the fiscal year so that materials can be ordered and staffing/resource schedules prepared in a timely manner.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Thomas Bennett, Director Resource Planning

Implementation of Recommendation

Construction work plans for FY12 were rolled-out to construction work forces in the New York East, Central, and West Divisions in early/mid December 2010 in accordance with the management audit recommendation timeline and process.

Major Activities and Schedule

Major Activities/Milestones	Completion Date
Short Term Asset Management, Program Management and Project Management team initiatives (refine process)	Apr 2010
System Upgrade (Primavera P6)	Jul 2010
System Upgrade (US Cost)	Mar 2010
System Upgrade (PPM)	Jun 2010
Update process documentation	Dec 2010

Recommendation X-3

Eliminate the remaining in-house tree trimmer positions.

Implementation Plan Leads

Executive Sponsor	William J. Akley, SVP Maintenance & Construction
Team Lead	Jerry Convery, Director Vegetation Management & Inspections

Implementation of Recommendation

In accordance with National Grid's Transformation initiative and consistent with the PSC Management Audit recommendation, all internal tree trimming activities have successfully been transitioned to contractors through our Strategic Contracting Model. Additionally, all internal tree trimming equipment (i.e., Forestry aerial lift and associated equipment) has been removed from service. This transition was completed on April 1, 2011.

With regard to personnel, since the Company's last Implementation Plan Update 3 provided to the Commission on January 31, 2011, six (6) additional tree trimmers have retired effective March 31, 2011 and one (1) has been placed into a new role within the organization. The remaining ten (10) tree trimmers in the Forestry group have transitioned to other support type roles including capital project support and customer requests. These 10 individuals are still subject to placement in accordance with the labor contract security clause, and will be placed in appropriate roles as individual positions become available.

Recommendation X-5

Review the practicality of the new storm response plans to ensure that NMPC ratepayers will be provided with timely and qualified services in the event of a storm emergency.

Implementation Plan Leads

Executive Sponsor	Ellen Smith, Chief Operating Officer
Team Lead	Jackie Christian, Director, Emergency Planning PMO

Implementation of Recommendation

Network Strategy designers and T&D Services employees have been assigned to new storm roles and have been trained. Designers supplement the work of operations supervisors in overseeing the response of line crews during storms. T&D Services' employees assist in operating the Outage Management System (PowerOn/PORD) and provide general office support. As personnel were trained, the Storm Emergency Assignment Listing ("SEAL") database was updated to reflect revised assignments and training dates. Examples of program success include the successful deployments of T&D Services' employees to remote divisions in the Central region in response to a snow storm in December 2009, and of Designers to Long Island in March, 2010 to assist in supervising line crews in response to a major rain and wind storm.

Major Activities and Schedule

Major Activities/Milestones	Completion Date
Identify and train centralized clerical staff to deploy to remote "impacted" areas to perform "storm board" functions.	Jan 2010
Identify and train Design Investigators and Supervisors remaining in the divisions to perform "storm board" functions	Mar 2010

Before the New York State Public Service Commission

NIAGARA MOHAWK POWER CORPORATION d/b/a NATIONAL GRID

Corrections and Updates Testimony

of the

Shared Services and Customer Panel

Q. Are you the same Shared Services and Customer Panel, consisting of Rudolph L. Wynter, Jr., Evelyn Kaye, and Edward H. White, Jr., who testified previously in this proceeding?

A. Yes. The Panel submitted direct testimony as part of the Company's April 27, 2012 filing.

Q. What is the purpose of the Panel's corrections and updates testimony?

A. The purpose of this testimony is to make corrections to the Panel's Exhibit __ (SSCP-10), to update the direct testimony and exhibits to provide updated uncollectibles expense and to provide an updated list of job vacancies in the Customer organization. The Panel sponsors the following exhibits, which were prepared under its direction and supervision:

- Exhibit __ (SSCP-10CU) - Proposed Changes to Customer Service-Related Metrics
- Exhibit __ (SSCP-16CU) - Job Vacancies in the Customer Organization
- Exhibit __ (SSCP-18CU) – Company's response to Information Request DPS-13 (GRW-1)

The Company started with the exhibits submitted on April 27, 2012 to prepare the corrected and/or updated exhibits. The Company has only included exhibits where corrections and/or updates were made.

Q. Please describe the corrections to the Panel's direct testimony.

A. The Panel has corrections for the tables on pages 3 and 4 of Exhibit __ (SSCP-10) where the proposed Small and Medium C&I Transaction Satisfaction Index threshold and minimum negative revenue adjustments are presented. The proposed change in the Small and Medium C&I Transaction Satisfaction Index minimum threshold from 69.5 to 75.1 is described correctly in the Panel's direct testimony, but is not correctly reflected in Exhibit __ (SSCP-10). Nor does the exhibit reflect the corresponding change in the maximum threshold from 65.5 to 71.1. Exhibit __ (SSCP-10) also does not reflect the Company's proposal to keep the total minimum negative revenue adjustment level unchanged from the level in the 2010 Electric Rate Case and 2008 Gas Rate Case. When added together, the minimum negative revenue adjustment levels in Exhibit __ (SSCP-10) equal $2,700,000. However, the minimum negative revenue adjustment levels from the prior cases add up to $2,850,000. To maintain the existing levels, the minimum negative revenue adjustments shown on the exhibit have been changed from $1,080,000 to $1,117,500 for the complaints per 100,000 customers metric, and from $540,000 to $577,500 for the remaining three customer service quality metrics. This makes the total minimum negative revenue adjustments equal to $2,850,000, the sum from the prior cases, as described in the Panel's direct

testimony. Starting with the tables in Exhibit __ (SSCP-10) of the Panel's April 27, 2012 testimony, the Company revised the threshold values and the minimum negative revenue adjustments on pages 3 and 4 of the exhibit and relabeled it as Exhibit __ (SSCP-10CU).

Q. Please describe the updates to the Panel's direct testimony.

A. The Panel has the following updates to its direct testimony and exhibits:

- The net write off forecast for the Rate Year shown on p. 28, line 17 of the direct testimony has been updated from $29.7 million to $37.9 million for electric and from $13.8 million to $18.5 million for gas. The Company has also included updated net write off forecast information for Data Years One and Two in Exhibit __ (RRP-3CU), Schedule 44, page 5 of 5. These amounts were calculated by applying the adjusted forecast write off rates found in the monthly updated response to Information Request DPS-13 (GRW-1), which includes Attachment 1 GRW-1 (Jun12 updt) [through May 31, 2012] on page 1 for electric -- and Attachment 2 GRW-1 (Jun12 updt) [through May 31, 2012] on page 1 for gas. As of May 31, 2012, based on the most recently available data, the rolling 12-month uncollectible rates have been updated from 1.271 percent to 1.6116 percent for electric and from 2.297 percent to 3.0483 percent for gas.

- On page 79, line 9 of the Panel's direct testimony, the number of job vacancies in the customer organization should be changed from 24 to 21. This change will affect the listing of jobs presented in Exhibit __ (SSCP-16). The table in Exhibit __ (SSCP-16) has been updated to remove the three job vacancies described above and relabeled Exhibit __ (SSCP-16CU). The three jobs that were eliminated are: (1) Business Partner, Customer & Product Experience, New Products & Services, (2) Analyst, LIPA Evaluation, and (3) Representative, Inside Sales, Gas, Small Medium Business Gas Sales. The Business Partner position was eliminated when accountabilities for the Business Partner role were shifted to the existing Analyst role in the Customer & Product Experience group. The LIPA Analyst role was moved from LIPA Planning, Evaluation & Support to the LIPA Business group based upon business need and workload. The Inside Sales, Gas, Small Medium Business Gas Sales was moved to Gas Sales Support based upon workload and a look at how the organization and resources aligned.

Q. Does this conclude the Panel's corrections and updates testimony?

A. Yes it does.

Exhibits of
SSCP

List of Exhibits

Exhibit __ (SSCP-10CU)

Exhibit __ (SSCP-10CU)

Proposed Changes to Customer Service-Related Metrics

Niagara Mohawk Power Corporation
Current vs. Proposed
Customer Service Quality Metrics

Current Metrics

I. Complaints Per 100,000 Customers

For the electric business, the measure is as follows:

Rate Interval (Complaints per 100,000 customers)	Negative Revenue Adjustment Linear Within Ranges
<1.5	$0
=1.5	$880,000
>1.5 – 2.5	$880,000 to $6,080,000
>2.5	$6,080,000

For the gas business, the measure is as follows:

Rate Interval (Complaints per 100,000 customers)	Negative Revenue Adjustment Linear Within Ranges
<3.0	$0
=3.0	$200,000
>3.0 – 5.0	$200,000 to $1,600,000
>5.0	$1,600,000

II. Residential Transaction Satisfaction Index

Residential Transaction Satisfaction Index Interval	Negative Revenue Adjustment Linear Within Ranges
>82.0	$0
=82.0	$540,000
<82.0 – 78.0	$540,000 to $3,840,000
<78.0	$3,840,000

Niagara Mohawk Power Corporation
Current vs. Proposed
Customer Service Quality Metrics

Current Metrics (cont't)

III. Small and Medium C&I Transaction Satisfaction Index

C&I Transaction Satisfaction Index Interval	Negative Revenue Adjustment Linear Within Ranges
>69.5	$0
=69.5	$540,000
<69.5 to 65.5	$540,000 to $3,840,000
<65.5	$3,840,000

IV. Percent of Meters Read

Percent Meters Read	Negative Revenue Adjustment Linear Within Ranges
>96.0	$0
=96.0	$50,000
<96.0 – 95.0	$50,000 to $400,000
<95.0	$400,000

V. Percent of Calls Answered within 30 Seconds

% Calls Answered Within 30 Seconds	Negative Revenue Adjustment Linear Within Ranges
>78.0	$0
=78.0	$540,000
<78.0 – 72.0	$540,000 to $3,840,000
<72.0	$3,840,000

VI. AffordAbility Program measures:

Annual Enrollment (No. of Customers)	Negative Revenue Adjustment Linear Within Ranges
>3,591	$0
=3,591	$100,000
3,591 – 3,402	$100,000 to $200,000
<3,402	$200,000

Niagara Mohawk Power Corporation
Current vs. Proposed
Customer Service Quality Metrics

Proposed Metrics

I. Complaints Per 100,000 Customers

The measure for all customers will be as follows:

Rate Interval (Complaints per 100,000 customers)	Negative Revenue Adjustment Linear Within Ranges
<1.5	$0
=1.5	$1,117,500
>1.5 – 2.5	$1,117,500 to $7,830,000
>2.5	$7,830,000

II. Residential Transaction Satisfaction Index - unchanged

Residential Transaction Satisfaction Index Interval	Negative Revenue Adjustment Linear Within Ranges
>82.0	$0
=82.0	$577,500
<82.0 – 78.0	$577,500 to $3,990,000
<78.0	$3,990,000

III. Small and Medium C&I Transaction Satisfaction Index

C&I Transaction Satisfaction Index Interval	Negative Revenue Adjustment Linear Within Ranges
>75.1	$0
=75.1	$577,500
<75.1 to 71.1	$577,500 to $3,990,000
<71.1	$3,990,000

IV. Percent of Meters Read – eliminated

Niagara Mohawk Power Corporation
Current vs. Proposed
Customer Service Quality Metrics

Proposed Metrics (cont't)

V. Percent of Calls Answered within 30 Seconds - unchanged

% Calls Answered Within 30 Seconds	Negative Revenue Adjustment Linear Within Ranges
>78.0	$0
=78.0	$577,500
<78.0 – 72.0	$577,500 to $3,990,000
<72.0	$3,990,000

VI. AffordAbility Program measures - eliminated

Exhibit __ (SSCP-16CU)

Exhibit __ (SSCP-16CU)

Job Vacancies in the Customer Organization

The following 21 Customer organization positions were created during the Company's restructuring. Jobs filled determined as of June 26, 2012.

