

#### VIA ELECTRONIC DELIVERY

January 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 6 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 6 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.

Thank you for your attention to this matter.

Very truly yours,

/s/ Carlos Gavilondo

Carlos Gavilondo Senior Counsel II

Enc.

cc: K. Tallmadge, DPS Staff (via electronic mail w/enclosures)

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

# IMPLEMENTATION PLAN UPDATE 6

PREPARED FOR:

THE STATE OF NEW YORK PUBLIC SERVICE COMMISSION

THREE EMPIRE STATE PLAZA

**ALBANY, NY 12223** 

JANUARY 31, 2012



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## **CHAPTER 1—INTRODUCTION**

## A. Background

In accordance with the Commission's December 18, 2009 order in this proceeding, <sup>1</sup> 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.<sup>2</sup> This is the Company's sixth 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:<sup>3</sup>

Table 1—Implementation Progress--Aggregate

<b>Total Recommendations</b>	44
Implemented	18
Pending Review	13
In Progress	13

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<sup>&</sup>lt;sup>1</sup> 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").

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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 18 implemented recommendations are each one less than the Staff's counts (i.e., 45 and 19, respectively).

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.<sup>4</sup>

Table 2 provides a status summary for each individual recommendation.<sup>5</sup>

**Table 2—Implementation Progress—Individual Recommendations** 

Rec Number	Recommendation	January 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 (new status)

<sup>&</sup>lt;sup>4</sup> This category also includes implementation steps that require action by Staff or the Commission in order to progress the recommendation.

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IMPLEMENTATION PLAN—UPDATE 6

<sup>&</sup>lt;sup>5</sup> 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)	In Progress
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 (new status)
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 systemwide 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)	In Progress
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)	Implemented (new status)
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)	Implemented (new status)
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 6 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 "Pending Review" to "Implemented":

Recommendations X-1 and X-4

From "In Progress" to "Pending Review":

o Recommendations III-9

From "Implemented" to "Pending Review":

- o Recommendation III-5
- Work Management and Electric Transformation Initiatives: Staff has accepted as "Implemented" Recommendation X-1 relating to the Company's work management program, and Recommendation X-4 dealing with the segregation of previously combined efficiency initiatives.
- NGUSA and NMPC Boards: The Company has elected NGUSA Board members who meet the criterion set forth in Recommendation III-9. However, the NMPC Board has been changed based on discussions with PSC Staff as part of the MJP Collaborative directed by the Commission in Case 10-E-0050. Thus, the Company has changed the status from In Progress to Pending Review.
- Smart Grid: Staff has asked the Company to reclassify the status of Recommendation III-5, relating to the monitoring and measurement of customer benefits arising from the Company's previously planned Smart Grid pilot projects, and recommending that the Company include a cost benefit analysis in connection with any future Smart Grid project proposals.

In addition to these highlights, the Company continues to make strides towards implementation of 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 6 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 thirteen (13) 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. The individual recommendations in the "In Progress" status category are indicated in Table 3.

Table 3--Update 6 Implemented Recommendations Pending Review

Rec Number	Recommendation/Progress Summary	January 2012 Status
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)	In Progress
	US Executive Director, Tom King, briefed Chairman, Sir Peter Gershon, on this recommendation	
	Consolidate the two service companies as soon as possible and as planned. (Refers to Finding III-30)	
III-8	A filing with the Commission that sets forth the proposed common allocators is targeted for March 2012. Adoption of a common allocation approach will ultimately be achieved through the implementation of US Foundation/SAP 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)	In Progress
	Several KPIs have been developed and others are under development; targeting Summer 2012 for implementation	
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)  Installation of equipment to enable partial implementation of this	In Progress
	recommendation began October 2011. The end-use survey component of this recommendation is awaiting NYSERDA action.	
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

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<sup>&</sup>lt;sup>6</sup> This category also includes implementation steps that require action by Staff or the Commission in order for further progress to occur.

	Progress on the final component of this recommendation is tied to completion of the end-use survey in V-2 above. All other components are complete.	
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
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 resanctioning 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; a streamlined project review framework has been adopted; anticipate complete implementation in Spring 2012.	
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 Company is progressing with development of a cost account system to align with the WBS, and user training was completed in September 2011.	
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, and includes several estimator positions; implementation of the US Cost application is targeted for July 2012	
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, and includes several estimator positions; implementation of the US Cost application 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)	
	The Company completed short-term cross functional team initiatives, and initiated a long-term solutions study to address work order closing delays; the Company anticipates presenting results of the long-term study June 2012.	In Progress

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)	In Progress
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

## A. Corporate Mission, Objectives, Goals and Planning

#### **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.

#### **Major Activities and Schedule**

This recommendation will be accomplished under the terms expressed below.

