# Table of Contents

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page No.</th>
<th>Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1. Adoption of the November 17, 2020 Proposed Meeting Agenda</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2. Motion to Conduct an Executive Session</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3. Motion to Resume Meeting in Open Session</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4. DISCUSSION AGENDA:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>a. Financial Operations</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>i. Risk Update – Enterprise Resilience</td>
<td>6</td>
<td>4a i-A</td>
</tr>
<tr>
<td>ii. Transfer of Canal OPEB Liabilities into the NYPA Trust</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>b. Utility Operations</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>i. Marcy-New Scotland Transmission Upgrade Project</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Capital Expenditure Authorization Request Resolution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. Smart Generation &amp; Transmission Initiative</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Communications Backbone Program – Capital Expenditure Authorization Request Resolution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii. Transmission Life Extension &amp; Modernization Program</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Niagara Switchyard Life Extension &amp; Modernization Project – Capital Expenditure Authorization Request Resolution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv. Transmission Life Extension &amp; Modernization Program</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Niagara Protective Relay Replacement Project – Capital Expenditure Authorization Request Resolution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>v. Blenheim-Gilboa Power Project – Circuit Breaker</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Replacement Project – Capital Expenditure Authorization Request and Contract Award Resolution</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Subject

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page No.</th>
<th>Exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>vii. Niagara Power Project – Next Generation Niagara Program – Mechanical and Electrical Upgrades Project – Shaft Procurement – Contract Award Resolution</td>
<td>29</td>
<td></td>
</tr>
</tbody>
</table>

5. **CONSENT AGENDA:**

   a. Approval of the Minutes of the Joint Meeting held on November 17, 2020 | 32       |

6. **Next Meeting**

7. **Closing**

   | 33       |

   | 34       |
Minutes of the joint meeting of the New York Power Authority and Canal Corporation’s Finance and Risk Committee held via videoconference at approximately 9:00 a.m.

Members of the Finance Committee present were:

Tracy B. McKibben - Chair  
John R. Koelmel  
Eugene Nicandri  
Dennis Trainor  
Michael Balboni

Anthony Picente, Jr. – Excused

Also in attendance were:

Gil Quiniones  
President and Chief Executive Officer
Justin Driscoll  
Executive Vice President and General Counsel
Adam Barsky  
Executive Vice President and Chief Financial Officer
Joseph Kessler  
Executive Vice President and Chief Operations Officer
Kristine Pizzo  
Executive Vice President and Chief Human Resources & Administrative Officer
Sarah Salati  
Executive Vice President and Chief Commercial Officer
Keith Hayes  
Senior Vice President – Clean Energy solutions
Yves Noel  
Senior Vice President – Strategy and Corporate Development
Soubhagya Parija  
Senior Vice President and Chief Risk Officer
Robert Plascik  
Senior Vice President and Chief Information Officer
Phil Toia  
Senior Vice President – Power Supply
Karen Delince  
Vice President and Corporate Secretary
Daniella Piper  
Vice President – Digital Transformation / Chief of Staff
John Canale  
Vice President – Strategic Supply Management
Patricia Lombardi  
Vice President – Project Management
Anne Reasoner  
Vice President Budgets and Business Controls
Saul Rojas  
Vice President – Enterprise Resilience
Scott Tetenman  
Vice President – Finance
Christina Reynolds  
Treasurer
Thakur Sundeep  
Controller
Andrienne Lotto  
Senior Director – Energy Security & Resilience Programs
Thomas Spencer  
Senior Director – Enterprise Risk & Corporate Insurance
Mary Cahill  
Manager – Executive Office
Richard Goldsmith  
Finance Project Manager
Lorna Johnson  
Senior Associate Corporate Secretary
Sheila Quatrocci  
Associate Corporate Secretary
Michele Stockwell  
Project Coordinator – Executive Office

Chairperson Tracy McKibben presided over the meeting. Corporate Secretary Delince kept the Minutes.
Introduction

Chairperson Tracy McKibben welcomed committee members and the Authority’s senior staff to the meeting. She said that 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 Finance Committee Charter.
1. **Adoption of the January 19, 2021 Proposed Meeting Agenda**

   On motion made by member Dennis Trainor and seconded by member John Koelmel, the agenda for the meeting was adopted.

**Conflicts of Interest**

Chairperson McKibben and members Koelmel, Nicandri, Balboni and Trainor declared no conflicts of interest based on the list of entities previously provided for their review.
2. **Motion to Conduct an Executive Session**

   *Mr. Chairman, I move that the Committee conduct an executive session to discuss the financial and credit history of a particular corporation and matters regarding public safety and security pursuant to Section 105 of the Public Officers Law.* On motion made by member Dennis Trainor and seconded by member Michael Balboni, the members conducted an executive session.
3. **Motion to Resume Meeting in Open Session**

*I move that the meeting resume in open session.* On motion made by member Michael Balboni and seconded by member John Koelmel, the meeting resumed in open session.

Chairperson McKibben said no votes were taken during the executive session.
4. **DISCUSSION AGENDA**

   a. **Financial Operations**
      
      i. **Risk Update – Enterprise Resilience**

      Mr. Thomas Spencer, Senior Director of Enterprise Risk and Corporate Insurance, and Ms. Adrienne Lotto, Senior Director of Energy, Security and Resilience Programs, provided highlights of the Enterprise Risks and Key Resilience Activities, respectively, to the committee (Exhibit “4a i-A”).

      **NYPA’s Enterprise Resilience Program**

      In 2017, the Risk Management Team developed an enterprise-wide resilience framework that leveraged the strong foundational elements of NYPA’s existing Resiliency programs which included Business Continuity, Cyber and Physical Security, Disaster Recovery and Energy Management.

      In addition to harmonizing those efforts, the Risk Management Team was able to establish an Enterprise Resiliency framework that broadened the scope of the traditional resilience program to include items such as insider threat and supply chain resiliency. Once NYPA was able to establish the framework and program, the program was transferred from Risk Management to Utility Operations and the Enterprise Resiliency Team.

      Since that time, the key areas of accomplishments include the successful build-out and hiring of appropriate subject matter expertises. This was a challenge, given the industry expansion and the view around the concept of resiliency and the demand for top talent.

      The second area of accomplishment was the development of policies and procedures that formed a concrete governance structure for the escalation of resiliency risk. By building on the existing Executive Risk Management committee governance structure, the Team was able to ensure that leadership had visibility into the Resiliency Program and resiliency-related risks.

      These efforts by the Risk and Enterprise Resiliency Teams have allowed NYPA to enhance, and continue to advance, its capabilities to anticipate and respond to disruption-related risks.

      **Key Resilience Activities**

      Resiliency is an Important Area of Focus for NYPA and its Strategy.

      In 2020, events such as civil unrest, change in legislation, and the impact of Covid-19 highlighted the importance of why resiliency is important. NYPA must be prepared to respond and bounce forward.

      First, NYPA has a traditional Service Catalog which includes Business Continuity Planning and Disaster Recovery. NYPA is now going beyond the Traditional Resilience Program to an Expanded Service Catalog which includes Insider Threat and Supply Chain Security.

      Secondly, each of these areas incorporate a cross-functional team and cross-business unit approach throughout the Authority to leverage skill sets and breakdown silos of communication.

      Thirdly, each of these areas has a roadmap, both short-term and long-term, to reach a more mature resilience level at NYPA.
2021 Key Deliverables

- Partnering with IT, the Team will be testing NYPA’s Business Continuity Plan, combined with a Disaster Recovery Drill, later this year.

- The Team will be advancing the Resilience Pillar in NYPA’s VISION2030 Strategy. To that end an RFQ was released for the Advance Climate Impact Study.