Title	Role	Filled	Reports to
Sales Support Representative, Sales Support, Albany	Helps National Grid expand its gas availability to more customers by proactively reaching out to and assisting new gas customers through the gas expansion and conversion process.	Filled	Manager of Sales Support
Sales Processing Assoc Analyst, Sales Support, Albany	Responsible for processing energy efficiency applications, for both gas and electric. This position will follow up with customers and vendors to collect appropriate documentation and track jobs to completion to ensure the customers receive their energy efficiency incentives in a timely manner. Directing application data entry from the sales personnel to an analyst will allow National Grid's Field Sales Representatives to spend more time in the field, working directly with commercial customers to identify potential energy efficiency projects.	Filled	Manager of Sales Support
Program Manager, Market Strategy, Energy Efficiency Strategy	Seeks to integrate the next generation of energy efficiency opportunities, including enhanced products, energy management, and program delivery platform, to increase savings for customers through energy efficiency.	Filled	Director of Market Strategy
Program Manager, Market Strategy, Customer Technology & Sustainability	Seeks to gather customer insights and intelligence regarding emerging energy technology to formulate a customer product and service platform that delivers the most efficient, safe, and reliable energy service available to customers.	Filled	Director of Market Strategy

Title	Role	Filled	Reports to
Representative, Account Development, Large Commercial Sales, Upstate New York	Seeks to develop and manage ongoing relationships with large customers and other stakeholders to identify and deliver gas growth opportunities as well as gas and electric energy efficiency efforts.	Filled	Vice President of Sales
Technical Support Consultant, Technical Sales & Engineering Support, New England	Is the distributed generation applicants' primary point of contact with the Company through the unit's interconnection process. The Technical Support Consultant also helps distributed generators interconnect to the distribution system by answering a variety of customer inquiries, such as but not limited to, tariff requirements, company standards and policies, timeframes, capacity availability and net metering.	Filled	Manager of Technical Sales & Engineering Support
Director, Alliance / Vendor Strategy	Helps devise strategic alliances and vendor strategy. The alliance strategy team will help engage customers and communities more deeply through efforts such as BNMC. The position is also responsible for seeking to leverage strategic alliances with third-party channel partners or vendors across jurisdictions for the benefit of customers in all jurisdictions.	Filled	Vice President of Customer and Business Strategy
Quantitative Analyst, Analytics, Modeling & Energy Forecasting	Works with mathematicians and statisticians to develop detailed gas and electric forecasts, and quantitative models and to optimize business processes to create value for customers and provide safe, reliable energy service.	Not Filled	Director, Analytics, Modeling & Energy Forecasting
Representative, Inside Sales, Gas, Small Medium Business Gas Sales	Responsible for working with builders, plumbers and customers on facilitating the use of natural gas in new projects by performing a flow analysis to determine if gas pressure is adequate for new customers and to understand the potential impact of the new service on existing accounts.	Filled	Manager of Gas Sales Support

Title	Role	Filled	Reports to
Sales Support Representative, Gas Sales Support, New England	Helps the Company to expand its gas availability to more customers by pro-actively reaching out to and assisting new gas customers through the gas expansion and conversion process. These positions also provide support to plumbers, builders, contractors and developers by identifying energy efficiency opportunities and supporting them through the service request process.	Filled	Manager of Gas Sales Support, NE
Sales Support Representative, Gas Sales Support, New England	Helps The Company to expand its gas availability to more customers by pro-actively reaching out to and assisting new gas customers through the gas expansion and conversion process. These positions also provide support to plumbers, builders, contractors and developers by identifying energy efficiency opportunities and supporting them through the service request process.	Filled	Manager of Gas Sales Support, NE
Gas Scheduler, Gas Scheduling	Performs gas scheduling functions including nominations and capacity release on the interstate pipelines that provide firm gas transportation and storage services to gas customers. These nomination and capacity release functions are crucial to providing firm gas supplies for National Grid' gas customers, facilitating National Grid's Retail Choice Programs and optimizing surplus interstate pipeline and underground storage capacity.	Filled	Manager of Gas Scheduling
Financial / Multi Commodity Trader, Origination & Price Volatility Mgmt	Manage and execute financial transactions that mitigate volatility in the customers' gas and electric commodity and supply costs.	Not Filled	Director of Origination & Price volatility Management

Title	Role	Filled	Reports to
Electric Trader, Wholesale Electric Supply, New England	Performs energy financial trading to meet the commodity and supply service needs of the customer. The financial multi-commodity trader is responsible to help manage and execute financial transactions that mitigate volatility in the customer's gas and electric commodity and supply costs. This position is cross-trained with the Trader, Financial Multi Commodity above.	Filled	Director of Wholesale Electric Supply
Energy Efficiency Program Strategy Analyst, Program Strategy, LIPA, C&I	Supports strategies to meet customer expectations and regulatory objectives for C&I energy efficiency and comprehensive sustainable solutions for customers.	Not Filled	Director, Program Strategy
Analyst, LIPA Business, Project Management	Provides project management services for small/medium projects within the Long Island Power Authority ("LIPA") Commercial Efficiency Program, thus helping commercial customers reduce energy usage and save on their energy bills.	Filled	Manager of LIPA Business
Analyst, LIPA Residential	Implements residential energy efficiency incentive programs for LIPA customers.	Not Filled	Director of Program Strategy, LIPA
Vendor Specialist, Customer Communications, Commercial	Works with our customer-facing energy trade allies, contractors and vendors to deliver energy efficiency programs and to help our customers identify energy efficiency and energy management opportunities available from National Grid. The work may include site visits for energy audits or contract work and installation.	Filled	Director of Customer Communications
Manager, Customer Communications, Internet Experience	Manage the development of new channels of communication such as mobile enablement, two-way text messaging, streamlining the web, and improving customer experience on the website.	Not Filled	Director of Customer Communications

Title	Role	Filled	Reports to
Sr. Specialist-Graphic Designer-Communications Development & Production	The owner and gatekeeper of communications, including design and content, for National Grid's communication with customers. Specifically, this position is responsible for the customer newsletter inserted in bills, letters to customers, social media and mandated and non-mandated communications, such as gas and electric safety.	Filled	Manager of Communications Development & Production
Program Manager, Customer Insights	Analyzing both internal and external customer data to develop customer insights and resulting areas for business improvement. These insights will be used to help drive improvement in customer satisfaction and the overall customer experience.	Filled	Manager, Customer Insights & Targeting

Exhibit __ (SSCP-18CU)

Response to Information Request DPS-13 (GRW-1)

Date of Request: May 9, 2012 Request No. DPS-13(GRW-1)
Due Date: June 21, 2012 NMPC Req. No. NM 13

NIAGARA MOHAWK POWER CORPORATION
Case No. 12-E-0201 and 12-G-0202 - Niagara Mohawk Power Corporation
d/b/a National Grid - Electric and Gas Rates

Request for Information

FROM: Gerald Wojcinski

TO: Shared Services and Customer Panel (SSCP)

SUBJECT: Uncollectibles

Request: Testimony of SSCP

1. Please refer to Exhibits___(SSCP-4) and (SSCP-5), both exhibits includes two pages. Beginning with January 2012, provide for every month to present and continue to update for every month thereafter, the latest 12-months-to-date information in a similar format for both exhibits and both pages in each.

2. Page 22 of the SSCP discusses the "Transfer-to-Active Project" that reinstated previously written –off accounts and transferred the unpaid balance to active account. During the period 2010 through 2011 what was the total increase in recoveries from this project? Also include the per month recoveries.

3. Page 22 SSCP also discusses, how the project significantly increased recoveries and reduced write-offs, however the testimony does not address the impacts to future periods from writing off these amounts again. Please quantify the impact to net-write offs and the impact to the uncollectible rate if the Transfer-to-Active Project was not implemented. Such impacts should be in the format as shown on exhibits SSCP-4 and SSCP-5 for both pages in each exhibit, beginning with January 2012, for every month to present and continue to update for every month thereafter, the latest 12-months-to-date information.

Response:

1. Please see Attachment 1 GRW-1 (Jun12 updt) for electric and Attachment 2 GRW-1 (Jun12 updt) for gas. [Note that the uncollectible 12-month rates on the 2nd page of each attachment will not differ from the 1st page for months after January 31, 2012. The 12 month period ending February 29, 2012 is after the completion of the manual phase of the Transfer to Active project that ran from November 2010 through February, 2011.]

3. Please see Attachment 4 GRW-1 (Jun12 updt) for electric and Attachment 5 GRW-1 (Jun12 updt) for gas. The 2nd page of both attachments indicates the impacts of removing both the manual phase of the transfer to active project that occurred from Nov'10 through Mar'11 and the manual test phase of this project (alluded to in the response to # 2 of GRW-1 submitted May 21) that occurred from mid-Feb'10 through mid-Apr'10. Furthermore, as indicated in the May 21 response to #2, the Company has assumed the full increment of the reinstatements that occurred from Feb'10-Apr'10 over those that happened from Feb'09 – Apr'09 as being project related. (However, account level detail is not available for this time period. Assumptions based on a high-level study conducted on all reinstated customers were used to allocate these dollars from the 1st quarter of 2010.) The analysis is conservative in that it only focuses on the impacts to net write-off and does not consider the payments received on the newly established active accounts since these are not technically recoveries, but reductions to accounts receivable and arrears. Also, since the automated phase of the transfer to active project sets a new norm, the analysis focuses only on the manual implementation of this project.

Name of Respondent:	Date of Reply:
Paul S. Leo	June 18, 2012

UNCOLLECTIBLE RATE CALCULATION

ELECTRIC
Rolling 12-Mo Ending
($000's)

	31-Jan-09	28-Feb-09	31-Mar-09	30-Apr-09	31-May-09	30-Jun-09	31-Jul-09	31-Aug-09	30-Sep-09	31-Oct-09	30-Nov-09	31-Dec-09
									(4)	(5)	(5)	
Normalized Bad Debt Net Write-Off	$ 45,164.9	$ 46,635.5	$ 47,788.6	$ 49,170.7	$ 50,054.7	$ 51,485.6	$ 52,386.9	$ 52,523.1	$ 52,925.8	$ 55,135.6	$ 54,543.7	$ 53,914.5
Total Tariff Revenue	$ 3,081,245.9	$ 3,076,984.3	$ 3,060,266.1	$ 3,028,875.3	$ 2,998,174.9	$ 2,950,238.7	$ 2,912,193.9	$ 2,849,751.4	$ 2,834,349.1	$ 2,830,718.7	$ 2,824,630.1	$ 2,824,675.0
Late Payment Revenue	$ 16,405.2	$ 16,322.3	$ 16,276.4	$ 16,420.3	$ 16,242.7	$ 15,798.3	$ 15,740.2	$ 15,356.5	$ 14,943.8	$ 14,793.9	$ 14,431.8	$ 14,570.3
POR Receivable Revenue	$ 349,756.9	$ 352,276.4	$ 349,087.9	$ 343,409.7	$ 336,950.9	$ 327,739.9	$ 312,052.6	$ 294,037.8	$ 287,904.5	$ 285,287.5	$ 284,009.1	$ 282,672.0
	$ 3,447,408.0	$ 3,445,583.0	$ 3,425,630.5	$ 3,388,705.3	$ 3,351,368.5	$ 3,293,776.8	$ 3,239,986.7	$ 3,159,145.6	$ 3,137,197.5	$ 3,130,800.1	$ 3,123,071.0	$ 3,121,917.2
Uncollectible Rate	**1.3101%**	**1.3535%**	**1.3950%**	**1.4510%**	**1.4936%**	**1.5631%**	**1.6169%**	**1.6626%**	**1.6870%**	**1.7611%**	**1.7465%**	**1.7270%**

