

PROPOSED AGENDA JOINT FINANCE COMMITTEE MEETING Videoconference – November 17, 2020 at 9:30 A.M.

- 1. Adoption of the November 17, 2020 Proposed Meeting Agenda
- 2. Motion to Conduct an Executive Session
- 3. Motion to Resume Meeting in Open Session
- 4. DISCUSSION AGENDA:
 - a. Utility Operations
 - i. Right of Way Vegetation Maintenance Contract Award (Phil Toia)

b. Commercial Operations

i. Economic Development Customer Assistance Program Temporary Power Assistance Initiative (Keith Hayes)

c. Financial Operations

- i. Recommend NYPA 2021 Budget and Proposed 2021-2024 Financial Plan (Adam Barsky)
- ii. Recommend Canal Corporation 2021 Budget (Adam Barsky)
- iii. Release of Funds in Support of the New York State Canal Corporation (Q1 2021) (Adam Barsky)
- iv. Release of Funds in Support of the Residential Consumer Discount Program Created in Connection with the Recharge New York Power Program (Adam Barsky)

d. Risk Management

i. Risk Update (Soubhagya Parija / Thomas Spencer)

5. CONSENT AGENDA:

a. Approval of the Joint Meeting Minutes held on September 23, 2020

6. Next Meeting



November 17, 2020

Motion to Conduct an Executive Session

I move that the Committee conduct an executive session to discuss the financial and credit history of a particular corporation (pursuant to §105 of the Public Officers Law).



November 17, 2020

Motion to Resume Meeting in Open Session

I move to resume the meeting in Open Session.





Date: November 17, 2020

To: THE FINANCE COMMITTEE

From: THE PRESIDENT and CHIEF EXECUTIVE OFFICER

Subject: Right of Way Vegetation Maintenance - Contract Award

<u>SUMMARY</u>

The Trustees will be requested to approve the award of a non-personal services contract for Right-of-Way Vegetation Maintenance Services along the Authority's transmission lines to Lewis Tree Service, Inc. ("LTS") of West Henrietta, NY for a total authorization amount of \$12 million for a four year term effective January 1, 2021 through December, 2025.

The Finance Committee, is requested to recommend to the Trustees to approve the award of a competitively bid contract to Lewis Tree Services, Inc. ("LTS") of West Henrietta, NY, at its December 9, 2020 meeting in the amount of \$12 million for a four year term. through December 2025.

BACKGROUND

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustee approval of procurement contracts involving services to be rendered for a period in excess of one year. Also, in accordance with the Authority's Expenditure Authorization Procedures, the award of construction services contracts in excess of \$6 million require the Trustee approval.

The single largest cause of electric power outages is trees growing into or falling onto overhead power lines. The Federal Energy Regulatory Commission (FERC), the North American Electric Reliability Corporation (NERC) and the New York State Public Service Commission (PSC) have all taken proactive steps to ensure that all utilities have a strong Integrated Vegetation Maintenance (IVM) program in place. The Authority has implemented a vegetation maintenance treatment cycle that ensures that it continues to be a leader in this now widely scrutinized and sensitive aspect of the utility industry.

This contract is for the control of undesirable target trees along over 20,000 acres or 1,400 miles of high voltage transmission lines over the course of a four-year cycle. These tall growing species will be removed by both mechanical means such as hand cutting with chainsaws or mowing and by chemical methods employing the

selective use of herbicides in a cut-stump application or by low volume foliar treatments. Trees located along side of the transmission right-of-way will be cut down and properly disposed of. Access roads shall be maintained free of all woody vegetation and all encroaching vegetation. Repairs will be made as necessary along these access roads.

DISCUSSION

Construction Contractor RFQ, RFP and Contract Awards

On September 2, 2020, a Request for Proposal (RFP) No. Q20-7034DK was advertised in the NY State *Contract Reporter* and the Authority's procurement websites for Right-of-Way Vegetation Maintenance along the Authority's transmission line system. Seven firms viewed the event notice the Ariba platform with two firms submitting proposals on October 8, 2020. The proposals were reviewed by an Evaluation Committee from ROW Maintenance/Environmental and Strategic Supply Management. The proposals were evaluated based on unit prices and hourly prices for each method and each year proposed by each bidder for the estimated acres anticipated to be required over the term of the contract were applied to extrapolate the numbers out over the four- year period.

LTS was determined to be the lowest-priced, technically qualified bidder. LTS did not take any exceptions to the terms and conditions of the RFP documents and will meet the MWBE requirements.

FISCAL INFORMATION

Funding for the Authority's Right-of-Way Vegetation Maintenance is provided from the Authority's operating and maintenance (O&M) funds which is budgeted for on an annual basis.

RECOMMENDATION

It is requested that the Trustees will be requested to approve the award of a non-personal services contract for Right-of-Way Vegetation Maintenance Services along the Authority's transmission lines to Lewis Tree Service, Inc. ("LTS") of West Henrietta, NY for a total authorization amount of \$12 million for a four year term through December, 2025.

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

Gil C. Quinones
President and Chief Executive Officer

RESOLUTION

RESOLVED, That the Finance Committee recommends that the Trustees, pursuant to the Guidelines for Procurement Contracts adopted by the Authority and the Authority's Expenditure Authorization Procedures, award a contract to Lewis Tree Services, Inc. of West Henrietta, NY for a total authorization amount of \$12 million to provide Right-of-Way Vegetation Maintenance Services along the Authority's transmission lines.

Contractor Lewis Tree Services, Inc. West Henrietta, NY Contract Amount \$12,000,000





Date: November 17, 2020

To: THE FINANCE COMMITTEE

From: THE PRESIDENT and CHIEF EXECUTIVE OFFICER

Subject: Economic Development Customer Assistance Program

Temporary Power Assistance Initiative

SUMMARY

As an enhancement to the Authority's Economic Development Customer Assistance Program which the Trustees approved March 31, 2020, the Trustees will be requested at their December 9th, 2020 meeting to authorize an initiative to make available for sale to Authority customers receiving power under the Recharge New York ("RNY"), Expansion Power ("EP"), Replacement Power ("RP"), and Preservation Power ("PP") programs (collectively, the "Economic Development Power" or "EDP" Programs) additional program power to be determined as a percentage of the customer's current allocation(s) on the terms and conditions discussed below. The amount of power to be made available under the initiative, to be known as Temporary Power Assistance ("TPA"), would not exceed in the aggregate 230 megawatts of unallocated EDP Program power (subject to statutory allocation limits) without additional Trustee approval. The Finance Committee is requested to recommend that the Trustees approve the Temporary Power Assistance Initiative.

DISCUSSION

Businesses across New York State, including many customers in the Authority's EDP Programs have been severely impacted by the COVID-19 pandemic. Many businesses have suffered significant losses in revenue, increased operating costs, and supply chain difficulties, and have had to curtail operations, reduce or eliminate capital spending, and/or reduce employment levels.

Given these unprecedented circumstances, the Trustees, at their March 31, 2020 meeting, approved an Economic Development Customer Assistance Program ("EDCAP") consisting of the following two components:

- (1) suspension of the Annual Adjustment Factor under applicable tariffs to energy and demand rates for customers in the Authority's EDP Programs, beginning with the adjustment that would have taken effect on July 1, 2020 for a period of one year from July 1, 2020 through June 30, 2021; and
- (2) an option for customers to defer payment of energy bills to the Authority, beginning with the April 2020 invoice, for up to 6 months, with repayment of deferred amounts to occur in equal installments over the subsequent 18-month period.

The COVID-19 pandemic continues to impact businesses statewide. Accordingly, to give the Authority's business customers additional options to help manage their energy costs, staff is recommending the Trustees authorize the Authority to implement the TPA initiative as an additional component of EDCAP.

Under the TPA initiative, the Authority would make available for sale to EDP Program customers on a short-term and temporary basis additional program power determined as a percentage of the customer's current EDP Program allocation(s).

Staff envisions implementing the TPA initiative as follows:

- The Authority will notify customers in the EDP Programs of the TPA offering, and establish an initial application period and simple application process for interested customers to apply for a supplemental increase to their power allocation within parameters developed by staff for each power program.
- Staff will evaluate applications and offer supplemental increases in accordance with established metrics and other appropriate considerations.
- Depending on the progress of the initial application round, the Authority could extend the initial application round or establish additional application rounds.
- As part of the application, customers will be required to supply relevant information, including copies of recent power bills to enable staff to confirm the customer can use the additional power immediately.
- Customers will not be required to make additional job or capital investments commitments to qualify for a supplemental increase.
- Staff will use the information gathered during the application process to assess overall demand, assess resource availability, and where necessary adjust metrics for supplemental power offerings under each EDP Program.

Power for supplemental increases would be sourced from unallocated power under the respective EDP Programs (RNY, EP, RP and PP). The following is an estimate of the amount of power currently unallocated under each EDP Program: (1) RNY Power: 227,008 kilowatts; EP: 63,595 kilowatts; RP: 90,836 kilowatts; and PP: 217,230 kilowatts.

The amount of supplemental power to be made available under TPA would not exceed in aggregate 230 megawatts of unallocated EDP Program power (subject to statutory allocation limits) without additional Trustee approval.

At this time staff is requesting authorization to implement TPA through January 31, 2024.

The proposed TPA initiative is consistent with the purposes underlying the other elements of the EDCAP.

If the Trustees approve the TPA initiative, staff will report to the Trustees periodically on TPA implementation, including on the metrics used to allocate supplemental increases, the supplemental increases made, and any recommended modifications to TPA.

FISCAL INFORMATION

The sale of supplemental power under the TPA will not have a negative fiscal impact on the Authority's finances.

RECOMMENDATION

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¹ The Authority has nearly reached the statutory cap on the amount of RNY Power that may be allocated to not-for profit corporations and small businesses. Therefore, in the absence of an enactment increasing this cap, supplemental power for customers in these sectors will be extremely limited or unavailable.

It is requested that the Finance Committee recommend that the Trustees approve implementation of the TPA initiative as described above for the Authority's RNY, EP, RP and PP customers subject to the terms and conditions described above.

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

Gil C. Quiniones President and Chief Executive Officer

RESOLUTION

RESOLVED, That as an enhancement to the Authority's Economic Development

Customer Assistance Program, the Finance Committee hereby recommends that the Trustees
authorize the Authority to make available for sale to customers receiving power under the
Recharge New York ("RNY"), Expansion Power ("EP"), Replacement Power ("RP"), and
Preservation Power ("PP") programs (collectively, the "Economic Development Power" or "EDP"

Programs) supplemental power increases as part of a Temporary Power Assistance ("TPA")
initiative as described in the attached Memorandum of the President and Chief Executive

Officer; and be it further

RESOLVED, that the amount of supplemental power increases shall be determined as a percentage of the customer's current allocation(s) and in accordance with other criteria developed by the Authority, and sold pursuant to the rates and other terms and conditions provided for in the customer's contract, provided that the total amount of supplemental power made available under each EDP Program shall not exceed in aggregate 230 megawatts of unallocated EDP Program power (subject to statutory allocation limits); and be it further

RESOLVED, that sales of supplemental power under TPA shall not be made beyond January 31, 2024, and all supplemental power sold shall be subject to recall on reasonable notice to customers to allow the Authority to address demand for new and extended allocations under the EDP Programs; and be it further

RESOLVED, That staff shall report to the Trustees no less often than quarterly on the implementation of the TPA initiative, including on the metrics used to allocate supplemental

increases, overall customer response to the TPA, and any recommended modifications to the TPA; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things and take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.





Date: November 17, 2020

To: THE FINANCE COMMITTEE

From: THE PRESIDENT and CHIEF EXECUTIVE OFFICER

Subject: 2021 Budget and Filing of the Proposed 2021-2024

Budget and Four-Year Financial Plan Pursuant to Regulations of the Office of the State Comptroller

SUMMARY

The Trustees will be requested at their December 9, 2020 meeting to approve the 2021 Budget for the Authority, specifically including the expenditures for the (i) 2021 Operations and Maintenance ("O&M") Budget (attached as Exhibit "A"), (ii) 2021 Capital Budget (attached as Exhibit "B"), (iii) 2021 Energy Services Budget (attached as Exhibit "C") and (iv) 2021 Canal Development Fund ("CDF") Budget (collectively, with Exhibits "A", "B", and "C", the "2021 Power Authority Budgets").

The 2021 Power Authority Budgets set forth the expected expenses of the Authority and include the recommended expenditures in the following amounts:

2021 Power Authority Budgets	(\$ million)
O&M	\$ 516.4
Capital	\$ 764.8
Energy Services	\$ 291.4

2021 Canal Corporation Budgets	<u>(\$ million)</u>
O&M (Inc. CDF)	\$ 111.6
Capital	\$ 40.3

In accordance with regulations of the Office of the State Comptroller ("OSC"), the Trustees will also be requested at their December 9, 2020 meeting to approve the 2021-2024 Proposed Four-Year Budget and Financial Plan [attached as Exhibit "D" (in the form approved, the "2021-2024 Four-Year Budget and Financial Plan")] and authorize: (i) submitting the 2021-2024 Four-Year Budget and Financial Plan to OSC, (ii) posting the 2021-2024 Four-Year Budget and Financial Plan on the Authority's website, and (iii) making the 2021-2024 Four-Year Budget and Financial Plan available for public inspection at not less than five convenient public places throughout New York State.