- The Team will develop Mature Resilience Metrics throughout the organization.

- The Team is advancing and finalizing an Insider Threat program in partnership with EPRI.

The key to accomplishing this is leveraging both NYPA’s internal and external partners.

Internally, as a Pillar in VISION2030, the Team have incorporated resilience into the Mission Statement and Corporate Values, and made both financial and human capital investments.

To raise awareness throughout the Authority, an “Always Resilient Campaign” was launched, partnering with the Communications, and each of the Business Units, to advance resilience throughout the entire organization.

Externally, the Team will continue with industry partnerships. The team have existing relationships with trade organizations such as American Public Power (“APPA”), or the Large Public Power Council (“LPPC”), and NATF.

The Team is also working with the private sector. As it relates to strategic partnerships with government and suppliers, last year the Authority announced the Center of Excellence with Siemens; work on that effort is continuing.

As it relates to Customer Resilience, the Authority have started to bring resilience into the forefront for its customers.
Transfer of Canal OPEB Liabilities into the NYPA Trust

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees will be requested at their January 26, 2021 meeting to approve the addition of Canal Corporation’s Other Post-Employment Benefits (‘OPEB’) Liabilities into the NYPA OPEB Trust effective January 1, 2021. Such an action will provide considerable benefit to NYPA largely by removing a significant liability from the NYPA Balance Sheet and providing more borrowing capacity to fund NYPA’s strategic investments consistent with Vision2030.

The Finance and Risk Committee is requested to recommend to the Trustees the approval of the aforementioned.

BACKGROUND

Other Post-Employment Benefits refers to the provision of health care coverage and other benefits by government agencies to retired employees and often to their spouses and other dependents. Aside from these benefits being provided to currently retired employees and their dependents, the government agencies also carry an obligation to provide benefits to currently active employees upon their future retirement, subject to certain eligibility rules defined by the government agency. In many cases, these benefits are reflected in collective bargaining agreements and are therefore contractual obligations.

The future obligation to provide post-employment benefits to both active and retired employees creates a liability of the agency. These obligations represent a multi-year stream of future benefits payments for retiree health care. NYPA adopted GASB 75 in 2017 which required reporting of future stream of any unfunded liabilities on its Balance Sheet.

Because the OPEB liabilities represent a multi-year stream of future benefits payments for retirees, spouses and dependents, the determination of the liabilities is provided through an actuarial assessment. The actuarial assessment is based upon an estimate of future benefits obligations that is discounted to the present value. The present value of the future obligations, when unfunded, is reported as an OPEB liability on the agency Balance Sheet.

To mitigate the potential impacts to NYPA’s financial standing and credit ratings resulting from unfunded OPEB liabilities, in 2007 NYPA created the Power Authority of the State of New York Other Post-Employment Benefits Trust Agreement (‘Trust Agreement’). The Board approved the initial funding of the Trust with $100 million out of the Operating Fund and up to $125 million of funding obtained through proceeds from the Authority’s Commercial Paper Series 3 Notes. One Hundred million dollars ($100M) was deposited into the Trust in 2007 and $125 million was added in 2008.

DISCUSSION

NYPA assumed ownership of the NY State Canal Corporation in January 2017. The Canal Corporation has accrued OPEB liabilities for its current and future retired employees and beneficiaries. However, the Canal OPEB liability was never funded. Therefore, the full Canal Corporation OPEB liability appears on the NYPA consolidated Balance Sheet. The 2021 projected OPEB liability for the Canal Corporation is $342 million. As is the case with NYPA, the Canal Corporation OPEB liability is determined based upon an actuarial analysis considering employee and retiree demographics, the retirement benefits provided to Canal Corporation retirees, projections of future healthcare costs and other relevant factors.
As the actuarial analysis is based upon a projection of multi-year healthcare benefits payments, these costs are present valued to the current year for reporting of the OPEB liability on the Balance Sheet. According to GASB 75, the present value rate used to discount the future projected benefit payments is based on the AA-rated Municipal Bond 20-Year Index rate (currently about 1.68 percent).

GASB 75 allows the use of a higher present value rate for Qualified Trusts. The discount rate used for the NYPA OPEB Trust is about 7 percent. At the much higher discount rate, OPEB liabilities have a much smaller present value. Therefore, less funds are required to be accrued in the Trust to pay for the OPEB liabilities. Canal Corporation’s OPEB liabilities, because they are converted to present value at a much lower discount rate, are considerably higher than they would be if pre-funded through a Qualifying Trust. Therefore, the impact to NYPA is twofold. First, the unfunded OPEB liabilities are reported on the NYPA Balance Sheet. Second, they are also larger in magnitude because of the lower discount rate used to compute the liabilities.

FISCAL INFORMATION

Since 2007, NYPA has contributed $340 million to its OPEB Trust. The Trust has performed well with a projected value by 2021 of $732 million. NYPA OPEB liabilities are projected to be about $537 million in 2021, leaving an estimated surplus of $195 million. Because the NYPA OPEB liabilities are fully funded, there are no OPEB liabilities for NYPA’s core business appearing on the NYPA Balance Sheet, providing an enhancement to NYPA’s financial position, and borrowing capacity.

The Canal OPEB liabilities on the NYPA Balance Sheet limit NYPA’s borrowing capacity. Without the OPEB liability on the NYPA Balance Sheet, there would be more capacity to borrow additional funds without impacting the target debt to equity ratio consistent with the Transmission rate cases. Removal from the Balance Sheet of the 2021 projected OPEB Liability of $342 million could increase borrowing capacity by an equivalent amount and increase NYPA’s investment capacity by up to $684M, which could be used to fund NYPA’s strategic programs under Vision2030.

The combination of the existing surplus in the NYPA OPEB Trust, along with the negative impact of the unfunded Canal OPEB liabilities on NYPA’s borrowing capacity, suggest a reasonable solution to move the OPEB liabilities into the NYPA Trust Fund. There are significant benefits of including Canal Corporation in the OPEB Trust including lower expense on income statement ($20M/year over 5.6 years), lower liability on Balance Sheet (liability goes to zero from $342M), the flexibility to optimize Trust surplus and improved capital capacity ($684M).

The decision to transfer the OPEB liabilities into the NYPA Trust is not irrevocable and NYPA could later choose to reverse the decision if other factors change.

RECOMMENDATION

The Executive Vice President and Chief Financial Officer request that the Finance and Risk Committee recommends that the Trustees approve the transfer of the Canal Corporation’s Other Post-Employment Benefits (‘OPEB’) liabilities into the New York Power Authority’s (‘NYPA’) OPEB Trust by approval of an amendment to the OPEB Trust Agreement to include payment of benefits to retirees of NYPA and its subsidiaries.

While other options have been examined, no other near-term options exist that can provide as much long-term advantage to NYPA as the one that has been recommended. NYPA will continue to pursue efforts to reduce the costs for providing retiree benefits. However, such efforts will provide benefits to NYPA regardless of the decision to transfer Canal Corporation’s OPEB liabilities to the NYPA Trust.
For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below.

Mr. Adam Barsky, Senior Vice President and Chief Financial Officer, provided highlights of the recommendation to the committee. He said, Other Post-Employment Benefits ("OPED"), which are primarily retiree health care costs, are reported on the Balance Sheet as liabilities, unless the company has a funded Trust to handle those liabilities. NYPA has a funded Trust in place for its employees; however, it does not have such a mechanism in place for Canals' employees, and this has resulted in an ever-growing liability on the Authority’s Balance Sheet. After exploring several options, and considering the pros and cons, it is recommended that the Authority transfer the Canal OPEB liability to the NYPA OPEB Trust. An amendment would be made to the Trust Agreement to include NYPA employees and its subsidiaries.

