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<td></td>
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December 12, 2017

Minutes of the regular meeting of the New York State Canal Corporation’s Audit Committee held at the Clarence D. Rappleyea Building, White Plains, at approximately 9:22 a.m.

**The following Members of the Audit Committee were present:**

Trustee Eugene Nicandri, Chairman
Trustee John R. Koelmel
Trustee Anne M. Kress
Trustee Michael Balboni

Trustee Tracy McKibben - Excused
Trustee Anthony Picente, Jr. - Excused
Trustee Dennis Trainor - Excused

**Also in attendance were:**

Gill Quiniones	President and Chief Executive Officer
Justin Driscoll	Executive Vice President and General Counsel
Kristine Pizzo	Senior Vice President - Human Resources & Enterprise
Karen Delince	Vice President and Corporate Secretary
Joseph Gryzlo	Vice President and Chief Ethics and Compliance Officer
Angela Gonzalez	Director - Internal Audit - Technology
Lorna Johnson	Senior Associate Corporate Secretary
Sheila Baughman	Senior Assistant Corporate Secretary
Gottor, Jaiah	Manager - Network Services
Joseph Rivera	Network Architect
Glen Martinez	Senior Network Analyst

Chairman Eugene Nicandri presided over the meeting. Corporate Secretary Delince kept the Minutes.
Introduction

Chairman Nicandri welcomed committee members and senior staff to the meeting. He said the meeting had been duly noticed as required by the Open Meetings Law and called the meeting to order pursuant to section B(4) of the Audit Committee Charter.
1. **Adoption of the Proposed Meeting Agenda**

   Upon motion made by Trustee Kress and seconded by Trustee Koelmel, the agenda for the meeting was adopted.
2. CONSENT AGENDA:

Upon motion made by Trustee Kress and seconded by Trustee Koelmel, the Consent Agenda was approved.
a. **Approval of the Minutes of the Regular Meeting held on September 26, 2017**

Upon motion made and seconded, the Minutes of the Committee's Regular Meeting held on September 26, 2017 were approved.
3. **DISCUSSION AGENDA:**

   a. **Internal Audit Activity Report**

   **Status of 2017 Audit Plan**

   Ms. Angela Gonzalez, Senior Vice President of Internal Audit, provided an update of the status of the 2017 Audit Plan to the Committee (Exhibit “3a-A”).

   **2017 Key Accomplishments**

   The key accomplishments for 2017:

   **People**
   - Continued onboarding and acclimation of new team members
   - Conducted business acumen, technical and soft skills trainings for the department
   - Developed Internal Audit Competency Model and implemented individual development planning
   - Guest Auditor Program launched with four colleagues participating in four audits
   - Execution of team building activities including two group community service events
   - Collaborated with Enterprise Risk Management for the LPPC Audit and Risk Roundtable Conference

   **Process**
   - Full rollout of the Audit Methodology including enhancements for consistent application
   - Introduced Fraud Questionnaire to audit planning and fieldwork processes
   - Continued with the Audit Liaison Program to pair Internal Audit team members with EMC-1
   - Execution of over 15 informal client support activities, i.e. participation in standing committees
   - Execution of nine audit transformation activities, i.e. Audit Methodology and Sharepoint Recommendation Tracking

   **Technology**
   - Successful partnership with co-source partner
   - Executing on model to build out Internal Audit Technology group, hired three team members
   - Co-leading project with Enterprise Risk Management and engaging other risk management units to design a risk and control framework and select the solution and implementer for the GRC tool
   - Roll out of SharePoint site to track and monitor open recommendation remediation and provide management reporting
   - Piloted Data Analytics in Q4 on a key audit

   **Status of Open Recommendations**

   Internal Audit has closed a number of issues and continues to work very closely with management to close the 11 open recommendations for 2017.
b. **Approval of the 2018 Internal Audit Plan**

Ms. Gonzales provided an update of the 2018 Internal Audit Plan to the committee. (Exhibit “3b-A”) She said that as Internal Audit continues to audit the Canal Corporation (“Canal”) and learn its operation, they will be able to fine-tune Canal’s audit universe and Audit Plan. Internal Audit has built a very good rapport with the Canal management and they are receptive to Internal Audit’s recommendations.

The Proposed 2018 Audit Plan includes:

- High risk areas identified through risk assessment and Internal Audit participation in Canals Management Committee
- Resources necessary to successfully complete the Audit Plan
- Alignment to Canals Top Enterprise Risks
- Key stakeholder input/buy in which includes Executive Management and various Risk Management Units

Internal Audit requested that the Audit Committee approve the Canal Corporation’s 2018 Internal Audit Plan.

