

Comprehensive Management and Operations Audit of National Grid USA's New York Electric and Gas Utilities

Case No. 18-M-0185

IMPLEMENTATION PLAN

PREPARED FOR:

THE STATE OF NEW YORK PUBLIC SERVICE COMMISSION
THREE EMPIRE STATE PLAZA
ALBANY, NEW YORK 12223

December 21, 2020



TABLE OF CONTENTS

Subject Area	Chapter	Rec #	Recommendation	Page
Corporate Governance	1	1	The NGUSA, NMPC, KEDNY, and KEDLI Boards should develop a process to ensure that future modifications to the governance and organizational framework are compliant with Commission Orders.	2
Corporate Governance	1	2	The NGUSA Board should exercise its authority to approve budgets and strategic plans.	2
Corporate Governance	1	3	NGUSA should obtain an independent assessment of the operation of its Board. The assessment should result in an action plan to address any deficiencies or improvement opportunities.	2
Corporate Governance	1	4	The Enterprise Risk Management program should identify and monitor utility-level risks.	6
Corporate Governance	1	5	NGUSA should establish criteria for determining which vendors receive the annual ethics training and the quarterly Contractor Alert.	9
Information Systems	2	6	NGUSA should evaluate the oversight and performance management of the Information Systems function.	11
Information Systems	2	7	NGUSA should evaluate delays and cost overruns associated with updating and replacing legacy systems.	13
Information Systems	2	8	US IT should increase Net Promoter Score targets to reflect recently achieved results and provide a new baseline for performance expectations.	15
Information Systems	2	9	US IT should improve internal satisfaction with Information Systems.	15
Information Systems	2	10	NGUSA should identify leading indicator metrics related to Information Systems and incorporate those into the Cadence process.	18
Information Systems	2	11	The Transformation Office should complete the development of the Digital Transformation Strategy and update this document regularly.	20
Information Systems	2	12	The Utilities should improve quarterly variance reports for Information Systems projects.	21
Electric Planning &	3	13	Upon the implementation of an automated VDER billing process, the Internal Audit group should	24

Grid Modernization			conduct periodic audits of this process.	
Electric Planning & Grid Modernization	3	14	NMPC should incorporate the Non-Wires Alternatives project development and solicitation process earlier in the capital planning process, and better integrate the consideration of these projects with the Complex Capital Delivery Process.	26
Gas Safety	6	15	The Utilities should document and justify deviations from the Leak-Prone Pipe risk-ranking algorithm.	28
Project Management	8	16	The Utilities should maintain lists of projects that were proposed for, but not included in, the current year's budget.	30
Project Management	8	17	KEDNY's capital project tracking documents should list reasons for any cancelled, delayed, or reprioritized projects.	32
Project Management	8	18	NMPC's Schedule Adherence Report should provide explanations for variances between scheduled hours and actual hours worked, and for unworked scheduled projects.	34
Project Management	8	19	The Utilities should submit a retrospective report to the Department containing all emergent and slipped gas projects that occurred in the previous fiscal year.	37
Project Management	8	20	The Utilities should identify causes of underestimates in CIAC project estimating and create an action plan focused on eradicating these causes and improving the accuracy of the estimates.	39
Program Management	9	21	NMPC should ensure the accuracy of its street lighting program data.	41
Performance Management	11	22	NGUSA should identify metrics related to grid modernization and environmental goals and include those in performance and incentive compensation programs for relevant employees.	44
Customer Operations	12	23	KEDNY and KEDLI should evaluate the feasibility of adding functionality to allow their customers to schedule new service appointments online or using Interactive Voice Response.	48
Customer Operations	12	24	The Utilities should track and maintain a record of customers to whom they issue missed appointment credits, the number of credits issued, the reason each appointment was missed, and the annual total of credits provided.	51

INTRODUCTION

The Brooklyn Union Gas Company d/b/a National Grid NY (“KEDNY”), KeySpan Gas East Corporation d/b/a National Grid (“KEDLI”), and Niagara Mohawk Power Corporation d/b/a National Grid (“NMPC”) (collectively, “National Grid” or the “NY Operating Companies”) submit this Implementation Plan for the audit recommendations contained in the September 21, 2020 *Final Audit Report* (the “Audit Report”) prepared by Department of Public Service Staff (“Staff”) for the Public Service Commission (“Commission”) in Case 18-M-0195.

As discussed in comments filed with the Commission on October 19, 2020, National Grid found the audit to be a constructive process that resulted in Staff identifying areas of strong performance in core areas, including: electric and gas operations, performance and project management, capital delivery, budgeting and finance, and customer service. At the same time, the Audit Report identified areas where Staff believes the NY Operating Companies have room for improvement. The Implementation Plan reflects an effort by National Grid to consider the recommendations from the Audit Report and deliver the opportunities to enhance performance identified by Staff.

The Audit Report contains 24 recommendations. For each recommendation, the Implementation Plan sets forth: (i) National Grid’s proposal to implement the recommendation; (ii) the executive sponsor and team leads; (iii) an implementation priority; (iv) an implementation schedule with start and end dates along with key milestones, where applicable; (v) a cost/benefit analysis associated with implementing the recommendation; and (vi) measures of success.

In developing the Implementation Plan, National Grid consulted with Staff on its form and content; however, National Grid considers the Implementation Plan to be a working document that will be updated and amended as the recommendations are implemented. National Grid will continue to consult with Staff and submit regular revisions to the Implementation Plan, as necessary.

To monitor and ensure compliance with the recommendations in the Audit Report, National Grid will upload each recommendation to its internal compliance database (“GRC”). The GRC database is used to monitor compliance with regulatory obligations across the organization. Additionally, the implementation status for each recommendation will be tracked and monitored as part of the monthly jurisdictional performance management process. This process will ensure that the Audit Report recommendations are implemented and that any future improvement opportunities can be identified.

Chapter 1: Corporate Governance

Recommendation: 1, 2, and 3 (page 24)

Recommendation 1. The NGUSA, NMPC, KEDNY, and KEDLI Boards should develop a process to ensure that future modifications to the governance and organizational framework are compliant with Commission Orders.

Recommendation 2. The NGUSA Board should exercise its authority to approve budgets and strategic plans.

Recommendation 3. NGUSA should obtain an independent assessment of the operation of its Board. The assessment should result in an action plan to address any deficiencies or improvement opportunities.

Implementation Leads

<i>Executive Sponsor:</i>	Badar Khan – US President
<i>Team Lead(s):</i>	Michele Paoli – Assistant General Counsel and Director

Implementation Priority: High

Recommendation Accepted: Yes

Background Information:

The Audit Report suggests that National Grid has effectively reversed elements of its implementation of prior recommendations from the 2013 Gas Management Audit¹ relating to the administration of the National Grid USA and NY Operating Companies' boards of directors ("BODs"). Specifically, the Audit Report indicates (at 13-15) that the National Grid USA and the NY Operating Companies' BODs are not entirely fulfilling the responsibilities laid out in their respective terms of reference adopted in response to prior audit recommendations – in particular, the provisions regarding annual performance reviews and approval of the annual budget, strategic plan, and business strategy. According to Staff, the BOD's decision to forego approval of these items impacts the functionality of the National Grid USA BOD.

Following the 2013 Gas Management Audit, National Grid adopted corporate governance guidelines that defined the roles and responsibilities of its National Grid USA and NY Operating Companies' BODs. These responsibilities included, and continue to include, overseeing these companies' operating and financial performance and major business initiatives, in addition to discharging formal corporate governance responsibilities, such as appointing officers and

¹ Case 13-G-009, NGUSA's Gas Companies – Management Audit, *Order Approving an Implementation Plan* (issued and effective May 14, 2015) ("2013 Gas Management Audit").

declaring dividends. For National Grid USA, in response to an audit recommendation, the Company appointed an independent director in 2015 to provide an external perspective. The National Grid USA BOD is currently comprised of National Grid's US President, US Chief Financial Officer, and the independent director. The NY Operating Companies' BODs are currently comprised of the New York Jurisdictional President, a vice president of New York finance, and vice presidents of New York electric and gas operations.

It is important to place these past recommendations in context. At the time of the 2013 Gas Management Audit, the US business had not yet implemented its current performance management practices. Today, as Staff acknowledges in the performance management sections of the Audit Report, the US Executive Team, which largely constitutes the membership of the National Grid USA and NY Operating Companies' BODs, are deeply engaged in overseeing the day-to-day operation of these businesses. Indeed, a robust performance management framework ensures our leadership team is directly accountable for delivering on the safety, customer service, regulatory, and strategic priorities of the New York business. That is not to say that our subsidiary BODs do not have an important role in providing strategic guidance and governance and National Grid seeks to build on the strong framework currently in place. To that end, National Grid is focused on striking the right balance between formal corporate governance requirements and providing greater external perspectives, strategic guidance, direction, and market and customer insights to deliver more value to the New York business.

Proposal to Implement Recommendation:

Recommendation 1

National Grid recently created a dedicated US Corporate Governance team within the US Legal function. To address Staff's recommendation, that team will be assigned the responsibility for monitoring and ensuring compliance with the recommendations regarding the BODs.

Recommendations 2 and 3

In June 2020, National Grid evaluated its US corporate governance framework to ensure National Grid USA's BOD was providing the appropriate governance and strategic value. The Company explored corporate governance and board structures at peer utilities and reviewed legal and regulatory requirements. Based on this review, National Grid identified the following opportunities to improve the National Grid USA BOD and enhance overall corporate governance in a manner that removes redundancies in the current model and creates a more effective framework focused on strategy and soliciting external perspectives.

1. *Establish Two Strategic External Advisory Boards.* The evolving energy landscape and need to support ambitious climate goals presents numerous opportunities and challenges for the US business. There are many potential pathways to meeting these challenges, and navigating them requires more external perspectives, feedback, and guidance than we have needed in the past. Therefore, to enable greater access to external views, National Grid is creating separate Advisory Boards for our New York and New England businesses. The

Advisory Boards will each be comprised of independent, external senior leaders with diverse experience in clean energy, customer service, business development, government, and other stakeholder priorities. Advisory Boards will advise senior leadership on execution of National Grid's strategic policies and clean energy transition, providing critical objective input, advice, and external expertise. Having two regional Advisory Boards provides the added benefit of addressing state-specific perspectives while enabling the promotion of knowledge sharing and best practices across the New York and New England jurisdictions, which will be helpful to meet the bold ambitions for the future.