	31-Jan-10	28-Feb-10	31-Mar-10	30-Apr-10	31-May-10	30-Jun-10	31-Jul-10	31-Aug-10	30-Sep-10	31-Oct-10	30-Nov-10	31-Dec-10
Normalized Bad Debt Net Write-Off	$ 52,443.1	$ 51,334.4	$ 49,235.9	$ 47,039.7	$ 45,545.5	$ 45,365.0	$ 45,354.5	$ 44,243.0	$ 43,707.3	$ 40,072.4	$ 37,123.7	$ 35,712.6
Total Tariff Revenue	$ 2,837,570.5	$ 2,844,630.0	$ 2,875,640.5	$ 2,901,351.0	$ 2,918,745.7	$ 2,952,145.3	$ 3,006,347.7	$ 3,066,735.2	$ 3,083,228.4	$ 3,097,873.9	$ 3,107,702.2	$ 3,116,097.8
Late Payment Revenue	$ 14,345.3	$ 14,280.1	$ 14,373.4	$ 14,068.0	$ 14,095.5	$ 14,283.0	$ 14,264.7	$ 14,333.6	$ 14,844.2	$ 15,153.3	$ 15,463.7	$ 15,519.1
POR Receivable Revenue	$ 285,682.9	$ 286,552.7	$ 290,639.6	$ 292,910.3	$ 296,946.4	$ 304,162.6	$ 317,773.4	$ 332,474.1	$ 339,667.1	$ 342,470.2	$ 342,481.7	$ 344,580.4
	$ 3,137,598.8	$ 3,145,462.7	$ 3,180,653.5	$ 3,208,329.3	$ 3,229,787.6	$ 3,270,591.0	$ 3,338,385.8	$ 3,413,542.9	$ 3,437,739.7	$ 3,455,497.4	$ 3,465,647.6	$ 3,476,197.2
Uncollectible Rate	**1.6714%**	**1.6320%**	**1.5480%**	**1.4662%**	**1.4102%**	**1.3871%**	**1.3586%**	**1.2961%**	**1.2714%**	**1.1597%**	**1.0712%**	**1.0273%**

	31-Jan-11	28-Feb-11	31-Mar-11	30-Apr-11	31-May-11	30-Jun-11	31-Jul-11	31-Aug-11	30-Sep-11	31-Oct-11	30-Nov-11	31-Dec-11
	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(2)
Normalized Bad Debt Net Write-Off	$ 32,093.3	$ 28,951.9	$ 29,638.7	$ 31,538.0	$ 31,234.6	$ 31,431.9	$ 31,396.3	$ 32,165.1	$ 33,068.9	$ 35,684.7	$ 39,160.3	$ 42,558.0
Total Tariff Revenue	$ 3,104,656.9	$ 3,115,788.6	$ 3,112,799.1	$ 3,111,821.6	$ 3,114,081.8	$ 3,114,069.6	$ 3,084,319.3	$ 3,065,335.0	$ 3,041,588.7	$ 3,037,782.3	$ 3,022,599.5	$ 2,999,929.5
Late Payment Revenue	$ 15,638.4	$ 15,709.2	$ 15,970.8	$ 16,055.3	$ 16,030.0	$ 16,075.0	$ 16,043.9	$ 16,078.1	$ 16,141.0	$ 16,191.1	$ 16,068.9	$ 15,691.5
POR Receivable Revenue	$ 343,719.4	$ 346,643.5	$ 347,173.7	$ 349,747.0	$ 349,326.4	$ 347,008.1	$ 340,695.6	$ 338,437.5	$ 334,773.4	$ 334,347.6	$ 335,533.8	$ 333,065.6
	$ 3,464,014.6	$ 3,478,141.3	$ 3,475,943.6	$ 3,477,623.9	$ 3,479,438.2	$ 3,477,152.7	$ 3,441,058.9	$ 3,419,850.6	$ 3,392,503.0	$ 3,388,320.9	$ 3,374,202.2	$ 3,348,686.6
Uncollectible Rate	**0.9265%**	**0.8324%**	**0.8527%**	**0.9069%**	**0.8977%**	**0.9040%**	**0.9124%**	**0.9405%**	**0.9748%**	**1.0532%**	**1.1606%**	**1.2709%**
3-Yr Aggregated Elec Uncoll Rate:	**1.2907%**	**1.2605%**	**1.2563%**	**1.2680%**	**1.2607%**	**1.2775%**	**1.2889%**	**1.2903%**	**1.3013%**	**1.3123%**	**1.3131%**	**1.3289%**

	31-Jan-12	29-Feb-12	31-Mar-12	30-Apr-12	31-May-12	30-Jun-12	31-Jul-12	31-Aug-12	30-Sep-12	31-Oct-12	30-Nov-12	31-Dec-12
	(2)	(2)	(2)	(2)	(2)							
Normalized Bad Debt Net Write-Off	$ 46,139.6	$ 48,965.5	$ 48,737.5	$ 47,083.4	$ 48,238.7							
Total Tariff Revenue	$ 2,946,068.8	$ 2,870,173.6	$ 2,800,982.2	$ 2,726,282.2	$ 2,672,835.3							
Late Payment Revenue	$ 15,435.3	$ 15,009.2	$ 14,680.6	$ 14,390.7	$ 14,242.4							
POR Receivable Revenue	$ 326,292.2	$ 318,635.6	$ 314,396.4	$ 308,724.3	$ 306,157.6							
	$ 3,287,796.3	$ 3,203,818.4	$ 3,130,059.2	$ 3,049,397.2	$ 2,993,235.4	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Uncollectible Rate	**1.4034%**	**1.5283%**	**1.5571%**	**1.5440%**	**1.6116%**							
3-Yr Aggregated Elec Uncoll Rate:	**1.3214%**	**1.3152%**	**1.3039%**	**1.2908%**	**1.2885%**							

(1) Beginning Jan'11, the electric-gas net write-off allocation was changed from 72%-28% to 69%-31% per the outcome of the NIMO electric rate case 10-E-0050.

(2) For the mo's beginning Nov'11, the electric gas net write-off allocation was changed from 69%-31% to 70%-30% per the outcome of the new annual assessment completed after the Oct'11.

(3) LICAP Arrears forgiveness is imbedded within the net write-off row and allocated between electric and gas as noted in (1) & (2) above.

(4) For the month of Sept '09, total electric & gas net write-off has been normalized by removing about $4.1 million that had been inadvertently accelerated to write-off due to a system issue. These amounts would have been written off during Oct '09 and Nov '09.

(5) For the months of Oct&Nov '09, total electric & gas net write-off has been increased by the allocated portion of the $4.1 million that had been inadvertently accelerated in Sept'09 due to a system issue. Also, written off during Oct '09 was another $1.5 accelerated amount that should have gone to Nov '09. Both Oct09 & Nov09 have been normalized by the additional figure.

ELECTRIC UNCOLLECTIBLE RATE ADJUSTED FOR IMPACTS OF THE MANUAL PHASE OF THE TRANSFER TO ACTIVE PROJECT

Rolling 12-Mo Ending

($000's)

	31-Jan-09	28-Feb-09	31-Mar-09	30-Apr-09	31-May-09	30-Jun-09	31-Jul-09	31-Aug-09	30-Sep-09	31-Oct-09	30-Nov-09	31-Dec-09
Normalized Bad Debt Net Write-Off	$ 45,164.9	$ 46,635.5	$ 47,788.6	$ 49,170.7	$ 50,054.7	$ 51,485.6	$ 52,386.9	$ 52,523.1	$ 52,925.8	$ 55,135.6	$ 54,543.7	$ 53,914.5
Total Tariff Revenue	$ 3,081,245.9	$ 3,076,984.3	$ 3,060,266.1	$ 3,028,875.3	$ 2,998,174.9	$ 2,950,238.7	$ 2,912,193.9	$ 2,849,751.4	$ 2,834,349.1	$ 2,830,718.7	$ 2,824,630.1	$ 2,824,675.0
Late Payment Revenue	$ 16,405.2	$ 16,322.3	$ 16,276.4	$ 16,420.3	$ 16,242.7	$ 15,798.3	$ 15,740.2	$ 15,356.5	$ 14,943.8	$ 14,793.9	$ 14,431.8	$ 14,570.3
POR Receivable Revenue	$ 349,756.9	$ 352,276.4	$ 349,087.9	$ 343,409.7	$ 336,950.9	$ 327,739.9	$ 312,052.6	$ 294,037.8	$ 287,904.5	$ 285,287.5	$ 284,009.1	$ 282,672.0
	$ 3,447,408.0	$ 3,445,583.0	$ 3,425,630.5	$ 3,388,705.3	$ 3,351,368.5	$ 3,293,776.8	$ 3,239,986.7	$ 3,159,145.6	$ 3,137,197.5	$ 3,130,800.1	$ 3,123,071.0	$ 3,121,917.2
Uncollectible Rate	**1.3101%**	**1.3535%**	**1.3950%**	**1.4510%**	**1.4936%**	**1.5631%**	**1.6169%**	**1.6626%**	**1.6870%**	**1.7611%**	**1.7465%**	**1.7270%**

	31-Jan-10	28-Feb-10	31-Mar-10	30-Apr-10	31-May-10	30-Jun-10	31-Jul-10	31-Aug-10	30-Sep-10	31-Oct-10	30-Nov-10	31-Dec-10
											(6)	(6)
Normalized Bad Debt Net Write-Off	$ 52,443.1	$ 51,334.4	$ 49,235.9	$ 47,039.7	$ 45,545.5	$ 45,365.0	$ 45,354.5	$ 44,243.0	$ 43,707.3	$ 40,072.4	**$ 37,743.5**	**$ 38,169.8**
Total Tariff Revenue	$ 2,837,570.5	$ 2,844,630.0	$ 2,875,640.5	$ 2,901,351.0	$ 2,918,745.7	$ 2,952,145.3	$ 3,006,347.7	$ 3,066,735.2	$ 3,083,228.4	$ 3,097,873.9	$ 3,107,702.2	$ 3,116,097.8
Late Payment Revenue	$ 14,345.3	$ 14,280.1	$ 14,373.4	$ 14,068.0	$ 14,095.5	$ 14,283.0	$ 14,264.7	$ 14,333.6	$ 14,844.2	$ 15,153.3	$ 15,463.7	$ 15,519.1
POR Receivable Revenue	$ 285,682.9	$ 286,552.7	$ 290,639.6	$ 292,910.3	$ 296,946.4	$ 304,162.6	$ 317,773.4	$ 332,474.1	$ 339,667.1	$ 342,470.2	$ 342,481.7	$ 344,580.4
	$ 3,137,598.8	$ 3,145,462.7	$ 3,180,653.5	$ 3,208,329.3	$ 3,229,787.6	$ 3,270,591.0	$ 3,338,385.8	$ 3,413,542.9	$ 3,437,739.7	$ 3,455,497.4	$ 3,465,647.6	$ 3,476,197.2
Uncollectible Rate	**1.6714%**	**1.6320%**	**1.5480%**	**1.4662%**	**1.4102%**	**1.3871%**	**1.3586%**	**1.2961%**	**1.2714%**	**1.1597%**	**1.0891%**	**1.0980%**