#### **Current Status**

This audit recommendation has been communicated to the Board of Directors as well as the Nominations Committee. In addition, Tom King, Executive Director US, has briefed Sir Peter Gershon, Chairman, on this recommendation. As the Board and Nominations Committee consider future candidates, experience in US utility operations or regulation will be an important consideration when pursuing the diversity objectives of the Board.

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**

Consolidation of the service companies is linked to development of a unified or common financial system platform with a common allocation methodology. Implementation of a common accounting system is on target for late fall 2012, in alignment with the US Foundation/SAP conversion timeframe. The Company has developed common allocation methodologies as well as the general allocator. The Company has targeted March 2012 for a filing with the Commission that sets forth the proposed common allocators. Adoption of a common allocation approach will ultimately be achieved through the implementation of US Foundation/SAP in 2012.

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		In Progress
Obtain regulatory approvals as may be needed for single allocation methodology	Fall 2011	Target filing Mar 2012		Pending

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**

On June 9, 2010, the Company filed a petition seeking limited waiver of provisions in the Merger Joint Proposal in Case 01-M-0075 so as to enable the Company's implementation of this Recommendation. In its January 24, 2011 Order in Case 10-E-0050, <sup>7</sup> the Commission directed the Company and interested parties to collaborate regarding the continuation of certain provisions of the Merger Joint Proposal adopted in Case 01-M-0075 ("MJP Collaborative"). The composition of the Niagara Mohawk board of directors has been a subject of the MJP Collaborative. On May 23, 2011, the Company submitted a request asking that the Commission defer action on the June 9, 2010 petition; and by letter dated August 31, 2011, the Company submitted another request to defer action on the petition based on on-going efforts of the MJP Collaborative.

The Company elected a new NMPC Board in 2011. The Board structure and composition is the result of discussions with DPS Staff during the MJP Collaborative. The Company anticipates reaching settlement with DPS Staff on the composition of the Board during the MJP Collaborative and subsequently filing a petition for approval of this agreement in February. The Company expects the current NMPC Board members will meet any requirements coming from the MJP collaborative discussions and resulting settlement.

For the NMPC Board, the Company will not implement the Recommendation as presented. The Company and Staff have agreed that the composition of the NMPC Board should be as filed in the Report on Rate Plan Provisions ("Report") dated January 31, 2012 in Case 10-E-0050. The Report on Rate Plan Provisions is the result of the collaborative efforts of the Company, Staff and interested parties and addresses issues such as affiliate rules and corporate structure, among others. NMPC has appointed board members consistent with the composition requirements set forth in the Report and the Report is being filed on or about January 31, 2012 for Commission approval. If approved as filed, the Company will consider this Recommendation complete as modified by the Report. If the requirements of NMPC's Board composition change as a result of the Commission not approving the Petition following conclusion of the MJP Collaborative, the Company will re-evaluate this Recommendation.

<sup>&</sup>lt;sup>7</sup> Case 10-E-0050, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulation of Niagara Mohawk Power Corporation for Electric Service, *Order Establishing Rates for Electric Service* (issued and effective January 24, 2011).

Major Activities / Milestones	Estimated Completion Date	Actual Completion Date	Current Status
Exec paper with	Dec 2009	Dec 2009	Complete
recommendation			
Petition for change in	Jun 2010	Jun 2010	Requests for PSC
Attachment 23 of MJP			to defer action
			filed May 23,
			2011, and August
			31, 2011
Submit report and petition to	June 2012		MJP Collaborative
Commission that addresses			efforts on-going
composition of NMPC Board of			
Directors			
Appoint/ Elect new Directors	Only necessary		MJP Collaborative
(45 days after approval of	If PSC orders		efforts on-going
above)	Other		
	requirements		

## **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. For example, the Company currently manages towards several performance factors that impact customers directly, including SAIDI, SAIFI, and CAIDI. Customer Satisfaction scores are routinely monitored, and safety metrics, such as OSHA Recordable Incidents, Lost Time Incidents, and High Potential Incidents, are also tracked. In addition, Operation and Maintenance expense per customer is measured. These combined KPIs are effective in examining the reliability, safety, and cost of our services to our ratepayers' satisfaction. A further example of performance KPIs can be found in the Customer Order Fulfillment area, where the Customer Need Date Attainment KPI has been implemented to monitor cycle times. This KPI, in addition to other metrics designed to measure field force productivity, has been implemented in response to Recommendation X-1.