The Finance Committee is requested to recommend that the Trustees (1) approve the Proposed 2021-2024 Four-Year Budget and Financial Plan, and (2) authorize (i) submitting the 2021-2024 Four-Year Budget and Financial Plan to the OSC in the prescribed format, (ii) posting the 2021-2024 Four-Year Budget and Financial Plan on the Authority's website, and (iii) making the 2021-2024 Four-Year Budget and Financial Plan available for public inspection at not less than five convenient public locations throughout New York State.

BACKGROUND

The Authority is committed to providing clean, low-cost and reliable energy consistent with its commitment to the environment and safety, while promoting economic development and job development, energy efficiency, renewables and innovation, for the benefit of our customers and all New Yorkers. The mission statement of the Authority is to power the economic growth and competitiveness of New York State by providing customers with low-cost, clean, reliable power and the innovative energy infrastructure and services they value.

The New York State Canal Corporation (the "Canal Corporation") became a subsidiary of the Authority effective January 1, 2017. The 2021 Power Authority Budgets include the budget information of the Authority and the Canal Corporation. Assumptions that were used by staff to prepare the 2021 Power Authority Budgets, and for forward periods, have been incorporated in the 2021-2024 Four-Year Budget and Financial Plan.

The 2021 Power Authority Budgets are intended to provide the Authority's operating facilities with, and support organizations by providing, the resources needed to meet the Authority's overall mission and the Authority's strategic objectives, and to fund the expenses of the Canal Corporation. Any transfers of funds from the Authority to the Canal Corporation would be subject to compliance with the Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented (the "Revenue Bond Resolution"). Canal Development Fund expenses are expected to be reimbursed to the Authority by the State Comptroller with monies held in the New York State Canal System Development Fund as discussed in the attached Canal Corporation Budget memorandum.

In approving the 2021 Power Authority Budgets, the Trustees will be authorizing spending for 2021 operations, spending for capital projects, and spending for general plant purchases of \$1.5 million or less. The requested headcount in the 2021 Power Authority Budgets will remain unchanged.

In accordance with the Authority's Expenditure Authorization Procedures, the President and Chief Executive Officer may, during the course of the year, authorize up to 15 new positions, new capital projects of \$6.0 million or less, or an increase in spending of no more than \$6.0 million to a capital project previously approved by the Trustees. All other spending authorizations must be approved by the Trustees.

The OSC implemented regulations in March 2006 addressing the preparation of annual budgets and four-year financial plans by "covered" public authorities, including the Authority. (See 2 NYCRR Part 203 ("Part 203")). These regulations, which are discussed below, establish various procedural and substantive requirements relating to the budgets and financial plans of public authorities. The 2021-2024 Four-Year Budget and Financial Plan has been prepared in accordance with these regulations.

DISCUSSION

2021 NEW YORK POWER AUTHORITY BUDGET

Operations & Maintenance

The 2021 O&M Budget of \$516.4 million reflects a continued concentration on the effective operation and maintenance of the Authority's critical investments in New York State's electric infrastructure and the continued support of NYPA's strategic investments. The 2021 O&M Budget

includes the Astoria Energy II lease payment of \$21.2 million which represents the contractual O&M costs for the plant, which was placed in commercial operation in New York City in July 2011. These costs are being recovered from the Authority's New York City governmental customers, who are beneficiaries of the outputs of these projects under a long-term contract with the Authority.

The 2021 O&M Budget for Operations provides \$276.3 million for baseline, or recurring work. In addition to the baseline work, scheduled maintenance outages at the Zeltmann Plant and the Small Clean Power Plants (totaling \$5.0 million), and planned enhancements in non-recurring maintenance work at the operating facilities (totaling \$30.4 million), are designed to support high reliability goals. Some of the major non-recurring projects include: Crescent Damn B Abutment C Concrete Repairs (\$4.0 Million), Robert Moses Niagara Power Project ("RMNPP") Upper Headgate Rail Slot Refurbishment (\$2.7 Million), Headgate Refurbishment RMNPP (\$1.6 Million), RMNPP River Gorge Erosion Repair (\$1.2 million), Robert Moses Unit Lube Oil System Modernization (\$1.1 Million), and the SENY Zeltmann 500MW 80/20T Bridge Crane (\$1.0 Million).

Capital

The 2021 Capital Budget totals \$764.8 million, which is a 42.4% increase over the 2020 Budget. Of this amount \$591.4 million – or 77.3% of the total – represents planned investments in the Authorities generation facilities as well as in the Authorities statewide transmission network. Significant capital projects for 2021 include: Moses Adirondack 1 & 2 Transmission Line Upgrade (\$113.5 million), Marcy-Scott Yard Transmission Upgrade (\$95.3 million), Communications Backbone (\$53.2 million), RMNPP Transmission LEM (\$36.2 million), Strategic EV Charging Stations Installation (\$33.6 million), Lewiston Pump Generation Plant ("LPGP") LEM (\$26.1 million), RMNPP Controls LEM (\$23.2 million).

Energy Services

The 2021 Energy Services Budget totals \$291.4 million, an increase of \$34.2 million from the 2020 Energy Services Budget. These expenditures will be subsequently recovered over time from the benefiting customers. The 2021 Energy Services Budget Includes Funding for energy efficiency projects for Authority customers and other eligible entities as the Authority strives to support the State's improved energy efficiency and clean, renewable energy goals.

2021 CANAL CORPORATION BUDGET

Operations & Maintenance

The 2021 Total O&M Budget for Operations includes \$111.6 million for the Canal Corporation for the purposes described in the 2021 Canal Corporation Budget memorandum being presented to the Canal Corporation Board of Directors at this December 2020 meeting. This figure, \$111.6 million, is made up of \$109.7 million in O&M for Canal Corporation in 2021 and \$1.9 million for the Canal Development Fund in 2021.

Canal Development Fund

The 2021 Canal Development Fund Budget totals \$1.9 million, representing ongoing costs associated with the New York State Canal System Development Fund ("Canal Development Fund").

The Canal Development Fund, created by State Finance Law §92-u, is a fund established in the joint custody of the State Comptroller and the Commissioner of Taxation and Finance. The Canal Development Fund consists largely of revenues received from the operation of the Canal System. Monies of the Canal Development Fund, following appropriation by the legislature, is made available to the Authority, and may be expended by the Authority or the Canal Corporation for the maintenance, construction, reconstruction, development or promotion of the Canal System. In addition, monies of the Canal Development Fund may be used for the purposes of interpretive signage and promotion for appropriate historically significant Erie Canal lands and related sites. Monies from the Canal Development Fund are paid out by the State Comptroller on certificates issued by the Director of the Budget.

Capital

The 2021 Capital Budget includes \$40.3 million for the Canal Corporation for the purposes described to the Finance Committee at this meeting and will be presented to the Canal Corporation Board of Directors at its December 2020 meeting.

2021-2024 Four-Year Budget and Financial Plan

Under Part 203 of the OSC Regulations, the Trustees are required to adopt a Four-Year Budget and Financial Plan. The approved Four-Year Budget and Financial Plan must be available for public inspection not less than seven days before the commencement of the next fiscal year for a period of not less than 45 days and in not less than five convenient public places throughout the State. The approved Four-Year Budget and Financial Plan must also be submitted to OSC, via electronic filing through the Public Authorities Reporting Information System, within seven days of approval by the Trustees. The regulations also require the Authority to post the approved Four-Year Budget and Financial Plan on its website.

Under Part 203, each Four-Year Budget and Financial Plan must be shown on both an accrual and cash basis and be prepared in accordance with generally accepted accounting principles; be based on reasonable assumptions and methods of estimation; be organized in a manner consistent with the public authority's programmatic and functional activities; include detailed estimates of projected operating revenues and sources of funding; contain detailed estimates of personal service expenses related to employees and outside contractors; list detailed estimates of non-personal service operating expenses and include estimates of projected debt service and capital project expenditures.

Other key elements that must be incorporated in each Four-Year Budget and Financial Plan are a description of the budget process and the principal assumptions, as well as a self-assessment of risks to the budget and financial plan. Additionally, each Four-Year Budget and Financial Plan must include a certification by the Chief Operating Officer.

The first year of the 2021-2024 Four-Year Budget and Financial Plan is based on the 2021 Power Authority Budgets being brought to the Board for approval at this time. The remaining three years are indicative forecasts.

FISCAL INFORMATION

Payment of O&M expenses will be made from the Operating Fund. Any transfers of funds from the Authority for payment O&M expenses of the Canal Corporation would be subject to approval by the Authority's Board of Trustees and compliance with the Authority's Revenue Bond Resolution.

Payment for Capital and Energy Services expenditures will be made from the Capital Fund and the Energy Conservation Construction and Effectuation Fund, respectively. Monies of up to \$805.1 million from the Operating Fund will be transferred to the Capital Fund for capital expenditures, subject to compliance with the Revenue Bond Resolution.

The 2021 Operating Budget shows adequate earnings levels so that the Authority may maintain its financial goals for cash flow and reserve requirements.

The 2021-2024 Four-Year Budget and Financial Plan's net income estimates for each of the years 2021 through 2024 are indicative forecasts. The Trustees are not being asked to approve any revenue and expenditure amounts for those years at this time.

RECOMMENDATION

The Chief Financial Officer recommends the Finance Committee recommends that the Trustees approve the 2021 Budget for the Power Authority, specifically including the expenditures for the (i) 2021 Operations and Maintenance Budget, (ii) 2021 Capital Budget, (iii) 2021 Energy Services Budget and (iv) 2021 Canal Development Fund Budget, each as discussed herein.

In connection with the 2021 Capital Budget, the Chief Financial Officer recommends the Finance Committee recommends that the Trustees authorize the transfer of up to \$805.1 million from the Operating Fund to the Capital Fund, subject to compliance with the Revenue Bond Resolution.

The Chief Financial Officer further recommends the Finance Committee recommends the Trustees (1) approve the 2021-2024 Four-Year Budget and Financial Plan, and (2) authorize (i) submitting the 2021-2024 Four-Year Budget and Financial Plan to the OSC in the prescribed format, (ii) posting the 2021-2024 Four-Year Budget and Financial Plan on the Authority's website, and (iii) making the 2021-2024 Four-Year Budget and Financial Plan available for public inspection at not less than five convenient public locations throughout New York State.

For the reasons stated, I recommend the approval of the above-requested actions by adoption of a resolution in the form of the attached draft resolution.

Gil C. Quiniones
President and Chief Executive Officer

RESOLUTION

RESOLVED, That the Finance Committee hereby recommends that the Trustees approve the 2021 Budget for the Power Authority, specifically including the expenditures for the (i) 2021 Power Authority Operations and Maintenance Budget, (ii) 2021 Capital Budget, (iii) 2021 Energy Services Budget and (iv) 2021 Canal Development Fund Budget, each as discussed in the attached memorandum of the President and Chief Executive Officer; and be it further

RESOLVED, That the Finance Committee recommends that the Trustees authorize up to \$805.1 million of monies in the Operating Fund are hereby authorized to be withdrawn from such Fund and deposited in the Capital Fund, provided that at the time of withdrawal of such amount or portions of such amount, the monies withdrawn are not then needed for any of the purposes specified in Sections 503(1)(a)-(c) of the General Resolution Authorizing Revenue Obligations as amended and supplemented, with the satisfaction of such condition being evidenced by a certificate of the Treasurer or the Deputy Treasurer; and be it further

RESOLVED, That the Finance Committee recommends that the Trustees, pursuant to 2 NYCRR Part 203, approve the Proposed 2021-2024 Four-Year Budget and Financial Plan, including its certification by the Chief Operating Officer, in accordance with the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Finance Committee recommends that the Trustees, pursuant to 2 NYCRR Part 203, authorize the Corporate Secretary to submit the proposed 2021-2024 Four-Year Budget and Financial Plan to the Office of the State Comptroller in the prescribed format, post the proposed 2021-2024 Four-Year Budget and Financial Plan on the Authority's website and make the 2021-2024 Four-Year Budget and Financial Plan available for public inspection at not less than five convenient public places throughout New York State.