	31-Jan-11	28-Feb-11	31-Mar-11	30-Apr-11	31-May-11	30-Jun-11	31-Jul-11	31-Aug-11	30-Sep-11	31-Oct-11	30-Nov-11	31-Dec-11
	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
Normalized Bad Debt Net Write-Off	**$ 36,601.0**	**$ 35,232.7**	**$ 35,919.5**	**$ 37,818.8**	**$ 37,515.4**	**$ 37,712.7**	**$ 37,677.1**	**$ 38,445.9**	**$ 39,349.7**	**$ 41,965.5**	**$ 44,821.3**	**$ 46,381.5**
Total Tariff Revenue	$ 3,104,656.9	$ 3,115,788.6	$ 3,112,799.1	$ 3,111,821.6	$ 3,114,081.8	$ 3,114,069.6	$ 3,084,319.3	$ 3,065,335.0	$ 3,041,588.7	$ 3,037,782.3	$ 3,022,599.5	$ 2,999,929.5
Late Payment Revenue	$ 15,638.4	$ 15,709.2	$ 15,970.8	$ 16,055.3	$ 16,030.0	$ 16,075.0	$ 16,043.9	$ 16,078.1	$ 16,141.0	$ 16,191.1	$ 16,068.9	$ 15,691.5
POR Receivable Revenue	$ 343,719.4	$ 346,643.5	$ 347,173.7	$ 349,747.0	$ 349,326.4	$ 347,008.1	$ 340,695.6	$ 338,437.5	$ 334,773.4	$ 334,347.6	$ 335,533.8	$ 333,065.6
	$ 3,464,014.6	$ 3,478,141.3	$ 3,475,943.6	$ 3,477,623.9	$ 3,479,438.2	$ 3,477,152.7	$ 3,441,058.9	$ 3,419,850.6	$ 3,392,503.0	$ 3,388,320.9	$ 3,374,202.2	$ 3,348,686.6
Uncollectible Rate	**1.0566%**	**1.0130%**	**1.0334%**	**1.0875%**	**1.0782%**	**1.0846%**	**1.0949%**	**1.1242%**	**1.1599%**	**1.2385%**	**1.3284%**	**1.3851%**
3-Yr Aggregated Elec Uncoll Rate:	**1.3355%**	**1.3229%**	**1.3186%**	**1.3304%**	**1.3231%**	**1.3401%**	**1.3516%**	**1.3531%**	**1.3643%**	**1.3752%**	**1.3762%**	**1.3921%**

	31-Jan-12	29-Feb-12	31-Mar-12	30-Apr-12	31-May-12	30-Jun-12	31-Jul-12	31-Aug-12	30-Sep-12	31-Oct-12	30-Nov-12	31-Dec-12
	(6)											
Normalized Bad Debt Net Write-Off	**$ 47,912.8**	$ 48,965.5	$ 48,737.5	$ 47,083.4	$ 48,238.7							
Total Tariff Revenue	$ 2,946,068.8	$ 2,870,173.6	$ 2,800,982.2	$ 2,726,282.2	$ 2,672,835.3							
Late Payment Revenue	$ 15,435.3	$ 15,009.2	$ 14,680.6	$ 14,390.7	$ 14,242.4							
POR Receivable Revenue	$ 326,292.2	$ 318,635.6	$ 314,396.4	$ 308,724.3	$ 306,157.6							
	$ 3,287,796.3	$ 3,203,818.4	$ 3,130,059.2	$ 3,049,397.2	$ 2,993,235.4	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Uncollectible Rate	**1.4573%**	**1.5283%**	**1.5571%**	**1.5440%**	**1.6116%**							
3-Yr Aggregated Elec Uncoll Rate:	**1.3849%**	**1.3791%**	**1.3681%**	**1.3553%**	**1.3533%**							

(6) The manual phase of the transfer to active project increased recoveries by a total of $8,954,239 for both electric and gas for the months of Nov'10 through Feb'11. This decreased the net write-offs in the rolling 12-mo analysis for each of the 12-mo periods ending Nov'10 through Jan'12. The figures below have been updated following a more precise study of the data conducted in preparation for the response to GRW-1 #3. The total of $8.9 million remains the same, however the Uncollectible Rates above have been adjusted slightly compared to pg 2 of Exhibit__(SSCP-4) to accommodte this new cashflow.

The revenue months (not-rolling 12-mo's) were impacted by this project as follows:

($000's)

	30-Nov-10	31-Dec-10	31-Jan-11	28-Feb-11	Total
	$ 860.9	$ 2,551.9	$ 2,971.7	$ 2,569.8	**$ 8,954.2**
Elec	$ 619.9	$ 1,837.4	$ 2,050.4	$ 1,773.1	**$ 6,280.8**
Gas	$ 241.1	$ 714.5	$ 921.2	$ 796.6	**$ 2,673.4**
	$ 860.9	$ 2,551.9	$ 2,971.7	$ 2,569.8	**$ 8,954.2**

UNCOLLECTIBLE RATE CALCULATION

GAS
Rolling 12-Mo Ending
($000's)

	31-Jan-09	28-Feb-09	31-Mar-09	30-Apr-09	31-May-09	30-Jun-09	31-Jul-09	31-Aug-09	30-Sep-09	31-Oct-09	30-Nov-09	31-Dec-09
									(4)	(5)	(5)	
Normalized Bad Debt Net Write-Off	$ 17,564.1	$ 18,136.0	$ 18,584.5	$ 19,121.9	$ 19,465.7	$ 20,022.2	$ 20,372.7	$ 20,425.7	$ 20,582.3	$ 21,441.6	$ 21,211.4	$ 20,966.8
Total Tariff Revenue	$ 839,607.5	$ 848,499.4	$ 837,487.4	$ 819,734.1	$ 803,816.6	$ 785,426.2	$ 775,087.7	$ 767,827.2	$ 763,533.7	$ 763,769.7	$ 757,565.1	$ 730,782.2
Late Payment Revenue	$ 3,712.2	$ 3,801.7	$ 3,859.5	$ 3,951.0	$ 3,893.1	$ 3,820.9	$ 3,796.6	$ 3,707.3	$ 3,637.4	$ 3,594.9	$ 3,537.0	$ 3,542.1
POR Receivable Revenue	$ 159,256.8	$ 168,279.2	$ 169,933.9	$ 168,444.5	$ 166,677.3	$ 162,960.1	$ 160,654.9	$ 158,229.2	$ 156,282.9	$ 150,195.2	$ 146,768.9	$ 139,006.2
	$ 1,002,576.5	$ 1,020,580.2	$ 1,011,280.7	$ 992,129.6	$ 974,387.0	$ 952,207.2	$ 939,539.2	$ 929,763.8	$ 923,454.0	$ 917,559.8	$ 907,871.0	$ 873,330.5
Uncollectible Rate	**1.7519%**	**1.7770%**	**1.8377%**	**1.9274%**	**1.9977%**	**2.1027%**	**2.1684%**	**2.1969%**	**2.2288%**	**2.3368%**	**2.3364%**	**2.4008%**

	31-Jan-10	28-Feb-10	31-Mar-10	30-Apr-10	31-May-10	30-Jun-10	31-Jul-10	31-Aug-10	30-Sep-10	31-Oct-10	30-Nov-10	31-Dec-10
Normalized Bad Debt Net Write-Off	$ 20,394.5	$ 19,963.4	$ 19,147.3	$ 18,293.2	$ 17,712.2	$ 17,641.9	$ 17,637.9	$ 17,205.6	$ 16,997.3	$ 15,583.7	$ 14,437.0	$ 13,888.2
Total Tariff Revenue	$ 703,008.1	$ 681,183.9	$ 666,195.7	$ 649,333.3	$ 648,898.4	$ 652,224.5	$ 654,378.5	$ 656,263.1	$ 658,641.9	$ 657,928.5	$ 656,989.5	$ 664,496.1
Late Payment Revenue	$ 3,405.9	$ 3,266.7	$ 3,247.8	$ 3,038.9	$ 2,972.1	$ 2,966.0	$ 2,917.5	$ 2,900.5	$ 2,934.8	$ 2,946.9	$ 2,949.9	$ 2,926.6
POR Receivable Revenue	$ 130,365.0	$ 122,297.0	$ 117,496.2	$ 111,943.6	$ 111,393.1	$ 111,475.6	$ 111,945.9	$ 112,226.3	$ 112,491.6	$ 112,179.8	$ 112,043.2	$ 113,655.0
	$ 836,779.0	$ 806,747.6	$ 786,939.6	$ 764,315.8	$ 763,263.6	$ 766,666.1	$ 769,241.9	$ 771,389.9	$ 774,068.3	$ 773,055.2	$ 771,982.6	$ 781,077.7
Uncollectible Rate	**2.4373%**	**2.4745%**	**2.4331%**	**2.3934%**	**2.3206%**	**2.3011%**	**2.2929%**	**2.2305%**	**2.1958%**	**2.0159%**	**1.8701%**	**1.7781%**

	31-Jan-11	28-Feb-11	31-Mar-11	30-Apr-11	31-May-11	30-Jun-11	31-Jul-11	31-Aug-11	30-Sep-11	31-Oct-11	30-Nov-11	31-Dec-11
	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(2)
Normalized Bad Debt Net Write-Off	$ 12,526.2	$ 11,234.7	$ 11,620.8	$ 12,510.2	$ 12,486.8	$ 12,822.5	$ 13,068.0	$ 13,726.7	$ 14,458.9	$ 15,849.1	$ 17,407.4	$ 18,915.1
Total Tariff Revenue	$ 662,135.8	$ 669,593.6	$ 682,623.5	$ 705,997.0	$ 717,768.4	$ 718,219.1	$ 717,707.3	$ 717,656.5	$ 717,386.3	$ 715,918.2	$ 712,758.1	$ 698,760.1
Late Payment Revenue	$ 2,950.2	$ 2,955.0	$ 3,010.6	$ 3,082.7	$ 3,137.0	$ 3,200.0	$ 3,205.9	$ 3,238.0	$ 3,255.0	$ 3,272.7	$ 3,273.1	$ 3,217.6
POR Receivable Revenue	$ 112,221.2	$ 113,807.1	$ 115,668.1	$ 121,290.9	$ 123,468.0	$ 123,768.5	$ 123,891.7	$ 123,992.2	$ 124,117.9	$ 124,090.0	$ 124,064.7	$ 121,455.3
	$ 777,307.3	$ 786,355.7	$ 801,302.2	$ 830,370.6	$ 844,373.4	$ 845,187.6	$ 844,804.9	$ 844,886.7	$ 844,759.2	$ 843,280.9	$ 840,095.9	$ 823,433.1
Uncollectible Rate	**1.6115%**	**1.4287%**	**1.4502%**	**1.5066%**	**1.4788%**	**1.5171%**	**1.5469%**	**1.6247%**	**1.7116%**	**1.8795%**	**2.0721%**	**2.2971%**
3-Yr Aggregated Gas Uncoll Rate:	**1.9294%**	**1.8875%**	**1.8985%**	**1.9300%**	**1.9235%**	**1.9690%**	**2.0003%**	**2.0172%**	**2.0469%**	**2.0867%**	**2.1054%**	**2.1700%**

	31-Jan-12	29-Feb-12	31-Mar-12	30-Apr-12	31-May-12	30-Jun-12	31-Jul-12	31-Aug-12	30-Sep-12	31-Oct-12	30-Nov-12	31-Dec-12
	(2)	(2)	(2)	(2)	(2)							
Normalized Bad Debt Net Write-Off	$ 20,434.6	$ 21,669.6	$ 21,531.1	$ 20,770.5	$ 21,233.2							
Total Tariff Revenue	$ 675,677.5	$ 649,501.8	$ 621,971.1	$ 598,344.9	$ 593,600.5							
Late Payment Revenue	$ 3,147.6	$ 3,031.1	$ 2,941.9	$ 2,850.7	$ 2,835.5							
POR Receivable Revenue	$ 117,086.9	$ 112,235.3	$ 107,300.4	$ 101,174.6	$ 100,114.1							
	$ 795,912.1	$ 764,768.2	$ 732,213.4	$ 702,370.2	$ 696,550.1	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Uncollectible Rate	**2.5674%**	**2.8335%**	**2.9405%**	**2.9572%**	**3.0483%**							
3-Yr Aggregated Gas Uncoll Rate:	**2.2139%**	**2.2422%**	**2.2538%**	**2.2452%**	**2.2321%**							

(1) Beginning Jan'11, the electric-gas net write-off allocation was changed from 72%-28% to 69%-31% per the outcome of the NIMO electric rate case 10-E-0050.