2. *Reconstitute the National Grid USA BOD.* The rigor and transparency around performance management through the cadence process, which did not exist at the time of the 2013 Gas Management Audit, has created an opportunity to remove the redundancy created by the current National Grid USA BOD structure and purview. As such, following the establishment of the Advisory Boards, National Grid will reconstitute the National Grid USA BOD to be comprised of three to five senior National Grid executives. The core governance activities currently performed by the National Grid USA Board will continue. This includes appointing officers, approving and declaring dividends, establishing BOD committees (including standing committees), approving loans and guarantees, approving material agreements, ensuring National Grid USA's values and standards are aligned with the values and standards set forth by the National Grid plc BOD, reviewing all material correspondence with National Grid's auditors, and making decisions regarding planning and oversight of the Company. Consistent with Staff's recommendation, the National USA BOD will also add to its remit approval of the annual budget and business plan.

Once these changes are fully implemented and in place for a sufficient time period, National Grid's Corporate Audit function will perform an assessment of the National USA BOD to ensure compliance with corporate governance guidelines and the management audit recommendations consistent with Staff's recommendation.

National Grid believes these efforts will enable a more efficient corporate governance process while providing critical external strategic input in a manner that best serves the interests of the business and New York customers. Additional benefits include: (i) providing National Grid with a better understanding of the goals and objectives of a broad range of stakeholders, including elected officials, business leaders, industry experts, and customers to make more informed strategic decisions; (ii) better connection to stakeholders focused on the clean energy transition; (iii) access to independent strategic advice on evolving the US business; and (iv) external perspective on risks facing the US business.

Schedule:

The major activities/milestones and timeline to implement the recommendations are as follows:

Major Activities/Milestones	Estimated Start Date	Estimated Completion Date
1. Input Management Audit recommendations to the GRC compliance database for tracking and monitoring.	December 21, 2020	December 31, 2020
2. Establish External Advisory Boards.	Ongoing	September 30, 2021
3. Reconstitute National Grid USA BOD with approval of the annual budget and business plan added to the remit.	June 1, 2021	August 31, 2021
4. Corporate Audit will prepare an assessment of the National USA BOD.		Fourth Quarter of Fiscal Year 2022

Summary of Cost/Benefit and Risk Analysis:

The Customer Benefit Analysis reflects a one-time cost of \$100,000 in consultant costs to conduct an independent review. In the Company's view, that estimate is low and believes that a more likely estimate would be approximately \$400,000 to \$500,000 for an external consultant. Notwithstanding, the Company is proposing to have its Corporate Audit function conduct the independent review and, as such, there will be no incremental costs. Benefits are qualitative in nature and include improved BOD performance, more objective oversight, and compliance assurance.

Measures of Success:

The deliverables to demonstrate that the recommendations have been implemented are: (i) input of the Audit recommendations in GRC; (ii) establishment of the Advisory Boards and reconstitution of the National Grid USA BOD with approval of the annual budget and business plan added to its remit; and (iii) Corporate Audit's assessment of the National Grid USA BOD.

Chapter 1: Corporate Governance

Recommendation: 4 (page 24)

The Enterprise Risk Management program should identify and monitor utility-level risks.

Implementation Leads

<i>Executive Sponsor:</i>	Badar Khan – US President
<i>Team Lead(s):</i>	Doneen Hobbs – US Chief Risk and Compliance Officer

Implementation Priority: High

Recommendation Accepted: Yes

Background Information:

The Audit Report suggests (at 19-20) that National Grid has not adequately addressed concerns raised in a previous management audit on the consideration of risk at the operating company level. Specifically, as Staff explained, the auditor in the 2013 Gas Management Audit recommended that National Grid appoint a Chief Risk Officer. To address this recommendation, in 2015, National Grid designated the US General Counsel as the US Chief Risk and Compliance Officer. Centralized risk and compliance teams reported to the US General Counsel who was primarily responsible for overseeing the internal reporting and escalation of the consolidated US risks and potential non-compliances. Over time, it became apparent that National Grid would benefit from more dedicated executive oversight of the risk and compliance processes across the US and UK. Accordingly, operating model adjustments were implemented to align the US Risk and Compliance teams to the Group Head of Assurance, who also reports to the Group General Counsel. A Vice President led the teams in the US with dotted line reporting to the US General Counsel.

At the time of the instant Audit, Staff found that it was unclear whether the Chief Risk Officer position had been eliminated or whether the responsibilities of that position had been realigned in the organization. Staff cited findings made by the independent monitor in Case 19-G-0678 to support its position. Ultimately, Staff concluded that National Grid should maintain the Chief Risk Officer position and that this individual be responsible for ensuring that US, jurisdictional, and operating company level risks are properly identified, monitored, and addressed and that reports be made to the plc Board, National Grid USA Board, operating company boards, and jurisdictional presidents. These reports should provide details related to risk identification, mitigation, and remediation plans, as applicable.

Proposal to Implement Recommendation:

While National Grid disagrees with the view that the Chief Risk Officer position was eliminated, the Company agrees with the overall intent of the recommendation to further enhance the Enterprise Risk Management and Compliance functions, particularly at the operating company level. Since the conclusion of this Audit, National Grid undertook an assessment of its central risk and compliance functions with the goal of enhancing second line assurance activities, particularly with respect to regulatory compliance and ensuring that risks are appropriately identified and monitored at the operating company level. To that end, National Grid is now implementing the following structural and process changes that will significantly enhance the Company's approach to risk and compliance and meet the requirements of this recommendations.

1. *Establishment of US Risk and Compliance Committee.* National Grid established a US Risk and Compliance Committee, which is meeting monthly and is chaired by the US President and is comprised of senior executives. Each business unit and function are accountable for identifying the risks in their respective areas with the support and facilitation of the Enterprise Risk Management team dedicated to supporting the US. Mitigation efforts and controls are thoroughly documented and reviewed.
2. *Appointment of US Chief Risk Officer.* In April 2020, National Grid named Doneen Hobbs, the Vice President overseeing National Grid's Assurance Standard, as the interim US Chief Risk Officer and a search for a permanent candidate was undertaken. This role will be a Vice President and officer of the Company and will report along with the Global Chief Risk and Compliance Officer to the Group Executive and to the PLC Board of Directors (or appropriate committee) at least annually.
3. *Creation of a Global Chief Risk and Compliance Officer.* In December 2020, the Company appointed Tim Bishton as the new Global Chief Risk and Compliance Officer.
4. *Business Management System (“BMS”).* BMS documents expectations and standards for the business to follow and consistently meet across the organization. The BMS has been broken down into 20 specific standards categorized into three specific areas of focus – risk, capabilities, and functional areas. The business units and functions have implemented all the standards except for components of the Security Standard, which will be fully implemented by June 2021.
5. *Re-baselining risks and controls and enhancement of risk management processes.* Since April 2020, the US Chief Risk Officer has been leading work within the US to re-baseline risks and controls for each US business unit and function and re-establish principal risks and controls for National Grid USA. Through this work, a three lines model to Enterprise Risk Management is being established with focus on enhancing first and second line roles and activities throughout the US business. This approach allows management to identify and monitor utility level risk and controls and provides insight into how the risks of the organization are being managed through specific control activities. Improvements are also underway with the GRC technology used to manage the Enterprise Risk Management

process and will provide better reporting and transparency into risks, controls, and remediation actions throughout all levels of the organization.

With the structural and process changes identified above, the Company is confident that it is significantly enhancing its approach to risk and compliance in compliance with Staff's recommendation.

Schedule:

The major activities/milestones and timeline to implement the recommendations are as follows:

Major Activities/Milestones	Estimated Start Date	Estimated Completion Date
1. Implementation of US Risk and Compliance Committee.		Completed
2. Appointment of an Interim US Chief Risk Officer.		Completed
3. Appointment of a Global Chief Risk Officer.		Completed
4. Appointment of US Chief Risk Officer.	Ongoing	March 2021
5. Implementation of Enhanced Risk Management activities.	Ongoing	December 2021

Summary of Cost/Benefit and Risk Analysis:

As set forth in the Customer Benefit Analysis, Staff estimated ongoing costs of 1.0 FTEs (Chief Risk Officer) and one-time costs of 0.5 FTEs. National Grid estimates, however, that there will be incremental costs associated with additional resources to perform required second line activities. National Grid will make every effort to minimize any such costs. Benefits include an enhanced focus on proactively identifying and addressing risk, second line assurance activities, and assurance that operating company level risk is appropriately considered.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is implementation of the enhanced risk management activities described above.

Chapter 1: Corporate Governance

Recommendation: 5 (page 25)

NGUSA should establish criteria for determining which vendors receive the annual ethics training and the quarterly Contractor Alert.

Implementation Leads

<i>Executive Sponsor:</i>	Simon Harnett – Vice President US Procurement
<i>Team Lead(s):</i>	William Holzhauer – US Director of Ethics and Compliance James Lennon – Manager, US Supply Chain Compliance and Audit

Implementation Priority: Medium

Recommendation Accepted: Yes

Background Information:

Staff found (at 23) that National Grid has well-defined procedures in place for receiving and responding to tips regarding potential misconduct from its contractors. These procedures include National Grid's Global Supplier Code of Conduct, which is provided to all contractors, along with annual ethics training and quarterly contractor alerts. Staff found that these procedures appropriately highlight areas of potential risk and remind contractors of the avenues to report any ethical issues. Currently, however, National Grid does not utilize defined criteria for determining which vendors receive annual ethics training and contractor alerts. As such, Staff recommends that the Company establish such criteria.