EXHIBIT A

	2020 A	dopted Budget	20	21 Requested Budget	Inc/(Dec) Change (\$)	Inc/(Dec) Change (%)
Executive	\$	6.3	\$	5.6	\$ (0.7)	-10.9%
Law	\$	9.9	\$	9.1	\$ (0.8)	-8.3%
Internal Audit	\$	4.5	\$	4.4	\$ (0.2)	-3.4%
Public & Regulatory Affairs	\$	7.7	\$	7.0	\$ (0.7)	-8.9%
Executive Offices	\$	28.4	\$	26.1	\$ (2.3)	-8.3%
EVP Commercial Operations	\$	1.5	\$	1.4	\$ (0.1)	-8.1%
Marketing & Product Development	\$	1.1	\$	2.2	\$ 1.1	99.4%
Project & Business Development	\$	3.0	\$	4.1	\$ 1.0	33.3%
Energy Resource Management	\$	1.0	\$	1.0	\$ (0.0)	-2.7%
E-Mobility & Grid Flexibility	\$	1.4	\$	0.7	\$ (0.7)	-51.3%
NY Energy Manager	\$	0.3	\$	0.0	\$ (0.3)	-91.6%
Commercial Operations	\$	8.4	\$	9.3	\$ 0.9	11.3%
EVP & CFO Business Services	\$	1.1	\$	1.0	\$ (0.1)	-9.5%
Budgets & Business Controls	\$	2.9	\$	3.1	\$ 0.2	6.3%
Controller	\$	6.0	\$	5.5	\$ (0.5)	-9.0%
Financial Operations	\$	0.4	\$	0.3	\$ (0.0)	-11.5%
Finance	\$	1.1	\$	1.3	\$ 0.1	13.4%
Treasury	\$	2.0	\$	2.2	\$ 0.2	9.8%
Risk Management	\$	7.4	\$	4.4	\$ (3.0)	-40.0%
Business Services	\$	20.9	\$	17.8	\$ (3.1)	-14.9%
SVP Corporate Strategy	\$	2.2	\$	3.2	\$ 1.0	44.8%
Strategic Management	\$	0.0	\$	1.4	\$ 1.3	3085.5%
Empire Line	\$	1.7	\$	1.0	\$ (0.7)	-41.8%
Corporate Strategy	\$	3.9	\$	5.5	\$ 1.6	41.1%
Information Technology	\$	30.5	\$	28.4	\$ (2.1)	-7.0%
EVP HR & Administration	\$	0.8	\$	0.8	\$ (0.1)	-6.6%
Enterprise Shared Services	\$	5.9	\$	5.4	\$ (0.5)	-8.2%
Corporate Communications	\$	5.6	\$	5.1	\$ (0.5)	-9.1%
Human Resources	\$	11.3	\$	12.4	\$ 1.1	10.1%
Strategic Supply Management	\$	7.5	\$	10.7	\$ 3.2	42.0%
Digital Warehouse	\$	1.6	\$	3.6	\$ 2.0	128.2%
Process Excellence	\$	2.2	\$	1.5	\$ (0.7)	-33.2%
Knowledge Management	\$	1.6	\$	0.9	\$ (0.7)	-45.0%
Civil Rights & Inclusion	\$	0.6	\$	2.3	\$ 1.7	285.9%
Human Resources & Administration	\$	37.2	\$	42.8	\$ 5.5	14.9%
SVP CES	\$	-	\$	-	\$ -	Х
Contracts & Program Operations	\$	-	\$	-	\$ -	X
Market Services & Business Control	\$	0.9	\$	0.4	\$ (0.6)	-61.4%
Business Development	\$	0.5	\$	0.2	\$ (0.3)	-62.9%
Engineering & Construction Management	\$	1.2	\$		\$ (1.2)	-100.0%
Clean Energy Solutions	\$	2.6	\$	0.5	\$ (2.1)	-79.5%

	2020	Adopted Budget	202	21 Requested Budget	Inc/(Dec) Change (\$)	Inc/(Dec) Change (%)
Operations Headquarters	\$	57.1	\$	61.5	\$ 4.4	7.7%
Blenheim-Gilboa	\$	21.7	\$	20.4	\$ (1.3)	-5.8%
St. Lawrence	\$	31.9	\$	31.9	\$ (0.0)	0.0%
Niagara	\$	62.9	\$	64.5	\$ 1.6	2.6%
Flynn	\$	11.0	\$	8.3	\$ (2.8)	-24.9%
Small Hydros	\$	6.5	\$	9.3	\$ 2.8	43.2%
SCPP	\$	21.9	\$	22.6	\$ 0.6	2.9%
Zeltmann	\$	31.6	\$	32.2	\$ 0.6	1.9%
Transmission Lines	\$	64.9	\$	56.0	\$ (8.9)	-13.8%
SENY	\$	4.3	\$	4.3	\$ 0.0	0.6%
Astoria Energy II O&M	\$	1.1	\$	0.7	\$ (0.4)	-33.7%
Operations	\$	314.9	\$	311.7	\$ (3.2)	-1.0%
Astoria II Energy Lease	\$	22.0	\$	21.2	\$ (0.7)	-3.4%
Recharge NY	\$	2.3	\$	2.6	\$ 0.3	12.6%
Research & Development	\$	12.3	\$	13.2	\$ 0.9	7.6%
Eliminations & Adjustments	\$	35.5	\$	37.2	\$ 1.7	4.7%
Total NYPA	\$	519.0	\$	516.4	\$ (2.7)	-0.5%
Canal HQ	\$	22.6	\$	33.3	\$ 10.7	47.3%
Canal East	\$	28.7	\$	34.2	\$ 5.5	19.0%
Canal West	\$	27.7	\$	30.0	\$ 2.3	8.3%
Canal CDF	\$	2.5	\$	1.7	\$ (0.8)	-31.2%
NYPA Direct Charges to Canals	\$	5.4	\$	6.4	\$ 1.0	18.8%
NYPA Direct Assess to Canals	\$	6.7	\$	6.0	\$ (0.7)	-10.2%
Total Canal Corporation	\$	93.6	\$	111.6	\$ 18.0	19.2%
Total NYPA & Canals	\$	612.6	\$	627.9	\$ 15.3	2.5%

NYPA & Canals O&M by Facility - \$627.9M

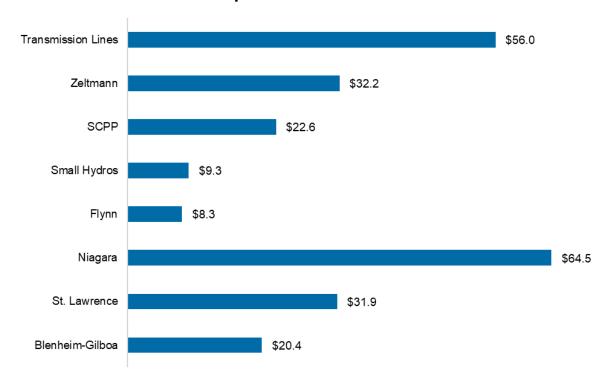


NYPA Total Headquarters - \$192.0M

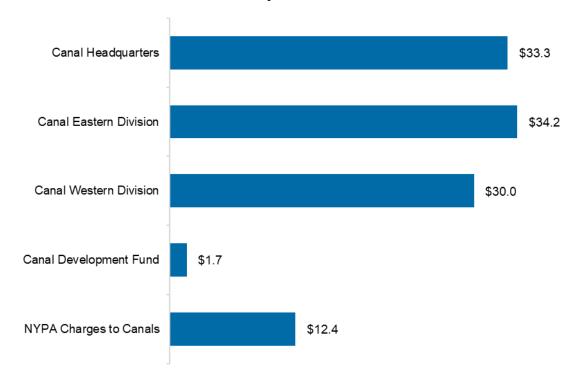
(Corporate & Operations Headquarters)



NYPA Operations Sites - \$245.2M



Canal Corporation - \$111.6M



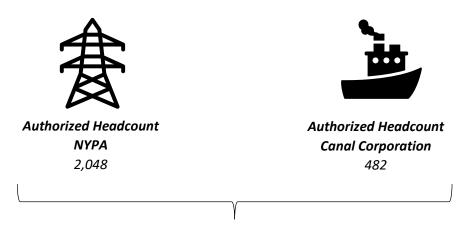
NYPA O&M by Cost Element Grouping - \$516.4M



Canal Corporation O&M by Cost Element Grouping - \$111.6M



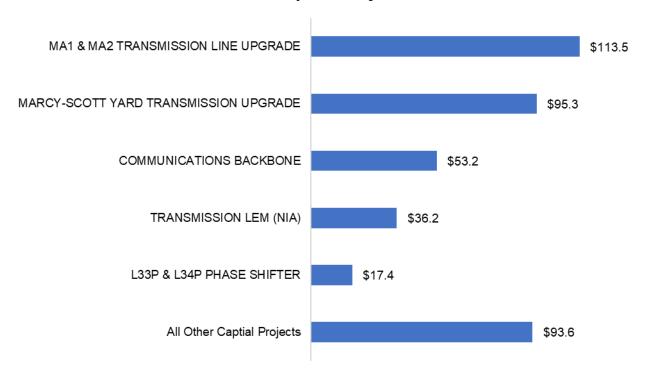
Authorized Headcount NYPA & Canal Corporation



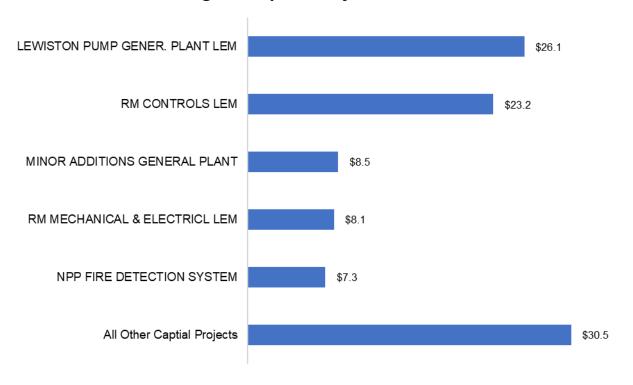
Authorized Headcount NYPA & Canal Corporation 2,530

Exhibit B

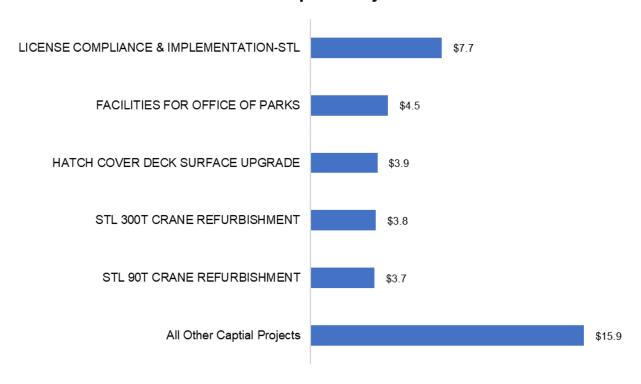
Transmission Capital Projects: \$509.4M



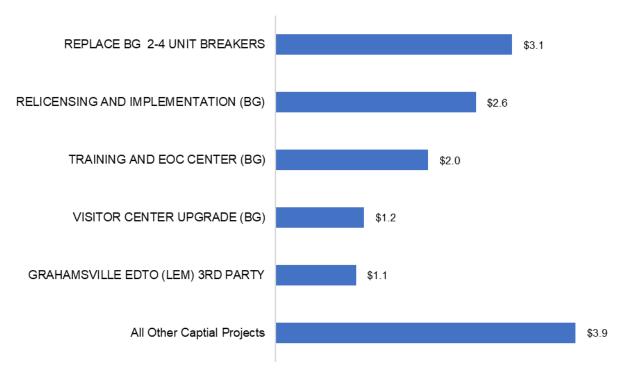
Niagara Capital Projects: \$103.8M



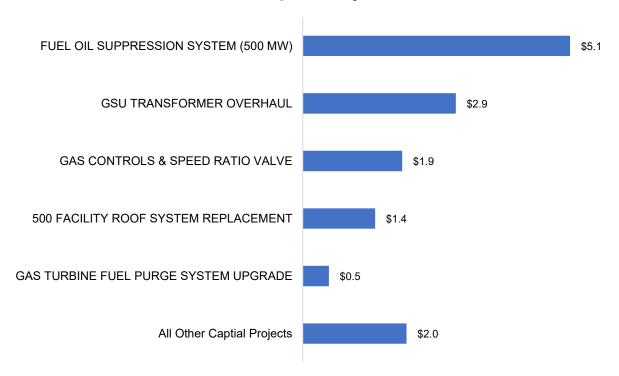
St. Lawrence Capital Projects: \$39.5M



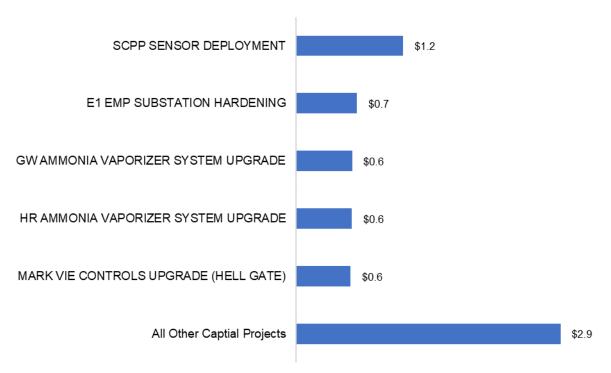
Blenheim-Gilboa Capital Projects: \$13.9M