(2) For the mo's beginning Nov'11, the electric gas net write-off allocation was changed from 69%-31% to 70%-30% per the outcome of the new annual assessment completed after the Oct'11.

(3) LICAP Arrears forgiveness is imbedded within the net write-off row and allocated between electric and gas as noted in (1) & (2) above.

(4) For the month of Sept '09, total electric & gas net write-off has been normalized by removing about $4.1 million that had been inadvertently accelerated to write-off due to a system issue. These amounts would have been written off during Oct '09 and Nov '09.

(5) For the months of Oct&Nov '09, total electric & gas net write-off has been increased by the allocated portion of the $4.1 million that had been inadvertently accelerated in Sept'09 due to a system issue.
Also, written off during Oct '09 was another $1.5 accelerated amount that should have gone to Nov '09. Both Oct09 & Nov09 have been normalized by the additional figure.

GAS UNCOLLECTIBLE RATE ADJUSTED FOR IMPACTS OF THE MANUAL PHASE OF THE TRANSFER TO ACTIVE PROJECT

Rolling 12-Mo Ending

($000's)

	31-Jan-09	28-Feb-09	31-Mar-09	30-Apr-09	31-May-09	30-Jun-09	31-Jul-09	31-Aug-09	30-Sep-09	31-Oct-09	30-Nov-09	31-Dec-09
Normalized Bad Debt Net Write-Off	$ 17,564.1	$ 18,136.0	$ 18,584.5	$ 19,121.9	$ 19,465.7	$ 20,022.2	$ 20,372.7	$ 20,425.7	$ 20,582.3	$ 21,441.6	$ 21,211.4	$ 20,966.8
Total Tariff Revenue	$ 839,607.5	$ 848,499.4	$ 837,487.4	$ 819,734.1	$ 803,816.6	$ 785,426.2	$ 775,087.7	$ 767,827.2	$ 763,533.7	$ 763,769.7	$ 757,565.1	$ 730,782.2
Late Payment Revenue	$ 3,712.2	$ 3,801.7	$ 3,859.5	$ 3,951.0	$ 3,893.1	$ 3,820.9	$ 3,796.6	$ 3,707.3	$ 3,637.4	$ 3,594.9	$ 3,537.0	$ 3,542.1
POR Receivable Revenue	$ 159,256.8	$ 168,279.2	$ 169,933.9	$ 168,444.5	$ 166,677.3	$ 162,960.1	$ 160,654.9	$ 158,229.2	$ 156,282.9	$ 150,195.2	$ 146,768.9	$ 139,006.2
	$ 1,002,576.5	$ 1,020,580.2	$ 1,011,280.7	$ 992,129.6	$ 974,387.0	$ 952,207.2	$ 939,539.2	$ 929,763.8	$ 923,454.0	$ 917,559.8	$ 907,871.0	$ 873,330.5
Uncollectible Rate	**1.7519%**	**1.7770%**	**1.8377%**	**1.9274%**	**1.9977%**	**2.1027%**	**2.1684%**	**2.1969%**	**2.2288%**	**2.3368%**	**2.3364%**	**2.4008%**

	31-Jan-10	28-Feb-10	31-Mar-10	30-Apr-10	31-May-10	30-Jun-10	31-Jul-10	31-Aug-10	30-Sep-10	31-Oct-10	30-Nov-10	31-Dec-10
											(6)	**(6)**
Normalized Bad Debt Net Write-Off	$ 20,394.5	$ 19,963.4	$ 19,147.3	$ 18,293.2	$ 17,712.2	$ 17,641.9	$ 17,637.9	$ 17,205.6	$ 16,997.3	$ 15,583.7	**$ 14,678.0**	**$ 14,843.8**
Total Tariff Revenue	$ 703,008.1	$ 681,183.9	$ 666,195.7	$ 649,333.3	$ 648,898.4	$ 652,224.5	$ 654,378.5	$ 656,263.1	$ 658,641.9	$ 657,928.5	$ 656,989.5	$ 664,496.1
Late Payment Revenue	$ 3,405.9	$ 3,266.7	$ 3,247.8	$ 3,038.9	$ 2,972.1	$ 2,966.0	$ 2,917.5	$ 2,900.5	$ 2,934.8	$ 2,946.9	$ 2,949.9	$ 2,926.6
POR Receivable Revenue	$ 130,365.0	$ 122,297.0	$ 117,496.2	$ 111,943.6	$ 111,393.1	$ 111,475.6	$ 111,945.9	$ 112,226.3	$ 112,491.6	$ 112,179.8	$ 112,043.2	$ 113,655.0
	$ 836,779.0	$ 806,747.6	$ 786,939.6	$ 764,315.8	$ 763,263.6	$ 766,666.1	$ 769,241.9	$ 771,389.9	$ 774,068.3	$ 773,055.2	$ 771,982.6	$ 781,077.7
Uncollectible Rate	**2.4373%**	**2.4745%**	**2.4331%**	**2.3934%**	**2.3206%**	**2.3011%**	**2.2929%**	**2.2305%**	**2.1958%**	**2.0159%**	**1.9013%**	**1.9004%**

	31-Jan-11	28-Feb-11	31-Mar-11	30-Apr-11	31-May-11	30-Jun-11	31-Jul-11	31-Aug-11	30-Sep-11	31-Oct-11	30-Nov-11	31-Dec-11
	(6)	**(6)**	**(6)**	**(6)**	**(6)**	**(6)**	**(6)**	**(6)**	**(6)**	**(6)**	**(6)**	**(6)**
Normalized Bad Debt Net Write-Off	**$ 14,403.0**	**$ 13,908.1**	**$ 14,294.3**	**$ 15,183.6**	**$ 15,160.2**	**$ 15,495.9**	**$ 15,741.5**	**$ 16,400.2**	**$ 17,132.3**	**$ 18,522.5**	**$ 19,839.7**	**$ 20,633.0**
Total Tariff Revenue	$ 662,135.8	$ 669,593.6	$ 682,623.5	$ 705,997.0	$ 717,768.4	$ 718,219.1	$ 717,707.3	$ 717,656.5	$ 717,386.3	$ 715,918.2	$ 712,758.1	$ 698,760.1
Late Payment Revenue	$ 2,950.2	$ 2,955.0	$ 3,010.6	$ 3,082.7	$ 3,137.0	$ 3,200.0	$ 3,205.9	$ 3,238.0	$ 3,255.0	$ 3,272.7	$ 3,273.1	$ 3,217.6
POR Receivable Revenue	$ 112,221.2	$ 113,807.1	$ 115,668.1	$ 121,290.9	$ 123,468.0	$ 123,768.5	$ 123,891.7	$ 123,992.2	$ 124,117.9	$ 124,090.0	$ 124,064.7	$ 121,455.3
	$ 777,307.3	$ 786,355.7	$ 801,302.2	$ 830,370.6	$ 844,373.4	$ 845,187.6	$ 844,804.9	$ 844,886.7	$ 844,759.2	$ 843,280.9	$ 840,095.9	$ 823,433.1
Uncollectible Rate	**1.8529%**	**1.7687%**	**1.7839%**	**1.8285%**	**1.7954%**	**1.8334%**	**1.8633%**	**1.9411%**	**2.0281%**	**2.1965%**	**2.3616%**	**2.5057%**
3-Yr Aggregated Gas Uncoll Rate:	**2.0011%**	**1.9898%**	**2.0014%**	**2.0333%**	**2.0270%**	**2.0733%**	**2.1050%**	**2.1222%**	**2.1521%**	**2.1922%**	**2.2115%**	**2.2779%**

	31-Jan-12	29-Feb-12	31-Mar-12	30-Apr-12	31-May-12	30-Jun-12	31-Jul-12	31-Aug-12	30-Sep-12	31-Oct-12	30-Nov-12	31-Dec-12
	(6)											
Normalized Bad Debt Net Write-Off	**$ 21,231.2**	$ 21,669.6	$ 21,531.1	$ 20,770.5	$ 21,233.2							
Total Tariff Revenue	$ 675,677.5	$ 649,501.8	$ 621,971.1	$ 598,344.9	$ 593,600.5							
Late Payment Revenue	$ 3,147.6	$ 3,031.1	$ 2,941.9	$ 2,850.7	$ 2,835.5							
POR Receivable Revenue	$ 117,086.9	$ 112,235.3	$ 107,300.4	$ 101,174.6	$ 100,114.1							
	$ 795,912.1	$ 764,768.2	$ 732,213.4	$ 702,370.2	$ 696,550.1	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Uncollectible Rate	**2.6675%**	**2.8335%**	**2.9405%**	**2.9572%**	**3.0483%**							
3-Yr Aggregated Gas Uncoll Rate:	**2.3248%**	**2.3556%**	**2.3690%**	**2.3616%**	**2.3481%**							

(6) The manual phase of the transfer to active project increased recoveries by a total of $8,954,239 for both electric and gas for the months of Nov'10 through Feb'11. This decreased the net write-offs in the rolling 12-mo analysis for each of the 12-mo periods ending Nov'10 through Jan'12. The figures below have been updated following a more precise study of the data conducted in preparation for the response to GRW-1 #3. The total of $8.9 million remains the same, however the Uncollectible Rates above have been adjusted slightly compared to pg 2 of Exhibit__(SSCP-5) to accommodte this new cashflow.

