



Date: March 29, 2016
To: Audit Committee
From: Jennifer Faulkner
Senior Vice President Internal Audits
Subject: Approval of 2016 Internal Audit Plan

SUMMARY

The Audit Committee is requested to approve the 2016 Internal Audit Plan set forth in Exhibit "A" of this item and to recommend its adoption to the Board of Trustees. The most significant amendments are discussed below.

BACKGROUND & DISCUSSION

The Audit Committee is required to approve 2016 Internal Audit Plan. The 2016 Internal Audit Plan was reviewed during the December 17, 2015 Audit Committee Meeting. The Internal Audit Department will commence executing this Audit Plan immediately based on feedback at that time. We will affirm your approval of this Audit Plan at the March 29, 2016 regularly scheduled meeting to the Audit Committee.

RECOMMENDATION

The Executive Vice President and General Counsel, the Senior Vice President – Internal Audit and I recommend that the Audit Committee approve the 2016 Plan.

The attached resolution is recommended for adoption.

Gil C. Quiniones
President and Chief Executive Office

RESOLUTION

RESOLVED, That the Audit Committee's 2016 Internal Audit Plan, in the form proposed in Exhibit "A," be and hereby is recommended for approval by the Authority's Board of Trustees.

2016 Audit Plan

Exhibit A
March 29, 2016

#	Proposed Project	Activity Type	Business Unit	Risk(s)	Description/Preliminary Scope	Risk Category	Timing
1	Customer Meter to Cash Audit	Audit	Economic Development & Energy Efficiency	Inaccurate or incomplete scheduling and/or settlement between NYISO, market participants, and NYPA's customers could lead to financial losses and/or incorrect customer bills.	Confirm that from the delivery of energy to NYPA's customer (at the meter), to the receipt of cash to satisfy accounts receivable, that NYPA is accurately allocating energy and other costs and billing/collecting those costs to/from its customers. Within this audit, we will consider both physical and financial transactions to the extent they exist. Processes and related handoffs between the following groups are in scope: Metering, Scheduling/Forecasting, Settlements, Energy Charge Adjustments and other rate related adjustments, Billing, Accounts Receivable/Collections, etc.	Financial	Q3
2	NERC CIPv5 Implementation Support (targeted assessments)	Consulting	Operations	Failure to comply with new NERC CIPv5 requirements may result in regulatory costs or increased regulatory scrutiny.	Targeted assessments during period 1/1/16 through 3/31/16 to ensure processes, procedures and controls are socialized and working as designed to support NYPA's CIPv5 compliance.	Legal and Regulatory	Q1
3	Ariba Post Implementation Review	Audit	Business Services	Delays in or an unexpected outcome when implementing Ariba could lead to inefficient or ineffective controls over the procurement process.	Conduct post implementation review activities of new Ariba modules as they are being planned for and released.	Operations	Q3 & Q4
4	End User Computing - Spreadsheets	Assessment	Entity-Wide	Overreliance on spreadsheets in decision making could lead to suboptimal decisions and decisions that are informed with inconsistent or inaccurate information.	Conduct an assessment of the current and potential future state for governing, monitoring and protecting critical spreadsheets for the organization.	Operations	Q1
5	Occupational Health & Safety Program Audit	Audit	Operations	Lack of safety culture could lead to injury or loss of life.	Evaluate program level governance and controls including monitoring provided by centralized EH&S Department on safety related matters for both management and bargaining unit employees. Ensure trends/themes from independent third party auditor are being identified by centralized EH&S and incorporated into NYPA's program.	Legal and Regulatory	Q2
6	BG SCADA - Pre/Post Implementation Review	Audit	Operations	Delays in or unexpected outcome of BG SCADA upgrade could result in negative impact to plant operations.	Conduct pre & post implementation review activities to ensure BG SCADA upgrade is completed on-time, within budget and without defects.	Operations	Q4
7	Vendor Management Governance Assessment	Assessment	Entity-Wide	Poor vendor, service provider, consultant or contractor performance could lead to inefficiencies within NYPA, confusion or conflict with our customers, performance delays or quality deficiencies, litigation against NYPA or impairment to NYPA's reputation.	Evaluate current vendor management (vendors, services providers, contractors and consultants) practices across NYPA including organizational governance and assess need/opportunity for entity-wide vendor management approach.	Operations	Q2
8	Program Change Management Review	Audit	Technology & Innovation	The lack of adequate change management processes and controls with proper segregation of duties may increase the risk of unauthorized changes implemented to production environment, inconsistency, and inefficiency from the operations and supporting personnel.	Evaluate the technology change management process and governance organization wide in IT and OT including the policies and procedures, ownership of the processes and controls, documentation requirements, and segregation of duties between development and production environment. Test select high risk controls based on the understanding of the design of the processes and controls.	Operations	Q4