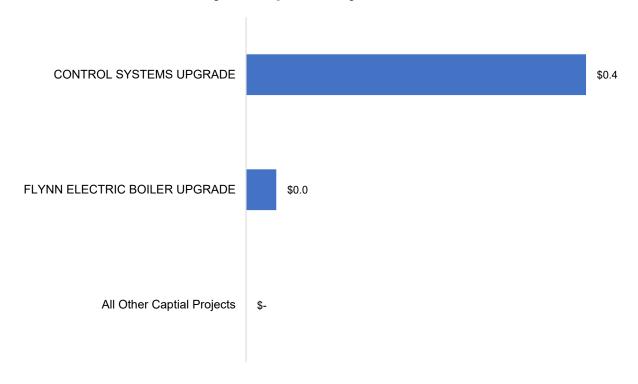
Zeltmann Captial Projects: \$13.8M



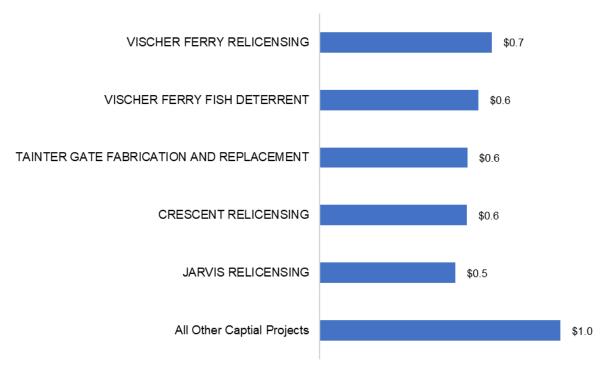
SCPP Captial Projects: \$6.5M



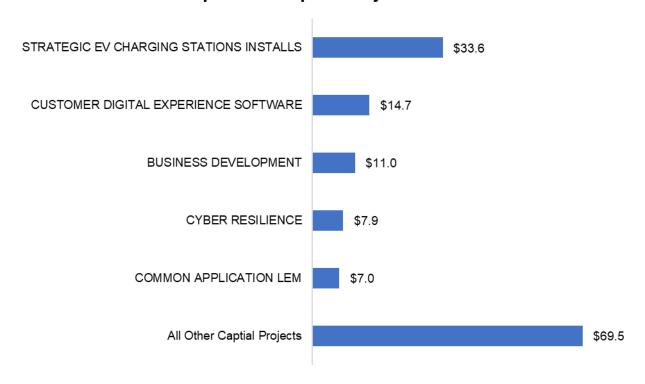
Flynn Capital Projects: \$0.5M



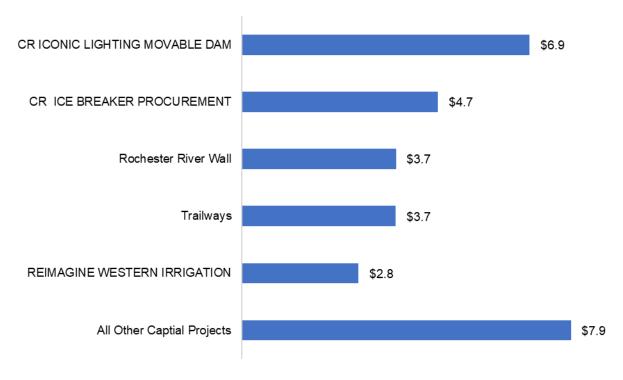
Smalll Hydros Capital Projects: \$4.1M



Headquarters Captial Projects: \$143.7M



Reimagine Canals Capital Projects: \$29.7M



Canals Capital Projects: \$40.3M

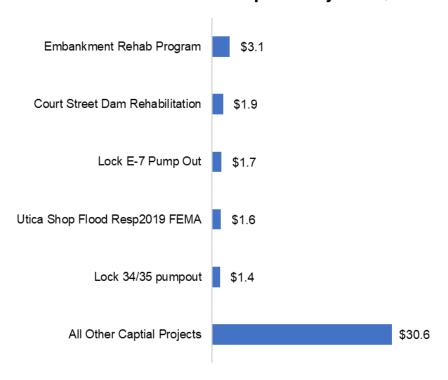
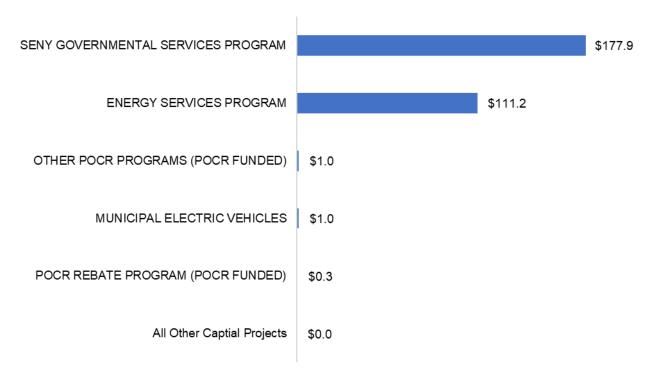


Exhibit C

Energy Services Captial Projects: \$291.4M



2021-2024 PROPOSED BUDGET & FINANCIAL PLAN In Compliance with 2 NYCRR Chapter 5, Part 203 NEW YORK STATE OF OPPORTUNITY. Authority

2021 – 2024 Proposed Budget and Financial Plan

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This document is a preliminary version of NYPA's 2021 Budget and 2021-2024 Financial Plan. It has not received approval from the Authority's Trustees and should not be relied upon as an official forecast. The 2021-2024 Approved Budget and Financial Plan, which is expected to be filed subsequent to the December 9th, 2020, Trustee meeting, will reflect the Official Budget for 2021.

Mission of the Power Authority of the State of New York

The new mission of the Power Authority of the State of New York ("NYPA" or the "Authority"), which is expected to be ratified by our Trustees in their December 2020 meeting, is to "Lead the transition to a carbon-free, economically vibrant New York through customer partnerships, innovative energy solutions, and the responsible supply of affordable, clean, and reliable electricity." The new mission statement adheres to maintaining NYPA's core operating businesses while also moving to support the energy goals of the State of New York, codified in the Clean Energy Standard, New York State Climate Leadership and Community Protection Act, our Enhanced Authority under changes to the Power Authority Act enacted in 2019, and the Accelerated Renewable Energy Growth and Community Benefit Act, outlined below.

The Authority's financial performance goal is to maintain a strong financial position to have the resources necessary to achieve its mission.

Clean Energy Standard

On August 1, 2016, the New York Public Service Commission ("NYPSC", "PSC") issued an order establishing a Clean Energy Standard (the "CES Order") to implement the clean energy goals of the State Energy Plan. Pursuant to the CES Order, load serving entities identified in the order are required to purchase "Zero Emission Credits" ("ZECs") from the New York State Energy Research Development Authority ("NYSERDA") to support the preservation of existing at-risk zero emissions nuclear generation. The Authority is not subject to NYPSC jurisdiction for purposes of the CES Order but has assumed an obligation to purchase ZECs consistent with the terms of the CES Order and intends to seek recovery of such costs from the Authority's customers. On January 31, 2017, the Authority's Trustees authorized (a) participation in the NYPSC's ZEC program and (b) execution of an agreement with NYSERDA to purchase ZECs associated with the Authority's applicable share of energy sales. The Authority and NYSERDA executed an agreement covering a two-year period from April 1, 2017 to March 31, 2020 under which the Authority committed to purchase ZECs in a quantity based on its proportional load in the New York control area. The Authority continues to operate under the terms of the agreement. As of August 2020, the Authority estimates that it will incur ZEC purchase costs associated with participation in the ZEC program of approximately \$268.5 million in aggregate over the 2020-2023 period, of which approximately \$14.4 million is not expected to be recovered under customer contracts that predate the adoption of the CES Order. As of June 30, 2020, the Authority has paid \$167.5 million in ZEC purchase costs.

New York State Climate Leadership and Community Protection Act

On July 18, 2019, the State enacted the "New York State Climate Leadership and Community Protection Act" as Chapter 106 of the Laws of 2019 ("Chapter 106"). Chapter 106 directs the New York State Department of Environmental Conservation (the "NYDEC") to develop regulations to reduce statewide greenhouse gas emissions ("GHG") to 60% of 1990 levels by 2030 and 15% of 1990 levels by 2050. Chapter 106 also requires that the state offset the remaining 15% of 1990 GHG emissions in 2050. NYDEC is currently drafting regulations that would implement these goals.

Several provisions of Chapter 106 could potentially impact the Authority's business and operations, such as the following: (1) a requirement that specified State entities, including the Authority, adopt regulations to contribute to achieving statewide GHG emissions; (2) a requirement that State entities, including the Authority, assess and implement strategies to reduce GHG emissions; (3) consideration of whether actions that the Authority would undertake in the course of its operations are consistent with State GHG emission limits that will be established pursuant to the enactment; and (4) potential allocation or realignment of resources to support State clean energy and energy efficiency goals for disadvantaged communities.

As part of the 2020-2021 Enacted State Budget, legislation was enacted that is expected to significantly speed up the siting and construction of clean energy projects to combat climate change in an effort to improve the State's economic recovery from the COVID-19 health crisis. The Accelerated Renewable Energy Growth and Community Benefit Act (the "CBA Act") will create an Office of Renewable Energy Siting to improve and streamline the process for environmentally responsible and cost-effective siting of large-scale renewable energy projects across the State while delivering



significant benefits to local communities. The CBA Act, which will be implemented by the Authority and New York State Department of State, NYSERDA, the Department of Public Service (the "DPS"), NYDEC and the Empire State Development Corporation, will accelerate progress towards the State's clean energy and climate goals, including the goal to obtain 70% of the State's electricity from renewable sources by 2030.

Enhanced Authority

Chapter 58 of the Laws of 2019 (Parts KK and LL), enacted April 12, 2019, amended the Power Authority Act to give the Authority enhanced powers to continue to support New York State energy policies and priorities, and offer additional energy products to entities who desire to purchase power from the Authority. In summary, the enactment authorizes the Authority to:

- 1) Design, finance, develop, construct, install, lease, operate and maintain electric vehicle charging stations throughout the State for use by the public;
- Plan, finance, construct, acquire, operate, improve and maintain transmission facilities to transmit power and energy generated from renewable wind energy generation in state territorial waters and waters under the jurisdiction or regulation of the U.S.;
- 3) Supply power and energy from competitive market sources to any Authority power customer, public entities (e.g., state entities, municipalities, public school districts), and community choice aggregation communities (Affected Entities);
- 4) Sell renewable power, energy, or related attributes (Energy Products) procured from competitive market and other qualifying sources to Affected Entities; and
- 5) Finance the development of renewable energy generating projects in the state in U.S. property/waters, including up to six projects with a generating capacity in excess of 25 megawatts, and sell Energy Products produced from such projects to Affected Entities.

The enhanced authority summarized in items 3-5 is subject to conditions and limitations specified in the enactment and is currently scheduled to repeal June 30, 2024. The enactment does not impact the Authority's legal authority existing under any other provision of law.

Leveraging this enactment, NYPA is in the process of developing new power products for customers, including green and blended power products, through rate structures intended to meet the energy, sustainability and financial goals of its customers. At this time, no financial estimates related to these product offerings have been incorporated into this Proposed Four-Year Plan.

Accelerated Renewable Energy Growth and Community Benefit Act

The Accelerated Renewable Energy Growth and Community Benefit Act (the "Renewable Energy Act") was enacted as part of the 2020-21 Enacted State Budget and amends State law with respect to the siting of major utility transmission facilities to (1) establish a 12-month target timeframe for the siting of major utility transmission facilities ("MUTFs"); and (2) authorizes the PSC to establish in regulation an expedited 9-month target timeframe for MUTFs that: (a) are constructed within existing rights-of-way, or (b) would not result in any significant adverse environmental impacts considering current uses and conditions existing at the site, as determined by the PSC, in consultation with the NYDEC, or (c) would necessitate expanding the existing rights-of-way where the expansion is for the purpose of complying with law, regulations or industry practices relating to electromagnetic fields. This new, expedited siting process will be administered through a new siting office to be established within the Department of State. The Renewable Energy Act also establishes a new "Clean Resources Development and Incentives Program" pursuant to which NYSERDA will establish "build-ready" sites that would be made available to renewables developers through a competitive process, and a host community benefits program to be established by PSC pursuant to which renewable developers would fund programs to provide benefits to communities that host new renewable generation projects.

The Renewable Energy Act also contains provisions to facilitate new and upgraded distribution and transmission projects that are necessary to for the state to avoid congestion and reach the Chapter 106 targets (the "Transmission Component"). The Legislature found that the Authority owns and operates backbone electric transmission assets in the State, has rights-of-way that can support in whole or in part bulk transmission investment projects, and has the financial stability, access to capital, technical expertise and experience to effectuate expeditious development of bulk



transmission investments needed to help the State meet its targets under Chapter 106. As such, the Transmission Component grants the Authority the ability to develop projects which the PSC determines should be pursued expeditiously to promote the State's public policy goals ("Priority Transmission Projects").

After the completion of a comprehensive study for the purpose of identifying distribution upgrades, local transmission upgrades and bulk transmission investments that are necessary or appropriate to facilitate the timely achievement of Chapter 106 targets (collectively, "Grid Study") undertaken by the DPS in consultation with the Authority, NYSERDA, the New York Independent System Operator ("NYISO"), and jurisdictional utilities and transmission operators, the PSC will establish a distribution and local transmission capital plan for each utility in whose service territory the Grid Study identified distribution upgrades and local transmission upgrades that DPS determines are necessary or appropriate to achieve targets set forth in Chapter 106. The upgrade programs shall establish a prioritized schedule upon which each such upgrades shall be accomplished. The PSC will also establish a bulk transmission system investment program that identifies bulk transmission investments it determines to be necessary or appropriate to achieve the Chapter 106 targets. PSC will identify Priority Transmission Projects to meet the Chapter 106 targets utilizing the NYISO's policy transmission planning process.