The revenue months (not-rolling 12-mo's) were impacted by this project as follows:

($000's)

	30-Nov-10	31-Dec-10	31-Jan-11	28-Feb-11	Total
	$ 860.9	$ 2,551.9	$ 2,971.7	$ 2,569.8	**$ 8,954.2**
Elec	$ 619.9	$ 1,837.4	$ 2,050.4	$ 1,773.1	**$ 6,280.8**
Gas	$ 241.1	$ 714.5	$ 921.2	$ 796.6	**$ 2,673.4**
	$ 860.9	$ 2,551.9	$ 2,971.7	$ 2,569.8	**$ 8,954.2**

UNCOLLECTIBLE RATE CALCULATION

ELECTRIC
Rolling 12-Mo Ending
($000's)

	31-Jan-09	28-Feb-09	31-Mar-09	30-Apr-09	31-May-09	30-Jun-09	31-Jul-09	31-Aug-09	30-Sep-09	31-Oct-09	30-Nov-09	31-Dec-09
									(4)	(5)	(5)	
Normalized Bad Debt Net Write-Off	$ 45,164.9	$ 46,635.5	$ 47,788.6	$ 49,170.7	$ 50,054.7	$ 51,485.6	$ 52,386.9	$ 52,523.1	$ 52,925.8	$ 55,135.6	$ 54,543.7	$ 53,914.5
Total Tariff Revenue	$ 3,081,245.9	$ 3,076,984.3	$ 3,060,266.1	$ 3,028,875.3	$ 2,998,174.9	$ 2,950,238.7	$ 2,912,193.9	$ 2,849,751.4	$ 2,834,349.1	$ 2,830,718.7	$ 2,824,630.1	$ 2,824,675.0
Late Payment Revenue	$ 16,405.2	$ 16,322.3	$ 16,276.4	$ 16,420.3	$ 16,242.7	$ 15,798.3	$ 15,740.2	$ 15,356.5	$ 14,943.8	$ 14,793.9	$ 14,431.8	$ 14,570.3
POR Receivable Revenue	$ 349,756.9	$ 352,276.4	$ 349,087.9	$ 343,409.7	$ 336,950.9	$ 327,739.9	$ 312,052.6	$ 294,037.8	$ 287,904.5	$ 285,287.5	$ 284,009.1	$ 282,672.0
	$ 3,447,408.0	$ 3,445,583.0	$ 3,425,630.5	$ 3,388,705.3	$ 3,351,368.5	$ 3,293,776.8	$ 3,239,986.7	$ 3,159,145.6	$ 3,137,197.5	$ 3,130,800.1	$ 3,123,071.0	$ 3,121,917.2
Uncollectible Rate	**1.3101%**	**1.3535%**	**1.3950%**	**1.4510%**	**1.4936%**	**1.5631%**	**1.6169%**	**1.6626%**	**1.6870%**	**1.7611%**	**1.7465%**	**1.7270%**

	31-Jan-10	28-Feb-10	31-Mar-10	30-Apr-10	31-May-10	30-Jun-10	31-Jul-10	31-Aug-10	30-Sep-10	31-Oct-10	30-Nov-10	31-Dec-10
Normalized Bad Debt Net Write-Off	$ 52,443.1	$ 51,334.4	$ 49,235.9	$ 47,039.7	$ 45,545.5	$ 45,365.0	$ 45,354.5	$ 44,243.0	$ 43,707.3	$ 40,072.4	$ 37,123.7	$ 35,712.6
Total Tariff Revenue	$ 2,837,570.5	$ 2,844,630.0	$ 2,875,640.5	$ 2,901,351.0	$ 2,918,745.7	$ 2,952,145.3	$ 3,006,347.7	$ 3,066,735.2	$ 3,083,228.4	$ 3,097,873.9	$ 3,107,702.2	$ 3,116,097.8
Late Payment Revenue	$ 14,345.3	$ 14,280.1	$ 14,373.4	$ 14,068.0	$ 14,095.5	$ 14,283.0	$ 14,264.7	$ 14,333.6	$ 14,844.2	$ 15,153.3	$ 15,463.7	$ 15,519.1
POR Receivable Revenue	$ 285,682.9	$ 286,552.7	$ 290,639.6	$ 292,910.3	$ 296,946.4	$ 304,162.6	$ 317,773.4	$ 332,474.1	$ 339,667.1	$ 342,470.2	$ 342,481.7	$ 344,580.4
	$ 3,137,598.8	$ 3,145,462.7	$ 3,180,653.5	$ 3,208,329.3	$ 3,229,787.6	$ 3,270,591.0	$ 3,338,385.8	$ 3,413,542.9	$ 3,437,739.7	$ 3,455,497.4	$ 3,465,647.6	$ 3,476,197.2
Uncollectible Rate	**1.6714%**	**1.6320%**	**1.5480%**	**1.4662%**	**1.4102%**	**1.3871%**	**1.3586%**	**1.2961%**	**1.2714%**	**1.1597%**	**1.0712%**	**1.0273%**

	31-Jan-11	28-Feb-11	31-Mar-11	30-Apr-11	31-May-11	30-Jun-11	31-Jul-11	31-Aug-11	30-Sep-11	31-Oct-11	30-Nov-11	31-Dec-11
	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(2)
Normalized Bad Debt Net Write-Off	$ 32,093.3	$ 28,951.9	$ 29,638.7	$ 31,538.0	$ 31,234.6	$ 31,431.9	$ 31,396.3	$ 32,165.1	$ 33,068.9	$ 35,684.7	$ 39,160.3	$ 42,558.0
Total Tariff Revenue	$ 3,104,656.9	$ 3,115,788.6	$ 3,112,799.1	$ 3,111,821.6	$ 3,114,081.8	$ 3,114,069.6	$ 3,084,319.3	$ 3,065,335.0	$ 3,041,588.7	$ 3,037,782.3	$ 3,022,599.5	$ 2,999,929.5
Late Payment Revenue	$ 15,638.4	$ 15,709.2	$ 15,970.8	$ 16,055.3	$ 16,030.0	$ 16,075.0	$ 16,043.9	$ 16,078.1	$ 16,141.0	$ 16,191.1	$ 16,068.9	$ 15,691.5
POR Receivable Revenue	$ 343,719.4	$ 346,643.5	$ 347,173.7	$ 349,747.0	$ 349,326.4	$ 347,008.1	$ 340,695.6	$ 338,437.5	$ 334,773.4	$ 334,347.6	$ 335,533.8	$ 333,065.6
	$ 3,464,014.6	$ 3,478,141.3	$ 3,475,943.6	$ 3,477,623.9	$ 3,479,438.2	$ 3,477,152.7	$ 3,441,058.9	$ 3,419,850.6	$ 3,392,503.0	$ 3,388,320.9	$ 3,374,202.2	$ 3,348,686.6
Uncollectible Rate	**0.9265%**	**0.8324%**	**0.8527%**	**0.9069%**	**0.8977%**	**0.9040%**	**0.9124%**	**0.9405%**	**0.9748%**	**1.0532%**	**1.1606%**	**1.2709%**
3-Yr Aggregated Elec Uncoll Rate:	**1.2907%**	**1.2605%**	**1.2563%**	**1.2680%**	**1.2607%**	**1.2775%**	**1.2889%**	**1.2903%**	**1.3013%**	**1.3123%**	**1.3131%**	**1.3289%**

	31-Jan-12	29-Feb-12	31-Mar-12	30-Apr-12	31-May-12	30-Jun-12	31-Jul-12	31-Aug-12	30-Sep-12	31-Oct-12	30-Nov-12	31-Dec-12
	(2)	(2)	(2)	(2)	(2)							
Normalized Bad Debt Net Write-Off	$ 46,139.6	$ 48,965.5	$ 48,737.5	$ 47,083.4	$ 48,238.7							
Total Tariff Revenue	$ 2,946,068.8	$ 2,870,173.6	$ 2,800,982.2	$ 2,726,282.2	$ 2,672,835.3							
Late Payment Revenue	$ 15,435.3	$ 15,009.2	$ 14,680.6	$ 14,390.7	$ 14,242.4							
POR Receivable Revenue	$ 326,292.2	$ 318,635.6	$ 314,396.4	$ 308,724.3	$ 306,157.6							
	$ 3,287,796.3	$ 3,203,818.4	$ 3,130,059.2	$ 3,049,397.2	$ 2,993,235.4	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Uncollectible Rate	**1.4034%**	**1.5283%**	**1.5571%**	**1.5440%**	**1.6116%**							
3-Yr Aggregated Elec Uncoll Rate:	**1.3214%**	**1.3152%**	**1.3039%**	**1.2908%**	**1.2885%**							

(1) Beginning Jan'11, the electric-gas net write-off allocation was changed from 72%-28% to 69%-31% per the outcome of the NIMO electric rate case 10-E-0050.

(2) For the mo's beginning Nov'11, the electric gas net write-off allocation was changed from 69%-31% to 70%-30% per the outcome of the new annual assessment completed after the Oct'11.

(3) LICAP Arrears forgiveness is imbedded within the net write-off row and allocated between electric and gas as noted in (1) & (2) above.

(4) For the month of Sept '09, total electric & gas net write-off has been normalized by removing about $4.1 million that had been inadvertently accelerated to write-off due to a system issue. These amounts would have been written off during Oct '09 and Nov '09.

(5) For the months of Oct&Nov '09, total electric & gas net write-off has been increased by the allocated portion of the $4.1 million that had been inadvertently accelerated in Sept'09 due to a system issue. Also, written off during Oct '09 was another $1.5 accelerated amount that should have gone to Nov '09. Both Oct09 & Nov09 have been normalized by the additional figure.

ELECTRIC UNCOLLECTIBLE RATE ADJUSTED FOR IMPACTS OF THE MANUAL PHASE OF THE TRANSFER TO ACTIVE PROJECT

Rolling 12-Mo Ending

($000's)

	31-Jan-09	28-Feb-09	31-Mar-09	30-Apr-09	31-May-09	30-Jun-09	31-Jul-09	31-Aug-09	30-Sep-09	31-Oct-09	30-Nov-09	31-Dec-09
Normalized Bad Debt Net Write-Off	$ 45,164.9	$ 46,635.5	$ 47,788.6	$ 49,170.7	$ 50,054.7	$ 51,485.6	$ 52,386.9	$ 52,523.1	$ 52,925.8	$ 55,135.6	$ 54,543.7	$ 53,914.5
Total Tariff Revenue	$ 3,081,245.9	$ 3,076,984.3	$ 3,060,266.1	$ 3,028,875.3	$ 2,998,174.9	$ 2,950,238.7	$ 2,912,193.9	$ 2,849,751.4	$ 2,834,349.1	$ 2,830,718.7	$ 2,824,630.1	$ 2,824,675.0
Late Payment Revenue	$ 16,405.2	$ 16,322.3	$ 16,276.4	$ 16,420.3	$ 16,242.7	$ 15,798.3	$ 15,740.2	$ 15,356.5	$ 14,943.8	$ 14,793.9	$ 14,431.8	$ 14,570.3
POR Receivable Revenue	$ 349,756.9	$ 352,276.4	$ 349,087.9	$ 343,409.7	$ 336,950.9	$ 327,739.9	$ 312,052.6	$ 294,037.8	$ 287,904.5	$ 285,287.5	$ 284,009.1	$ 282,672.0
	$ 3,447,408.0	$ 3,445,583.0	$ 3,425,630.5	$ 3,388,705.3	$ 3,351,368.5	$ 3,293,776.8	$ 3,239,986.7	$ 3,159,145.6	$ 3,137,197.5	$ 3,130,800.1	$ 3,123,071.0	$ 3,121,917.2
Uncollectible Rate	**1.3101%**	**1.3535%**	**1.3950%**	**1.4510%**	**1.4936%**	**1.5631%**	**1.6169%**	**1.6626%**	**1.6870%**	**1.7611%**	**1.7465%**	**1.7270%**