The NYPA Trust was created before the Canal Corporation became a subsidiary of NYPA. After reviewing the activities over the last few years, staff believes this action would be beneficial for the Authority in protecting its Balance Sheet and helping its capital capacity, while making sure it appropriately address the OPEB liabilities for both NYPA and Canals.

He continued that, as previously mentioned, the Authority did consider a number of different options and found this to be the best alternative. The Authority will continue its work in this area and will come back to the Trustees with various other options and recommendations at a later time. In the interim, this is the recommended course to take, going forward, to be able to strengthen NYPA’s Balance Sheet and address the liabilities issue.

In the event Canal employees went elsewhere from NYPA or any other factor, this decision is reversible.

On motion made by member Michael Balboni and seconded by member Dennis Trainor, the following resolution, as recommended by the President and Chief Executive Officer was unanimously adopted.

RESOLVED, That the Executive Vice President and Chief Financial Officer be, and hereby is, authorized to enter into that certain First Amendment to Power Authority of the State of New York Other Post-Employment Benefits Trust Agreement to amend that certain Other Post-Employment Benefits Trust Agreement dated November 21, 2007 (the “OPEB Trust Agreement”) for the purpose of expressly including service providers of the Authority’s subsidiaries thereunder and otherwise updating the OPEB Trust Agreement, subject to the approval of such amendment by the Executive Vice President and General Counsel or his designee; and be it further

RESOLVED, That the Finance and Risk Committee recommends that the Trustees approve that the Executive Vice President and Chief Financial Officer is hereby authorized to execute and deliver any and all other agreements, papers or instruments on behalf of the Authority that may be deemed necessary or desirable to carry out the foregoing, subject to the approval by the Executive Vice President and General Counsel.
b. Utility Operations

i. Marcy-New Scotland Transmission Upgrade Project
   Capital Expenditure Authorization Request

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees will be requested at their January 26, 2021 meeting to authorize capital expenditures in the amount of $208,320,800 for the Marcy to New Scotland Transmission Upgrade Project (‘Project’), formerly referred to as the AC Transmission Project. This funding will support final engineering, property acquisition, procurement and construction of the transmission line upgrades, upgrades at the Marcy substation, and the remaining system upgrades to the connecting Transmission Owners.

NYPA filed, and the Federal Energy Regulatory Commission (‘FERC’) approved a Project cost of $280.9 million or 37.5% of the total Project cost of $750M. LS Power Grid New York Corporation I (‘LS’) has submitted and received FERC’s approval for the balance of the Project. To date, the Trustees have approved capital expenditures in the amount of $31.1 million for the Project. At this time, the total Project cost estimate is expected to be $239.4 million, but the costs will continue to be assessed as the design and construction progresses. If additional funds are required, a future request will be made to the Finance and Risk Committee and Trustees. The Finance and Risk Committee, at its January 19, 2021, meeting, adopted a resolution recommending that the Trustees approve capital expenditures for continued implementation of the Project. Project staff does not anticipate this need prior to 2023.

BACKGROUND

In 2016, the Authority, together with North America Transmission (‘NAT’), started Project development and subsequently submitted responses to the New York Independent System Operator (‘NYISO’) issued AC Transmission Public Policy Transmission Needs Project Solicitation. A Participation Agreement (‘PA’) was entered into by the Authority and NAT on June 7, 2018. The PA was signed by NAT which changed its name to LS Power Grid New York LLC (‘LS LLC’). In January 2020, LS LLC assigned its rights in the Project and the PA to LS Power Grid New York Corporation I.

On April 8, 2019, the NYISO Board of Directors selected the Project as the winning proposal for segment A of the Transmission Need. In consideration of maintaining its purchase option under the PA, the Authority continued to fund 33% of Project development costs until July 28, 2020 when the Authority exercised its ownership option. Upon exercising its option, the Authority is responsible for 37.5% of the total Project costs. A reconciliation process for the change in responsibility of percentage of costs is currently ongoing.

In accordance with the Authority’s Capital Planning and Budgeting Procedures, capital expenditures in excess of $6 million require Trustee approval.

DISCUSSION

The Project will benefit New York State’s electric consumers by enabling the delivery of environmentally desirable power required to meet state energy goals, relieving uneconomic congestion, and replacing aging infrastructure while enhancing New York state’s already high standard of system reliability.
The Project is anticipated to be in-service by December 2023 and consists of the following:

- Replacement of approximately twelve (12) miles of conductor on existing Authority-owned 345kV structures;
- Removal of approximately eighty (80) miles of existing National Grid-owned circuits (115kV, 230kV and 345kV);
- Installation of approximately eighty (80) miles of new double- or two new single-circuit 345kV circuits;
- Installation of a new 345kV switchyard at Princeton;
- Removal of the existing National Grid-owned 230kV Rotterdam substation; and
- Installation of a new 345kV substation at Rotterdam.

The Project also includes the upgrade of substation facilities, as determined during the system impact and facility studies. These costs are not included in the $750 million estimate but are the responsibility of LS and the Authority.

The Finance and Risk Committee is requested to recommend approval of capital expenditures of $208.3 million. This funding will be utilized for:

- Engineering/Licensing/Proposal $ 1,125,600
- Property Rights Acquisition $ 22,318,900
- Procurement $ 46,185,600
- Construction $137,102,800
- Authority Direct and Indirect Expenses $ 1,587,900

TOTAL $ 208,320,800

FISCAL INFORMATION

Payment associated with this Project will be made from the Authority’s Capital Fund and will be eligible for cost recovery as approved by FERC. The proposed spending has been included in the approved 2021 Capital Budget and Four-Year Capital Plan.

RECOMMENDATION

It is requested that the Finance and Risk Committee recommend that the Trustees authorize capital expenditures in the amount of $208,320,800 to support final engineering, property acquisition, procurement and construction of the transmission line upgrades, upgrades at the Marcy substation, and the remaining system upgrades to the connecting Transmission Owners for the Marcy to New Scotland Transmission Upgrade Project.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below.”

Ms. Patricia Lombardi, Vice President of Project Management, provided highlights of staff’s recommendation to the committee.

On motion made by member Michael Balboni and seconded by member Dennis Trainor, the following resolution, as recommended by the President and Chief Executive Officer, was unanimously adopted.
RESOLVED, That the Finance and Risk Committee recommends that the Trustees, in accordance with the Authority's Capital Planning and Budgeting Procedures, approve capital expenditures in the amount of $208,320,800 for the Marcy to New Scotland Transmission Upgrade Project.

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<tr>
<th>Capital</th>
<th>Expenditure</th>
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<tr>
<td>Marcy to New Scotland Transmission Upgrade Project</td>
<td>$208,320,800</td>
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ii. Smart Generation & Transmission Initiative Communications Backbone Program – Capital Expenditure Authorization Request

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees will be requested at their January 26, 2021 meeting to approve additional capital expenditures in the amount of $24,752,178 for the Communications Backbone Program (‘Program’). The increased funding would be in addition to the $153 million currently authorized by the Trustees, bringing the total Program cost to $177,782,358.

The Finance and Risk Committee is requested to recommend to the Trustees the approval of additional capital expenditures in the amount of $24,752,178 for continued implementation of the Program.

BACKGROUND

In accordance with the Authority’s Capital Planning and Budgeting Procedures, capital expenditures in excess of $6 million require Trustee approval.