Pursuant to the Renewable Energy Act, the Authority is authorized to solicit interest from potential co-participants in each Priority Transmission Project it agrees to develop, and assess whether any joint development would provide for significant additional benefits in achieving the Chapter 106 targets. The Authority may then undertake the development of the Priority Transmission Project on its own or undertake the Priority Transmission Project jointly with one or more other parties. A joint development of a Priority Transmission Project may be accomplished through agreements on such terms and conditions as the Authority finds to be appropriate and necessary to undertake and complete timely development of the Priority Transmission Project. For those Priority Transmission Projects that the Authority determines to undertake, and which are not substantially within its rights-of-way, the Authority will, select private sector participants through a competitive bidding process. Excluded from these Priority Transmission Projects are generation lead lines, and repairs to, replacement of or upgrades to the Authority's own transmission assets.

Background of the Power Authority of the State of New York

The Authority generates, transmits, purchases, and sells electric power and energy as authorized by law. The Authority's customers include municipal and rural electric cooperatives, investor-owned utilities, high load factor industrial customers, commercial/industrial and not-for-profit businesses, public entities and Community Choice Aggregation Communities located throughout New York State, state local towns, villages, school districts, fire departments, etc. located in Southeastern New York within the metropolitan area of New York City ("SENY governmental customers"), and certain neighboring states. Legislation enacted in 2019, amended the Power Authority Act to give the Authority enhanced powers to continue to support New York State energy policies and priorities, and offer additional energy products to entities who desire to purchase power from the Authority. In addition to contractual sales to customers, the Power Authority also sells power into the wholesale electricity market operated by the NYISO.

To provide electric service, the Authority owns and operates five major generating facilities, eleven small gas-fired electric generating facilities, and four small hydroelectric facilities in addition to a number of transmission lines, including major 765kV, 345kV, 230kV and 115kV transmission facilities. The Authority's five major generating facilities consist of two large hydroelectric facilities: Niagara Power Project ("Niagara") and St. Lawrence-Franklin D. Roosevelt Power Project ("St. Lawrence-FDR"); Blenheim-Gilboa Pumped Storage Project ("Blenheim-Gilboa") a large pumped-storage hydroelectric facility, and two combined cycle electric generating plants: the Eugene W. Zeltmann Power Project ("Zeltmann") located in Queens, New York and the Richard M. Flynn Power Plant ("Flynn") located on Long Island.

As a component of NYPA's strategic plan, there are on-going efforts to modernize NYPA's generation and transmission infrastructure to increase flexibility and resiliency, to serve customers' needs in an increasingly dynamic energy marketplace, and to support the State's clean energy goals.

On April 29, 2020, NYPA came to market with the largest issuance in its ~90-year existence and its inaugural Green Bond issuance of approximately \$792 million. NYPA's \$1.2 billion April financing is a major steppingstone in achieving the Country's most ambitious decarbonization agenda as set out by New York's Climate Leadership and Community Protection Act ("CLCPA"), which Governor Andrew M. Cuomo signed into law on July 18, 2019. The issuance of the 2020 bonds continues to support NYPA's Strong Governance Practices, including supporting NYPA's capital plan and its goal of avoiding deferred maintenance, keeping assets in good repair, and investing in IT infrastructure projects to protect against cyber threats. The Authority owns and operates the Niagara Power Project ("RMNPP") providing up to 2.6 million kilowatts of clean electricity generated by two facilities, the Robert Moses Power Plant ("RMPP") and the



Lewiston Pump Generation Plant ("LPGP"). Because a majority of the RMPP equipment is nearly 60 years old, the Authority is undertaking a Life Extension & Modernization (LEM) program for it and its associated infrastructure. The program is focused on modernizing the thirteen units at RMPP, digitization of controls and providing for security and reliability of the RMNPP and its integrated infrastructure (NextGen Niagara).

The Authority provides customers with wide-ranging on-site energy solutions including energy data analytics, planning, operations, and the development of capital projects such as energy efficiency, distributed generation, advanced technologies, and renewables. The Authority also has the responsibility for implementation of: (a) the Governor's Executive Order No. 88, known as "BuildSmart NY" to improve energy efficiency at State owned and managed buildings; (b) the "Five Cities Energy Efficiency Implementation Plans" (the cities of Albany, Buffalo, Rochester, Syracuse and Yonkers) to reduce overall energy costs and consumption, strengthen the reliability of energy infrastructure, create jobs in local clean energy industries and contribute to a cleaner environment. From January 2013 through December 2019, NYPA has provided approximately \$651 million in financing for energy efficiency projects covered by Executive Order 88. Overall financing from January 2013 through December 2019 for energy efficiency projects for all customers (including EO88 facilities) amounts to \$1.68 billion.

To achieve its goal of promoting clean energy and efficiency, NYPA implements energy services for the benefit of its power supply customers and for various other public entities throughout the State. Under these programs, the Authority finances the installation of energy saving measures and equipment, which are owned by the customers and public entities upon their installation and which focus primarily on energy efficiency, renewables, resiliency, and sustainability. These programs provide funding for, among other things, high efficiency lighting technology conversions, high efficiency heating, ventilating and air conditioning systems and controls, boiler conversions, replacement of inefficient refrigerators with energy efficient units in public housing projects, electric vehicles and charging stations, distributed generation technologies and clean energy technologies, and installation of non-electric energy saving measures. The Authority has authorized, as of September 2019, the expenditure of an aggregate of \$5.4 billion on these programs.

Effective January 1, 2017, the New York State Canal Corporation (the "Canal Corporation") became a subsidiary of the Authority, and the Authority assumed certain powers and duties relating to the Canal System (as defined below) to be exercised through the Canal Corporation. The Canal Corporation is responsible for a 524-mile canal system consisting of the Erie, Champlain, Oswego, and Cayuga-Seneca canals (the "Canal System"). See "(c) Budget Assumptions, Canal Corporation" for more information.

In 2019, the Authority received ISO 55001 certification for asset management enterprise wide. Asset management is one of the critical components of the Authority' business strategy. ISO 55001 is an asset management system standard, the main objective of which is to help organizations manage the lifecycle of assets more effectively. By implementing ISO 55001, organizations will have better control over daily activities, achieve higher returns with their assets, and reduce the total cost of risk.

In 2019, the Authority enrolled in the premier Bitsight cyber security ranking system to validate and monitor its external security posture. Bitsight is a web application that ranks companies based on external scans of their information technology environment. Since enrolling, NYPA has consistently ranked in the top 10% of all utilities in its peer group.

2021-2030 Strategic Plan

NYPA is closing out the NYPA 2020 Strategic Plan which encompassed Customer Empowerment, Infrastructure Modernization and Resource Alignment themes and saw accomplishments in the achievement of ISO 55001 certification for asset management, significant progress on the transition to an all-digital utility, which allowed for a near-seamless transition to work-from-home during the pandemic, and the build out of a statewide electric vehicle charging infrastructure, among many others.

As part of the next strategic plan, VISION2030, the Authority is proposing strategic goals that will focus on preserving the value of our hydropower assets; rapidly developing new transmission assets to meet market needs; leading the transition away from natural gas while ensuring system reliability; and growing NYPA's business lines to fulfill customers' energy, resiliency and decarbonization goals. NYPA's proposed goals also will ensure the continuation of NYPA's evolution to an all-digital utility and the adoption of the rigorous Environment, Social, Governance and Economic (ESG&E) framework.

The VISION2030 strategic plan is anchored in helping achieve the greenhouse gas reduction targets in New York State's Climate Leadership and Community Protection Act, which was passed in 2019 and is the most ambitious climate change legislation in the country, while ensuring an equitable transition to a thriving clean energy economy in New



York. This plan will be presented to the Authority's Board of Trustees for approval in December 2020 and will be included in the final four-year budget and financial plan published after that meeting.

This Proposed Four-Year Plan reflects costs and revenues with respect to this strategic plan.

(a) NYPA's Relationship with New York State Government

The Authority is a corporate municipal instrumentality and political subdivision of the State of New York (the "State") created in 1931 by Title 1 of Article 5 of the Public Authorities Law, Chapter 43-A of the Consolidated Laws of the State, as amended from time to time (the "Act"), to help provide a continuous and adequate supply of dependable electric power and energy to the people of the State.

The Authority's operations are overseen by a Board of Trustees. NYPA's Trustees are appointed by the Governor of the State, with the advice and consent of the State Senate. The Authority is a fiscally independent public corporation whose operations are not supported by state tax revenues. NYPA generally finances construction of new projects through a combination of internally generated funds and the sale of bonds and notes to investors and pays related debt service with revenues from the generation and transmission of electricity. Income of the Authority and properties acquired by it for its projects are exempt from taxation.

(b) Budget Process

upon Trustee approval.

NYPA operates in a capital-intensive industry where operating revenues and expenses are significant and highly variable due to the volatility of electricity prices and fuel costs. NYPA's operations are not only subject to electric and fuel cost volatility, but also changing water flows that have a direct effect on hydroelectric generation levels. This 2021-2024 Proposed Budget and Financial Plan ("Proposed Four-Year Plan") and the 2021-2024 Final Budget and Financial Plan rely on data and projections developed through the following timeframe:

- During July November 2020, develop preliminary forecasts of electric prices (both energy and capacity), ancillary services revenue and expenses, and fuel expenses; NYPA customer power and energy use; NYPA customer rates; Annual Transmission Revenue Requirement; generation levels at NYPA power projects reflecting scheduled outages; and purchased energy and power requirements and sources.
- During July November 2020, develop preliminary operations and maintenance, and capital expense targets.
- November 1, 2020, post this Proposed Four-Year Plan for public inspection at five convenient locations and on NYPA's internet website.
- During October November 2020, update and finalize all forecasts and cost estimates.
- During November December 2020, integrate above data to produce the 2021-2024 Final Budget and Financial Plan.
- Seek authorization of NYPA's Trustees to approve the 2021-2024 Final Budget and Financial Plan at their meeting currently scheduled for December 9, 2020.
 Submit the approved 2021-2024 Budget and Financial Plan to the State Comptroller's Office; and make the

approved document available for public inspection at five convenient locations and on NYPA's internet website

NEW YORK STATE OF OPPORTUNITY.

NY Power Authority

NYPA & Canals Four-Year Projected Income Statements (In \$ Millions)

NYPA	2021	2022	2023	2024
Operating Revenue:				
Customer Revenue	\$1,785.3	\$1,782.1	\$1,837.2	\$1,860.0
Market-Based Power Sales	439.5	460.3	474.9	511.9
Ancillary Service Revenue	27.8	28.2	28.0	29.2
NTAC and Other	237.5	243.1	282.4	334.8
Non Utility Revenue	<u>29.2</u>	<u>29.7</u>	<u>33.8</u>	<u>39.4</u>
Operating Revenue Total	2,519.3	2,543.4	2,656.3	2,775.3
Operating Expense:	(2.1.1.2)	(2.2.4.2)	(0 = 4 = 2	(2.2.2.2)
Purchase Power	(614.6)	(631.0)	(654.8)	(680.2)
Ancillary Service Expense	(60.2)	(61.8)	(62.3)	(63.2)
Fuel Consumed	(115.1)	(130.7)	, ,	
Wheeling	(643.0)	,	, ,	
Operations & Maintenance	(472.0)	(514.6)	(541.7)	(565.9)
Other Expense	<u>(126.7)</u>	<u>(76.1)</u>	<u>(74.4)</u>	<u>(73.8)</u>
Operating Expense Total	(2,031.6)	(2,057.4)	(2,118.8)	(2,181.8)
EBIDA:	487.7	486.0	537.5	593.5
Compounded Annual Growth Rate (CAGR)		0%	5%	7%
Non-Occupation Income 9 Francisco				
Non Operating Income & Expenses:	(220.4)	(240.0)	(200 4)	(202.0)
Depreciation & Amortization Investment and Other Income	(229.1)	(246.8)	(269.1)	(293.8)
	23.1	21.3	21.9	16.8
Mark to Market Adjustments	0.5	(0.4)	(0.9)	0.0
Interest & Other Expenses	(131.7)	(105.1)	(128.9)	(150.3)
Non Operating Income & Expenses Total	(337.2)	(331.0)	(377.0)	(427.3)
NYPA NET INCOME:	\$150.5	\$155.0	\$160.5	\$166.2
04141.0				
CANALS:	40.0	# 0.0	# 0.0	60.0
Operating Revenue	\$3.0	\$3.0	\$3.0	\$3.0
Operating Expense	(105.5)	(107.9)	(107.7)	(107.6)
EBIDA:	(102.5)	(104.9)	(104.7)	(104.6)
Non Operating Income & Expenses	(27.8)	(29.1)	(32.0)	(34.9)
CANALS NET INCOME:	(130.3)	(134.0)	(136.7)	(139.5)
CONSOLIDATED NET INCOME (NYPA & CANALS):	\$20.2	\$21.0	\$23.8	\$26.7

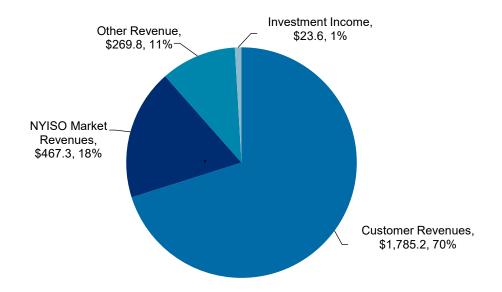


NYPA Gross Margin Analysis (In \$ Millions)

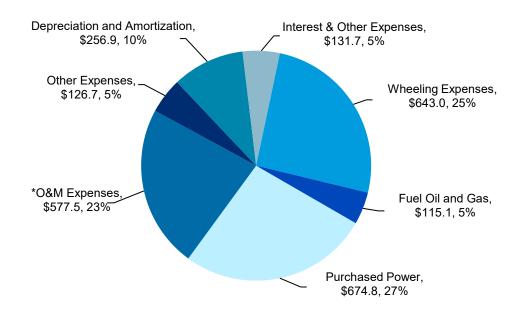
	2021	2022	2023	2024
Merchant Margin	\$311.5	\$289.5	\$287.0	\$301.0
Customer Margin	551.1	556.1	590.4	589.0
Transmission Margin	187.6	190.0	229.3	284.6
Other Margin	36.1	41.0	47.0	58.7
TOTAL MARGIN:	1,086.3	1,076.6	1,153.7	1,233.3
Operations & Maintenance	(472.0)	(514.6)	(541.7)	(565.9)
Other Expenses	(126.6)	(76.0)	(74.5)	(73.9)
EBIDA:	\$487.7	\$486.0	\$537.5	\$593.5



2021 Budget - Sources (In \$ Millions)



2021 Budget - Uses (In \$ Millions)



^{*} Reflects NYPA's base O&M expenses plus administrative expenses less the Allocation to Capital.