Proposal to Implement Recommendation:

Staff's recommendation is reasonable and will enhance National Grid's current procedures. To implement the recommendation, National Grid's US Ethics and Compliance function will partner with the Global Procurement function to develop the criteria for contractors who will receive the annual ethics training and quarterly contractor alerts.

Schedule:

The major activities/milestones and timeline to implement the recommendation are as follows:

Major Activities/Milestones	Estimated Start Date	Estimated Completion Date
1. Establish criteria for which contractors will receive the annual ethics training and quarterly contractor alerts.	January 1, 2021	February 28, 2021
2. Develop a training module for the contractors.	March 1, 2021	April 30, 2021
3. Rollout the formal training to the contractors that qualify under the established criteria.	June 1, 2021 and annually thereafter	

Summary of Cost/Benefit and Risk Analysis:

As reflected in the Customer Benefit Analyses section of the Audit Report, there are no incremental costs associated with implementing this recommendation, as the work will be performed by internal resources. Benefits are qualitative in nature and include enhancements to the current process and the avoidance of risk from a contractor being unfamiliar with ethical obligations or how to report a potential ethical issue.

Measures of Success:

The deliverables to demonstrate that the recommendation has been implemented are: (i) establishment of criteria that sets forth which vendors will receive the annual ethics training and quarterly contractor alerts; and (ii) rollout of the formal training to the contractors that qualify under the established criteria.

Chapter 2: Information Systems

Recommendation: 6 (page 39)

NGUSA should evaluate the oversight and performance management of the Information Systems function.

Implementation Leads

<i>Executive Sponsor:</i>	Rudolph Wynter, Jr. - NY President
<i>Team Lead(s):</i>	Krishna Seetharam - NY CIO

Implementation Priority: High

Recommendation Accepted: Yes

Background Information:

As the Audit Report recognized, the information technology (“IT”) supporting our business is increasingly sophisticated as legacy systems are updated and/or replaced to adapt to technological advancements and evolving customer expectations. As a result, IT investments have become an increasingly significant component of utility capital budgets – making planning and oversight over the implementation of IT investments even more critical. In that regard, the Audit Report reflects many positive findings regarding National Grid’s IT function but at the same time fairly questions whether the current organizational structure provides sufficient oversight and performance capabilities in this complex area.

Over the last several years, National Grid’s IT investments have grown to meet the needs of modern energy networks that increasingly rely on state-of-the-art information systems to monitor, manage, and optimize system performance, integrate renewables and other distributed energy resources, and stay ahead of emerging cyber-security threats. Drawing on lessons learned as well as changes in the IT industry, National Grid modified its IT organization to in-source certain roles to ensure access to technical expertise in key areas, adjusted the level of third-party support to provide higher quality service and capability, designed better performance measures to increase accountability from vendors, established a cadence of performance reporting, and enhanced IT reporting to provide more transparency to Staff and the Commission. In addition, to manage and provide quality assurance for the implementation of major transformational IT programs currently being undertaken, National Grid created a Transformation Office. The Transformation Office is tasked with, among other things: (i) building the capability and approach to effectively develop and deploy IT based programs; (ii) creating visibility of the Company’s change plan and ensuring prioritization and effective sequencing of projects; and (iii) building enduring capability to deliver change effectively across our business. These process improvements are providing tangible benefits in terms of day-to-day performance and complex program delivery – but National Grid acknowledges that more must be done to increase transparency and demonstrate our IT capabilities

and long-term strategy.

To that end, Staff's recommendation for National Grid to evaluate the oversight and performance management of the IT function, including reviewing the applicable organizational structure, incentive compensation metrics, and service level agreements, is timely, as the Company is in the process of making operating model changes that will enhance the provision of IT services to the NY Operating Companies consistent with this recommendation.

Proposal to Implement Recommendation:

Beginning April 1, 2021, National Grid will transition to a deeper regional jurisdictional model. Structurally, the US business will primarily align to a New York and a New England President who will report to the US CEO. Jurisdiction Business Unit Presidents will now have autonomous oversight of their region with full accountability for profit and loss statements, regulatory proceedings, and operational performance.

For IT, the New York business will have a dedicated New York Chief Information Officer ("CIO") who will oversee and be responsible for IT investments for the NY Operating Companies. Creating a New York-focused CIO will enhance the performance management and oversight of IT services to the NY Operating Companies. Indeed, IT services will now be better aligned with New York business needs, helping to ensure greater accountability to the NY President in terms of costs and quality of services to NMPC, KEDNY, and KEDLI. As a member of the New York Jurisdiction leadership team, the new CIO will have their performance goals aligned to the goals of the New York Jurisdiction and those goals will cascade through a New York-focused IT team. In summary, the new model will enable enhanced oversight and performance management of the IT function in a manner that extends beyond the current operating model or could be achieved via a service level agreement.

Schedule:

The changes to the operational model referenced above are scheduled to take effect on April 1, 2021.

Summary of Cost/Benefit and Risk Analysis:

The Customer Benefit Analyses section of the Audit Report reflects Staff's belief that there will be no incremental costs to implement this recommendation. While there may be some incremental costs, which cannot be estimated at this time, National Grid will make every effort to minimize any such costs. Benefits are qualitative in nature and include enhanced oversight and controls and improved performance.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is implementation of the new operating model with the dedicated NY CIO, effective April 1, 2021.

Chapter 7: Information Systems

Recommendation: 7 (page 39)

NGUSA should evaluate delays and cost overruns associated with updating and replacing legacy systems.

Implementation Leads

<i>Executive Sponsor:</i>	Rudolph Wynter, Jr. – NY President
<i>Team Lead(s):</i>	Krishna Seetharam – NY CIO

Implementation Priority: High

Recommendation Accepted: Yes

Background Information:

As is the case across the industry, many legacy IT systems at National Grid are operating on outdated technology that is challenged to meet the technological needs of today's energy customers. Because these legacy systems are less reliable and upgradeable, it is becoming increasingly difficult to support operations and meet emerging regulatory obligations. Modern, supported solutions are also needed to help reliably deliver significant levels of capital investments and implement new complicated billing methodologies and rate designs to provide customers with greater insight and control over their energy usage.

Citing the delays and budget increases experienced by the Gas Business Enablement (“GBE”) program, Staff recommends that National Grid undertake a root cause analysis to understand the nature of how delays, cost overruns, and other issues arise during the process of updating and replacing legacy systems. This evaluation should produce an action plan to address identified concerns.

Proposal to Implement Recommendation:

National Grid will conduct a root cause analysis of major IT projects that have encountered significant implementation delays, cost overruns, and other contributing issues over the last two years and will prepare a report of its findings and lessons learned. Lessons learned from the GBE Program will be included in the report. The report will then be used by National Grid to inform planned legacy system upgrades.

Schedule:

National Grid will begin undertaking the analysis following the operational model changes discussed above (in response to Recommendation No. 6) with the goal of completing the analysis

with lessons learned by the end of calendar year 2022. The resulting analysis and action plan will be shared with Staff.

Summary of Cost/Benefit and Risk Analysis:

As reflected in the Customer Benefit Analyses section of the Audit Report, there are no incremental costs associated with implementing this recommendation as the work will be performed with existing internal resources. Benefits are qualitative in nature and include enhancements to project schedules and providing assurance around the implementation of IT solutions in a timely manner.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is completion of the root cause analysis discussed above.

Chapter 2: Information Systems

Recommendation: 8 and 9 (page 39)

Recommendation 8. US IT should increase Net Promoter Score targets to reflect recently achieved results and provide a new baseline for performance expectations.

Recommendation 9. US IT should improve internal satisfaction with Information Systems.

Implementation Leads

<i>Executive Sponsor:</i>	Shannon Soland – Vice President, Infrastructure and Operations
<i>Team Lead(s):</i>	Ali Fakhouri – Director, Service Delivery Anusha Balineni – Jurisdictional Business Partner

Implementation Priority: Medium

Recommendation Accepted: Yes

Background:

As a way of measuring performance and identifying improvement opportunities, National Grid's IT function conducts two internal surveys each year: the Net Promotor Score ("NPS") and the Colleague Net Promotor Score ("cNPS") assessments.

The NPS assessment is an industry standard surveying methodology that measures the satisfaction of National Grid employees who contact the IT function for support. This includes help desk, tech bar, and field support interactions. The cNPS assessment was first implemented in 2018 and is performed bi-annually to assesses how the delivery of IT services is perceived more broadly across the organization. The cNPS survey is sent to senior management employees and is non-anonymous, which allows the IT function to reach out directly to survey respondents to better understand and mitigate issues.

Staff found (at 27-28) that the NPS score has improved year-over-year – and, in fact, has exceeded the established targets. The cNPS score, however, has been negative in each of the three waves of the survey conducted to date. Staff therefore recommends that National Grid adjust the NPS target to reflect recent improvements and develop a plan to improve the cNPS scores with input from survey recipients.

Proposal to Implement Recommendation:

Consistent with Staff's recommendation, National Grid will update the NPS targets to reflect recent performance results.

With respect to the cNPS assessment, National Grid has taken many steps to improve internal satisfaction with IT services since the conclusion of the Audit, and will look for ways to further improve. For instance, in response to direct feedback on the surveys, the IT function deployed additional “tech bars” at various facilities so that employees can get IT assistance in person. The IT function also improved the onboarding experience by delivering IT hardware on the first day a new employee reports to work. Most significantly, in response to the ongoing pandemic, the IT function has taken unprecedented efforts to support the transition to a work-from-home model for thousands of its employees. This seamless transition was made possible through system investments and ingenuity on the part of National Grid’s IT professionals, who ensured employees could function in the same manner as if they were working in the office. These efforts have not gone unnoticed and have been reflected in the most recent cNPS scores, which demonstrated improvement since the last cNPS survey.

Going forward, National Grid will continue to utilize the cNPS assessment to measure the perception of the IT function across the business. To address Staff’s recommendation, with the operating model changes discussed in the response to Recommendation No. 6, feedback from the cNPS assessment will be taken into consideration and addressed as part of the New York jurisdictional performance meetings.