Upon motion made by Trustee Kress and seconded by Trustee Koelmel, the 2018 internal Audit Plan was approved.
4. **Next Meeting**

Chairman Nicandri said that the next regular meeting of the Audit Committee would be held on March 20, 2018 at the Clarence D. Rappendy Building in White Plains, New York at a time to be determined.
Closing

Upon motion made by Trustee Koelmel and seconded by Trustee McKibben, the meeting was adjourned by Chairman Nicandri at approximately 9:38 a.m.

Karen Delince
Karen Delince
Corporate Secretary
Audit Committee Update
Internal Audit Activity Report

12/12/2017
2017 Status Update
NYP A and Canals
2017 Audit Plan Status

- 2017 Plan Status:
  - 43 deliverables have been issued that are associated with 48 audit projects (including 37 reports and six interim memos) as of 11/30/17. Total 2017 deliverables will be 52 reports and memos.
  - Reporting for the remaining nine audits will be completed by 12/11/18 and are expected to be issued by the end of December.
## 2017 Key Accomplishments

### People
- Continued onboarding and acclimation of new team members
- Conducted business acumen, technical and soft skills trainings for the department
- Developed Internal Audit Competency Model and implemented individual development planning
- Guest Auditor Program launched with four colleagues participating in four audits
- Execution of team building activities including two group community service events
- Collaborated with Enterprise Risk Management for the LPPC Audit and Risk Roundtable Conference

### Process
- Full rollout of the Audit Methodology including enhancements for consistent application
- Introduced Fraud Questionnaire to audit planning and fieldwork processes
- Continued with the Audit Liaison Program to pair Internal Audit team members with EMC-1
- Execution of over 15 informal client support activities, i.e. participation in standing committees
- Execution of nine audit transformation activities, i.e. Audit Methodology and Sharepoint Recommendation Tracking

### Technology
- Successful partnership with co-source partner
- Executing on model to build out Internal Audit Technology group, hired three team members
- Co-leading project with Enterprise Risk Management and engaging other risk management units to design a risk and control framework and select the solution and implementer for the GRC tool
- Roll out of SharePoint site to track and monitor open recommendation remediation and provide management reporting
- Piloted Data Analytics in Q4 on a key audit
Appendix
Status of Audit Recommendations – NYPA and Canals

Below is the status of open recommendations by year:

- **2015 Issue Remediation Status (Total 13) - NYPA**
- **2016 Issue Remediation Status (Total 38) - NYPA**
- **2017 Issue Remediation Status (Total 28) - NYPA**
- **2017 Issue Remediation Status (Total 10) – Canals**

Internal Audit has supported management with reporting identified issues and is monitoring remediation efforts for High and Medium risk issues, with the priority on High Risk Issues.
Status of Audit Recommendations – NYPA and Canals

Below is a status of open recommendations by year 2015-2017:

<table>
<thead>
<tr>
<th>Year</th>
<th>In-Progress</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>13</td>
<td>111</td>
</tr>
<tr>
<td>2016</td>
<td>39</td>
<td>110</td>
</tr>
<tr>
<td>2017</td>
<td>38</td>
<td>45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>In-Progress</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>10.48%</td>
<td>89.52%</td>
</tr>
<tr>
<td>2016</td>
<td>25.50%</td>
<td>74.50%</td>
</tr>
<tr>
<td>2017</td>
<td>45.78%</td>
<td>54.22%</td>
</tr>
</tbody>
</table>
Audit Committee Update
2018 Canal Corporation Internal Audit Plan
Executive Summary

Annual Planning Goal

Internal Audit’s work in 2018 represents the second year the Canal Corporation will be under the purview of the Internal Audit function.

- IA will continue to refine the Canals Audit Universe which will be integrated into the GRC implementation in 2018. The 2018 Audit Plan will be adjusted as business needs change, if necessary.