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9	Strategic Plan Governance - Follow-up	Audit	Business Services	Lack of organizational support and alignment could lead to NYPA not achieving its strategic objectives.	Conduct a follow-up audit to validate the implementation of previous audit recommendation and to test the effectiveness of controls designed to provide transparency into the identification and mitigation of strategic initiative implementation related risks.	Strategic	Q3
10	Cyber Security Rollup / Consolidation	Assessment	Entity-Wide	Duplicative and/or redundant efforts may be in progress due to multiple technology consultant engagements producing overlapping management recommendations.	NYPA Management has engaged many (over ten) third parties to provide assessments of the technology control environment (including Cyber Security) in the last few years. Each engagement has identified numerous issues and produced a variety of recommendations. Based on this work, management has developed multiple action plans which are in various stages of completion. Internal Audit will review the recommendations and actions plans and "level set" / prioritize them against each other in order to provide management with a single set of prioritized actions that management can consider implementing.	Operations	Ongoing
11	Transmission O&M Audit	Audit	Operations	Ineffective maintenance practices may impact operational performance.	O&M Audit - confirm the following: - cross-functional assessment of Transmission and Generation O&M activities - newly created Maximo utilization procedures are consistently followed - monitoring of work activities is conducted - maintenance completion consistent with work prioritization methodology - root cause assessment (TapRoot) of equipment or system failure is conducted and followed up on.	Operations	Q2
12	Targeted Network Review	Assessment	Technology & Innovation	Failure to establish and maintain a robust network security configuration and restrict high privileged accounts to appropriate individuals without conflicting roles may increase the risk of exposure to vulnerability.	Review the managed network (encryption, security, segmentation), authentication (TACACS), network logging, redundancy, firewall filtering policies, clear text service protocols, and change management processes.	Operations	Q2
13	Workforce Planning Strategic Initiative Support	Consulting	HR & Enterprise Shared Services	Unclear or ineffective governance over the Workforce Planning Strategic Initiative may result in the organization not achieving its strategic objectives	IA to be embedded in the workforce planning initiative to ensure controls related to the alignment of workforce to company needs is adequate.	Strategic	Ongoing
14	Technical Training Audit	Audit	Operations	Critical skills shortages could lead to an increasing number of errors or delays in completing normal business activities, project delays or deficiencies, increased outages, increased safety violations, etc.	Ensure adequacy and effectiveness of technical training activities (including the Apprenticeship Program) including design and delivery of training to meet key skills requirements at NYPA. Assess internal and external constraints which may negatively impact technical training.	Operations	Q4