Schedule:

The major activities/milestones and timeline to implement the recommendations are as follows:

Major Activities/Milestones	Estimated Start Date	Estimated Completion Date
1. Update NPS assessment targets to reflect recent performance.	April 1, 2021	June 30, 2021
2. Implement process whereby issues identified in the bi-annual cNPS are addressed as part of the New York jurisdictional performance meetings.	April 1, 2021	July 31, 2021

Summary of Cost/Benefit and Risk Analysis:

As reflected in the Customer Benefit Analyses section of the Audit Report, there are no incremental costs associated with implementing this recommendation as the work will be performed with existing internal resources. Benefits are qualitative in nature and include enhanced internal satisfaction with the performance of the IT function.

Measures of Success:

The deliverables to demonstrate that the recommendations have been implemented are: (i) updating the NPS assessment targets; and (ii) implementing a process to incorporate feedback from the cNPS assessment in the jurisdiction performance meeting.

Chapter 2: Information Systems

Recommendation: 10 (page 39)

NGUSA should identify leading indicator metrics related to Information Systems and incorporate those into the Cadence process.

Implementation Leads

<i>Executive Sponsor:</i>	Krishna Seetharam – NY CIO
<i>Team Lead(s):</i>	Arundhati Biswas – Manager IT Business Office

Implementation Priority: High

Recommendation Accepted: Yes

Background Information:

IT performance is currently monitored through the monthly cadence process. This process includes a series of monthly performance meetings at which the performance of the individual Business Units and Functions (e.g., IT) are reviewed at the operating company level. As the Audit Report notes (at 98), the cadence process includes a thorough review of risk and operational/performance by Jurisdiction and represents a significant maturation of performance management at National Grid relative to findings in previous management audits.

Staff reviewed various metrics utilized by the IT function and recommends that National Grid enhance existing metrics to include more leading indicator metrics and incorporate those metrics into the cadence process.

Proposal to Implement Recommendation:

National Grid recognizes that its existing metrics for the IT function could be enhanced to include a series of leading indicators to help proactively identify potential issues. National Grid is currently evaluating leading and lagging IT metrics with the objective of including new metrics in the cadence process subject to agreement with the New York Jurisdictional President.

The steps to implement this recommendation are as follows:

1. Benchmarking. Benchmark with other utilities to review and assess the metrics identified above and determine if additional leading indicators would be beneficial.
2. Engage Stakeholders and the NY Jurisdiction. Engage key stakeholders and end users of IT services within National Grid with the goal of assessing the leading indicator metrics that should be utilized.

3. Incorporate into Performance Reporting. Once leading indicators are identified and agreed upon, incorporate those metrics into the monthly jurisdictional performance management process.

Schedule:

This work will be undertaken over the course of the next four to nine months. The benchmarking is targeted for April 30, 2021 and will be followed by discussions with key internal stakeholders in May 2021. Once the new operating model takes effect in April 2021, the NY Operating Companies will enhance IT metrics with the goal of incorporation of the new leading indicator metrics in the New York Jurisdiction Business Unit cadence meeting in Q2 of fiscal year 2022.

Summary of Cost/Benefit and Risk Analysis:

National Grid does not anticipate material incremental costs at this time. Benefits are qualitative in nature and include enhancements to the performance management process.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is the incorporation of leading and lagging IT performance metrics in the monthly jurisdictional performance management process.

Chapter 2: Information Systems

Recommendation: 11 (page 40)

The Transformation Office should complete the development of the Digital Transformation Strategy and update this document regularly.

Implementation Leads

<i>Executive Sponsor:</i>	Adriana Karaboutis – Global Chief Information and Digital Officer
<i>Team Lead(s):</i>	Charles Zentay – Vice President, Global Strategy and Business Office

Implementation Priority: High

Recommendation Accepted: Yes (**Implemented**)

Background Information:

National Grid began work in 2019 to update its digital transformation strategy document. The purpose of the document is to align IT programs and efforts to business strategy with a focus on enabling business capabilities. The Audit Report notes (at page 31) that the document has been delayed and recommends that it be completed and updated on a regular basis, similar to the US Systems Strategy and Roadmap.

Proposal to Implement Recommendation:

The digital transformation strategy document along with several digital roadmaps have been completed. Consistent with the recommendation, the strategy document will be refreshed annually. In addition, digital roadmaps are being developed on an on-going basis as new digital applications are being explored. As such, National Grid submits that this recommendation has been implemented.

Summary of Cost/Benefit and Risk Analysis:

As reflected in the Customer Benefit Analyses section of the Audit Report, there are no incremental costs associated with implementing this recommendation. Benefits are qualitative in nature and include enhancements to the current process.

Chapter 2: Information Systems

Recommendation: 12 (page 40)

The Utilities should improve quarterly variance reports for Information Systems projects.

Implementation Leads

<i>Executive Sponsor:</i>	Krishna Seetharam – NY CIO (Designate)
<i>Team Lead(s):</i>	Daniel J. DeMauro, Jr. – Director, IT Regulatory Jim Reynolds – Director, IT Finance Caitlin Davidson – Director, US IT PMO

Implementation Priority: High

Recommendation Accepted: Yes (with modification)

Background Information:

As part of its rate plan in Cases 17-E-0238 and 17-G-0239, NMPC provides information to Staff and the Commission about IT project selection and budgeting. Prior to each of its rate years, NMPC files with the Commission its IT Capital Investment Plan for the upcoming rate year, including the overall IT investment plan for that year, the process for developing the plan, and identification of the proposed IT projects and their estimated costs. NMPC also files quarterly variance reports to address the status of the Service Company IT programs/projects and budgets. The variance reports include (i) a narrative explaining overall IT investment plan approach; (ii) a description of defined program categories (e.g., Regulatory, Legal and Compliance Mandates; Business Programs and Projects; Technology/Infrastructure Foundation and Reliability) that form the spending rationale for IT projects; (iii) detail on budgets and actual spending for each of the program categories, and for the top ten projects by budget within the program categories; (iv) explanations of variances between budgets and actual spending; (v) identification of allocations to NMPC; and (vi) a report on budget exceptions by program category and top ten projects based on allocations to NMPC. In the report for the last quarter of each Rate Year, NMPC also includes (i) an explanation of any cost or timeline differences exceeding ten percent for projects completed; (ii) the latest partial, full, re-sanction or closure paper for any projects exceeding \$1 million that were authorized during the previous rate year; and (iii) performance on the IT capital cost incentive. NMPC also meets with Staff on a semi-annual basis to (i) discuss proposed projects for the next six months; (ii) provide an update on the status of in-flight projects; (iii) discuss proposed projects for the next six months; and (iv) review quarterly filings. The Audit Report states (at 34) that the information currently provided by NMPC is generally adequate but could benefit from additional detail.

At present, KEDNY and KEDLI do not have an IT reporting requirement in their current rate plan, but Staff filed testimony in their ongoing rate proceedings (Cases 19-G-0309 and 19-G-0310) (the

“2019 KEDNY and KEDLI Rate Cases”) recommending that KEDNY and KEDLI adopt similar reporting requirements as NMPC and meet with Staff on a semi-annual basis.

Most recently, on November 25, 2020, Staff filed testimony in NMPC’s current rate proceeding (Cases 20-E-0380 and 20-G-0381) (the “2020 NMPC Rate Case”) stating that the IT reporting requirements currently in effect for NMPC (as described above) require significant efforts from both NMPC to develop the reports and from Staff to review the reports. At the same time, Staff testified that the IT reporting requirements do not necessarily provide the information in a format that permits easy monitoring and understanding of any individual IT project’s progress or enables full comprehension of the entire IT portfolio. Therefore, Staff recommends collaborating with NMPC to develop streamlined and improved IT reporting requirements to enable easier monitoring of project progress in terms of schedule, scope, and budget.²

Proposal to Implement Recommendation:

KEDNY and KEDLI will implement IT reporting requirements that are ultimately adopted by the Commission in the 2019 KEDNY and KEDLI Rate Cases. At the same time, the NY Operating Companies believe that collaboration with Staff is necessary to streamline the IT reporting process to provide benefits to National Grid and Staff, as recognized by the Staff Information Technology Panel in the 2020 NMPC Rate Case. Therefore, the NY Operating Companies propose to meet with Staff within 120 days of the Commission’s order in the 2019 KEDNY and KEDLI Rate Cases to adopt an IT reporting framework that provides Staff with greater transparency into National Grid’s IT investment, sanctioning, budgeting, and approval process without creating an undue burden on the NY Operating Companies to compile the information and on Staff to review the information.

Schedule:

KEDNY and KEDLI will implement the new reporting consistent with the timelines adopted by the Commission in the 2019 KEDNY and KEDLI Rate Cases to be followed by a collaborative meeting with Staff within 120 days of that order. At that meeting, the NY Operating Companies and Staff will develop a framework for IT reporting that can be utilized by the NY Operating Companies to address both the Audit Report recommendation as well as any obligations established in rate plans in a manner that aligns reporting across the NY Operating Companies.

Summary of Cost/Benefit and Risk Analysis:

Extending the current NMPC reporting requirements to KEDNY and KEDLI will require a significant amount of incremental information and documentation across the NY Operating Companies. An incremental full time equivalent will be needed to compile this reporting on an ongoing basis. The expectation is that National Grid and Staff can meet to discuss an enhanced process that streamlines reporting while at the same time providing better transparency to Staff.

² See Cases 20-E-0380 and 20-E-3081, Staff Information Technology Panel’s testimony at 73-74.

Benefits are qualitative in nature and include improved visibility to variances and further transparency to Staff on IT investments, sanctioning, budgeting, and approval.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is submission to Staff of the enhanced IT reporting for the NY Operating Companies.

Chapter 3: Electric Planning & Grid Modernization

Recommendation: 13 (page 49)

Upon the implementation of an automated VDER billing process, the Internal Audit group should conduct periodic audits of this process.