NYPA's Statement of Cash Flows*

(In \$ Millions)

	2019	2020	2021	2022	2023	2024
Revenue Receipts:						
Sale of Power, Use of Transmission Lines,						
Wheeling Charges and other receipts	\$2,355.7	\$2,273.4	\$2,510.6	\$2,542.2	\$2,663.7	\$2,792.0
Earnings on Investments and Time Deposits	<u>18.3</u>	<u>36.8</u>	<u>20.1</u>	<u>18.3</u>	<u>18.9</u>	<u>13.8</u>
Total Revenues	2,374.0	2,310.2	2,530.7	2,560.5	2,682.6	2,805.8
Expenses:						
Operation and Maintenance, including Transmission						
of Electricity by others, Purchased Power and						
Fuel Purchases	(2,113.3)	(2,088.9)	(2,269.9)	(2,298.8)	(2,359.9)	(2,436.0)
Debt Service:						
Interest on Bonds and Notes	(52.8)	(64.6)	(41.4)	(43.2)	(65.1)	(104.4)
Bonds and Notes Retired	(349.0)	(268.8)	(0.9)	(2.7)	(0.9)	(16.8)
Total Debt Service	(401.8)	(333.4)	(42.3)	(45.9)	(66.0)	(121.2)
Total Requirements	(2,515.1)	(2,422.3)	(2,312.2)	(2,344.7)	(2,425.9)	(2,557.2)
Net Operations	(141.1)	(112.1)	218.5	215.8	256.7	248.6
Capital Receipts:						
Sale of Bonds, Promissory Notes & Commercial Paper	294.4	1,234.6	0.0	0.0	119.8	106.6
Less: Repayments	0.0	0.0	0.0	0.0	0.0	0.0
Earnings on Construction Funds	0.0	0.0	0.0	0.0	0.0	0.0
DSM Recovery Receipts	0.0	0.0	0.0	0.0	0.0	0.0
Temporary Asset Transfer Return from NYS	43.0	0.0	43.0	43.0	43.0	0.0
Other	<u>0.0</u>	<u>0.0</u>	0.0	0.0	<u>0.0</u>	0.0
Total Capital Receipts	337.4	1,234.6	43.0	43.0	162.8	106.6
Capital Additions & Refunds:						
Additions to Electric Plant in Service and						
Construction Work in Progress, and Other costs	(391.4)	(438.8)	(843.7)	(883.1)	(720.8)	(509.0)
Construction Funds - Net Transfer	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	0.0	<u>0.0</u>
Total Capital Additions & Refunds	(391.4)	(438.8)	(843.7)	(883.1)	(720.8)	(509.0)
Net Capital	(54.0)	795.8	(800.7)	(840.1)	(558.0)	(402.4)
Net Increase/(Decrease):	(\$195.1)	\$683.7	(\$582.2)	(\$624.3)	(\$301.3)	(\$153.8)

^{*} This Statement of Cash Flows follows the format prescribed by §2801 of New York State Public Authorities Law and does not follow GASB financial statement standards.



(c) Budget Assumptions

NYISO Revenue and Expenses

Based on scheduled customer power needs and available electricity generated by NYPA's operating assets, the Authority buys and sells capacity and energy through markets operated by the NYISO. Various NYISO purchased power charges in combination with generation related fuel expenses comprise a large portion of NYPA's operating expenses. A significant amount of the Authority's revenues result from sales of the Authority's generation into the NYISO market for which the energy revenues are projected based on available forward price curves and the capacity revenues are estimated using end of day price marks.

Customer and Project Revenue

The customers served by the Authority and the rates paid by such customers vary within the NYPA Power Programs designated to serve such loads. NYPA's power supply customers are served under contracts and tariffs approved by the Trustees.

St. Lawrence-FDR and Niagara Customers

Power and energy from the St. Lawrence-FDR and Niagara hydroelectric facilities are sold under contract to municipal electric systems, rural electric cooperatives, industrial and other business customers, certain public bodies, investorowned utilities, and out-of-state customers, with the balance sold into the NYISO market.

The charges for firm and/or firm peaking power and associated energy sold by the Authority, as applicable, to the fifty-one municipal electric systems and rural electric cooperatives in New York State; two public transportation agencies; three investor-owned utilities for the benefit of rural and domestic customers; and seven out-of-state public customers have been established on the basis of the cost to serve these loads. This Proposed Four-Year Plan Models Trustee-approved rate changes for customers as well as prospective rate changes.

Niagara and St. Lawrence-FDR's Expansion & Replacement Power, RNY and Preservation Power customers are allocated over 30% of the average generation capacity of the plants. Sale of expansion and replacement power historically had been handled on a sale-for-resale basis through National Grid and New York State Electric and Gas. However, the direct sale of low-cost hydro power to these customers commenced July 1, 2013. As a result, NYPA is now the load-serving entity for these transactions.

Legislation enacted in March 2011, effective July 2012, created a new economic development power program, the ReCharge New York Power Program ("RNYPP"), to replace two other economic development programs. RNYPP is a permanent power program administered by the Authority and the Economic Development Power Allocation Board ("EDPAB"). The RNYPP utilizes up to 455 MW of hydropower from the Authority's Niagara and St. Lawrence-FDR projects combined with up to 455 MW of other power procured by the Authority from other sources. The 910 MW of power is available for allocations to eligible new and existing businesses and not-for-profit corporations under contracts of up to seven years. The RNYPP legislation also authorizes the Authority, as deemed feasible and advisable by the Trustees, to provide annual funding of \$30 million each year for the purpose of funding a residential consumer discount program for those customers that had previously received this hydropower. Revenues earned from the sale of unused RNYPP power into the wholesale market may be used to offset the cost of these residential discounts. The Authority's Trustees have authorized the release of a total \$584 million for the period from August 2011 to December 2019 in support this residential discount program. The Authority supplemented the market revenues used to fund the residential discount program with internal funds, totaling cumulatively \$64 million from August 2011 through June 30, 2020.

In March 2019, the Trustees approved a seven-year extension of an agreement for the sale of firm hydroelectric power and energy from the St. Lawrence-FDR project to the Aluminum Company of America ("Alcoa") at its West Plant facilities. The existing contract with Alcoa, for an aggregate of 240 MW, has been executed effective April 1, 2019 through March 31, 2026, replacing prior long-term contracts. The contract extension provides for monthly Base Rate adjustments based upon on the price of aluminum on the London Metal Exchange and contains provisions for employment (450 jobs) and capital (\$14 million) commitments. Changes from the previous contract include: a reduced allocation of 240 MW, with the additional 5 MW being allocated to Arconic, a newly formed business independent of Alcoa, sold under a separate Preservation Power sale agreement; a monthly Clean Energy Standard ("CES") charge relating to Zero Emission Credits ("ZEC") and Renewable Energy Credits ("REC") that NYPA purchases which are attributable to Alcoa's load. The contract specifies a sharing mechanism for the CES charges between Alcoa, New



York State and NYPA, whereby Alcoa's share increases as the aluminum price increases. The Authority has entered into hedging contracts on the price of aluminum to mitigate potential downside risk in that market and intends to continue to do so based upon prevailing economic conditions as appropriate.

The Authority estimates that the total costs associated with the relicensing of the St. Lawrence-FDR Project in 2003 for a period of 50 years will be approximately \$224 million, of which approximately \$208 million has already been spent as of June 30, 2020. These total costs could increase in the future as a result of authorities reserved by FERC in the license for the St. Lawrence-FDR Project issued in 2003. The Authority is collecting in its rates for the sale of St. Lawrence-FDR power amounts necessary to fund such relicensing costs.

Chapter 545 of the laws of 2014 enacted the "Northern New York Power Proceeds Act" ("NNYPPA"). The NNYPPA authorizes the Authority, as deemed feasible and advisable by the Trustees, to deposit net earnings from the sale of unallocated St. Lawrence County Economic Development Power ("SLCEDP") by the Authority in the wholesale energy market into an account known as the Northern New York Economic Development Fund ("NNYED Fund") administered by the Authority, and to make awards to eligible applicants that propose eligible projects that satisfy applicable criteria. The NNYPPA established a five-member allocation board appointed by the Governor to review applications seeking NNYED Fund benefits and to make recommendations to the Authority concerning benefits awards.

SLCEDP consists of up to 20 MW of hydropower from the Authority's St. Lawrence-FDR Power Project which the Authority has made available for sale to the Town of Massena Electric Department ("MED") for MED to sub-allocate for economic development purposes in accordance with a contract between the parties entered into in 2012 (the "Authority-MED Contact"). The NNYPPA defines "net earnings" as the aggregate excess of revenues received by the Authority from the sale of energy associated with SLCEDP sold by the Authority in the wholesale energy market over what revenues would have been received had such energy been sold to MED on a firm basis under the terms of the Authority-MED Contract. For the first 5 years after enactment, the amount of SLCEDP the Authority could use to generate net earnings may not exceed the lesser of 20 MW or the amount of SLCEDP that has not been allocated by the Authority pursuant to the Authority-MED contract. Thereafter, the amount of SLCEDP that the Authority could use for such purpose may not exceed the lesser of 10 MW or the amount of SLCEDP that has not been allocated. The Authority's estimates of payments from the Authority to the NNYED Fund have been incorporated into this Proposed Four-Year Plan.

The Western New York Power Proceeds Act ("WNYPPA"), which was enacted on March 30, 2012, authorizes the Authority to deposit net earnings from the sale of unused Expansion Power and Replacement Power from the Authority's Niagara project into the Western New York Economic Development Fund ("WNY Fund") as deemed feasible and advisable by the Authority's Trustees. "Net earnings" are defined as any excess revenue earned from such power sold into the wholesale market over the revenue that would have been received had the power been sold at the Expansion Power and Replacement Power rates. Proceeds from the WNY Fund may be used to support eligible projects undertaken within a 30-mile radius of the Niagara project that qualify under the applicable criteria. The WNYPPA established a five-member allocation board appointed by the Governor. The Authority's estimates of payments from the Authority to the WNY Fund have been incorporated into this Proposed Four-Year Plan.

SENY Governmental Customers

Various municipalities, school districts and public agencies in New York City are served by the Authority's combined cycle Zeltmann plant, the contracted output of the Astoria Energy II plant, and capacity and energy purchased by the Authority in the NYISO markets.

In 2018 and 2019, the Authority executed new supplemental long-term electricity supply agreements (2018 LTAs) with its eleven NYC Governmental Customers, including the Metropolitan Transportation Authority, the City of New York, the Port Authority of New York and New Jersey (Port Authority), the New York City Housing Authority, and the New York State Office of General Services. Under the Supplemental LTAs, the NYC Governmental Customers agreed to purchase their electricity from the Authority through December 31, 2027, with the NYC Governmental Customers having the right to terminate at any time upon at least twelve months' notice. Both, the Authority and the NYC Governmental Customers, may also terminate effective December 31, 2022 upon at least six months' notice. Under the Supplemental LTAs, fixed costs were set for each customer and are subject to renegotiation after five years. Variable costs, including fuel, purchased power and NYISO related costs, are to be set on a pro-forma cost of service basis and reconciled as a pass-through to each customer by an energy charge adjustment.

In 2008, the Authority entered into a long-term power purchase agreement with Astoria Energy II LLC for the purchase of the output of Astoria Energy II, a 550 MW plant, which was constructed and entered into commercial operation on



July 1, 2011 in Astoria, Queens, for the sole benefit of the NYC Governmental Customers. Although the Astoria Energy II power purchase contract goes through to 2031 and is beyond the electricity supply agreement under the Supplemental LTA's, the Authority's contract with the NYC Governmental Customers served by the output of Astoria Energy II is coterminous with the power purchase agreement with Astoria Energy II LLC.