The Energy Portfolio Management group has also implemented appropriate metrics to assess its performance in the acquisition of energy supply as part of its actions to address Recommendation VI-1. Specifically, the following two performance metrics have been incorporated into performance for growth (P4G) system individual goals: (1) Limit the quantity of Real Time NYISO purchases to +/- 10% of the total NM Commodity Load; and (2) Limit the net cost of Real Time NYISO purchases to <3% of the total energy (LBMP only) costs. The supply portfolio performance metrics (prices and volatility metrics from the quarterly NYPSC filings, as well as available comparative data on other NY utilities) have

also been incorporated into the Company's KPIs. These KPI reports present graphic comparisons of Niagara Mohawks' rates and rate volatility to other NY utilities.

With regard to metrics associated with system plans, the Company provided Staff with its draft 15-Year System Plan in April 2011 (see Recommendation VIII-1). The Company will consider whether effective performance metrics can be established after it has had an opportunity to determine whether any new or revised Asset Management objectives may come from the Company's new organizational model and once feedback on the 15-Year Plan has been received from Staff.

We have established a preliminary process and resulting scorecard to track project cost estimating and project management performance, both of which have been established in conjunction with the End-to-End Project Management initiative. These measures are being more fully developed with the assistance of the software supplier to address various system interfaces. Full implementation is expected by summer of 2012, subject to configuration, functionality and full implementation of the estimating application tool (see Recommendation VIII-3), and completion of staffing for the new jurisdictional operating model.

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. With regard to "Planned EE End-Use Metering," Staff previously accepted the Company's proposed methodology to conduct the end-use metering of our small business program, and the project was initiated in the third quarter of 2011. Installation of end-use metering technologies began in October 2011. The end-use metering for residential cooling will not be implemented, however, because the Company's proposal for a modified electric HVAC program in 2010-2011 was rejected by the Commission (as a result, the 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 will be reviewed over the next several weeks with a decision made in mid-February 2012.

National Grid has completed its "Best Practices" research and submitted details to Staff for review. It is the Company's position that it should not adopt end-use modeling at this time because: 1) industry practice confirms the viability of the econometric approach for forecasting future trends in usage; 2) the econometric approach can be modified easily for introduction of additional demand-side variables such as energy efficiency, demand response and distributed generation; and 3) the costs of procuring, implementing and maintaining a new end-use model is high with no clear offsetting benefit for the Company's customers. Although the Company is not implementing end-use modeling at this time, it continues to explore the most appropriate, cost-effective means of incorporating new technologies and efficiency measures into the forecast, including the potential adoption of end-use modeling in the future.

Finally, 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.

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		In Progress
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 evaluation and projected future targets.	Nov 2010	TBD		Pending "In Progress" action above
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 in progress, with several aspects completed and one aspect pending. "Post Model Adjustments" for customer energy efficiency and "Alternative Model / Methods" – i.e., best approach to modeling EE - have been completed, and details have been submitted to Staff for review. Similarly, "Customer Usage Trends" have been completed and incorporated into the forecasting process. The NYSERDA RFP, required for the EE End Use Customer Survey, was conducted and bids will be reviewed over the next several weeks with a decision made in mid-February.

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	Jun 2012		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; 5-Year Capital Investment Plan; 15-Year System 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 has been communicating with Staff since then on the contents on that draft and on ways to revise the plan. Staff most recently provided feedback on January 25, 2012 relating to revised drafts of chapters 1-3 of the 15-Year Plan provided by the Company in December 2011. Changes to the 15-Year Plan will be made based on Staff's feedback, and a revised plan will be submitted by the end of February 2012.

This recommendation requires the completion of the Company's 15-Year system plan. Once the Company has developed a 15-Year plan consistent with its needs and considering suggestions form DPS Staff, the Company will be able to evaluate the effectiveness of the system plan on an annual basis.

Major Activities / Milestones	Estimated Start Date	Estimated Completion	Actual Completion	Current Status
		Date	Date	
Asset Management Strategies will be reviewed and revised accordingly over a two- year period beginning in January 2010. (VII- 3)	Jan 2010	Feb 2012		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. Details supporting the recommended level of Project Management discipline that will be applied to a project based on its respective complexity score are being finalized for Staff review.