Implementation Leads

<i>Executive Sponsor:</i>	Thomas Clark – Vice President of US Audit
<i>Team Lead(s):</i>	Vivian Fu – Director of US Audit

Implementation Priority: Medium

Recommendation Accepted: Yes

Background Information:

As discussed in the Audit Report (at 45), NMPC’s legacy Customer Service System (“CSS”) is not capable of processing the complex Value of Distributed Energy Resources (“VDER”) billing methodology established in the Commission’s March 9, 2017 *Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters* in Case 15-E-0751. As a result, NMPC uses a manual process to calculate VDER billing and track bill credits associated with the use of DER on the Company’s electric network. Staff found that the manual bill process is clearly defined with multiple layers of review and verification.

Proposal to Implement Recommendation:

In the near term, NMPC has undertaken a project to automate VDER billing calculations in the CSS. This functionality will be implemented in phases, with full implementation targeted for August 2021. In the long term, NMPC is planning to replace its legacy CSS, which is more than 20 years old, with a new Customer Information System (“CIS”) that will support customers’ escalating expectations and increasingly sophisticated billing needs such as the VDER billing methodology. The proposed CIS investment is included in NMPC’s current base rate filing (Cases 20-E-0380 and 20-G-0381) and has an anticipated in-service date of 2028.

Staff recommends that National Grid’s Corporate Audit function conduct periodic audits of the VDER billing process once it is automated. The Company agrees with this recommendation. To that end, the Corporate Audit function will perform a post-implementation audit of the automated VDER billing process. Thereafter, the automated VDER billing process will be added as a potential audit topic for future consideration as part of Corporate Audit’s risk-based audit planning process.

Schedule:

The major activities/milestones and timeline to implement the recommendation are as follows:

Major Activities/Milestones	Estimated Start Date	Estimated Completion Date
1. Automate VDER calculations in the CSS.	Ongoing	August 31, 2021
2. Perform post-implementation audit of the automated VDER billing process.	Audit will be added to Corporate Audit's Fiscal Year 2022 audit plan (for Quarter 4). Going forward, the automated VDER billing process will be included as a potential topic for future consideration as part of Corporate Audit's risk-based audit planning process	

Summary of Cost/Benefit and Risk Analysis:

As reflected in the Customer Benefit Analyses section of the Audit Report, there are no incremental costs associated with implementing this recommendation. Benefits are qualitative in nature and include enhanced controls around the VDER billing process.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is a post-implementation audit of the automated VDER billing process by Corporate Audit.

Chapter 3: Electric Planning & Grid Modernization

Recommendation: 14 (page 49)

NMPC should incorporate the Non-Wires Alternatives project development and solicitation process earlier in the capital planning process, and better integrate the consideration of these projects with the Complex Capital Delivery Process.

Implementation Leads

<i>Executive Sponsor:</i>	Carol Sedewitz – Vice President, Electric Asset and Management Planning
<i>Team Lead(s):</i>	Dan Marceau – Manager, Electric Reliability Analytics and NWAs Kevin Stablewski – Director, Electric Distribution Planning and Asset Management, New York

Implementation Priority: High.

Recommendation Accepted: Yes (**Implemented**)

Background Information:

The Audit Report found (at 47) that NMPC has a defined process for non-wires alternatives (“NWA”) project development and solicitation that is consistent with Commission guidance. At the time of the audit, NMPC identified NWA project opportunities at the conclusion of the annual distribution planning process during development of the annual capital infrastructure plan (“CIP”). To enhance the process, Staff recommended incorporating NWA opportunities earlier in the planning process and integrating the consideration of these projects with the Complex Capital Delivery Process.

Proposal to Implement Recommendation:

Implementation of this recommendation for NMPC was a top priority and, as result the recommendation is implemented.

Specifically, prior to the submission of the Audit Report, NMPC had already instituted changes to bring NWA consideration earlier in the planning and overall capital delivery process. NMPC is mandated to consider NWA opportunities when a particular “traditional” project passes the suitability criteria (which tests the cost, implementation timing, and justification for the project). This implies that the traditional project must already be developed to a point of having a schedule and reasonable estimate to consider the NWA opportunity. NMPC still screens developed projects for potential NWA opportunities (as mandated), but in addition incorporated NWA consideration early in the planning process, at the same time that traditional options are being developed. As a result, NWA opportunities are now considered for applicability in parallel with consideration of the traditional project in the capital delivery process, well before the traditional project has a

schedule and cost estimate. This allows a planner to best consider if and how to incorporate NWAs into the preferred solution and should ultimately lead to more success in integrating NWAs into distribution planning.

In addition, the NWA development and solicitation process are now better integrated into the complex capital delivery process, with NWA opportunities now considered at all applicable stage gates of the complex capital delivery process. To that end, the Complex Capital Delivery Project Book and Gate Checklist has been updated to reflect the incorporation of NWA project development in the early stages of the capital delivery process in accordance with the recommendation.

This step change in how NMPC considers NWAs has been shared with Staff at one of the NWA meetings.

Summary of Cost/Benefit and Risk Analysis:

There are no expected incremental costs of implementing this recommendation. NMPC believes that to promote the success of NWAs in meeting planning needs while providing societal value and make NWA consideration and implementation “business as usual,” the Company should consider the NWA at the outset of the capital delivery process – in the planning study phase following need statement development. Considering NWAs as a partial or primary solution, as opposed to an alternative to an existing solution, should ultimately lead to more success in integrating NWAs into distribution planning, helping to advance the State’s clean energy goals and better optimize capital infrastructure planning.

Chapter 6: Gas Safety

Recommendation: 15 (page 63)

The Utilities should document and justify deviations from the Leak-Prone Pipe risk-ranking algorithm.

Implementation Leads

<i>Executive Sponsor:</i>	Tom Bennett – Vice President, Asset Management and System Planning
<i>Team Lead(s):</i>	Saadat Khan – Director, Distribution Engineering

Implementation Priority: Medium

Recommendation Accepted: Yes

Background Information:

The Audit Report (at 61-62) assessed NMPC, KEDNY, and KEDLI's leak prone pipe ("LPP") replacement programs. Each year, the NY Operating Companies utilize a risk-ranking algorithm to prioritize segments of LPP for replacement. The risk model calculates a relative risk score for each LPP segment based on specific performance data and localized incident probabilities. In addition, National Grid's engineering judgment is used to inform the LPP retirement strategy. National Grid's Distribution Integrity Management Plan ("DIMP") specifies the types of information that can be used to justify modifications based on engineering judgment. The risk-based algorithm along with engineering judgment forms the foundation of the NY Operating Companies' LPP retirement strategy. Factors that may affect the LPP work plan in a given year include public works (e.g., paving opportunities), resource availability by yards/regions, and permitting issues.

Staff found that the criteria used to inform engineering judgment "appear reasonable and well-defined" but noted that two categories set forth in the DIMP could be viewed as overly broad if not documented. These two categories are "[a]ny special or unusual conditions or considered identified by Field Operations" and "[a]ny other safety, integrity, operational or economic factors that are available and deemed appropriate." While noting that leaving some discretion to field operations to modify LPP retirement jobs "can be beneficial," Staff recommends documenting those instances in which the algorithm was not followed.

Proposal to Implement Recommendation:

Prior to the start of the fiscal year, the NY Operating Companies prepare a list of all LPP replacement projects as part of the sanction process. This list is based on the result of the risk-ranking algorithm. To implement Staff's recommendation, as part of the close-out process,

National Grid will document the reasons for any deviation from planned projects in the close-out sanction papers.

Schedule:

The close-out process for Fiscal Year 2020 LPP replacement projects will be completed in August 2021. The NY Operating Companies will begin including the reasons for any deviations in the August 2021 sanction close-out papers.

Summary of Cost/Benefit and Risk Analysis:

National Grid does not believe there will be any incremental costs to implement the recommendation, as the work will be performed by internal resources. Benefits are qualitative in nature and include process enhancements to the LPP program.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is inclusion of the reasons where engineering judgment and operational circumstances were substituted for the risk-ranking algorithm in the sanction close-out papers. This enhanced process will begin with the August 2021 sanction close-out papers.

Chapter 8: Project Management

Recommendation: 16 (page 88)

The Utilities should maintain lists of projects that were proposed for, but not included in, the current year's budget.

Implementation Leads

<i>Executive Sponsor:</i>	Kathleen Geraghty – Vice President, Electric Investment & Resource Planning Caroline Hon – Vice President, Gas Resource Management
<i>Team Lead(s):</i>	Suzan Martuscello – Director, Investment Strategy Patty McVeigh – Director, Investment and Long Term Resource Planning

Implementation Priority: Medium

Recommendation Accepted: Yes

Background Information:

Staff found (at 78) that NMPC, KEDNY, and KEDLI provide complete lists of all approved capital projects in their respective electric and gas capital plans, which are filed with the Commission. The NY Operating Companies do not, however, maintain a formal list of projects that were proposed but not included in the current year's budget. Staff recommends that the NY Operating Companies compile such a list.

Proposal to Implement Recommendation:

Development of capital projects for inclusion in the annual electric and gas budgets is an iterative process. Projects may be approved through the sanction process but not included in the current year's budget for many reasons, including, but not limited to: changes in the need date for the project; changing priorities within the electric and gas portfolios; new or changing customer requirements; resources availability; and regulatory input through rate cases. In general, unless the ultimate system or customer need for the project has been eliminated, projects not included in the current year's budget will normally be prioritized within the outer years of the capital plans and included in a future year's budget.

To implement the recommendation, the NY Operating Companies will maintain a list of capital projects greater than \$500,000 that were actively considered but not included in the current year's budget during the annual budget build cycle. The NY Operating Companies will include the list as an attachment to their respective annual electric and gas capital plans.