	Proposed Project	Activity Type	Business Unit	Risk(s)	Description/Preliminary Scope	Risk Category	Timing
15	Product and Service Marketing Assessment	Assessment	Economic Development & Energy Efficiency	Lack of customer awareness of NYPA products and services could lead to unrecoverable investments in new products/services and the inability for NYPA to achieve its strategic objectives.	Evaluate the following in support of the CES strategic initiative: - response/actions planned from the Strategic Initiative's marketing study - accuracy and completeness of marketing materials developed to inform existing and potential new customers of NYPA's product/service offerings - methods by which marketing information is made available to customers - methods by which management is monitoring/controlling the success of its marketing efforts - methods by which NYPA is monitoring changing customer preferences	Strategic	Q1
16	NERC Reliability Compliance Controls Audit(s)	Assessment	Operations	Non compliance with reliability compliance standards may result in significant fines and increased regulatory scrutiny.	Evaluate NYPA's Integrated Risk Assessment and Internal Control Evaluation activities and the role of IA in supporting the long-term objectives of these initiatives. Where appropriate, conduct targeted assessments to confirm the effectiveness of internal controls as identified by management in their Internal Controls Evaluation.	Legal and Regulatory	Q3
17	CES Technology Solution Support	Consulting	Economic Development & Energy Efficiency	Unclear requirements for potential new CES system may impact the achievement of business objectives.	Conduct pre/post implementation review activities for new CES systems being developed and/or implemented.	Strategic	Ongoing
18	Project Management Cycle Audit	Audit	Operations	Inefficient or ineffective project management activities could result in suboptimal use of resources and projects that do not meet objectives.	Ensure adequacy and effectiveness of controls throughout the project management life cycle including but not limited to project initiation and approval (including CEAR, new project evaluation metrics such as ROI and EVA, etc.), planning, controlling, execution, and closeout and the related handoffs between functional departments.	Operations	Q3
19	Cloud Governance	Assessment	Entity-Wide	Increasing reliance on cloud based technology solutions could result in changing O&M costs and the associated implications to the pass through of costs to customers, changing cyber security profile for NYPA, etc.	Assess the need for and options for NYPA to develop consistent governance of, contract requirements and other key controls when contemplating/deploying cloud based solutions.	Strategic	Q1
20	Strategic Asset Management Plan Support	Consulting	Operations	Unclear or ineffective governance over the Asset Management Strategic Initiative may result in the organization not achieving its strategic objectives	IA to be embedded into the strategic initiative as a key stakeholder to provide independent and objective support in the design of internal controls. In addition, work during this consulting project will include determining opportunities for IA to support NYPA in its pursuit of ISO 55000.	Strategic	Ongoing
21	Patch Management Review	Audit	Technology & Innovation	The lack of adequate patch management processes and controls may increase the risk of unauthorized changes implemented to production environment, inconsistency, and inefficiency from the operations and supporting personnel to manage the latest version or patch implementation.	Evaluate the patch management process and governance including how necessary patches are identified, authorized, tested, and approved for implementation. Select and test the current patch compliance levels within IT and OT on a sample basis.	Operations	Q2

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	Proposed Project	Activity Type	Business Unit	Risk(s)	Description/Preliminary Scope	Risk Category	Timing
22	Sustainability Assessment	Assessment	Entity-Wide	The mismanagement of "socially responsible" activities may result in an unfavorable corporate perception with stakeholders, customers, suppliers, business partners, employees and the regulatory community.	Evaluate the need/opportunity for enhanced/continued governance of sustainability related activities at NYPA. Perform an analysis of current processes in place to obtain and be informed of all sustainability regulations, and apply them throughout NYPA. Assess whether key regulations have not been considered and whether employees are complying with sustainability requirements.	Legal and Regulatory	Q3
23	User Access Recertification Review at OS, DB Network Layers	Audit	Technology & Innovation	Failure to periodically review and recertify high privileged user access at the infrastructure and network systems may result in unauthorized access to sensitive/ critical data and changes via user access that is not needed or not authorized.	Review the design of IT & OT periodic user access recertification process/ controls at network, application, database, and operating system focusing on high privileged accounts (HPA).	Operations	Q3
24	Succession Planning	Assessment	Entity-Wide	Significant workforce retirements or an increasing number of staff exiting NYPA could lead to knowledge loss and critical skills shortages.	Conduct an assessment of the organization, governance and tools related to succession planning activities across NYPA and provide recommendations for improving activities to meet NYPA strategic plan objectives.	Strategic	Q2
25	De-provisioning Review	Audit	Technology & Innovation	Failure to remove terminated or transferred users' access from systems and/ or network increase the risk of unauthorized access to the systems, records in those systems, and company network.	Perform a review of the design of the user access de-provisioning process and controls within the numerous IT/OT systems including network, applications, databases, and operating systems. The in-scope systems for this review will be based on how the user authentication (user ID and/ or password) are managed (i.e. single sign-on, using the same ID/password of active directory).	Operations	Q3
26	Lock-Out/Tag-Out Compliance Audit	Audit	Operations	Ineffective lock out/tag out of energized equipment could lead to an employee safety incident or an unplanned outage.	Ensure NYPA personnel continue to rigorously follow the requirements in CPP1 related to lock out and tag out. Ensure PTR system and related interfaces continue to enable the effective implementation of CPP1.	Operations	Q2
27	Generation Bidding Audit	Audit	Wholesale Commercial Operations	Lack of a clear operating strategy for generating assets could result in unexpected losses to NYPA or excessive cycling of the plant that leads to increased outages.	Ensure generation bid strategies exist and are being executed to optimize the value of NYPA's generation assets. NOTE: emphasis for the audit will be on Flynn (new merchant unit), SCPPs and BG	Operations	Q1
28	Fuel Purchasing & Hedging Audit	Audit	Wholesale Commercial Operations	Increasing or unexpected changes in natural gas commodity prices could result NYPA's fossil generating assets to be uneconomical.	Ensure controls over the purchase of fuel are adequate and working effectively to minimize the cost of fuel and ensure adequate supply to optimize the value of NYPA's generating assets.	Operations	Q2