In addition, a beta version of the combined PM Playbook, including documentation of the process for non PMP managed projects (i.e., Level 3), has been developed. However, because additional work remains on the End-to-End Project Management initiative (i.e., input from the various Action Teams) the fully detailed PM Playbook has not yet been finalized and approved. 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 dependant on the 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 /	Estimated	Estimated	Actual	Current
Milestones	Start Date	Completion	Completion	Status
		Date	Date	
Publish criteria	Apr 2010	Mar 2011	Mar 2011	Complete
document that defines				
the level of project				
management discipline				
that will be applied to a				
project.				
Fully document process	Jan 2010	Spring 2012		In Progress
for non PMP managed				
projects.				

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 Constru	. •	VP	Project	Management	and	Complex

#### **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 / 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
<b>Quality Council</b>				
Bi-Monthly Quality Council Meetings	Apr 2009	On-going	Apr 2010	Complete and on- going
<b>Construction Audits</b>				Complete and on- going

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						
	Constru	uction					

#### **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 twice 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 TRAC (transmission resource allocation committee) and SRAC (system resource allocation committee), and will promote greater coordination in project development and management.

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 /	Estimated	Estimated	Actual	Current
Milestones	Start Date	Completion	Completion	Status
		Date	Date	
Formal project reviews at	Apr 2010	Jul 2011		In Progress
governance boards				
Formal monitoring of non	Jun 2011	Fall 2011		In Progress
PMP projects				

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
	Constru	action					

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

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

#### **Implementation Plan Leads**

Executive Sponsor	Ellen Smith, Chief Operating Officer						
Team Lead	David Constru	. •	VP	Project	Management	and	Complex

### **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 / 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

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**

The approved WBS structure has been implemented for projects moving forward within Primavera P6 for the FY13 portfolio of projects. Training has been provided to Program Managers within Resource Planning in the proper application within P6. Conversion of existing in flight projects to the new WBS will be at the discretion of the Program Manager on a project by project basis after taking into consideration the effort required and the time to completion of the specific project.

The efforts associated with cost accounting to support the cost capturing against the lower levels of the WBS have been included as part of US Foundation. An initial pass of cost accounts has been reviewed by Estimating and by senior management. The limitations of the systems and implementation are under review by the implementation team. Unresolved issues still exist at the IT system and work force time reporting levels, and solutions are being considered to address these issues. The time frame for implementation will be incorporated as part of US Foundation implementation plan.

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

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 at a high level, and further definition will occur as part of the End-to-End Project Management initiative, creation of the centralized estimating group, 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 (US Cost) 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 is being developed to help facilitate the use of US Cost 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, develop estimating units, and to create process and procedure documentation, from which training will follow. 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. A US Cost to Primavera P6 interface solution has been decided on and the design is in progress. Implementation is scheduled for July 2012.

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

Between October 2009 and June 2010, the Company hired professional estimators with responsibility for developing estimates for substation and transmission line projects. Supplemental staff must be hired to augment these estimators, to fully implement the estimating tool, and to develop and implement the estimating procedures. The current approach is to designate such staffing as part of the transition to the new jurisdictional organization model. The Estimating Center of Excellence Director has been identified and assumed this new role effective June 1, 2011. Staffing selections are complete, including distribution line estimators to provide review and oversight for distribution estimates, and became effective September 26, 2011. 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 / 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**

With the exception of metrics development, all the short-term cross functional team initiatives have been completed. Several "patches" to the existing version of PowerPlant (Version 9) have been implemented to address the largest categories of validation problems in the short-term and provide system logic to correct these issues within the system. The proposed Power Plant upgrade to version 10.2 will be implemented as part of the long-term US Foundation / SAP enhancements and ultimate conversion of back office systems.

Plant Accounting has also conducted a series of work order close-out training sessions for numerous affected groups across the business on such topics as: the steps and information required for proper work order close out; work order status changes; opening and closing work orders; and completion of final and estimated as-built summaries. Training sessions will continue as the Company transitions to the new jurisdictional operating model. A supplementary project close out policy has been drafted and is under review for implementation as part of the US Foundation Project. Discussions with the business and stakeholders related to the associated guidelines have begun. The policy and guidelines are expected to result in:

- Solutions to problem areas and potential corrections and process flows to provide guidance for the elements to be incorporated into the US Foundation design.
- Establishment of business rules for identifying and processing aged work orders.
- Implementation of a standardized set of guidelines and incorporation with the US Foundation / SAP and PowerPlant applications.