Schedule:

The major activities/milestones and timeline to implement the recommendation are as follows:

Major Activities/Milestones	Estimated Start Date	Estimated Completion Date
1. Establish a process to track projects not included in the current year's budget.	December 1, 2020	December 31, 2020
2. Prepare listing of such projects and include them as an attachment to the annual electric and gas capital plan report filing.	<u>Electric</u> - January 31, 2021 (and annually thereafter) <u>Gas</u> - April 1, 2021 (and annually thereafter)	

Summary of Cost/Benefit and Risk Analysis:

There are no expected incremental costs of implementing this recommendation. Capturing the lists of projects that were proposed for, but not included in, the current year's budget may yield qualitative improvements to the capital planning process in the process.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is the development of a listing of projects that were proposed for, but not included in, the current year's budget, which will be included in the annual electric and gas capital plan report.

Chapter 8: Project Management

Recommendation: 17 (page 88)

KEDNY's capital project tracking documents should list reasons for any cancelled, delayed, or reprioritized projects.

Implementation Leads

<i>Executive Sponsor:</i>	Caroline Hon – Vice President, Gas Resource Management
<i>Team Lead(s):</i>	Tom Finneral – Director, Gas Resource Planning Victor Vientos – Manager, KEDNY Resource Planning

Implementation Priority: Medium

Recommendation Accepted: Yes

Background Information:

The Audit Report found (at 80-81) that NMPC, KEDNY, and KEDLI have project scheduling processes in place and appropriately track the status of each project throughout its lifecycle. While KEDNY's LPP tracker lists all projects and their statuses, including those that have been canceled, not all of the projects have a reason for the cancellation noted in the comments field. Staff recommends that KEDNY update its capital tracking documents to list the reasons for any canceled, delayed, or reprioritized projects.

Proposal to Implement Recommendation:

In-year tracking of specific complex capital projects is part of the monthly forecast process. Within a given year, it is possible for a capital project to be cancelled, delayed, or deferred (proactively or reactively) due to external factors such as the inability to obtain the requisite permits or other constraints.

Implementation of this recommendation will require KEDNY to capture the reasons for variances within the forecast tracker database for complex capital projects that are cancelled in-year or experience a material delay in their in-service date.

Schedule:

The major activities/milestones and timeline to implement the recommendation are as follows:

Major Activities/Milestones	Estimated Start	Estimated

	Date	Completion Date
1. Develop variance codes to include in forecast tracker to identify reasons for cancellations, delays, or deferrals and develop process/procedure for tracking codes.	January 1, 2021	January 31, 2021
2. Train users on forecast variance tracking for complex capital projects.	February 1, 2021	March 31, 2021
3. Implement new tracking on FY22 projects using the first forecast of the fiscal year, which is aligned to the budget (0+12 forecast).	April 1, 2021	April 30, 2021

Summary of Cost/Benefit and Risk Analysis:

As set forth in the Customer Benefit Analysis section of the Audit Report, there will be minor incremental costs (estimated at \$10,000) to capture and report on the reasons for the variances. Benefits are qualitative in nature and include enhancements to current practices and processes and more comprehensive project records.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is the development of a list of the reasons for canceled, delayed, or reprioritized complex capital gas projects beginning with fiscal year 2022 projects.

Chapter 8: Project Management

Recommendation: 18 (page 88)

NMPC's Schedule Adherence Report should provide explanations for variances between scheduled hours and actual hours worked, and for unworked scheduled projects.

Implementation Leads

<i>Executive Sponsor:</i>	Matthew Barnett – Vice President, Electric Field Operations, New York
<i>Team Lead(s):</i>	Charles K. Bentley – Manager, Distribution Line Worker Donna Haughey – Manager, Electric Resource Coordination, East Tina Vashion – Manager, Electric Resource Coordination, West

Implementation Priority: Medium

Recommendation Accepted: Yes

Background Information:

Over the years, NMPC's electric business has utilized different scheduling processes, reporting, and tracking mechanisms to identify potential improvement opportunities. For example, NMPC undertook an initiative to attempt to forecast, based on history, the likely amount of time crews would have to allocate to unplanned activities such as emergency response to weather-related interruptions. At that time, NMPC also developed and tracked specific explanations of the variances between scheduled hour and actual hours worked for crew locations for adherence purposes on a weekly basis. Utilization of this reporting revealed that the majority of cases where actual plans deviated from the weekly schedules fell primarily into a common set of categories (e.g., customer outages during the regularly scheduled workday; rest time due to overnight outages; sickness; and unplanned vacation). Because these drivers were repetitive and primarily outside of NMPC's control, the Company determined that it had achieved all the benefits available from that tracking and terminated the process.

Separately, in 2019, NMPC initiated the Field Excellence Initiative focused on productivity improvements. During that effort, NMPC utilized the learnings noted above regarding scheduling along with other inputs to implement a scheduling improvement whereby all crew locations would be scheduled to 100 percent of their availability. While the nature of utility work includes responding to unplanned events, this change ensured that crews always had a full complement of planned work to complete on those days where interruptions do not occur. This change provided a productivity improvement, and also guaranteed that the majority of crews would not reach 100 percent adherence in a given week.

In the Audit Report (at 81-82), Staff found that NMPC, KEDNY, and KEDLI employ numerous

methods to control capital project costs, scope expansion, and schedule adherence. These methods include a combination of meetings, reports, automated tools, and metrics (such as the ones described above) to monitor changes in gas and electric projects. For example, to monitor project schedules, NMPC's electric business: (i) conducts monthly performance reviews of major projects using the Critical Milestone Attainment report; (ii) the Capital Delivery Oversight Committee conducts a monthly review of the Project Dashboard, which reviews current and forecast electric project performance, among other items; and (iii) closure papers are used as another means of controlling the schedule, scope, and cost of projects.

Additionally, NMPC's electric business produces a weekly Schedule Adherence Report that tracks scheduled and unscheduled electric projects, grouped by district. Staff found that, while the Schedule Adherence Report includes several data points used to assess schedule adherence, the report could be improved by adding explanations for variances between scheduled hours and actual hours worked, and for unworked scheduled projects. NMPC agrees with Staff's recommendation and believes that the suggested changes will be beneficial.

Proposal to Implement Recommendation:

To implement the recommendation, NMPC's electric business will undertake the following activities:

1. *Schedule Adherence Report*. Continue utilization of the Schedule Adherence Report at each crew barn.
2. *Document Reasons for Variances*. For crew areas where schedule adherence performance falls under the threshold of 75 percent in a week, NMPC will develop a process to document the specific drivers and reasons for the variance between scheduled and actual work hours.
3. *Use of Data*. Utilize the resulting data for weekly discussions to determine opportunities for improvement at the local level.
4. *Reporting*. Develop a quarterly report to be submitted to the Vice President, Electric Field Operations summarizing the drivers for variances and identified areas of improvement as well as progress on any improvement implementations, as appropriate.

Schedule:

This process update will be implemented by March 31, 2021 with the first quarterly report of results for FY22 Q1 (April – June) to be provided to the Vice President, Electric Field Operations by July 31, 2021.

Summary of Cost/Benefit and Risk Analysis:

There are no expected incremental costs of implementing this recommendation. Capturing the variances between scheduled hours and actual hours worked and unworked scheduled projects may yield qualitative improvements in the process through better planning.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is the development of the quarterly report that details the drivers for variances between scheduled hours and actual hours worked, and for unworked scheduled projects.

Chapter 8: Project Management

Recommendation: 19 (pages 88-89)

The Utilities should submit a retrospective report to the Department containing all emergent and slipped gas projects that occurred in the previous fiscal year.

Implementation Leads

<i>Executive Sponsor:</i>	Caroline Hon – Vice President, Gas Resource Management
<i>Team Lead(s):</i>	Tom Finneral – Director, Gas Resource Planning

Implementation Priority: Medium

Recommendation Accepted: Yes

Background Information:

As part of their respective gas rate plans, NMPC, KEDNY, and KEDLI provide Staff and the Commission with numerous reports and documentation related to their capital programs. This information includes LPP and leak prioritization reports, quarterly and annual capital reports, and estimating metric reports. Staff recommends the NY Operating Companies add a retrospective report that would list all emergent and slipped gas projects that occurred in the previous fiscal year.

Proposal to Implement Recommendation:

NMPC, KEDNY, and KEDLI will create a new report that lists all emergent and slipped gas projects that occurred in the previous fiscal year and submit the report to Staff on an annual basis beginning in Fiscal Year 2023. The report will include details on project scope, functionality, or scope modifications, and the addition of any projects not based on sanction papers.

Schedule:

The major activities/milestones and timeline to implement the recommendation are as follows:

Major Activities/Milestones	Estimated Start Date	Estimated Completion Date
1. Modify the Unplanned Capital Expenditure forms to capture emergent complex gas projects and forecast tracker to capture as a variance code.	January 1, 2021	January 31, 2021
2. Train users on forecast variance tracking for complex capital projects.	February 1, 2021	March 31, 2021
3. Implement new tracking on FY22 projects using 0+12 forecast.	April 1, 2021	April 30, 2021
4. Develop standard report utilizing the variance codes in the forecast tracker to capture emergent projects and projects that have a delayed gas-in date.	May 1, 2021	October 31, 2021
5. Issue final report of emergent and slipped projects to Staff from prior fiscal year	June 2022 for prior fiscal year (April 2021 – March 31, 2022) and every year thereafter	

Summary of Cost/Benefit and Risk Analysis:

There will be minor incremental costs (estimated at \$10,000) to capture and report on the reasons for the variances. Benefits are qualitative in nature and include enhancements to current practices and processes.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is the creation of a report that will be submitted to Staff on an annual basis beginning in fiscal year 2023.

Chapter 8: Project Management

Recommendation: 20 (page 89)

The Utilities should identify causes of underestimates in CIAC project estimating and create an action plan focused on eradicating these causes and improving the accuracy of the estimates.

Implementation Leads

<i>Executive Sponsor:</i>	Matt Foran – Vice President (interim), Customer Sales and Solutions
<i>Team Lead(s):</i>	Kevin Kelly – Director, Customer Electric Connections Bryan Zulberti – Manager, Customer Gas Connections

Implementation Priority: Medium

Recommendation Accepted: Yes

Background Information:

Staff found (at 87) that the NY Operating Companies have appropriate procedures and metrics in place for customer contribution in aid of construction (“CIAC”) projects. These include policies, job aids, and training to ensure that customers are provided with accurate and timely information for their construction projects. In addition, the NY Operating Companies conduct monthly CIAC meetings to review regulatory obligations, rates, and reconciliations. Staff reviewed fiscal year (“FY”) 2019 and 2020 reconciliation data and determined that CIAC projects in the aggregate tend to be underestimated. Therefore, Staff recommends that the NY Operating Companies create an action plan to improve the accuracy of CIAC estimates.