Currently energy generated by the Astoria Energy II and Zeltmann plants are sold into the NYISO markets, and sale proceeds are used to offset the cost associated with the production of energy and capacity from the plants. All net costs and benefits to the Authority for both facilities are directly passed through to the NYC Governmental customers. Approximately 26% and 20% of the NYC Governmental Customer load requirements are covered by Astoria Energy II and Zeltmann plants respectively, while the remaining over 53% remain open to be sourced from the open market.

The Authority's other Southeastern New York (SENY) Governmental Customers are Westchester County and numerous municipalities, school districts, and other public agencies located in Westchester County (collectively, the "Westchester Governmental Customers"). The Authority has entered into an evergreen supplemental electricity supply agreement with all 103 Westchester Governmental Customers. Among other things, under the agreement, customers can partially terminate service from the Authority on at least two months' notice prior to the start of the NYISO capability periods. Full termination is allowed on at least one year's notice, effective no sooner than January 1 following the one-year notice. Westchester governmental customers are partially served by the Authority's four small hydroelectric plants. The remainder of the Westchester governmental customers' load requirements are supplied through energy and capacity purchased from the NYISO markets. Sales into the NYISO of energy generated by the small hydroelectric resources, as well as grandfathered and historic fixed priced transmission congestion contracts, all help to offset the cost of the energy purchased, with an energy charge adjustment mechanism in place for cost reconciliation.

Blenheim-Gilboa Customers

The Blenheim-Gilboa project currently operates as a merchant plant, with power and energy not committed to any customer, but primarily used to meet the requirements of the Authority's business and governmental customers and to provide services in the NYISO markets generally at the market-clearing price. The current forecast assumes Blenheim-Gilboa will operate as a merchant plant for the upcoming four years.

Small Clean Power Plants ("SCPPs")

In the summer of 2001, the Authority placed in operation ten 44 MW natural-gas-fueled SCPPs in New York City and one on Long Island, to address a potential local reliability deficiency in the New York City metropolitan area and its potential impact on statewide reliability. As a result of the settlement of litigation relating to certain of the SCPPs, the Authority has agreed under the settlement agreement to cease operations at the Vernon location, which houses two units, under certain conditions and if the Mayor of New York City directs such cessation. No such cessation has occurred. The plant at the Vernon location is assumed to be operating during the forecast period pursuant to the terms of an agreement entered into at the time of construction.

For this Proposed Four-Year Plan, it is assumed that the capacity of the SCPPs may be used by the Authority to meet its customers' capacity requirements, sold to other users via bilateral arrangements and/or sold into the NYISO capacity auctions. NYPA sells the energy produced by the SCPPs into the NYISO energy markets.

Flynn

The Flynn project currently operates as a merchant plant, with capacity and energy output sold into the NYISO market. The forecast assumes Flynn operates as a merchant plant for the upcoming four years.

Transmission Projects

The Authority owns approximately 1,400 circuit miles of high voltage transmission lines, and associated substations operating at voltages of 115kV, 230kV, 345kV, and 765kV. The Authority's Backbone Transmission System consists of a large subset of these transmission facilities, with major circuits such as:



765kV

- MSU1 (Marcy-Massena)
- MSC-7040 (Massena-Chateauguay)

345kV

- UE1-7 (Marcy-Edic)
- UNS-18 (Marcy-New Scotland)
- VU19 (Volney-Marcy)
- NR-2 (Niagara-Rochester)
- NS-1 (Niagara-Sommerset)
- Y-49 (Long Island Sound Cable)
- Q-35L&M (Queens-Manhattan)

230kV

- MA-1/MA-2 (Moses-Adirondack)
- MMS-1/MMS-2 (Moses-Massena)
- MW-1/MW-2 (Moses-Willis)

Since the formation of the NYISO in November 1999, cost recovery for the Authority's provision of transmission service over its facilities has been governed by the NYISO tariff which included an annual transmission revenue requirement ("TRR") for NYPA of \$165.4 million. The Authority receives cost recovery through the NYISO tariff mechanism known as the NYPA Transmission Adjustment Charge ("NTAC"), recovering NYPA Backbone Transmission System costs on a statewide basis after accounting for NYPA's revenues received from pre-existing customer transmission service contracts, a Transmission Service Charge assessed on customers in NYPA's upstate load zone, and other sources.

In July 2012, the Authority filed for its first TRR increase with FERC. The Authority's filing resulted in an uncontested settlement approved by FERC for a new, \$175.5 million TRR applicable to the Authority, effective August 1, 2012. The increased TRR is necessary to cover increased operating and maintenance expenses of NYPA's bulk transmission system, as well as to make necessary capital improvements.

In January 2016, the Authority filed for a transmission revenue requirement formula rate with FERC. In March 2016, FERC accepted the filing and made it effective April 1, 2016, as requested, subject to hearing and settlement judge procedures. The Authority requested a formula rate to more efficiently recover its increased capital and operating expenditures needed to maintain the reliability of its transmission system. The Authority filed an unopposed Offer of Settlement on September 30, 2016 that fully resolves the issues raised by interested parties in settlement negotiations concerning the formula rate. Separately, the annual TRR under the formula of \$190.0 million initially made effective April 1 was updated on July 1, 2016 to \$198.2 million pursuant to the formula rate annual update process. Effective July 1, 2020, the Transmission Revenue Requirement is \$276.7 million, which includes the revenue requirements for the Marcy South Series Compensation and AC Transmission projects. Annual updates commensurate with projected costs are assumed to continue throughout the forecast period.

The Authority is moving forward with its plans to replace a major section of the Moses Adirondack Line, one of the Authority's Backbone Transmission System lines. The Smart Path Reliability Project covers 78 circuit miles of 230kV transmission line from Massena to the town of Croghan in Lewis County. The project includes the replacement of obsolete wood pole structures with higher, steel pole structures, as well as replacement of failing conductors with new conductors and insulators. The line will initially operate at its current 230kV level, but the conductors and insulators will accommodate future 345kV operation.

In July 2017, the Authority received authorization under the NYISO tariff to include the costs of this replacement project in its NTAC mechanism for cost recovery of the Authority's transmission system costs, which means that the costs will be allocated to all ratepayers in the State. On November 14, 2019, the Public Service Commission granted the Authority's Article VII certificate for the project. The Authority estimates a project cost of \$484 million through project completion. This Proposed Four-Year Plan includes revenues and costs associated with the Moses Adirondack project.

In October 2020, the NYPSC adopted criteria for identifying transmission projects that are needed urgently to meet the nation-leading renewable energy goals of the Climate Leadership and Community Protection Act, identifying the Authority's proposed Northern New York Project as a high-priority project and referred it to NYPA for development and



construction in accordance with the Accelerated Energy Growth and Community Benefit Act. The Northern NY Project is a multi-faceted project that includes completion of the second phase of NYPA's 86-mile Smart Path Moses-Adirondack rebuild, rebuilding approximately 45 circuit miles of transmission eastward from Massena to the Town of Clinton, rebuilding approximately 55 circuit miles of transmission southward from Croghan to Marcy, as well as rebuilding and expanding several substations along the impacted transmission corridor. The work falls largely within NYPA's existing transmission rights-of-way. NYPA identified the multi-pronged Northern NY Project earlier this year as work that is urgently needed help unbottle existing renewable energy in the region and estimates it will result in significant production cost savings, emissions reductions, and decreases in transmission congestion. The project is estimated to result in more than 1.16 million tons of CO2 emissions avoided annually on a statewide basis, and an annual reduction of approximately 160 tons of NOx emissions from downstate emissions sources. Finally, NYPA estimates the project would result in more than \$447 million in annual congestion savings in Northern New York and will created hundreds of jobs in the North Country during construction. The costs and revenues associated with the Northern New York Project are included as part of this plan.

On August 1, 2014, the Public Policy Transmission Planning Process administered by the NYISO invited solicitations to address the AC Transmission Public Policy Need for new transmission lines to relieve the congested Central East and UPNY/SENY transmission interfaces. In June 2018, the Authority and North America Transmission ("NAT") entered into a Participation Agreement which granted the Authority the option to secure an ownership interest of up to 37.5% in the projects that they jointly proposed. In April 2019, the NYISO board selected the project proposed by LS Power Grid New York, LLC ("LS Power") (formerly known as NAT) and the Authority for Segment A (also known as the Marcy to New Scotland Upgrade Project and AC Transmission) to increase transfer capability from central to eastern New York. The project proposed by NYPA and LS Power include the construction of over 90 circuit miles of new 345kV and 115kV transmission lines and two new substations.

In August 2019, LS Power and the Authority submitted an Article VII application to the New York Public Service Commission ("NYPSC"). If the PSC authorizes the project, construction is targeted to begin early 2021. Ultimately, the transmission lines to be rebuilt as part of the Segment A project are expected to be energized as part of the New York electrical system by the end of 2023.

The Authority originally funded 33% of the Segment A project development costs and exercised its 37.5% purchase option in July 2020, bringing the Authority's total estimated project costs to \$276 million.

FERC authorized NYPA's recovery of a facility charge for NYPA's AC Transmission project costs, adopted per NYISO filling made on behalf of NYPA. The Authority is currently recovering its costs associated with Segment A of the project through FERC's cost-recovery mechanisms, which includes an incentive return mechanism, all granted by FERC on the Authority's "Construction Work in Progress" balance, within its Annual Transmission Revenue Requirement. This Four-Year Plan models estimated revenues and costs associated with the AC Transmission project.

Large-Scale Renewable Program

The CLCPA and current CES Order, as modified by the PSC per the Order dated October 15, 2020, requires that 70% of the State's electricity comes from renewable sources by 2030. In support of the CLCPA and CES goal of the State, the Authority issued a request for proposals in July 2020 to solicit Renewable Energy Certificates ("RECs"), energy and capacity from eligible large-scale renewable projects which include wind and solar resources. The Authority expects to award project(s) with long-term agreement(s) for the purchase of RECs that will be generated from the projects. The Authority expect to recover costs associated with the agreement(s) through sales of RECs by the Authority to the Authority's customers. The Authority anticipates that it will undertake future procurements of RECs in order to support its customers and the achievement of the Clean Energy Standard goals.

Hudson Transmission Project

In 2011, the Trustees authorized Authority staff to enter into an agreement with Hudson Transmission Partners, LLC ("HTP") for the purchase of capacity to meet the long-term requirements of the Authority's NYC Governmental Customers and to improve the transmission infrastructure serving New York City through the transmission rights associated with HTP's transmission line (the "Line") extending from Bergen County, New Jersey in the PJM Interconnection, LLC ("PJM") transmission system, to Consolidated Edison Company of New York, Inc.'s ("Con Edison") West 49th Street substation in the NYISO. Specifically, the Authority executed a Firm Transmission Capacity Purchase Agreement ("FTCPA") with HTP under which the Authority gained the entitlement to 75% of the Line's 660 MW capacity, or 495 MW, for 20 years. The Authority's capacity payment obligations under the FTCPA began upon the Line's commencement of commercial operation, which occurred on June 3, 2013. Also, upon commercial operation, the



FTCPA obligates the Authority to reimburse HTP for the cost of interconnection and transmission upgrades in New York and New Jersey associated with the Line and to pay for all remaining upgrade costs as they are incurred. Such interconnection and transmission upgrades have been completed at a total cost to the Authority of \$334.9 million. The Authority's obligations under the FTCPA also include payment of the Regional Transmission Enhancement Plan ("RTEP") charges allocated to HTP in accordance with the PJM tariff. Such RTEP costs are significant and are discussed below.

PJM's RTEP cost allocation methodology for certain upgrades, such as the Bergen-Linden Corridor ("BLC") project built by Public Service Electric & Gas Company ("PSE&G") in New Jersey, was challenged at FERC in numerous proceedings by Con Edison, the Authority, HTP and other New York parties on the grounds that PJM has disproportionately allocated the costs of those projects to those parties. These challenges are now pending before the DC Circuit Court of Appeals. In a separate FERC proceeding (also now before the DC Circuit), the Authority challenged the RTEP share of the BLC project costs allocated to HTP that were effective May 1, 2017 as a result of Con Edison's termination of its PJM firm transmission rights. The cost allocations shifted approximately \$533 million in RTEP charges for the BLC project that had been previously allocated to Con Edison to HTP. Such costs are in addition to the \$111 million in RTEP charges for the BLC project that had been previously allocated to HTP.

In July 2017, the Authority, together with HTP, petitioned FERC to relinquish the Firm Transmission Withdrawal Rights ("FTWRs") held by HTP on the Line. HTP's FTWRs formed the basis for the allocation of RTEP costs to HTP, which are the Authority's obligation under the FTCPA. By order dated December 15, 2017, FERC granted the request, permitting HTP to relinquish its firm rights ("December 2017 Order"). Accordingly, when PJM's annual RTEP cost allocation update for 2018 was filed, the Authority's obligation to pay RTEP charges related to the BLC project was 100% eliminated for 2018 and beyond. FERC denied requests for rehearing of the December 2017 Order, but the New Jersey Board of Public Utilities ("BPU") petitioned for review before the D.C. Circuit, where the case is now pending.

On January 19, 2018, PJM filed tariff revisions that not only eliminated NYPA's cost responsibility for RTEP projects subject to annual updates (a category that included the BLC project costs), but also eliminated NYPA's cost responsibility for RTEP charges that are not generally updated each year. Though challenged by the PJM transmission owners and the BPU, NYPA was allocated zero RTEP charges by PJM for 2018, 2019 and the first quarter of 2020. In March 2020, FERC partially reversed PJM's allocation determinations, which is discussed below.