The Program was initially identified as a foundational element of the Authority’s Smart Generation & Transmission (‘Smart G&T’) Strategic Initiative. The goal of the Program is to establish a dedicated, redundant communications network that builds on the Authority’s existing infrastructure and is integrated into the long-term asset strategy while leveraging available infrastructure from independent dark-fiber service providers to reduce dependency on commercial telecommunication providers. With VISION2030, the Program continues to be a key enabler to achieving NYPA’s strategic priorities, including the development of new products and services.

Once completed, the Authority will have a dedicated, robust, secure, and scalable communications network that supports:

- Replacement of legacy point-to-point circuits that will inevitably need to be retired;
- Increased data flow from a host of intelligent end-point devices deployed throughout the Authority’s generation and transmission assets;
- Enabling capabilities of key components of the Strategic Vision including the Integrated Smart Operating Center (‘iSOC’) and the Emergency Energy Control Center; and
- Improved analytics to promote improved business and operational decisions.

At the onset of the Program, the Authority evaluated three options when considering a solution for an improved communications system. The first option was to continue with a total leased solution. Second, a total-owned solution, in which the Authority would deploy fiber optical ground wire (‘OPGW’) along all its transmission lines. Last, a hybrid solution utilizing a mix of OPGW, digital microwave networks, and dark fiber leasing.

The hybrid solution offers the Authority the best value, including many of the controls and security benefits of a fully-owned solution while reducing implementation costs and resource needs. The scope of the hybrid solution is to install OPGW, microwave communications, and utilize capitalized leases for dark fiber in the Authority’s regions. The redundant network will leverage existing infrastructure and new installations including fiber OPGW which will be installed on the Authority’s existing transmission towers. A new redundant microwave system will be installed in Northern NY and a new system will be installed in the Southeast NY region, leveraging existing Authority infrastructure as well as tower leasing sites for
optimum communication and stability. Leasing of dark fiber provides a secondary fiber path to all major sites in each region.

DISCUSSION

Capital expenditures in the amount of $153,030,180 were previously approved by the Trustees for implementation of the Program as follows:

- $19.78 million - March 2017,
- $77.5 million - October 2018, and
- $52.72 million - December 2019

OPGW has been installed on the following NYPA transmission lines: NR2, CCDA, DART44, GF5, GNS1, MMS, PS1 and PV20 which totals completing installation of OPGW for approximately 210 miles out of 530 miles. Furthermore, the engineering for all OPGW work has been completed except the MSU section that has been descoped. Also, fiber electronics Phase 1 has been installed, and all equipment for Phases 2 and 3 have been purchased. A lease fiber connection from CEC to Plattsburgh has been completed. Lastly, a lease connection from Dolson Avenue to White Plains has been commissioned.

After the spring 2020 outage work was canceled and contracts were paused due to the COVID-19 pandemic, the Program cost and scope were re-evaluated, and the Estimate at Completion has increased to $177,782,358 due to the following changes:

- Increased cost:

  1. OPGW installation cost increase:
     a. Fall 2019 & Spring 2020 outage cancelations
     b. Additional constraints required per regulatory permits
     c. Addition of aviation subject-matter experts
     d. Contingencies required for installation during the summer peak period, with potential 72-hour recalls
     e. OPGW third party tie-in implementation re-evaluation

  2. Increase in the cost of the Northern New York microwave installation
     a. Unplanned, unforeseen station upgrades
     b. Temporary migration to and from the DANC dark fiber to commission the project

  3. New fiber lease connection between Plattsburgh and Albany was added as a secondary path out of Northern New York to increase network resiliency. This was not an option at the onset of the Program but was added since MSU was descoped.

  4. The original estimate of 3% for project direct cost has been increased to 6% based.

  5. Capital indirect costs increased from 5% to 12%, due to the Authority’s policy change in July 2020.

- Decreased cost:

  1. OPGW installation on MSU1, MW1, and WPN1 transmission lines have been removed from the project scope.
FISCAL INFORMATION

Payment associated with this Program will be made from the Authority’s Capital Fund and 65% of the cost will be recovered under the Authority’s FERC approved formula rate. The proposed spending has been included in the approved 2021 Capital Budget and Four-Year Capital Plan.

RECOMMENDATION

It is requested that the Finance and Risk Committee recommend that the Trustees approve additional capital expenditures in the amount of $24,752,178 to continue implementation of the Communications Backbone Program.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below:"

Ms. Patricia Lombardi, Vice President of Project Management, provided highlights of the recommendation to the committee.

On motion made by member Michael Balboni and seconded by member Dennis Trainor, the following resolution, as recommended by the President and Chief Executive Officer was unanimously adopted.

RESOLVED, That the Finance and Risk Committee recommendation that the Trustees authorize capital expenditures in the amount of $24,752,178 are hereby authorized in accordance with, and as recommended in, the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Authority will use Capital Funds, which may include proceeds of debt to finance the costs of the Smart Generation & Transmission Initiative Communications Backbone Program.

<table>
<thead>
<tr>
<th>Capital Authorization</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Generation &amp; Transmission Initiative Communications Backbone Program</td>
<td>$24,752,178</td>
</tr>
</tbody>
</table>
iii. Transmission Life Extension & Modernization Program
Niagara Switchyard Life Extension & Modernization Project – Capital Expenditure Authorization Request

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees will be requested at their January 26, 2021 meeting to approve capital expenditures in the amount of $121 million for the continued implementation and completion of the Transmission Life Extension and Modernization (‘TLEM’) Program – Niagara Switchyard Life Extension & Modernization Project (‘Project’).

The total estimated Project cost is $276 million. The Trustees approved $154.7 million at their May 22, 2014 meeting. This request will release the final balance of the capital expenditures for the Project.

The Finance and Risk Committee is requested to recommend to the Trustees the approval of capital expenditures in the amount of $121 million, to continue implementation and complete the Project.

BACKGROUND

In accordance with the Authority’s Capital Planning and Budgeting Procedures, capital expenditures in excess of $6 million require Trustee approval.

The TLEM Program is a multiyear program that will upgrade the Authority’s existing transmission system to maintain availability, increase reliability and ensure regulatory compliance. The TLEM Program encompasses transmission assets in the Central, Northern, and Western regions and has been divided into several projects at an estimated cost of $726 million.

The Niagara Switchyard is a critical component of the Authority’s transmission system. The existing equipment at the Niagara Switchyard are at, or near the end-of-life and require replacement. The Project, which commenced in 2014, is structured to prioritize the replacement of poor performing systems and sequenced in conjunction with planned equipment outages, internal resource availability and external utility upgrades.

DISCUSSION

The Niagara Switchyard Life Extension & Modernization Project is a multiyear project within the TLEM Program and includes replacement or upgrades to the 115kV and 230kV Switchyard equipment, including:

1. Oil Circuit Breakers (115kV & 230kV)
2. 13.8kV Switchgear
3. Autotransformers
4. Disconnect Switches and Motorized Disconnect Switches
5. Grounding (Sections)
6. Measurement Transformers
7. Insulators
8. Conductors
The Project is structured to align with the Niagara Relay Replacement Project. Through 2020, two Autotransformers, sixteen (16) 115kv Circuit Breakers, nine (9) 230kV Circuit Breakers, the 115kV Bus, disconnects switches and other ancillary equipment have been replaced. Beginning in 2021, the remaining project activities will replace two (2) Autotransformers, five (5) 115kv Circuit Breakers, twenty-one (21) 230kV Circuit Breakers, the 13.8kV Switchgear, motor and manually operated disconnect switches and other ancillary equipment. Completion is targeted in 2025, subject to approved outages.