Proposal to Implement Recommendation:

National Grid supports Staff’s recommendation but notes that there are many reasons why CIAC estimates may vary from actual project costs, some of which are outside the NY Operating Companies’ control. These include changes in installed footages and/or units as well as changes in project scope. In addition, some projects involving CIACs may span multiple years and, as a result, estimates can vary, plus or minus. Notwithstanding, National Grid is firmly committed to estimating accuracy and believes that Staff’s recommendation is beneficial and should assist in further improvement efforts.

Schedule:

The major activities/milestones and timeline to implement the recommendation are as follows:

Major Activities/Milestones	Estimated Start Date	Estimated Completion Date
1. Analyze FY19 and FY20 CIAC reconciliations and develop report identifying root causes of estimate to actual variances.	February 1, 2021	April 30, 2021
2. Perform CIAC Estimation to Reconciliation End-to-End process review to identify improvement opportunities to minimize project cost variances.	April 1, 2021	August 31, 2021
3. Develop plan and begin implementing (as appropriate) process improvements identified in CIAC Estimation to Reconciliation End-to-End review.	September 1, 2021	October 31, 2021

Summary of Cost/Benefit and Risk Analysis:

It is possible there could be incremental costs to implement this recommendation; however, at this time, it is too early to tell. Any such costs are likely to be identified during the End-to-End process review and will be updated as part of the implementation plan update process. Benefits are qualitative in nature and include more accurate project estimates and enhanced customer satisfaction.

Measures of Success:

The deliverables to demonstrate that the recommendation has been implemented are the identification of root causes of CIAC variances followed by an action plan to address those root causes.

Chapter 9: Program Management

Recommendation: 21 (page 95)

NMPC should ensure the accuracy of its street lighting program data.

Implementation Leads

<i>Executive Sponsor:</i>	Carol Sedewitz – Vice President, Electric Asset and Management Planning Thomas Clark – Vice President of US Audit
<i>Team Lead(s):</i>	Eileen Duarte - Manager Outdoor Lighting Dilip Kommineni – Principal Engineer Vivian Fu – Director of US Audit

Implementation Priority: Medium

Recommendation Accepted: Yes

Background Information:

The Audit Report recommends (at 95) that NMPC examine the processes and systems involved with maintaining street lighting asset records, determine ways to limit the potential for human error, and establish appropriate control mechanisms and regular internal audits to ensure this data is reliable and that control mechanisms are functioning correctly.

NMPC recognizes the importance of minimizing human error. For that reason, the Company has taken numerous steps over the years to utilize new technology and adapt its processes to ensure the continued validity and reliability of its outdoor lighting asset data.

In 2007, NMPC retired its legacy outdoor lighting system and migrated its asset information to the Customer Service System (“CSS”). This migration integrated the outdoor lighting inventory and billing information into a single system, minimizing the potential for discrepancies. In addition, CSS validation checks, performed automatically each time an order is processed, alert users to potential errors, including component mismatches, duplicate orders, and missing data, as well as preventing orders with errors from processing until they are corrected. An additional validation check between CSS and the Severn Trent Operations Resource Management System (“STORMS”) prevents orders completed in the field from updating the CSS inventory unless any data discrepancies are first reconciled. Moreover, NMPC also implemented a robust series of job aids to assist users in learning the mechanics of creating and completing investigation and construction orders in the CSS system.

In 2019, due to large-scale changes to NMPC’s lighting asset inventories from street light system sales and conversions to LED technology, the Company introduced an automated process to update

asset records. This process improved the efficiency of the data changes and eliminated potential keystroke errors.

Proposal to Implement Recommendation:

On April 1, 2021, NMPC will launch an Outdoor Lighting Customer Portal (the “Portal”), which will provide outdoor lighting customers and the public at large with a map-based system to locate, select, and self-report streetlight outages and other maintenance issues using mobile devices, tablets or computers. Issues submitted through the Portal will lead to the automatic creation of investigation orders in CSS, eliminating manual work by the Customer Contact Center and resulting in improved accuracy in the dispatching of field crews and in updating maintenance history.

In conjunction with the above-mentioned effort, NMPC recognizes a need to continually review and improve upon existing outdoor lighting processes to limit or mitigate the potential for human error. Toward that end, NMPC will establish an interdepartmental working group to investigate and identify the common types, sources, and causes of human errors that impact the lighting asset inventory. Key metrics will be created to manage and monitor the findings for improved performance. By December 2021, the group will document its findings, review controls, and recommend improvements to existing processes and systems. Following that review, the Corporate Audit function will perform an internal audit of the outdoor lighting program (targeted for Quarter 4 of Fiscal Year 2022) and will also add outdoor lighting as a potential audit topic for future consideration as part of Corporate Audit’s risk-based audit planning process.

In the long term, NMPC plans to adopt many new technologies to further automate its outdoor lighting processes and reduce opportunity for human error. Some technologies, however, such as the new customer information system (“CIS”) and the networked lighting controls (“NLC”) currently being tested under the City of Schenectady Reforming the Energy Vision (“REV”) project, will not be available for several years. The implementation of NLCs with built-in diagnostics and GPS will mean that street lights experiencing performance characteristics outside of their normal specifications will automatically report the anomaly and lead to the creation of CSS field investigation orders without the need for human intervention. The GPS coordinates will enable field crews to locate the lights with little or no difficulty.

These actions will help ensure the accuracy of NMPC street lighting program data and will set the framework for future automation opportunities.

Schedule:

The major activities/milestones and timeline to implement the recommendation are as follows:

Major Activities/Milestones	Estimated Start Date	Estimated Completion Date
1. Establish interdepartmental working group.		January 31, 2021
2. Launch Outdoor Lighting Customer Portal.		April 1, 2021
3. Document working groups findings and recommendations and establish plans to implement recommendations.	January 15, 2021	December 31, 2021
4. Conduct internal audit of the outdoor lighting program.		Audit will be added to Corporate Audit's Fiscal Year 2022 audit plan (for Quarter 4). Going forward, the outdoor lighting program will be included as a potential topic for future consideration as part of Corporate Audit's risk-based audit planning process

Summary of Cost/Benefit and Risk Analysis:

The work described above will be performed using internal resources. Depending upon the recommendations and process improvements arising out of the working group, there may be some incremental costs. NMPC will update this information as part of the normal update process. Benefits are qualitative in nature and include enhancements to the outdoor lighting process.

Measures of Success:

The deliverables to demonstrate that the recommendation has been implemented are: (i) the development of working group findings with plans to implement improvement opportunities; and (ii) an audit of the outdoor lighting program by Corporate Audit.

Chapter 11: Performance Management

Recommendation: 22 (page 101)

NGUSA should identify metrics related to grid modernization and environmental goals and include those in performance and incentive compensation programs for relevant employees.

Implementation Leads

<i>Executive Sponsor:</i>	Maureen Heaphy – Vice President, US Compensation, Benefits, and Pensions
<i>Team Lead(s):</i>	Alexander Beauchamp – Director, Compensation and Benefits

Implementation Priority: High

Recommendation Accepted: Yes (**Implemented**)

Proposal to Implement Recommendation:

National Grid's overall approach to compensation is to ensure that (i) a significant portion of employee compensation is tied to the attainment of performance goals that create benefits for customers and are consistent with regulators' priorities and policy goals, (ii) employees' total compensation is comparable to median compensation for comparable positions in both the utility industry and general industry and is reasonable after considering base and variable pay and benefits in total, and (iii) variable pay is based on both the overall performance of National Grid and the performance of each individual in achieving customer satisfaction, safety, reliability, and environmental objectives. National Grid's variable pay program, known as the Annual Performance Plan (the "Plan"), is intended to motivate employees to achieve the highest levels of individual performance while promoting National Grid's fulfillment of its customer, safety, health, reliability, and clean energy objectives.

For calendar year 2020/2021, National Grid modified the corporate goals in the Plan (which were previously built around customers, communities, and people areas of focus) to align with the Company's corporate vision – to be at the heart of a clean, fair, and affordable energy future – and National Grid's four new strategic priorities: (i) deliver for our customers efficiently; (ii) grow our organizational capability; (iii) empower our people; and (iv) enable the energy transition for all. These priorities are designed to enhance National Grid's connection with its customers and stakeholders, deliver energy with greater safety and reliability, and, importantly, support programs and investments that will enable the transition to a clean energy future. As will be seen, the new goals are consistent with the recommendation.

For the *deliver for our customers efficiently* priority, metrics will focus on reliability, safety, and customer satisfaction measures applicable in the jurisdictions in which National Grid operates,

including those adopted by the Commission. In addition, budgetary objectives will focus the workforce on providing better, more efficient services to customers. To evaluate the *grow our organizational capability* priority, metrics will focus on end-to-end process improvement and execution of digital projects that reflect the goal of improving how National Grid operates. With regard to the *empower our people* priority, National Grid will measure safety performance and focus on development plans intended to support the growth of our employees across the Company.

Relevant to this recommendation, to evaluate performance for the *enable the energy transition for all* priority, National Grid developed metrics that measure the enablement of renewables on the electric and gas networks, the delivery of energy efficiency programs, and the reduction of emissions through replacement of leak prone pipe. These metrics demonstrate National Grid's commitment to meeting environmental goals and modernizing the network and ensures that our employees are working towards and contributing to these important goals. The table below illustrates the specific metrics that will be used to measure performance for the *enable the energy transition for all* priority.