These process guidelines, when employed through the US Foundation / SAP and PowerPlant applications, will impact the following processes: Month End Inactive, Planning & Initiation, Construction, As-built In Service and Retirements. Roll-out of the associated training has begun, in parallel with the End-to-End Project Management initiative training and the process guidelines are expected to be finalized in conjunction with the operating model transition. In May 2011, Plant Accounting also commenced monthly workshops with representatives from all business functions to identify all major issues, concerns and recommended solutions, as well as future training needs. These workshops continue.

Proposed Construction Work In Progress (CWIP) and Completed Construction Not Classified (CCNC) tracking and reporting metrics to track open Work Orders have been developed and are undergoing further review. Before final validation, the Company expects to engage other utilities in New York and elsewhere to review best practices. Once validated, the metrics will be presented to Commission Staff for further discussion and agreement. On a monthly basis, Plant Accounting will distribute a reporting package, including applicable metrics, to field operations. The package will include: (i) Closed work orders (dollar value and quantity) as a percentage of total work orders in a given period; (ii) Percentage of active work orders that are to be aged in the inactive category within the next month; and (iii) activity of work orders during their life cycle and any exceptions to the metrics such as work orders held open for street paving or customer/vendor payments.

Significant work has been ongoing to reduce the backlog of inactive capital work orders. Teams have been organized to review, process, and close work orders. Work is also ongoing to further develop the validation guidelines that the business will follow to avoid future backlogs. The Company is also developing prototype reporting to identify work orders that fall outside the aforementioned guidelines. The Company continues to finalize the long term process and application configurations and anticipates approving the associated recommendations by June 2012.

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

## F. Capital and Operating & Maintenance Budgeting

#### **Recommendation 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)

#### **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**

Service Level Agreements (SLAs) regarding National Grid service functions provided to Niagara Mohawk were provided to Staff on September 16. The SLA governance process is defined in the US SLA Governance Handbook, which was completed in September 2011 along with the SLAs. National Grid continues to evaluate the issues regarding reference to the SLAs in the service company contracts. The companies expect resolution of this issue by the time the service companies' contracts are filed with the Commission.

Since the September 2011 Update report, the Company has met with PSC Staff three times to review progress in this area. At these meetings, the Company has shared its financial review process that allows monthly reviews of costs incurred by Niagara Mohawk, and as a result of input from PSC Staff, has refined that process.

# CHAPTER 3—IMPLEMENTED RECOMMENDATIONS PENDING REVIEW

Currently, there are thirteen (13) 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 6 Implemented Recommendations Pending Review

Rec Number	Recommendation	January 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 (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 (new status)
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 systemwide 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	Pending Review
	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)	

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 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	Complete
completed and approved for FY2010/11 though FY2014/15	Apr 2010
Ongoing process for development, review, and completion of the NMPC 5-	Complete
year business plan agreed with North Star and PSC Staff	May 2010
Kick-off of the NMPC 5-year annual business plan. A full business plan	Complete
cycle will include development and documentation of:	(on-going)
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	
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-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 C Corporate	Counsel &	& Director		

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

## **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**

The Company has completed a consultant review of procurement strategies and developed a comprehensive, long-term supply procurement policy. The Company completed an internal audit of electric supply procurement in March 2010, resulting in an audit opinion of "satisfactory." The satisfactory audit opinion reflected additional expert input from Ernst & Young on common industry best practices in this area. The auditors provided reasonable assurance that existing processes and controls are effectively designed, and also reviewed the governance, oversight, and accountability of committees made up of senior management.

The Company discussed proposed regulatory treatment with the Staff prior to filing its commodity cost recovery mechanism on March 10, 2011. The Company also met with the Staff to further develop its commodity hedging strategy that would include existing hedges and a plan for procuring additional hedges to meet pricing and volatility metrics. The Company will continue its regular portfolio reviews with Staff, and will continue to focus on reliable long-term supply within the NYISO market framework. The Company has 46 existing IPP contracts and the Nine Mile #2 financial hedge to provide mass market customers a commodity hedge post-2011.

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

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 Energy Procurement Risk Management Committee ("EPRMC") was restructured in April 2009 with increased control over annual supply plans, and currently includes senior management from Regulatory, Legal, and Finance, all of which all are officers. In addition, the Commodity Management Committee was expanded in July 2009 to include representation from both gas and electric regulatory. With the potential for an expanded role in long-term supply procurement, the Company continues its review of its risk management processes related to supply procurement.