Capital expenditures in the amount of $154.7 million were previously authorized, of which $105,610,052 has been spent through November 2020. The current request of $121 million includes the remaining balance of capital funds needed to complete the Project, scheduled through 2025, and is comprised as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering/Design</td>
<td>$10,650,000</td>
</tr>
<tr>
<td>Procurement</td>
<td>$39,720,000</td>
</tr>
<tr>
<td>Construction/Installation</td>
<td>$43,080,000</td>
</tr>
<tr>
<td>Authority Direct and Indirect Expenses</td>
<td>$27,550,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$121,000,000</strong></td>
</tr>
</tbody>
</table>

The estimated cost to continue and complete execution of the project is $121 million, of which $266.9 million was previously presented to the Trustees in May 2014. The higher estimate to complete the Project is due to the increase in indirect costs as a result of the Authority’s Policy Change adopted in July 2020, which increased the indirect capital allocation from 5% to 12%, retroactive to January 2020.

FISCAL INFORMATION

Payments associated with this Project will be made from the Authority’s Capital Fund and will be recovered under the Authority’s FERC approved formula rate.

The proposed spending has been included in the approved 2021 Capital Budget and Four-Year Capital Plan.

RECOMMENDATION

It is requested that the Finance and Risk Committee recommend that the Trustees approve capital expenditures in the amount of $121 million for the continued implementation and completion of the Transmission Life Extension and Modernization Program – Niagara Switchyard Life Extension & Modernization Project.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below.”

Ms. Patricia Lombardi, Vice President of Project Management, provided highlights of the recommendation to the committee.

On motion made by member Michael Balboni and seconded by member Dennis Trainor, the following resolution, as recommended by the President and Chief Executive Officer was unanimously adopted.
RESOLVED, That the Finance and Risk Committee recommends that the Trustees, pursuant to the Authority’s Capital Planning and Budgeting Procedures, approve capital expenditures in the amount of $121,000,000 for the continued implementation and completion of the Transmission Life Extension and Modernization Program – Niagara Switchyard Life Extension & Modernization Project, in accordance with, and as recommended in, the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Authority will use Capital Funds, which may include proceeds of debt issuances, to finance the costs for the aforementioned project.

<table>
<thead>
<tr>
<th>Capital Authorization</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLEM – Niagara Switchyard LEM</td>
<td>$121,000,000</td>
</tr>
</tbody>
</table>
iv. Transmission Life Extension & Modernization Program
Niagara Protective Relay Replacement Project – Capital Expenditure Authorization Request

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees will be requested at their January 26, 2021 meeting to approve capital expenditures in the amount of $18.3 million for the continued implementation and completion of the Transmission Life Extension and Modernization Program – Niagara Protective Relay Replacement Project (‘Project’).

The total estimated Project cost is $44.2 million. The Trustees approved $25.9 million in 2012. This request will release the final balance of the capital expenditures for the Project.

The Finance and Risk Committee is requested to recommend to the Trustees the approval of capital expenditures in the amount of $18.3 million to continue implementation and complete the Project.

BACKGROUND

In accordance with the Authority’s Capital Planning and Budgeting Procedures, capital expenditures in excess of $6 million require Trustee approval.

The Transmission Life Extension and Modernization (‘TLEM’) Program is a multiyear program that will upgrade the Authority’s existing transmission system to maintain availability, increase reliability and ensure regulatory compliance. The TLEM Program encompasses transmission assets in the Central, Northern, and Western regions and has been divided into several projects at an estimated cost of $726 million.

The Authority is facing a growing need to replace existing protective relaying systems at its facilities. This is due to many factors including unavailability of spare parts, lack of original equipment manufacturer support and poor reliability. This Project will continue to replace the existing protective relay systems at the Niagara Switchyard.

DISCUSSION

The Niagara Protective Relay Replacement Project is a multiyear project within the TLEM Program and includes protective relay upgrades to the 115kV and 230kV switchyard equipment. The protective relay system is a critical component of the power system and ensures its reliable and safe operation. The protective relay systems at the Niagara Switchyard are at, or near their end-of-life and require replacement. The Project, which commenced in 2012, is structured to prioritize the replacement of poor performing relay systems and sequenced in conjunction with planned equipment outages, internal resource availability and utility upgrades.

This Project was initiated in 2012, and through 2020 protective relays have been upgraded in Bays 11, 12, 13, 15, 16, 17, 19, 20, 23 and the 115kV Bus sections. The remaining project activities include replacement of protective relays for Bays 10, 14, 18, 22 through 26 and the 230kV Bus sections. Completion is targeted in 2025, subject to approved outages.

Capital expenditures in the amount of $25.9 million were previously authorized, of which $23,236,620 has been spent through November 2020. The current request of $18.3 million includes the remaining balance of capital funds needed to complete the Project, scheduled through 2025, and is comprised as follows:
The estimated cost to continue implementation and complete the Project is $18.3 million. A total estimate of $52.2 million was previously presented to the Trustees in October 2012. Through lessons learned and efficiencies gained, the new Project total estimate is $44.2 million, which represents a decrease of $8 million from the previous estimate.

FISCAL INFORMATION

Payments associated with this Project will be made from the Authority’s Capital Fund and will be recovered under the Authority’s FERC approved formula rate.

The proposed spending has been included in the approved 2021 Capital Budget and Four-Year Capital Plan.

RECOMMENDATION

It is requested that the Finance and Risk Committee recommend that the Trustees approve capital expenditures in the amount of $18.3 million for the continued implementation and completion of the Transmission Life Extension and Modernization Program – Niagara Protective Relay Replacement Project.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below.”

Ms. Patricia Lombardi, Vice President of Project Management, provided highlights of the recommendation to the committee.

On motion made by member Michael Balboni and seconded by member Dennis Trainor, the following resolution, as recommended by the President and Chief Executive Officer was unanimously adopted.

RESOLVED, That the Finance and Risk Committee recommends that the Trustees, pursuant to the Authority’s Capital Planning and Budgeting Procedures, approve capital expenditures in the amount of $18,300,000 for the continued implementation and completion of the Transmission Life Extension and Modernization Program – Niagara Protective Relay Replacement Project, in accordance with, as recommended in, the foregoing report of the President and Chief Executive Officer; and be it further
RESOLVED, That the Authority will use Capital Funds, which may include proceeds of debt issuances, to finance the costs for the aforementioned project.

<table>
<thead>
<tr>
<th>Capital</th>
<th>Expenditure Authorization</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLEM – Niagara Protective</td>
<td>$18,300,000</td>
</tr>
</tbody>
</table>
v. Blenheim-Gilboa Power Project  
Circuit Breaker Replacement Project –  
Capital Expenditure Authorization  
Request and Contract Award

The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees will be requested at their January 26, 2021 meeting to approve capital expenditures in the amount of $10,544,000 and approve the award of a four-year contract to ABB Enterprise Software Inc., of Cary, NC, (“ABB”) in the amount of $1,458,135 to complete design, fabrication, testing, delivery, and installation of ISO Phase Bus work associated with three indoor SF6 generator/motor protection circuit breakers at the Blenheim-Gilboa (“B-G) Power Project (the ‘Project’).

Capital Expenditures in the amount of $250,000, for preliminary engineering and planning, were previously approved by the President and Chief Executive Officer, bringing the total estimated Project cost to $10.8 million. Also, interim funding for the contract award to ABB, in the amount of $200,000, was approved by the Executive Vice President and Chief Operating Officer in December 2020.

The Finance and Risk Committee is requested to recommend to the Trustees the approval of capital expenditures in the amount of $10,544,000 and approve a four-year contract to ABB in the amount of $1,458,135 for engineering, procurement, and construction services, for the implementation of the Project.

BACKGROUND

In accordance with the Authority’s Capital Planning and Budgeting Procedures, capital expenditures in excess of $6 million require Trustee approval.