Table 1 - Enable the Energy Transition: 2020/2021 Plan Metrics

APP Measure	What it Means
Green Ratio	This target measures renewables available on the system to serve peak load and can be defined as follows: (Nameplate Renewable Generation Connected to Transmission (excluding <u>existing</u> large scale hydro), Sub-transmission, and Distribution + Demand Response in MW / Peak Load (with DG added back in).
Leak Prone Pipe	Miles of Leak Prone Pipe Retired, across all OpCos.
Electric EE Delivery	Percent of Electric Energy Efficiency Regulatory Target met for each Electric OpCo.
Gas EE Delivery	Percent of Gas Energy Efficiency Regulatory Target met for each Gas OpCo.

Individual objectives in this area have also been established for employees, as appropriate, in consultation with their managers and supervisors. The table below sets forth representative individual objectives for employees in areas supporting the clean energy transition at National Grid.

Table 2 – Example Individual Objectives Related to Grid Modernization and Clean Energy

Area	Role	Objective
Future of Heat	Manager	(i) Develop and implement gas demand response programs that support system reliability; (ii) integrate non-pipeline alternatives, including beneficial electrification, into system planning; (iii) decarbonize the gas supply through integration of RNG and hydrogen; and (iv) support the GBU transformation office to ensure we have the capabilities to meet future needs.
AMI	Director	Execute the NY AMI Strategy by: (i) identifying a project team for the anticipated project start in fiscal year 2022; (ii) completing the integrated project schedule and governance deliverables based on an anticipated order approving AMI; (iii) coordinate timely responses to all formal and informal AMI-related information requests; and (iv) maintaining a regular cadence of internal stakeholder involvement to ensure the Company is prepared to deliver AMI if the Commission issues an order approving the project.
Grid Mod	Vice President, Electric Asset Mgmt & Planning	Drive activities that enable the clean energy transition for all – this includes everything from defining and driving charters for the Electric Business Unit's priorities, standards that support carbon reduction, T&D services that focus on SF6 reduction, and all activities related to DER interconnection improvements and supporting green bonds.
Regulation and Strategy	Vice President, New York Regulation and Pricing	(i) Promote Company's proposal for new Distributed Generation initiatives in New York; (ii) provide regulatory expertise and support for EV infrastructure deployment; (iii) provide regulatory support for Grid Modernization and Advanced Metering filing; and (iv) include future of heat proposals for NMPC and KEDNY/KEDLI.
Legal	Director, New York Regulatory	Execute on NY rate cases and NY regulatory filings to deliver regulatory strategy and support the clean energy transition.

Based on the foregoing, National Grid submits that this recommendation has been implemented, as grid modernization and environmental goals are now included in the overall corporate goals as well as individual goals for relevant employees.

Summary of Cost/Benefit and Risk Analysis:

As reflected in the Customer Benefit Analyses section of the Audit Report, there are no incremental costs associated with implementing this recommendation. Benefits include greater focus and alignment of employee behavior towards advancement New York State's clean energy goals in alignment with National Grid's vision.

Chapter 12: Customer Operations

Recommendation: 23 (page 114)

KEDNY and KEDLI should evaluate the feasibility of adding functionality to allow their customers to schedule new service appointments online or using Interactive Voice Response.

Implementation Leads

<i>Executive Sponsor:</i>	Kelly Carney – Vice President, Customer Solutions
<i>Team Lead(s):</i>	Arlene Gans – Director, Customer Contact Centers, New York Nancy Concemi – Director, Process and Performance Improvement

Implementation Priority: Medium

Recommendation Accepted: Yes (**Implemented**)

Background Information:

The Audit Report found (at 112) that NMPC customers have more methods to schedule new service appointments than KEDNY and KEDLI customers. While NMPC customers can schedule most new service appointments online or on the phone via the Interactive Voice Response (“IVR”) system, KEDNY and KEDLI customers must speak with a live agent via telephone or in person at one of the many contact centers. Therefore, Staff recommends that KEDNY and KEDLI conduct a study to assess the feasibility of adding new information technology functionality that would enable KEDNY and KEDLI customers to schedule service appointments in the same manner as NMPC customers.³

Proposal to Implement Recommendation:

National Grid agrees with the intent of the recommendation, which is to expand access to KEDNY and KEDLI customers to more self-service options for scheduling new appointments. A study, however, is not required as National Grid is already working towards delivering these capabilities for KEDNY and KEDLI customers, and therefore submits that the recommendation is

³ There are reasons for the difference among the NY Operating Companies in the ways to schedule appointments. Unlike NMPC, KEDNY and KEDLI are gas only companies. As such, most service appointments for KEDNY and KEDLI require speaking with a live agent because the customer must provide access to the premises at a mutually convenient date and time. Even gas simple disconnects require a live agent to review the account and ensure there is not a pending connect order for a new customer moving into the premise. Having a live agent talk with the customer helps eliminate delays in connecting gas service for the new customer, ensures the safety of the premise if the location is going to remain unoccupied for a period of time, and helps improve overall satisfaction.

implemented. Specifically, National Grid's Customer Experience Program ("CXP") is a comprehensive program to change how National Grid interacts, serves, and communicates with customers. This in-flight program will set the foundation for the processes and technology changes needed to drive step improvements to the customer experience – including changes to the retail web, which will enable new self-service options. The CXP will focus on re-engineering customers' digital interactions to create a universal and seamless customer experience through multiple service options, including web, mobile, text, email, and future emerging channels.

A critical enabler of the CXP is implementation of the Gas Business Enablement ("GBE") Program in Downstate New York. The deployment of the GBE Program will enable the integration of work management and scheduling solutions that will expand self-service options for appointments. Without the critical capability of being able to view and schedule appointments based on availability, self-service options are not practical at this time. Upon the successful completion of the upgrades to the retail web via the CXP and deployment of the GBE Program in Downstate New York, KEDNY and KEDLI customers will have more methods in which to schedule appointments, consistent with the intent of the recommendation.

Schedule:

The feasibility of adding enhanced functionality has already been evaluated. Therefore, this recommendation has been implemented. Notwithstanding, National Grid is providing the activities/milestones below simply to illustrate the timing for when the new functionality is expected to be in place.

Major Activities/Milestones	Estimated Start Date	Estimated Completion Date
1. Implementation of the GBE Program in Downstate New York.	In progress	KEDLI - Q3 FY22 (by end of CY2021) KEDNY – Q1 FY23 (late spring of CY2022).
2. Upgrade the retail web.	In progress	Q1 FY 22
3. Integrate the work management system with the retail web and IVR to enable self-service options in Long Island.	Q4 FY22	Q1 FY23
4. Conduct New York City pilot period to test and ensure that the appointment	Q1 FY23	Q2 FY23

functionality is operating as intended.		
---	--	--

Summary of Cost/Benefit and Risk Analysis:

The costs and benefits for the GBE Program and CXP investments are reflected in KEDNY and KEDLI's ongoing base rate filings (Cases 19-G-0309 and 19-G-0310). Additional benefits include providing customers with greater flexibility in scheduling appointments.

Chapter 12: Customer Operations

Recommendation: 24 (page 114)

The Utilities should track and maintain a record of customers to whom they issue missed appointment credits, the number of credits issued, the reason each appointment was missed, and the annual total of credits provided.

Implementation Leads

<i>Executive Sponsor:</i>	Edward VanDam – Vice President, Business Services
<i>Team Lead(s):</i>	Megan Piccarreto – Manager, Accounts Maintenance and Operations Philip Rodriguez – Manager, Gas Dispatch

Implementation Priority: Medium

Recommendation Accepted: Yes

Background Information:

Staff found (at 110) that NMPC, KEDNY, and KEDLI properly report missed appointment data monthly to Staff and the Commission as part of the Performance Indicators (“PI”) Report in Case 15-M-0566 and have appropriate internal controls in place related to missed appointments. Staff believes the NY Operating Companies could improve their processes by tracking the following additional data points: (i) the customer to whom a missed appointment credit was issued; (ii) the number of credits issued; (iii) the reason each appointment was missed; and (iv) the annual total of credits provided.

Proposal to Implement Recommendation:

The NY Operating Companies agree that tracking the additional data points will allow for more robust reporting and analysis. Among other things, the NY Operating Companies will need to develop standardized reporting across the New York regions, and establish a process by which the additional data points set forth in the recommendation are captured, including reconciling the missed appointment credits to the SAP general ledger. Monthly reporting and tracking of the additional data will be required.

Schedule:

The major activities/milestones and timeline to implement the recommendation is as follows:

Major Activities/Milestones	Estimated Start Date	Estimated Completion Date
1. <u>Report</u> - Create a standardized report across the three New York regions. The report will show all customers that are to receive a missed appointment credit. The report will contain (i) a standard set of missed appointment types, (ii) the customer classification (<i>i.e.</i> , residential or non-residential), (iii) standard reasons for missed appointments, and (iv) the specific credits set forth in the individual Niagara Mohawk, KEDNY, and KEDLI tariffs.	January 1, 2021	March 31, 2021
2. <u>End-to-End Process</u> – Establish a new end-to-end process to ensure alignment between Dispatch (who tracks missed appointments) with the credits issued by Account Maintenance and Operations (“AMO”). This may require IT system work as appointments are contained in the Work Management Systems while the credits are in the CSS and CRIS customer information systems.	January 1, 2021	May 31, 2021
3. <u>Financial Reconciliation</u> – Establish process to reconcile the PI report (where missed appointments are reported) with the credits issued and ensure alignment with the SAP general ledger.	February 28, 2021	June 30, 2021
4. <u>New Reporting</u> – Implement new internal reporting consistent with the recommendation.	July 1, 2021	July 31, 2021

Summary of Cost/Benefit and Risk Analysis:

Depending on the extent of the IT system work required to reconcile between the Work Management Systems and the CSS and CRIS customer information systems, incremental costs may be required to implement this recommendation. National Grid will provide an update as part of the implementation plan process once additional information becomes available. Benefits are

qualitative in nature and include improvements to the tracking and reporting of missed appointment bill credits.

Measures of Success:

The deliverable to demonstrate that the recommendation has been implemented is the creation of a report to track the information set forth in the recommendation.