Proposed 2018 Audit Plan includes:

- High risk areas identified through risk assessment and Internal Audit participation in Canals Management Committee
- Resources necessary to successfully complete the Audit Plan
- Alignment to Canals Top Enterprise Risks
- Key stakeholder input/buy in which includes Executive Management and various Risk Management Units
Proposed 2018 Plan – Audit Plan Coverage

2018 Planned Activities
11 projects in the Proposed 2018 Audit Plan

Comparison to Prior Year

<table>
<thead>
<tr>
<th></th>
<th>2018 Plan</th>
<th>2017 Actual</th>
<th>2017 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessments</td>
<td>*7</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Audits</td>
<td>4</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>

*The increase in assessments and decrease in audits is due to audit projects included in the 2018 Audit Plan that cover areas requiring follow up or additional review due to slower than anticipated adoption of NYPA policies and procedures.
Proposed 2018 Plan – Resource Allocation

Year 2 Impact

With acquired knowledge from audit activities in 2017, 2018 audits are more targeted as follows:

• Three of 11 (or 27%) 2018 audit activities represent Year 2 integration related activities that Internal Audit does not expect to occur in future years. These business processes should be absorbed into NYPA processes and will be audited as part of the NYPA Audit Plan.

• To complete the 2018 Audit Plan and establish resources to cover audits over the Canal Corporation, Internal Audit has a consulting budget of approximately $500,000 and will allocate one staff member to select audit projects and as staff are hired. Approximately 300 business hours have been allocated from the NYPA available hours to this plan.

• It is Internal Audit’s goal to develop NYPA expertise for Canals business operations and processes and to use co-source resources for subject matter expertise in future audits.

Resource Allocation

<table>
<thead>
<tr>
<th></th>
<th>Business</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Resource hours available</td>
<td>1,300</td>
<td>0</td>
</tr>
<tr>
<td>Budgeted Third Party hours available</td>
<td>1,700</td>
<td>300</td>
</tr>
<tr>
<td>Proposed 2018 Audit Plan Hours</td>
<td>3,000</td>
<td>300</td>
</tr>
</tbody>
</table>

Types of Audits

- **Business**: 82%
- **Technology**: 18%
- **Integrated**: 0%
## 2018 Audit Plan Alignment to Top Enterprise Risks

Audit Projects were aligned to the top five Canals Enterprise Risks and represents 36% of the Audit Plan.

<table>
<thead>
<tr>
<th>Top Enterprise Risks</th>
<th>2018 Audit Plan Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attract and Sustain Workforce</td>
<td>None</td>
</tr>
<tr>
<td>Catastrophic Events</td>
<td>Canals Crisis Management</td>
</tr>
<tr>
<td>Critical Infrastructure</td>
<td>Maximo Lite Post Implementation</td>
</tr>
<tr>
<td>Physical and Cyber Security</td>
<td>None</td>
</tr>
<tr>
<td>Workforce Health and Safety</td>
<td>EH&amp;S Study Follow-up</td>
</tr>
<tr>
<td></td>
<td>Dam Safety</td>
</tr>
</tbody>
</table>

Note: Audits related to Physical and Cyber Security risk were covered in the Canals 2017 Audit Plan or through NYPA technology audits. Audits to cover the Attract and Sustain Workforce risk will be included in the 2019 Audit Plan.
IA Canal Internal Audit Plan Approval Request