Section 2879 of the Public Authorities Law and the Authority’s Guidelines for Procurement Contracts requires Trustee approval for procurement contracts involving services to be rendered for a period in excess of one year.

B-G Unit-1 breaker was replaced in May 2019 due to a catastrophic, sudden failure in September 2018. Following a root cause analysis and to mitigate the risk of another failure, the breakers for B-G Units 2-4 will be replaced with newly designed breakers. Consequently, the ISO Phase Bus will be modified to accommodate the new breaker design and a maintenance link will be added to facilitate maintenance, as was done for Unit-1.

DISCUSSION

The scope of this project includes design, fabrication, testing, site delivery, removal of existing, and installation of three, new indoor SF6 generator/motor protection circuit breakers (plus one spare breaker), its associated ISO Phase Bus work and maintenance disconnect links, at the B-G Project. ABB will design and furnish the three breakers under a separate equipment contract. B-G operations and maintenance crew and resources will remove the existing and install the new breakers. ABB will also design, furnish and install the ISO Phase Bus work and maintenance disconnect links associated with breakers as part of the Request for Proposal (‘RFP’) described below. One breaker and associated ISO Phase bus work installation per year is planned with anticipated project closeout to occur by December 2024.

The Authority issued RFP, No. Q20-7040MH, which was advertised in the NYS Contract Reporter on September 24, 2020. The Discovery tool of the ARIBA event was activated for this RFP. Thirteen
potential bidders were invited/requested to participate to this RFP. On October 28, 2020, two proposals were received as summarized in the table below.

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABB Enterprise Software Inc. (ABB)</td>
<td>Cary, NC</td>
</tr>
<tr>
<td>Haugland Energy Group LLC</td>
<td>Plainview, NY</td>
</tr>
</tbody>
</table>

Proposals were reviewed by an Evaluation Committee comprised of representatives from Engineering, Quality Assurance, Strategic Supply Management, B-G Operations, and Project Management. The proposals were evaluated based upon proposal completeness, experience, schedule, price, responsiveness to the requirements of the RFP, proposed team, and technical and commercial exceptions taken to the RFP.

Since the breakers are critical assets to the Bulk Electric System (“BES”), replacement must be procured from suppliers that are compliant with NERC CIP-013 requirements and qualified as BES equipment suppliers to the Authority. NERC-CIP13 review was completed and approved by the Authority’s cross functional team. The review consisted of questionnaire related to Network Security Risk, Platform and Data Security Risk, Technology Risk, Cyber Threat, and Manufacturing and Development Risk. The RFP event was also reviewed for compliance with the Executive Order (“EO”) 13920 “Securing the United States Bulk Power System.” After reviewing the EO, it was considered not applicable to this Contract. Minority/Women-Owned Business Enterprise (‘M/WBE’) and Service-Disabled Veteran-Owned (‘SDVOB’) participation goals were waived on the RFP.

The committee concluded that ABB submitted the lowest-priced and technically acceptable bid. ABB has extensive experience in construction of this magnitude, has performed well on previous Authority projects, has demonstrated knowledge of the scope-of-work and is capable of completing this project in accordance with the schedule.

Preliminary funding in the amount of $250,000 was approved to start this Project. The total capital expenditure authorization request is comprised of the following:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Engineering</td>
<td>$ 50,000</td>
</tr>
<tr>
<td>Detailed Engineering</td>
<td>$ 262,500</td>
</tr>
<tr>
<td>Equipment Procurement / Fabrication</td>
<td>$ 5,500,000</td>
</tr>
<tr>
<td>Construction/ Installation</td>
<td>$ 1,935,000</td>
</tr>
<tr>
<td>Authority Direct and Indirect Expense</td>
<td>$ 3,046,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 10,794,000</strong></td>
</tr>
</tbody>
</table>

**FISCAL INFORMATION**

Payments associated with this project will be made from the Authority’s Capital Fund.
RECOMMENDATION

It is requested that the Finance and Risk Committee recommend that the Trustees approve capital expenditures in the amount of $10,544,000 and approve a four-year contract to ABB Enterprise Software Inc., in the amount of $1,458,135, for engineering, procurement, and construction services, for implementation of the Blenheim-Gilboa Power Project Circuit Breaker Replacement Project.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

Ms. Patricia Lombardi, Vice President of Project Management, provided highlights of the recommendation to the committee.

On motion made by member Michael Balboni and seconded by member Dennis Trainor, the following resolution, as recommended by the President and Chief Executive Officer was unanimously adopted.

RESOLVED, That the Finance and Risk Committee recommends that, pursuant to the Authority's Capital Planning and Budgeting Procedures, the Trustees approve capital expenditures in the amount of $10,544,000 for the replacement of breakers for BG Units 2-4 in accordance with, and as recommended in, the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Authority will use capital funds, which may include proceeds of debt, to finance the costs of the BG Units 2-4 Breaker Replacement Project.

<table>
<thead>
<tr>
<th>Capital Authorization</th>
<th>Expenditure Authorization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blenheim-Gilboa Power Project</td>
<td>$10,544,000</td>
</tr>
<tr>
<td>Replace BG 2-4 Unit Breakers</td>
<td></td>
</tr>
</tbody>
</table>

AND BE IT FURTHER RESOLVED, That the Finance and Risk Committee recommends that, pursuant to the Guidelines for Procurement Contracts adopted by the Authority and the Authority's Expenditure Authorization Procedures, the Trustees approve a four-year contract award in the amount of $1,458,135, for the aforementioned project;

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABB Enterprise Software Inc. (ABB)</td>
<td>$1,458,135</td>
</tr>
<tr>
<td>(Q20-7040MH)</td>
<td></td>
</tr>
</tbody>
</table>
vi. **St. Lawrence-FDR Power Project**  
**Long Sault Dam Positive Restraint Barrier Project – Capital Expenditure Authorization Request and Contract Award**

The President and Chief Executive Officer submitted the following report:

"**SUMMARY**

The Trustees will be requested at their January 26, 2021 meeting to approve capital expenditures in the amount of $11,831,700 and the award of a two-year contract to HOHL Industrial Inc., of Buffalo, NY, in the amount of $8.1 million for engineering, procurement, and construction services required to install a Positive Restraint Barrier upstream of the Long Sault Dam (‘LSD’) at the St. Lawrence-FDR Power Project (the ‘Project’). Interim funding in the amount of $1,000,000 was previously approved by the Chief Operating Officer, to initiate the design and engineering of the barrier system and begin the geotechnical planning.

Capital Expenditures in the amount of $1,000,000, for preliminary engineering and planning, were previously approved by the President and Chief Executive Officer, bringing the total estimated Project cost to $12.8 million.

The Finance and Risk Committee is requested to recommend to the Trustees the approval of capital expenditures in the amount of $11,831,700 and the approval of a two-year contract to HOHL Industrial Inc., in the amount of $8.1 million for engineering, procurement, and construction services, for the implementation of the Project.

**BACKGROUND**

In accordance with the Authority’s Capital Planning and Budgeting Procedures, capital expenditures in excess of $6 million require Trustee approval.

Section 2879 of the Public Authorities Law and the Authority’s Guidelines for Procurement Contracts requires Trustee approval for procurement contracts involving services to be rendered for a period in excess of one year.

The LSD is a 2,960-foot-long curved concrete gravity structure with 30 gated spillway bays. At the south end of the spillways are three non-overflow blocks and an earth embankment. At the north end of the spillways are 16 non-overflow blocks, four of which contain service and equipment rooms.