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	Proposed Project	Activity Type	Business Unit	Risk(s)	Description/Preliminary Scope	Risk Category	Timing
29	Performance Management Audit (Level 1, Business Unit, Department and Individual)	Audit	Business Services	Lack of corporate objectives and performance metrics could result in conflicts as to how line and business unit management prioritize work activities.	Ensure the socialization of corporate performance measures and the alignment of the measures to business unit, department and individual employee performance goals/expectations as appropriate.	Strategic	Q4
30	Northern NY Power Proceeds Audit	Audit	Economic Development & Energy Efficiency	Noncompliance with the Northern NY Power Proceeds program could significantly impact designated communities and impair NYPAs reputation.	Ensure adequacy and effectiveness of controls in place to comply with the Northern NY Power Proceeds program/agreement.	Legal and Regulatory	Q4
31	Data Analytics Initiatives Support	Consulting	Entity-Wide	Lack of clear definition of and objectives for Data Analytics could lead to unnecessary investments and the inability for NYPAs to achieve its strategic plan.	IA to be embedded in NYPAs IT Strategic Plan - Data Analytics Initiative as well as other entity-wide initiatives such as the Asset Management Strategic Initiative focused on Data Analytical to provide internal control and other enterprise level support.	Strategic	Ongoing
32	Transmission LEM Project Audit	Audit	Operations	Inefficient or ineffective project management activities could result in suboptimal use of resources and projects that do not meet objectives.	Large Construction Project Audit - ensure project risks are being identified and mitigated, project is conducted consistent with CEAR/approval, that management is aware of the projects status and that significant vendors or contractors are performing in accordance with contract terms.	Operations	Q3
33	Contract Governance and Control Audit	Audit	Entity-Wide	New/Changing contracts for products and services may not adequately protect NYPAs interests that could lead to unanticipated litigation outcomes or NYPAs inability to meet customer expectations and operations.	Confirm NYPAs has consistent governance and control over new and changing contracts (ad hoc or standardized). Processes to be considered include contract development, negotiation, review, approval and filing/retention. Additionally, we will confirm the clarity of roles and responsibilities within the individual processes and where handoffs between processes exist.	Legal and Regulatory	Q2
34	Affordable Care Act Compliance Assessment	Consulting	HR & Enterprise Shared Services	The new Affordable Care Act could result in significant benefits cost increases to NYPAs (via Cadillac Tax) or NYPAs workforce.	IA to be embedded in management's evaluation process over the various compensation and benefits being offered that could affect NYPAs being subject to the Affordable Care Act Cadillac tax. These activities include but are not limited to a review of current benefits providers and the associated contract bidding process planned for 2016 as well as a review and potential re-write of employees policies.	Legal and Regulatory	Q3
35	Western Region O&M Audit	Audit	Operations	Ineffective maintenance practices may impact operational performance.	O&M Audit - confirm the following: - newly created Maximo utilization procedures are consistently followed - monitoring of work activities is conducted - maintenance is completed consistent with work prioritization methodology - root cause assessment (TapRoot) of equipment or system failure is conducted and followed up on.	Operations	Q1