The Energy Procurement group continues to present its electric procurement strategies for Niagara Mohawk to the EPRMC for approval on an annual basis. Energy Procurement also meets with the middle office Risk Management group monthly to discuss various supply portfolio, regulatory and strategic issues. Any need to enter into long term contracts will be aligned with the proper regulatory recovery mechanism. The Company meets at least annually with Staff on the short- and long-term strategy of the supply portfolio.

The Company has in place a risk management system with daily credit and market monitoring, which captures, manages, measures and monitors procurement and hedging functions entered into by the Energy Procurement group.

#### 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-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	<ul> <li>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.</li> <li>Prioritize asset management strategies by their relationship to outage causal factors and their ability to directly affect reliability performance measures.</li> <li>Evaluate this stratification annually to maintain focus.</li> <li>Differentiate long term asset strategies from those dealing with specific reliability problems and their incorporation into the annual system plans.</li> <li>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)</li> </ul>

## **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 been communicating on ways to improve the plan. Staff most recently provided feedback on January 25, 2012. The Company anticipates submitting an updated 15-Year Plan to Staff by the end of February 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 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		Dec 2010	Dec 2010	Complete and
studies to identify				on-going
more efficient system				
modifications that can				
reduce the costs of				
service and increase				
utilization of				
resources. (VII-5)				
Develop process in	Feb 2010	Dec 2010	Dec 2010	Complete and
order to evaluate				on-going
outages that were				
avoidable due to				
improved system				
planning and				
preventive				
maintenance. (VII-6)				
Incorporate the results	Feb 2010	Apr 2011	Apr 2011	Complete
of a traditional				
transmission utility				
system planning				
function. (VII-7)				
Adopt a results	Feb 2010	Sep 2010	Dec 2010	Complete and
oriented approach to				on-going
drive the development				
and implementation				
of asset management				
strategies by their				
relationship to				
equipment failure				
causal factors and				
system performance.				
(VII-9)				

## 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 (SLAs) regarding National Grid service functions provided to Niagara Mohawk were provided to Staff on September 16. The SLA governance process is defined in the US SLA Governance Handbook, which was completed in September 2011 along with the SLAs. Year One SLAs will employ an abridged governance process due to a shortened timeframe and availability of information for the new organizational structure. The complete governance process will be deployed beginning in January 2012. National Grid continues to evaluate the issues regarding reference to the SLAs in the service company contracts. The companies expect resolution of this issue by the time the service companies' contracts are filed with the Commission.

## **CHAPTER 4—IMPLEMENTED RECOMMENDATIONS**

To date, eighteen (18) of the forty-four (44) recommendations in the Management Audit report have been implemented by the Company and accepted by Staff as complete.<sup>8</sup> The individual recommendations in this status category are indicated in Table 6.

**Table 6--Update 6 Implemented Recommendations** 

Rec Number	Recommendation	January 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

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<sup>&</sup>lt;sup>8</sup> 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 18 implemented recommendations are each one less than the Staff's counts (i.e., 45 and 19, respectively).

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-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)	Implemented (new status)
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)	Implemented (new status)	
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 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/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**

Ellen Smith, Chief Operating Officer					
Mallikarjun Angalakudati, Director Operation					
	,	llikarjun Angalakudati,	llikarjun Angalakudati, Director		

## **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/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	May 2010
updated to reflect benchmarking and the plan	

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

## **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 / 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/Milestones	<b>Completion Date</b>
Incorporate formal process for considering "non-wires alternatives"	Jul 2011
as part of electric system planning	

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

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

## 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/Milestones	<b>Completion Date</b>
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/Milestones	<b>Completion Date</b>
Short Term AM and PM team initiatives	Dec 2009
Update process documentation	Oct 2010

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.

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/Milestones	<b>Completion Date</b>
Develop Capital Investment Plan	Jan 2010
File CIP and Rate Case	Jan 2010
Conclude Rate Case	Jan 2011

## H. 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. Field productivity measures in line with the overall process-oriented performance management framework have been implemented based on review of the 29 value metrics.

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

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

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	&
	Inspe	ctions				

#### **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.

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 our key value drivers (i.e., safety, efficiency, reliability and customer satisfaction).

National Grid further integrated the EDO Transformation effort into our business planning process by incorporating the initiatives into our 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 Milestones	Current Status
Align Transformation with Performance Management	Complete Mar 2010
(organizationally)	
Align Transformation with Business Planning Process	Complete Mar 2010

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