The present operation of the LSD is to serve power generation, via operation of the spillway gates. The gates function to spill excess flows from the St. Lawrence River, when necessary, in the operation of the Robert Moses/Robert H. Saunders Power Dam. LSD spillway gates have been operated more frequently in recent years due to higher than normal river flows and to account for economic conditions as Zone D has a high concentration of wind generation. Power Dam operations must still meet river flow requirements by spilling at LSD when these situations arise.

To ensure safety and minimize access by unauthorized persons, the Authority, at the direction of the Federal Energy Regulatory Commission (‘FERC’) was tasked with installing a positive-restraint barrier system, upstream of the LSD. The Authority was required to submit a schedule for design to FERC for review by December 31, 2020 and complete construction by October of 2021. To meet this aggressive schedule, it is critical to award and start design immediately.

The scope of this Project includes engineering, design, fabrication, and installation of an approximately 4,500-ft boat denial barrier, upstream of the LSD. To support the installation and future
maintenance of the barrier, design, engineering, and installation of a boat launch is also required as part of the scope of work.

**DISCUSSION**

The Authority issued Request for Proposal Q20-7073NF (‘RFP’) through the Ariba system, which was advertised in the New York State *Contract Reporter* on October 26, 2020. Twenty (20) firms were invited into the Ariba Event and eighty-two (82) firms viewed the RFP on the Authority’s Strategic Supply Management (‘SSM’) website. A bid walk was held November 4, 2020, with eight (8) firms in attendance. One addendum was issued on November 13, 2020. Two proposals were received on December 1, 2020.

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOHL Industrial Services</td>
<td>Buffalo, NY</td>
</tr>
<tr>
<td>JF Brennan Company</td>
<td>La Crosse, WI</td>
</tr>
</tbody>
</table>

Proposals were reviewed by an Evaluation Committee comprised of representatives from Engineering, Strategic Supply Management, St. Lawrence Maintenance, Program Controls, and Project Management. The proposals were evaluated based upon proposal completeness, experience, schedule, price, responsiveness to the requirements of the RFP, proposed team, and technical and commercial exceptions taken to the RFP.

HOHL’s proposal was found to be compliant with the requirements of the bid documents. Additionally, HOHL provided quality control, environmental, and safety plans. HOHL can meet the schedule and has demonstrated execution of similar work for another customer.

Preliminary funding in the amount of $1,000,000 was recently approved to start engineering and required geotechnical plans and surveys. The total capital expenditure authorization request is comprised of the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Engineering</td>
<td>$450,000</td>
</tr>
<tr>
<td>Detailed Engineering</td>
<td>$1,086,100</td>
</tr>
<tr>
<td>Procurement</td>
<td>$2,125,800</td>
</tr>
<tr>
<td>Construction/ Installation</td>
<td>$6,526,100</td>
</tr>
<tr>
<td>Authority Direct and Indirect Expense</td>
<td>$2,643,700</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$12,831,700</strong></td>
</tr>
</tbody>
</table>

**FISCAL INFORMATION**

Payments associated with this project will be made from the Authority’s Capital Fund.

**RECOMMENDATION**

It is requested that the Finance and Risk Committee recommend that the Trustees approve capital expenditures in the amount of $11,831,700 and approve a two-year contract to HOHL Industrial Inc., in the amount of $8.1 million for engineering, procurement, and construction services, for the implementation of the Long Sault Dam Positive Restraint Barrier Project.
For the reasons stated, I recommend the approval of the above-requested action by adoption of
the resolution below.

Ms. Patricia Lombardi, Vice President of Project Management, provided highlights of the
recommendation to the committee.

On motion made by member Michael Balboni and seconded by member Dennis Trainor, the
following resolution, as recommended by the President and Chief Executive Officer was unanimously
adopted.

RESOLVED, That the Finance and Risk Committee
recommends that, pursuant to the Authority’s Capital Planning
and Budgeting Procedures, the Trustees approve capital
expenditures in the amount of $11,831,700 for the installation of
the Positive Restraint Barrier to be located upstream of the Long
Sault Dam at the St. Lawrence-FDR Power Project, in
accordance with, and as recommended in, the foregoing report
of the President and Chief Executive Officer; and be it further

RESOLVED, That the Authority will use capital funds,
which may include proceeds of debt, to finance the costs for the
Long Sault Dam Positive Restraint Barrier Project.

<table>
<thead>
<tr>
<th>Capital</th>
<th>Expenditure Authorization</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Lawrence-FDR Power Project</td>
<td>$11,831,700</td>
</tr>
<tr>
<td>Long Sault Dam</td>
<td></td>
</tr>
<tr>
<td>Positive Restraint Barrier</td>
<td></td>
</tr>
</tbody>
</table>

AND BE IT FURTHER RESOLVED, That the Finance and Risk
Committee recommends that, pursuant to the Guidelines for
Procurement Contracts adopted by the Authority and the
Authority’s Expenditure Authorization Procedures, the Trustees
approve a two-year contract award in the amount of $8.1 million, for
the aforementioned project;

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Contract Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOHL Industrial Inc.</td>
<td>$8,100,000</td>
</tr>
<tr>
<td>Buffalo, NY</td>
<td></td>
</tr>
</tbody>
</table>

(Q20-7073NF)
The President and Chief Executive Officer submitted the following report:

“SUMMARY

The Trustees will be requested at their January 26, 2021 meeting to approve the award of a 15-year design, manufacture, and delivery contract to GE Renewables US LLC ('GE') of Greenwood Village, CO in the amount of $18.1 million. This award includes $3.2 million in escalation over the life of the contract for the Next Generation Niagara ('NGN') – Mechanical and Electrical Upgrades Project – Shaft Procurement. In addition, the Trustees are requested to waive the New York Buy America Act requirements regarding the purchase of steel components.

The Finance Committee is requested to recommend to the Trustees the approval of the aforementioned contract.

BACKGROUND

Section 2879 of the Public Authorities Law and in accordance with the Authority’s Expenditure Authorization Procedures, the award of non-personal services contracts in excess of $6 million require the Trustees’ approval.

NGN is comprised of four main projects: (1) controls upgrade, (2) mechanical and electrical upgrades, (3) 630-ton gantry crane replacement, and (4) penstock platform and inspections. This contract is for the design, manufacture, and delivery of the shafts required to support the Mechanical and Electrical Upgrades project. The Mechanical and Electrical Upgrades project will have future, separate contract(s) for procurement of other major material and to perform the remaining work.

The scope-of-work under this contract is for design, manufacture, and delivery of thirteen (13) shafts and one (1) thrust runner. The shafts will be received and installed by Authority craft in support of the NGN Mechanical and Electrical Upgrades.

It is anticipated that the next contract to be submitted for Trustee approval will be for unit overhauls starting in 2023, which is tentatively scheduled to be presented to the Trustees at the May 2021 meeting. The overall Program is estimated for completion by 2034.

DISCUSSION

A Request for Proposal ('RFP'), Inquiry No. Q20-6925HM, was issued through the Authority’s Ariba system and was advertised in the NYS Contract Reporter on March 24, 2020. A total of twelve (12) firms were invited into the Ariba Event with forty-five (45) firms having viewed the RFP on the Strategic Supply Management website. Seven (7) proposals were received through Ariba on June 12, 2020. The list of Bidders is below:

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE Renewables US LLC</td>
<td>Greenwood Village, CO</td>
</tr>
<tr>
<td>Andritz Hydro Corp</td>
<td>Charlotte, NC</td>
</tr>
<tr>
<td>Voith Hydro, Inc.</td>
<td>York, PA</td>
</tr>
<tr>
<td>Gracon LLC</td>
<td>Lafayette, CO</td>
</tr>
</tbody>
</table>
The Evaluation Committee, comprised of representatives from Strategic Supply Management, Mechanical Engineering, Project Delivery, Control Room Operations, Mechanical Maintenance, Quality Assurance, Environmental, Health and Safety, Project Management, and Program Controls, reviewed and evaluated the proposals based on the evaluation criteria established in the RFP which included: best value, proposal completeness, technical capabilities, ability to meet the schedule, experience in performing this type of work, and safety records.