	31-Jan-10	28-Feb-10	31-Mar-10	30-Apr-10	31-May-10	30-Jun-10	31-Jul-10	31-Aug-10	30-Sep-10	31-Oct-10	30-Nov-10	31-Dec-10
		(7)	(7)	(7)							(6)	(6)
Normalized Bad Debt Net Write-Off	$ 52,443.1	**$ 52,593.3**	**$ 52,799.5**	**$ 52,319.6**	**$ 50,760.4**	**$ 50,471.6**	**$ 50,354.6**	**$ 49,106.5**	**$ 48,418.5**	**$ 44,641.5**	**$ 42,181.9**	**$ 42,486.4**
Total Tariff Revenue	$ 2,837,570.5	$ 2,844,630.0	$ 2,875,640.5	$ 2,901,351.0	$ 2,918,745.7	$ 2,952,145.3	$ 3,006,347.7	$ 3,066,735.2	$ 3,083,228.4	$ 3,097,873.9	$ 3,107,702.2	$ 3,116,097.8
Late Payment Revenue	$ 14,345.3	$ 14,280.1	$ 14,373.4	$ 14,068.0	$ 14,095.5	$ 14,283.0	$ 14,264.7	$ 14,333.6	$ 14,844.2	$ 15,153.3	$ 15,463.7	$ 15,519.1
POR Receivable Revenue	$ 285,682.9	$ 286,552.7	$ 290,639.6	$ 292,910.3	$ 296,946.4	$ 304,162.6	$ 317,773.4	$ 332,474.1	$ 339,667.1	$ 342,470.2	$ 342,481.7	$ 344,580.4
	$ 3,137,598.8	$ 3,145,462.7	$ 3,180,653.5	$ 3,208,329.3	$ 3,229,787.6	$ 3,270,591.0	$ 3,338,385.8	$ 3,413,542.9	$ 3,437,739.7	$ 3,455,497.4	$ 3,465,647.6	$ 3,476,197.2
Uncollectible Rate	**1.6714%**	**1.6720%**	**1.6600%**	**1.6307%**	**1.5716%**	**1.5432%**	**1.5084%**	**1.4386%**	**1.4084%**	**1.2919%**	**1.2171%**	**1.2222%**

	31-Jan-11	28-Feb-11	31-Mar-11	30-Apr-11	31-May-11	30-Jun-11	31-Jul-11	31-Aug-11	30-Sep-11	31-Oct-11	30-Nov-11	31-Dec-11
	(6)	(6)										
Normalized Bad Debt Net Write-Off	**$ 40,730.8**	**$ 37,969.1**	**$ 36,169.7**	**$ 36,233.2**	**$ 35,905.8**	**$ 36,062.9**	**$ 35,987.8**	**$ 36,706.1**	**$ 37,553.4**	**$ 40,116.6**	**$ 42,921.3**	**$ 44,434.1**
Total Tariff Revenue	$ 3,104,656.9	$ 3,115,788.6	$ 3,112,799.1	$ 3,111,821.6	$ 3,114,081.8	$ 3,114,069.6	$ 3,084,319.3	$ 3,065,335.0	$ 3,041,588.7	$ 3,037,782.3	$ 3,022,599.5	$ 2,999,929.5
Late Payment Revenue	$ 15,638.4	$ 15,709.2	$ 15,970.8	$ 16,055.3	$ 16,030.0	$ 16,075.0	$ 16,043.9	$ 16,078.1	$ 16,141.0	$ 16,191.1	$ 16,068.9	$ 15,691.5
POR Receivable Revenue	$ 343,719.4	$ 346,643.5	$ 347,173.7	$ 349,747.0	$ 349,326.4	$ 347,008.1	$ 340,695.6	$ 338,437.5	$ 334,773.4	$ 334,347.6	$ 335,533.8	$ 333,065.6
	$ 3,464,014.6	$ 3,478,141.3	$ 3,475,943.6	$ 3,477,623.9	$ 3,479,438.2	$ 3,477,152.7	$ 3,441,058.9	$ 3,419,850.6	$ 3,392,503.0	$ 3,388,320.9	$ 3,374,202.2	$ 3,348,686.6
Uncollectible Rate	**1.1758%**	**1.0916%**	**1.0406%**	**1.0419%**	**1.0319%**	**1.0371%**	**1.0458%**	**1.0733%**	**1.1070%**	**1.1840%**	**1.2720%**	**1.3269%**
3-Yr Aggregated Elec Uncoll Rate:	**1.3766%**	**1.3626%**	**1.3564%**	**1.3670%**	**1.3590%**	**1.3745%**	**1.3846%**	**1.3844%**	**1.3935%**	**1.4025%**	**1.4017%**	**1.4159%**

	31-Jan-12	29-Feb-12	31-Mar-12	30-Apr-12	31-May-12	30-Jun-12	31-Jul-12	31-Aug-12	30-Sep-12	31-Oct-12	30-Nov-12	31-Dec-12
Normalized Bad Debt Net Write-Off	**$ 46,030.9**	$ 47,160.7	$ 47,050.9	$ 45,479.8	$ 46,699.9							
Total Tariff Revenue	$ 2,946,068.8	$ 2,870,173.6	$ 2,800,982.2	$ 2,726,282.2	$ 2,672,835.3							
Late Payment Revenue	$ 15,435.3	$ 15,009.2	$ 14,680.6	$ 14,390.7	$ 14,242.4							
POR Receivable Revenue	$ 326,292.2	$ 318,635.6	$ 314,396.4	$ 308,724.3	$ 306,157.6							
	$ 3,287,796.3	$ 3,203,818.4	$ 3,130,059.2	$ 3,049,397.2	$ 2,993,235.4	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Uncollectible Rate	**1.4001%**	**1.4720%**	**1.5032%**	**1.4914%**	**1.5602%**							
3-Yr Aggregated Elec Uncoll Rate:	**1.4076%**	**1.4014%**	**1.3899%**	**1.3768%**	**1.3746%**							

(6) The manual phase of the transfer to active project increased recoveries by a total of $8,954,239 for both electric and gas for the months of Nov'10 through Feb'11. This decreased the net write-offs in the rolling 12-mo analysis for each of the 12-mo periods ending Nov'10 through Jan'12. The figures below have been updated following a more precise study of the data conducted in preparation for the response to GRW-1 #3. The total of $8.9 million remains the same, however the Uncollectible Rates above have been adjusted slightly compared to pg 2 of Exhibit__(SSCP-4) to accommodte this new cashflow.

(7) It is assumed for this illustration that the test phase of the manual project involved the full incremental dollars indicated in Attachment 3 GRW-1 for the months of Feb'10 through Apr'10 vs. those for the same months in 2009. As indicated in that attachment, a total of $7,454,403 between electric electric and gas affected Feb'1- thru Apr'10.

UNCOLLECTIBLE RATE CALCULATION

GAS
Rolling 12-Mo Ending
($000's)

	31-Jan-09	28-Feb-09	31-Mar-09	30-Apr-09	31-May-09	30-Jun-09	31-Jul-09	31-Aug-09	30-Sep-09	31-Oct-09	30-Nov-09	31-Dec-09
									(4)	(5)	(5)	
Normalized Bad Debt Net Write-Off	$ 17,564.1	$ 18,136.0	$ 18,584.5	$ 19,121.9	$ 19,465.7	$ 20,022.2	$ 20,372.7	$ 20,425.7	$ 20,582.3	$ 21,441.6	$ 21,211.4	$ 20,966.8
Total Tariff Revenue	$ 839,607.5	$ 848,499.4	$ 837,487.4	$ 819,734.1	$ 803,816.6	$ 785,426.2	$ 775,087.7	$ 767,827.2	$ 763,533.7	$ 763,769.7	$ 757,565.1	$ 730,782.2
Late Payment Revenue	$ 3,712.2	$ 3,801.7	$ 3,859.5	$ 3,951.0	$ 3,893.1	$ 3,820.9	$ 3,796.6	$ 3,707.3	$ 3,637.4	$ 3,594.9	$ 3,537.0	$ 3,542.1
POR Receivable Revenue	$ 159,256.8	$ 168,279.2	$ 169,933.9	$ 168,444.5	$ 166,677.3	$ 162,960.1	$ 160,654.9	$ 158,229.2	$ 156,282.9	$ 150,195.2	$ 146,768.9	$ 139,006.2
	$ 1,002,576.5	$ 1,020,580.2	$ 1,011,280.7	$ 992,129.6	$ 974,387.0	$ 952,207.2	$ 939,539.2	$ 929,763.8	$ 923,454.0	$ 917,559.8	$ 907,871.0	$ 873,330.5
Uncollectible Rate	**1.7519%**	**1.7770%**	**1.8377%**	**1.9274%**	**1.9977%**	**2.1027%**	**2.1684%**	**2.1969%**	**2.2288%**	**2.3368%**	**2.3364%**	**2.4008%**

	31-Jan-10	28-Feb-10	31-Mar-10	30-Apr-10	31-May-10	30-Jun-10	31-Jul-10	31-Aug-10	30-Sep-10	31-Oct-10	30-Nov-10	31-Dec-10
Normalized Bad Debt Net Write-Off	$ 20,394.5	$ 19,963.4	$ 19,147.3	$ 18,293.2	$ 17,712.2	$ 17,641.9	$ 17,637.9	$ 17,205.6	$ 16,997.3	$ 15,583.7	$ 14,437.0	$ 13,888.2
Total Tariff Revenue	$ 703,008.1	$ 681,183.9	$ 666,195.7	$ 649,333.3	$ 648,898.4	$ 652,224.5	$ 654,378.5	$ 656,263.1	$ 658,641.9	$ 657,928.5	$ 656,989.5	$ 664,496.1
Late Payment Revenue	$ 3,405.9	$ 3,266.7	$ 3,247.8	$ 3,038.9	$ 2,972.1	$ 2,966.0	$ 2,917.5	$ 2,900.5	$ 2,934.8	$ 2,946.9	$ 2,949.9	$ 2,926.6
POR Receivable Revenue	$ 130,365.0	$ 122,297.0	$ 117,496.2	$ 111,943.6	$ 111,393.1	$ 111,475.6	$ 111,945.9	$ 112,226.3	$ 112,491.6	$ 112,179.8	$ 112,043.2	$ 113,655.0
	$ 836,779.0	$ 806,747.6	$ 786,939.6	$ 764,315.8	$ 763,263.6	$ 766,666.1	$ 769,241.9	$ 771,389.9	$ 774,068.3	$ 773,055.2	$ 771,982.6	$ 781,077.7
Uncollectible Rate	**2.4373%**	**2.4745%**	**2.4331%**	**2.3934%**	**2.3206%**	**2.3011%**	**2.2929%**	**2.2305%**	**2.1958%**	**2.0159%**	**1.8701%**	**1.7781%**

	31-Jan-11	28-Feb-11	31-Mar-11	30-Apr-11	31-May-11	30-Jun-11	31-Jul-11	31-Aug-11	30-Sep-11	31-Oct-11	30-Nov-11	31-Dec-11
	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(2)
Normalized Bad Debt Net Write-Off	$ 12,526.2	$ 11,234.7	$ 11,620.8	$ 12,510.2	$ 12,486.8	$ 12,822.5	$ 13,068.0	$ 13,726.7	$ 14,458.9	$ 15,849.1	$ 17,407.4	$ 18,915.1
Total Tariff Revenue	$ 662,135.8	$ 669,593.6	$ 682,623.5	$ 705,997.0	$ 717,768.4	$ 718,219.1	$ 717,707.3	$ 717,656.5	$ 717,386.3	$ 715,918.2	$ 712,758.1	$ 698,760.1
Late Payment Revenue	$ 2,950.2	$ 2,955.0	$ 3,010.6	$ 3,082.7	$ 3,137.0	$ 3,200.0	$ 3,205.9	$ 3,238.0	$ 3,255.0	$ 3,272.7	$ 3,273.1	$ 3,217.6
POR Receivable Revenue	$ 112,221.2	$ 113,807.1	$ 115,668.1	$ 121,290.9	$ 123,468.0	$ 123,768.5	$ 123,891.7	$ 123,992.2	$ 124,117.9	$ 124,090.0	$ 124,064.7	$ 121,455.3
	$ 777,307.3	$ 786,355.7	$ 801,302.2	$ 830,370.6	$ 844,373.4	$ 845,187.6	$ 844,804.9	$ 844,886.7	$ 844,759.2	$ 843,280.9	$ 840,095.9	$ 823,433.1
Uncollectible Rate	**1.6115%**	**1.4287%**	**1.4502%**	**1.5066%**	**1.4788%**	**1.5171%**	**1.5469%**	**1.6247%**	**1.7116%**	**1.8795%**	**2.0721%**	**2.2971%**
3-Yr Aggregated Gas Uncoll Rate:	**1.9294%**	**1.8875%**	**1.8985%**	**1.9300%**	**1.9235%**	**1.9690%**	**2.0003%**	**2.0172%**	**2.0469%**	**2.0867%**	**2.1054%**	**2.1700%**