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36	Contractor Tenure	Audit	Entity-Wide	Failure to identify and prevent legal risks posed by contractors and prevent non-compliance with state/local and country specific regulatory requirements; Failure to onboard workers appropriately to ensure adequate knowledge transfer.	Assess the current process, policies and procedures in place for utilizing contractors and for complying with Department of Labor requirements.	Legal and Regulatory	Q4
37	Muni/Coop Regulation Audit	Audit	Economic Development & Energy Efficiency	New/changing business requirements for municipal and cooperative customers could result in increased litigation, external stakeholder influence and impaired reputation to NYPA.	Ensure NYPA's regulation of full requirements and monitoring/oversight of partial requirements municipal and cooperative is adequate and effective.	Legal and Regulatory	Q3
38	Energy Efficiency Finance & Accounting	Audit	Economic Development & Energy Efficiency	Misaligned business activities could lead to inaccurate financial information informing business decisions	Evaluate the adequacy and effectiveness of controls within the Economic Development & Energy Efficiency Business Unit's finance and accounting function. Assess the consistency of activities to corporate finance and accounting governance expectations.	Financial	Q2
39	Past Due Receivables Audit	Audit	Business Services	Customer payment defaults could result in NYPA writing off uncollectable receivables.	Evaluate the adequacy and effectiveness of controls to ensure a consistent and measured response by NYPA to past due receivables to minimize default risk.	Financial	Q2
40	Payroll Cycle Audit	Audit	Business Services	Ineffective or inefficient payroll processing activities could result in incorrect, improper or unauthorized payments to employees.	Confirm the adequacy and effectiveness of controls over payroll processing including but not limited to timekeeping, master file updates, policy enforcement, exceptions, processing and approvals for various payroll related activities including Flex, overtime and other payroll related exceptions.	Financial	Q1
41	R&D Spend Audit	Audit	Technology & Innovation	Lack of clear R&D objectives or inability to achieve objectives could result in suboptimal R&D spending and/or negative external stakeholder perception of NYPA.	Ensure controls are adequate and working effectively to ensure R&D spend is consistent with R&D objectives.	Strategic	Q1
42	Vegetation Management Vendor Audit	Audit	Operations	Lack of oversight of vegetation management contractor could lead to excessive costs or poor performance.	Ensure adequacy and effectiveness of vendor management controls to ensure quality of vendor performance and management of costs.	Operations	Q1
43	St. Lawrence - Finance & Administration Audit	Audit	Operations	Misaligned administrative processes within the region could lead to inefficiencies or ineffective control over financial and human resources.	Ensure adequacy and effectiveness of finance and administration activities at the site including but not limited to recruiting and performance management, financial discipline (budgeting and expense management, financial acumen), T&E, etc.	Financial	Q2
44	Energy Commodity Risk Management GAP Analysis Support	Consulting	Risk Management	Failure to effectively understand the mitigate energy commodity risks could lead to unexpected impacts to NYPA's financial performance.	IA to be embedded in the project to evaluate energy commodity risk management at NYPA and resolve gaps between current and potential future state strategies. The project will lead to potential changes in processes and tools for managing energy commodity risks.	Strategic	Ongoing

	Proposed Project	Activity Type	Business Unit	Risk(s)	Description/Preliminary Scope	Risk Category	Timing
45	Clark Energy Center - Finance & Administration Audit	Audit	Operations	Misaligned administrative processes within the region could lead to inefficiencies or ineffective control over financial and human resources.	Ensure adequacy and effectiveness of finance and administration activities at the site including but not limited to recruiting and performance management, financial discipline (budgeting and expense management, financial acumen), T&E, etc.	Financial	Q3
46	SENY - Purchasing & Warehousing Audit	Audit	Operations	Failure to procure and maintain necessary equipment necessary to operate equipment/systems due to inadequate asset management planning, incorrect or obsolete materials in stock, inventory stock-out, and/or delays in procurement.	Ensure consistent application of controls for the purchase of goods and materials at the site and the effective management of inventory to meet the plant's operational needs.	Financial	Q3
47	Concur (travel & entertainment expense) Pre/Post Implementation Review	Audit	Business Services	Delays in or an unexpected outcome when implementing Concur would result in a continuation of a recognized inefficient T&E process (links to Process Excellence strategic initiative) and employee dissatisfaction.	Conduct Pre/Post implementation review activities for new travel & entertainment (T&E) expense processing software.	Operations	Ongoing
48	Customer Job Audits (D&M)	Audit	Economic Development & Energy Efficiency	Noncompliance with Recharge NY and other power allocation program (EP, RP, etc.) legislation could lead to increased regulatory scrutiny and negative impact to NYPA's reputation.	Recurring audit support for NYPA Marketing Department to support compliance program.	Legal and Regulatory	Q2 and Q4
49	Third Party Contract Audits	Audit	Entity-Wide	Third party vendor nonperformance could lead to delays or failure to achieve business objectives, impairment of NYPA's reputation or increased litigation.	Identify high risk third party contracts (vendor, service provider, contractors or consultants) and exercise our audits rights to confirm performance in accordance with contract terms including accuracy of invoicing and contract deliverables.	Operations	Ongoing