IA request that the Audit Committee approve the 2018 Canal Corporation Internal Audit Plan.
Appendix A - Proposed 2018 Audit Plan
# Proposed Project | Project Type | Business Unit | Risk | Description/Preliminary Scope | Risk Rating | Timing |
--- | --- | --- | --- | --- | --- | --- |
1 | Canals Crisis Management | Assessment | Operations | Risk of alignment of various functional areas working to establish emergency management, business resiliency, business continuity, disaster recovery and incident response solutions could lead to inefficiencies and excessive costs to NYPA. Additionally, integration of the NYPA crisis management plan with Canals may not address the nature of the Canals specific risks. | Evaluate emergency management related functions (emergency management, business resiliency, business continuity, disaster recovery and incident response) in development or reengineered across NYPA to confirm common vision, frameworks, and alignment. Consider Systems like Flood Warning System and DLAN that support the Crisis Management Plan. | High | Q3 |
2 | Canals Governance | Assessment | Entity-Wide | Risk of corporate governance is not complete or accurately aligned to support Canals as an entity and not appropriately aligned to NYPA’s existing governance. | Evaluate the various boards and entity level governance including organizational by-laws, board and committee structures and charters and other relevant governance tools to ensure up-to-date and aligned to legislative mandates and the Authority's existing governance. | High | Q3 |
3 | EH&S Study Follow-up | Assessment | Operations | Risk of non-compliance with NYS contributions requirements that could lead to impaired reputation and sanctions by state governing bodies. | Internal Audit will continue to monitor management's efforts to develop and implement mitigation plans for risks identified in the pre-Day 1 EH&S study. Assess the status of management's efforts and ensure a governance structure is in place to monitor mitigation/ action plans, transparency of the status of mitigation/ action plan efforts and EH&S training requirements. | High | Q4 |
4 | Grants and Sponsorships | Audit | Corporate Affairs | Risk of unauthorized or inappropriate use of P- Cards issued to Canals personnel could lead to excessive operating expenses or impairment to the Authority's reputation. | Evaluate previous and ongoing grants and sponsorship commitments (in-kind and Cash) made by/for Canals to ensure funding source is clear, NYPA's ongoing commitment has been determined, and that controls are adequate and working effectively to ensure compliance with NYS requirements. | Medium | Q2 |
5 | P-Cards Follow-up | Audit | Entity-Wide | Risk of unauthorized disposal of Real Estate could lead to regulatory scrutiny and/or the impairment of the Authority's reputation. | For P-Cards issued to Canals personnel, ensure personnel were trained in the appropriate use of the cards, that monitoring controls are in place and working as designed, cards are being used for authorized activities and by authorized personnel. | High | Q1 |
6 | Real Estate | Assessment | HR & Enterprise Shared Services | Risk of non-compliance with NYS contributions requirements that could lead to impaired reputation and sanctions by state governing bodies. | Evaluate the controls established for managing real estate owned, leased or otherwise in the control of Canals to ensure land interests are appropriately protected and that disposition of disputes such as encroachment issues are consistently resolved in the best interest of Canals. Review the process for disposing of land and ensure compliant to NYS disposal requirements. | High | Q3 |
**Appendix A - Proposed 2018 Audit Plan**

<table>
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<tr>
<th>#</th>
<th>Proposed Project</th>
<th>Project Type</th>
<th>Business Unit</th>
<th>Risk</th>
<th>Description/Preliminary Scope</th>
<th>Risk Rating</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Payroll Audit</td>
<td>Audit</td>
<td>Business Services</td>
<td>Ineffective or inefficient payroll processing activities could result in incorrect, improper, or unauthorized payments to employees.</td>
<td>Confirm the adequacy and effectiveness of controls over payroll processing including but not limited to timekeeping, master file updates, vacation &amp; sick time accruals, policy enforcement, exceptions, processing and approvals for various payroll-related activities including Flex, overtime and other payroll-related exceptions.</td>
<td>High</td>
<td>Q1</td>
</tr>
<tr>
<td>8</td>
<td>Dam Safety Assessment</td>
<td>Assessment</td>
<td>Operations</td>
<td>Lack of resources or organizational commitment to implementing mitigation/action plans to address Dam Safety issues could lead to the realization of local or statewide safety or environmental risks, regulatory sanctions and/or significantly impaired reputation.</td>
<td>Evaluate the processes that ensure Dams are periodically inspected for structural safety, and that deficiencies identified by out agencies are addressed in a timely manner. Assess the status of management's efforts and ensure governance structure is in place to monitor mitigation/action plans and transparency of the status of mitigation/action plan efforts resulting from outside agency assessments.</td>
<td>High</td>
<td>Q2</td>
</tr>
<tr>
<td>9</td>
<td>Maximo Lite Post Implementation Assessment</td>
<td>Assessment</td>
<td>Technology</td>
<td>Lack of effective system implementation can lead to original business objectives not meet, poor system performance, inefficiencies and user dissatisfaction.</td>
<td>Determine that the Maximo Lite application is functioning as intended, if business objectives have been met, efficiencies gained, system performance is adequate, organizational change management is effective and users are satisfied. Also, verify if additional changes were necessary made after go live.</td>
<td>High</td>
<td>Q4</td>
</tr>
<tr>
<td>10</td>
<td>Vegetation Management Assessment</td>
<td>Operations</td>
<td></td>
<td>Inadequate management of vegetation growth on Canals property could lead to safety hazards and interfere with operations at Canals facilities.</td>
<td>Evaluate programs and processes in place to maintain vegetation at manageable levels at Canals sites. These programs should ensure that excessive vegetation does not interfere with normal operations, or create a safety hazard.</td>
<td>High</td>
<td>Q1</td>
</tr>
<tr>
<td>11</td>
<td>Vendor Payment Accruals Audit</td>
<td>Audit</td>
<td>Business Services</td>
<td>Inadequate management of vendor payments and associated accruals could lead to vendors paid late and the Canals Balance sheet being misstated</td>
<td>Ensure controls over the processing of manual accounting entries in SAP are adequate and working effectively, and validate the completeness and accuracy of accruals.</td>
<td>High</td>
<td>Q2</td>
</tr>
</tbody>
</table>
Appendix B - 2018 Risk Assessment – Projects Considered But Not Included in Plan
## Appendix B - 2018 – Projects Considered but Not Included in Plan