	31-Jan-12	29-Feb-12	31-Mar-12	30-Apr-12	31-May-12	30-Jun-12	31-Jul-12	31-Aug-12	30-Sep-12	31-Oct-12	30-Nov-12	31-Dec-12
	(2)	(2)	(2)	(2)	(2)							
Normalized Bad Debt Net Write-Off	$ 20,434.6	$ 21,669.6	$ 21,531.1	$ 20,770.5	$ 21,233.2							
Total Tariff Revenue	$ 675,677.5	$ 649,501.8	$ 621,971.1	$ 598,344.9	$ 593,600.5							
Late Payment Revenue	$ 3,147.6	$ 3,031.1	$ 2,941.9	$ 2,850.7	$ 2,835.5							
POR Receivable Revenue	$ 117,086.9	$ 112,235.3	$ 107,300.4	$ 101,174.6	$ 100,114.1							
	$ 795,912.1	$ 764,768.2	$ 732,213.4	$ 702,370.2	$ 696,550.1	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Uncollectible Rate	**2.5674%**	**2.8335%**	**2.9405%**	**2.9572%**	**3.0483%**							
3-Yr Aggregated Gas Uncoll Rate:	**2.2139%**	**2.2422%**	**2.2538%**	**2.2452%**	**2.2321%**							

(1) Beginning Jan'11, the electric-gas net write-off allocation was changed from 72%-28% to 69%-31% per the outcome of the NIMO electric rate case 10-E-0050.

(2) For the mo's beginning Nov'11, the electric gas net write-off allocation was changed from 69%-31% to 70%-30% per the outcome of the new annual assessment completed after the Oct'11.

(3) LICAP Arrears forgiveness is imbedded within the net write-off row and allocated between electric and gas as noted in (1) & (2) above.

(4) For the month of Sept '09, total electric & gas net write-off has been normalized by removing about $4.1 million that had been inadvertently accelerated to write-off due to a system issue. These amounts would have been written off during Oct '09 and Nov '09.

(5) For the months of Oct&Nov '09, total electric & gas net write-off has been increased by the allocated portion of the $4.1 million that had been inadvertently accelerated in Sept'09 due to a system issue.
Also, written off during Oct '09 was another $1.5 accelerated amount that should have gone to Nov '09. Both Oct09 & Nov09 have been normalized by the additional figure.

GAS UNCOLLECTIBLE RATE ADJUSTED FOR IMPACTS OF THE MANUAL PHASE OF THE TRANSFER TO ACTIVE PROJECT

Rolling 12-Mo Ending

($000's)

	31-Jan-09	28-Feb-09	31-Mar-09	30-Apr-09	31-May-09	30-Jun-09	31-Jul-09	31-Aug-09	30-Sep-09	31-Oct-09	30-Nov-09	31-Dec-09
Normalized Bad Debt Net Write-Off	$ 17,564.1	$ 18,136.0	$ 18,584.5	$ 19,121.9	$ 19,465.7	$ 20,022.2	$ 20,372.7	$ 20,425.7	$ 20,582.3	$ 21,441.6	$ 21,211.4	$ 20,966.8
Total Tariff Revenue	$ 839,607.5	$ 848,499.4	$ 837,487.4	$ 819,734.1	$ 803,816.6	$ 785,426.2	$ 775,087.7	$ 767,827.2	$ 763,533.7	$ 763,769.7	$ 757,565.1	$ 730,782.2
Late Payment Revenue	$ 3,712.2	$ 3,801.7	$ 3,859.5	$ 3,951.0	$ 3,893.1	$ 3,820.9	$ 3,796.6	$ 3,707.3	$ 3,637.4	$ 3,594.9	$ 3,537.0	$ 3,542.1
POR Receivable Revenue	$ 159,256.8	$ 168,279.2	$ 169,933.9	$ 168,444.5	$ 166,677.3	$ 162,960.1	$ 160,654.9	$ 158,229.2	$ 156,282.9	$ 150,195.2	$ 146,768.9	$ 139,006.2
	$ 1,002,576.5	$ 1,020,580.2	$ 1,011,280.7	$ 992,129.6	$ 974,387.0	$ 952,207.2	$ 939,539.2	$ 929,763.8	$ 923,454.0	$ 917,559.8	$ 907,871.0	$ 873,330.5
Uncollectible Rate	**1.7519%**	**1.7770%**	**1.8377%**	**1.9274%**	**1.9977%**	**2.1027%**	**2.1684%**	**2.1969%**	**2.2288%**	**2.3368%**	**2.3364%**	**2.4008%**

	31-Jan-10	28-Feb-10	31-Mar-10	30-Apr-10	31-May-10	30-Jun-10	31-Jul-10	31-Aug-10	30-Sep-10	31-Oct-10	30-Nov-10	31-Dec-10
		(7)	(7)	(7)							(6)	(6)
Normalized Bad Debt Net Write-Off	$ 20,394.5	**$ 20,452.9**	**$ 20,533.2**	**$ 20,346.5**	**$ 19,740.2**	**$ 19,627.8**	**$ 19,582.3**	**$ 19,097.0**	**$ 18,829.4**	**$ 17,360.6**	**$ 16,404.1**	**$ 16,522.5**
Total Tariff Revenue	$ 703,008.1	$ 681,183.9	$ 666,195.7	$ 649,333.3	$ 648,898.4	$ 652,224.5	$ 654,378.5	$ 656,263.1	$ 658,641.9	$ 657,928.5	$ 656,989.5	$ 664,496.1
Late Payment Revenue	$ 3,405.9	$ 3,266.7	$ 3,247.8	$ 3,038.9	$ 2,972.1	$ 2,966.0	$ 2,917.5	$ 2,900.5	$ 2,934.8	$ 2,946.9	$ 2,949.9	$ 2,926.6
POR Receivable Revenue	$ 130,365.0	$ 122,297.0	$ 117,496.2	$ 111,943.6	$ 111,393.1	$ 111,475.6	$ 111,945.9	$ 112,226.3	$ 112,491.6	$ 112,179.8	$ 112,043.2	$ 113,655.0
	$ 836,779.0	$ 806,747.6	$ 786,939.6	$ 764,315.8	$ 763,263.6	$ 766,666.1	$ 769,241.9	$ 771,389.9	$ 774,068.3	$ 773,055.2	$ 771,982.6	$ 781,077.7
Uncollectible Rate	**2.4373%**	**2.5352%**	**2.6092%**	**2.6621%**	**2.5863%**	**2.5602%**	**2.5457%**	**2.4757%**	**2.4325%**	**2.2457%**	**2.1249%**	**2.1153%**

	31-Jan-11	28-Feb-11	31-Mar-11	30-Apr-11	31-May-11	30-Jun-11	31-Jul-11	31-Aug-11	30-Sep-11	31-Oct-11	30-Nov-11	31-Dec-11
	(6)	(6)										
Normalized Bad Debt Net Write-Off	**$ 15,997.8**	**$ 14,952.9**	**$ 14,361.2**	**$ 14,529.4**	**$ 14,491.3**	**$ 14,802.4**	**$ 15,023.8**	**$ 15,651.5**	**$ 16,349.1**	**$ 17,707.1**	**$ 18,997.3**	**$ 19,765.3**
Total Tariff Revenue	$ 662,135.8	$ 669,593.6	$ 682,623.5	$ 705,997.0	$ 717,768.4	$ 718,219.1	$ 717,707.3	$ 717,656.5	$ 717,386.3	$ 715,918.2	$ 712,758.1	$ 698,760.1
Late Payment Revenue	$ 2,950.2	$ 2,955.0	$ 3,010.6	$ 3,082.7	$ 3,137.0	$ 3,200.0	$ 3,205.9	$ 3,238.0	$ 3,255.0	$ 3,272.7	$ 3,273.1	$ 3,217.6
POR Receivable Revenue	$ 112,221.2	$ 113,807.1	$ 115,668.1	$ 121,290.9	$ 123,468.0	$ 123,768.5	$ 123,891.7	$ 123,992.2	$ 124,117.9	$ 124,090.0	$ 124,064.7	$ 121,455.3
	$ 777,307.3	$ 786,355.7	$ 801,302.2	$ 830,370.6	$ 844,373.4	$ 845,187.6	$ 844,804.9	$ 844,886.7	$ 844,759.2	$ 843,280.9	$ 840,095.9	$ 823,433.1
Uncollectible Rate	**2.0581%**	**1.9015%**	**1.7922%**	**1.7498%**	**1.7162%**	**1.7514%**	**1.7784%**	**1.8525%**	**1.9354%**	**2.0998%**	**2.2613%**	**2.4004%**
3-Yr Aggregated Gas Uncoll Rate:	**2.0620%**	**2.0485%**	**2.0573%**	**2.0874%**	**2.0797%**	**2.1237%**	**2.1530%**	**2.1671%**	**2.1933%**	**2.2301%**	**2.2466%**	**2.3107%**

	31-Jan-12	29-Feb-12	31-Mar-12	30-Apr-12	31-May-12	30-Jun-12	31-Jul-12	31-Aug-12	30-Sep-12	31-Oct-12	30-Nov-12	31-Dec-12
Normalized Bad Debt Net Write-Off	**$ 20,395.5**	$ 20,869.7	$ 20,785.6	$ 20,063.0	$ 20,555.4							
Total Tariff Revenue	$ 675,677.5	$ 649,501.8	$ 621,971.1	$ 598,344.9	$ 593,600.5							
Late Payment Revenue	$ 3,147.6	$ 3,031.1	$ 2,941.9	$ 2,850.7	$ 2,835.5							
POR Receivable Revenue	$ 117,086.9	$ 112,235.3	$ 107,300.4	$ 101,174.6	$ 100,114.1							
	$ 795,912.1	$ 764,768.2	$ 732,213.4	$ 702,370.2	$ 696,550.1	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Uncollectible Rate	**2.5625%**	**2.7289%**	**2.8387%**	**2.8565%**	**2.9510%**							
3-Yr Aggregated Gas Uncoll Rate:	**2.3563%**	**2.3867%**	**2.3995%**	**2.3917%**	**2.3777%**							

(6) The manual phase of the transfer to active project increased recoveries by a total of $8,954,239 for both electric and gas for the months of Nov'10 through Feb'11. This decreased the net write-offs in the rolling 12-mo analysis for each of the 12-mo periods ending Nov'10 through Jan'12. The figures below have been updated following a more precise study of the data conducted in preparation for the response to GRW-1 #3. The total of $8.9 million remains the same, however the Uncollectible Rates above have been adjusted slightly compared to pg 2 of Exhibit__(SSCP-5) to accommodte this new cashflow.

(7) It is assumed for this illustration that the test phase of the manual project involved the full incremental dollars indicated in Attachment 3 GRW-1 for the months of Feb'10 through Apr'10 vs. those for the same months in 2009. As indicated in that attachment, a total of $7,454,403 between electric electric and gas affected Feb'1- thru Apr'10.