The RFP event was also reviewed for compliance with the Executive Order (‘EO’) 13920 ‘Securing the United States Bulk Power System.’ After reviewing the EO, it was considered not applicable to this Contract. The proposals were also reviewed for compliance with the New York Buy American Act. After review, it was recommended that this requirement be waived based on the cost savings of 50% that would be realized to the Authority. Requirements for Minority and Women-Owned Business Enterprise and Service-Disabled Veteran-Owned Business were waived on this contract.

The current RM shafts are original to the plant and have been in service for 60 years. As such, it is not likely that the existing shafts will provide the Authority’s Robert Moses Niagara Power Plant with another 60+ years of reliable service. At the Authority’s adjacent Lewiston Pump Storage Plant (‘LPGP’), replacement of the shafts was not included in the base scope of the ongoing LPGP LEM Program, but the option to replace the shafts was immediately exercised when circumferential cracking was discovered upon the first unit disassembly. With this lesson learned and the Authority’s collaboration with hydropower technical leads from domestic and international plants from CEATI’s Hydraulic Plant Life Interest Group, it is in the Authority’s best interest to replace all the shafts.

GE was determined to be the best value based on its strength of experience, ongoing support throughout the life of the project, a well, thought-out project execution plan, high quality manufacturing processes, ability to address the Authority’s requirements and expectations, and best value proposal. This best value proposal also provides the competitive pricing that allows for the replacement of all 13 shafts and streamlining manufacturing and the schedule over the course of this project.

The proposed spending for this contract is in alignment with the original program estimates for this work, which were approved by the Trustees at their July 2019 meeting and has been included in the approved Four-Year capital plan.

**FISCAL INFORMATION**

Payment associated with this Project will be made from the Authority’s Capital Fund. Funding in the amount of $224 million has been authorized, to date, for the Next Generation Niagara Program, which is estimated at $1.1 billion, to complete preliminary engineering, conduct engineering and design, material procurement, implement limited construction, and Authority direct/indirect costs. The balance, to be authorized at future Trustee meeting(s), is estimated at $876 million for the remaining work associated with this program.

**RECOMMENDATION**

It is requested that the Finance and Risk Committee recommend that the Trustees approve a 15-year contract in the amount of $18.1 million, which includes $3.2 million in escalation over the life of the contract, to GE Renewables US LLC of Greenwood Village, CO for design, manufacture, and delivery of the shafts in support of the Next Generation Niagara Program – Mechanical and Electrical Upgrades.
Project. In addition, it is requested that the Finance and Risk Committee recommend that the Trustees waive the New York Buy America Act requirements regarding the purchase of steel components.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

Ms. Patricia Lombardi, Vice President of Project Management, provided highlights of the recommendation to the committee.

On motion made by member Michael Balboni and seconded by member Dennis Trainor, the following resolution, as recommended by the President and Chief Executive Officer was unanimously adopted.

RESOLVED, That the Finance and Risk Committee recommends that the Trustees, pursuant to the Guidelines for Procurement adopted by the Authority and the Authority’s Expenditure Authorization Procedures, approve the award of a 15-year contract to GE Renewables US LLC in the amount of $18,100,000 for the design, manufacture, and delivery of the shafts in support of the Next Generation Niagara Program - Mechanical and Electrical Upgrades Project; and be it further

RESOLVED, That the Finance and Risk Committee recommends that the Trustees waive the requirements of the New York Buy America Act for this contract award; and be it further

RESOLVED, That the Authority will use Capital Funds, which may include proceeds of debt issuances, to finance the costs of the Next Generation Niagara – Mechanical and Electrical Upgrades Project – Shafts Procurement;

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Contract Approval</th>
</tr>
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<tbody>
<tr>
<td>GE Renewables US LLC</td>
<td>$18.1 million</td>
</tr>
<tr>
<td>Greenwood Village, CO</td>
<td></td>
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<tr>
<td>RFP # Q20-6925HM</td>
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</table>
5. CONSENT AGENDA:

a. Approval of the Minutes of the Joint Meeting held on November 17, 2020

On motion made by member Dennis Tranor and seconded by member John Koelmel, the Minutes of the Joint Meeting held on November 17, 2020 were approved.
6. **Next Meeting**

   Chairperson Tracy McKibben said that the next regular meeting of the Finance Committee is scheduled for March 18, 2021.
Closing

On motion made by member Dennis Trainor and seconded by member John Koelmel, the meeting was adjourned by Chairperson McKibben at approximately 11:07 a.m.

Karen Delince
Karen Delince
Corporate Secretary
EXHIBITS

For

January 19, 2021

Meeting Minutes
Risk Update - Enterprise Resilience

Thomas Spencer
Sr. Director, Enterprise Risk

Adrienne Lotto
Sr. Director, Energy Security & Resilience Programs
In 2017, Enterprise Risk Management Established an Enhanced Approach to Resiliency

Enhanced our capabilities to anticipate and respond to disruption-related risks

- Established a broad-based Enterprise Resilience framework
- Harmonized existing programs leveraging the strong foundational elements already in place at NYPA
- Clearly defined governance structure
- Framework operationalized through Utility Operations and the Enterprise Resiliency Team
Why is resiliency an important area of focus for NYPA and our strategy?

NYPA must accelerate its adoption of a resilience strategy to prepare for a more distributed and uncertain operating environment that will create a constant evolution of threats. Vigilance to anticipate and mitigate those threats is the very essence of resilience.

### Categories

**All-Hazards**
- Extreme Weather
- Kinetic Attacks

**Nation State Adversaries**
- Physical Threat
- Advanced Persistent Threat

**Legislation**
- CLCPA
- AREGCBA

**Digitization**
- Interconnected Ecosystem
- New / Expanding Attack Vectors

**Societal Changes**
- COVID-19
- New Operating Models

**NYPA’s Mission**
- Thought Leader and Innovator Expectations
- Reputational Pressures

**Keywords**
- All-Hazards
- Nation State Adversaries
- Legislation
- Digitization
- Societal Changes
- NYPA’s Mission

**Themes**
- CLCPA
- AREGCBA
- Interconnected Ecosystem
- New Operating Models
- COVID-19
- Thought Leader and Innovator Expectations
- Reputational Pressures

**Categories**
- Legislation
- Digitization
- Societal Changes
- NYPA’s Mission
Where We Are Going: Key Resilience Activities

- Disaster Recovery (IT and OT Systems)
- Business Continuity Planning (Key Business Process)
- Crisis Management (NYPA and Canals)
- Grid Security & Physical Security

Traditional Service Catalog

- Cyber Security
- Insider Threat
- Supply Chain Security
- Workforce Resilience
- Extreme Weather

Expanded Service Catalog
Several Key Deliverables in 2021….

1. Completion of Business Continuity Plans for HQ and Sites together with Disaster Recovery Drill
2. Advance Climate Impact Study
3. Mature Resilience Metrics
4. Finalize Insider Threat partnership with EPRI
How will we get there?

**Internal**

- Pillar in Vision2030
- Mission Statement and Corporate Values
- Financial and human capital investments
- Cascading Metrics
- Implementing resilience “Champions”
- AllWays Resilient Campaign --- Raise Awareness
- Utilize Cross Function Teams

**External**

- Continue industry partnerships - APPA, LPPC, ESCC, NATF, EPRI
- Strategic partnerships with government and suppliers - Center of Excellence
- Customer Resilience