<table>
<thead>
<tr>
<th>#</th>
<th>Proposed Project</th>
<th>Description/Preliminary Scope</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capital Asset Management</td>
<td>Review the adequacy and efficiency of current Capital Asset Management policies and procedures as they relate to asset procurement, valuation, tracking and monitoring, recording and reporting, disposal of assets, and depreciation.</td>
<td>Medium risk activity. Consider in 2018 if risk or Audit resource levels change.</td>
</tr>
<tr>
<td>2</td>
<td>EH&amp;S Training Assessment</td>
<td>Assess EH&amp;S training activities to ensure Canals personnel are inculcated into the Authority's EH&amp;S culture and that Canals personnel are trained on utilizing the Authority's EH&amp;S tools.</td>
<td>Medium risk activity. Consider in 2018 if risk or Audit resource levels change.</td>
</tr>
<tr>
<td>3</td>
<td>Insurance</td>
<td>Evaluate the Authority's controls for evaluating the risks posed by Canal's, identifying opportunities for transferring risk above the Authority's appetite, assessing the cost versus benefit of procuring insurance and procuring insurance where determined appropriate.</td>
<td>Medium risk activity. Consider in 2018 if risk or Audit resource levels change.</td>
</tr>
<tr>
<td>4</td>
<td>Manual Check Processing</td>
<td>Ensure the adequate and effective handling of checks received by Canals.</td>
<td>Medium risk activity. Consider in 2018 if risk or Audit resource levels change.</td>
</tr>
<tr>
<td>5</td>
<td>Pension/Other Post Retirement Benefits</td>
<td>Evaluate the support for judgements made by the Authority related to post retirement benefits and ensure proper accounting treatment.</td>
<td>Medium risk activity. Consider in 2018 if risk or Audit resource levels change.</td>
</tr>
<tr>
<td>6</td>
<td>Software License Management</td>
<td>Determine the proper software licenses have either been procured or transferred to NYPA to support Canal applications/infrastructure. Verify software licenses are tracked for inventory purposes to support compliance with license agreements and future audits by the software vendors.</td>
<td>Medium risk activity. Consider in 2018 if risk or Audit resource levels change.</td>
</tr>
</tbody>
</table>
## Appendix B - 2018 – Projects Considered but Not Included in Plan

<table>
<thead>
<tr>
<th>#</th>
<th>Proposed Project</th>
<th>Description/Preliminary Scope</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Warehousing</td>
<td>Evaluate the adequacy and effectiveness of controls for purchasing, receiving and maintaining inventory items and spare parts in Canal’s warehouses.</td>
<td>Medium risk activity. Consider in 2018 if risk or Audit resource levels change.</td>
</tr>
<tr>
<td>8</td>
<td>Whistleblower and Anti-Retaliation Process Assessment</td>
<td>Assess the status of inculcating the Authority’s whistleblower and anti-retaliation policies and control activities into Canals. Ensure Canals personnel receive training to introduce and reinforce the Authority’s ethics and compliance culture.</td>
<td>Medium risk activity. Consider in 2018 if risk or Audit resource levels change.</td>
</tr>
<tr>
<td>9</td>
<td>Employee &amp; Labor Relations</td>
<td>Evaluate policies and procedures that govern all employee management practices for Union and Non-Union workers to ensure that they applicable NYPA policies, and Union Contract requirements adhered to.</td>
<td>Medium risk activity. Consider in 2018 if risk or Audit resource levels change.</td>
</tr>
<tr>
<td>10</td>
<td>Regulatory Reporting</td>
<td>Determine if an inventory of required regulatory reports has been documented, and that they are being furnished to the applicable governmental Agency at the prescribed intervals.</td>
<td>Medium risk activity. Consider in 2018 if risk or Audit resource levels change.</td>
</tr>
<tr>
<td>11</td>
<td>CIMS Upgrade</td>
<td>Assess the upgrade of CIMS to ensure that; system configuration, interfaces, and system security (data base, application, and operating system) were appropriately implemented.</td>
<td>Medium risk activity. Consider in 2018 if risk or Audit resource levels change.</td>
</tr>
</tbody>
</table>