On March 31, 2017, the Authority and HTP executed an amendment to the FTCPA. In exchange for the Authority extending the cure period for HTP to replace underwater cables that have been subject to failure and which have resulted in the Line being out of service, under the amended FTCPA the Authority received HTP's assurances to pursue certain remedies at FERC concerning the termination of the 320 MW of FTWRs in order to eliminate RTEP assessments and a guarantee that if PJM RTEP assessments cannot be eliminated despite HTP's efforts to terminate the FTWRs, that HTP will cancel its interconnection service agreement ("ISA") to physically disconnect the Line from the PJM transmission system, causing termination of all RTEP allocations. The December 2017 Order and resulting PJM allocations have fulfilled the goal of eliminating the RTEP assessments associated with the BLC project (though subject to further legal processes as described above). In addition, the Authority and HTP agreed to: (a) based upon RTEP costs already paid, increase, by \$40 million, the size of the tracking account that is used to offset the cost to purchase the Line at the end of the FTCPA term, at the Authority's option, and (b) shared rights to direct power on the Line in the opposite direction of its current flow should market conditions present revenue opportunities for selling capacity and energy from New York to New Jersey. In November 2017, HTP completed the cable replacement and, pursuant to the March 31, 2017 amendments, the Authority increased the leased portion of the Line's capacity from 75% to 87.12%, bringing the total leased capacity from 495 MW to 575 MW at a monthly capacity charge rate that represents a decrease in the unit price (on a \$/MW-month basis) paid to HTP in the original FTCPA.

In 2020, FERC partially reversed PJM's January 2018 RTEP allocations, over the Authority's objections. Specifically, FERC determined that PJM's tariff did not permit the cancellation of RTEP cost responsibility for certain RTEP projects allocated using the older violations-based DFAX ("VBDFAX") methodology, which in this case applied to certain lower voltage RTEP facilities approved by PJM prior to February 2013. FERC did not disturb PJM's decision to eliminate the Authority's RTEP responsibility for the BLC project thus determining that the relinquishment of HTP's FTWRs eliminated any cost responsibility for RTEP projects allocated under the solutions-based DFAX method which applied to projects (including BLC) approved February 2013 or later. But for RTEP projects allocated under VBDFAX, FERC determined that the elimination of FTWRs did not alter cost responsibility, and that those RTEP costs had to be reinstated.

In May 2020, PJM informed NYPA that, pursuant to the FERC order, it intended to bill NYPA for the back charges for 2018, 2019 and the first half of 2020 starting in September 2020. PJM's RTEP charges total approximately \$33 million through the end of 2020, and RTEP charges related to these projects will continue into the future.



NYPA/HTP sought rehearing of the FERC order, which was denied, but an appeal is pending in the D.C. Circuit Court of Appeals. NYPA and HTP assert that the sacrifice of their firm rights and use of only non-firm rights over the HTP facility made PJM initially correct in refusing to assign any further RTEP to NYPA and that the reinstatement of those VBDFAX RTEP charges is contrary to the PJM tariff. A successful appeal would enable NYPA to receive refunds for the RTEP payments made for 2018 and beyond, and disallow any future RTEP allocations to NYPA.

It is estimated that the revenues derived from the Authority's rights under the FTCPA will not be sufficient to fully cover the Authority's costs under the FTCPA during the 20-year term of the FTCPA.

From June 2013 through August 2020, the Authority has paid approximately \$106 million in PJM RTEP charges for the line. As noted above, the reinstatement of PJM RTEP charges for 2018/2019/2020 will result in NYPA incurring approximately \$33 million in PJM RTEP charges for 2020. In addition, the Authority will accrue approximately \$1.1 million per month effective 2021 through the term of the agreement which ends in 2033.

In August 2020, the Authority estimated that its net cost per this order will be an additional \$13 million per year for 2021 through 2033 and HTP inclusive of this amount is now estimated to be approximately \$100 million per year net cost. These net cost estimates were based on projections of the capacity payment obligations, the costs of interconnection and transmission upgrades, and energy revenues.

Purchased Power Expenses

Capacity, energy and ancillary service purchases made on behalf of customers (except for those made through previously approved purchased power agreements) are assumed to be transacted at the market clearing price in the wholesale market. For purposes of developing this Proposed Four-Year Plan, projected energy rates are based on published forward price curves, while capacity rates are based on internally developed capacity curves using external pricing sources such as broker quotes and trading platforms.

Fuel Expenses

Fossil-fuel purchases in this Proposed Four-Year Plan are based on expected net generation levels determined through the use of an economic dispatch model for the Authority's plants and on available forward fuel price curves. Fuel expenses also include the costs associated with emission credit requirements under the Regional Greenhouse Gas Initiative ("RGGI"). RGGI requires the Authority to buy emission credits for its fossil-fuel plants, and the Authority also purchases such credits for the contracted Astoria Energy II plant. The projections for RGGI costs are based on projected emission rates and forecasted consumption of natural gas and oil, with such costs recovered either through specific customer contract pass-through provisions or from the wholesale market.

Wheeling Expenses

Wheeling (i.e., the transmission and/or delivery of power and energy to customers over the lines of a third party) expenses are based on contractual and/or tariff rates of the service provider and are recovered through pass-through provisions in customer contracts.

Canal Corporation

Effective January 1, 2017, the Canal Corporation became a subsidiary of the Authority, and the Authority assumed certain powers and duties relating to the Canal System to be exercised through the Canal Corporation.

The Canal Corporation operates at a loss and is expected to require substantial operating and maintenance support and capital investment. The Canal Corporation's expenses are expected to be funded by transfers of funds from the Authority. Any transfer of funds would be subject to approval by the Authority's Board of Trustees and compliance with the Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented. Certain expenses eligible for reimbursement are expected to be reimbursed to the Authority by moneys held in the Canal Development Fund maintained by the State Comptroller and the Commissioner of Taxation and Finance.

Given the age of the Canal System, the Authority expects that significant maintenance and capital investments will be required to assure the Canal System's continuing operation. The Authority's budget and financial plan for 2021-2024 includes Canal-related operating expenditures of approximately \$110 million per year and capital expenditures of approximately \$80 million per year. The Authority will continue to evaluate the condition of the Canal System and



expects to allocate additional funding if deemed necessary through its annual budgeting process or reduce funding if efficiencies are found.

Reimagine the Canals Initiative

On January 29, 2020, the Board of Trustees authorized an investment of \$300 million over five years for the Reimagine the Canals Initiative ("Reimagine the Canals Initiative") and approved \$30 million to fund the Reimagine the Canals Initiative in 2020. The Reimagine the Canals Initiative encompasses three prongs: (1) \$100 million of funding for economic development projects in communities along the Canal System, (2) \$65 million of funding for projects that will help prevent ice jams and related flooding, and (3) \$135 million of funding for projects related to mitigation of drought impacts on agriculture, expansion of fishing opportunities, flood mitigation, invasive species prevention, and ecosystem restoration.

AGILe

The Authority, in collaboration with the State utilities, NYSERDA and NYISO, has developed an advanced grid innovation lab for energy ("AGILe") to create new tools to better monitor, control, accommodate and respond to the evolving energy sector. On July 25, 2017, the Board of Trustees authorized capital expenditures in the amount of \$20 million for the initial phase of AGILe, which has since commenced. Costs to the Authority are not expected to exceed \$50 million through final build-out of the facility. Upon completion, operating and maintenance costs are expected to be shared among AGILe participants. As of June 30, 2020, approximately \$4.9 million has been spent.

Electric Vehicle Acceleration Initiative

In May 2018, the Authority's Trustees approved an overall allocation of up to \$250 million to be used through 2025 for an electric vehicle acceleration initiative and authorized \$40 million for the first phase of the initiative. The Authority will own and operate a charging network of 800 DC fast chargers across the State, the first of which became operational in September 2020. As of June 30, 2020, approximately \$3 million has been spent.

Investment Income

Investment of the Authority's funds is administered in accordance with the applicable provisions of the Bond Resolution and with the Authority's investment guidelines. These guidelines comply with the New York State Comptroller's investment guidelines for public authorities and were adopted pursuant to Section 2925 of the New York Public Authorities Law.

The Authority's investments include, but are not limited to (a) collateralized certificates of deposit, (b) direct obligations of or obligations guaranteed by the United States of America or the State of New York, (c) obligations issued or guaranteed by certain specified federal agencies and any agency controlled by or supervised by and acting as an instrumentality of the United States Government, and (d) obligations of any state or any political subdivision thereof or any agency, instrumentality or local government unit of any such state or political subdivision which is rated in any of the three highest long-term rating categories, or the highest short-term rating category, by nationally recognized rating agencies. The Authority's investments in the debt securities of Federal Home Loan Bank rated Aaa by Moody's Investors Services and AA+ by Standard & Poor's; Federal National Mortgage Association, Federal Farm Credit Bank and Federal Home Loan Mortgage Corp. were rated Aaa by Moody's Investors Services, AAA by Fitch Ratings, and AA+ by Standard & Poor's. All of the Authority's investments in U.S. debt instruments are issued or explicitly quaranteed by the United States Government.

As part of its Series 2020 financing, NYPA raised over \$1.2 billion the proceeds of these 2020 Bonds will be used, together with other available funds, to finance capital expenditures related to the Authority's transmission assets and other capital projects, including reimbursement for prior capital spending, defease to maturity, or call for redemption prior to maturity, a portion of the Authority's Series 2011 A Revenue Bonds, refund a portion of the CP Notes which have been or are being issued to refund certain outstanding Bonds, pay capitalized interest, and pay the costs of issuance of the 2020 Bonds. Certain proceeds of the 2020 Bonds will be used to reimburse the Authority for moneys previously spent on capital expenditures. The remaining proceeds from the transaction were used to bolster NYPA's liquidity and restructure near-term debt service, while supporting NYPA's clean energy goals.



In addition to the green aspects of the transaction, the financing was structured to match debt service to the lifespan of the utility's assets, including restructuring existing obligations. The transaction locked in the lowest interest rate achieved in NYPA's history.

Summary of the 2020 Transaction: Summary Information

	2020A	2020B (Taxable)
Bond Ratings (M/S/F)*:	Aa2 (Stable)	/ AA (Stable) / AA (Stable)
Par Amount	\$1,120,610,000	\$114,020,000
Green Bonds:	\$791,620,000	-
All-in Total Interest Cost	3.63%	2.87%
Amortization	2039 – 2060	2034 – 2039
Average Life	31.5 years	17.2 years

^{*} Current rating at the time of Proposed Four-Year Plan



Operations and Maintenance Expenses

NYPA's O&M plan for 2021-2024 is as follows:

Operations and Maintenance Forecast by Cost Element (In \$ Millions)

	2021	2022	2023	2024
Payroll:				
Regular Pay	\$243.9	\$250.2	\$256.7	\$263.4
Overtime	12.4	12.8	13.2	13.6
Other Payroll	<u>7.3</u>	<u>7.4</u>	<u>7.5</u>	<u>7.6</u>
Total Payroll	263.6	270.4	277.4	284.6
Benefits:				
Employee Benefits	48.6	49.8	51.0	52.3
Pension	31.3	32.1	32.9	33.8
OPEB	40.6	40.7	40.7	40.7
FICA	<u>17.8</u>	<u>18.2</u>	<u>18.7</u>	<u>19.2</u>
Total Benefits:	138.3	140.8	143.3	146.0
Materials/Supplies	27.7	28.3	29.1	29.9
Fees	11.3	11.7	12.0	12.4
Office & Station	29.0	29.8	30.6	31.5
Maintenance Repair & Service Contracts	145.2	166.0	168.6	175.1
Consultants	58.2	65.7	67.2	68.9
Charges to:				
Outside Agencies	19.5	20.0	20.5	21.2
Capital Programs	<u>(63.9)</u>	<u>(65.4)</u>	(66.9)	<u>(68.5)</u>
Total Charges:	(44.3)	(45.3)	(46.4)	(47.3)
Research & Development	13.1	15.1	15.1	15.1
Total NYPA O&M:	\$642.1	\$682.5	\$696.9	\$716.1

Depreciation and Amortization Expenses

Depreciation of capital assets is generally provided on a straight-line basis over the estimated lives of the various classes of capital assets. The related depreciation provisions on December 31, 2019 expressed as a percentage of average depreciable capital assets was 2.6%.

Other Expenses

The Other Expenses category largely reflects various accruals and other miscellaneous expenses (e.g., payments to the NNYED Fund and WNY Fund), some of which require Trustee authorization on a case-by-case basis.



(d) Self – Assessment of Budgetary Risks

Set forth below is a summary of key risks associated with the Authority's assets and operations. The following discussion of risks is intended only as a summary and does not purport to identify all of the risk factors that may affect the Authority's assets and operations. Any one or more of the factors discussed and others could adversely affect the Authority's operations, assets, revenues, and expenses to an extent that cannot be determined at this time.

As an organization, our business units represent the first line of defense in identifying and mitigating risk within each of their verticals. This is complemented by a robust, ongoing assessment process, overseen by the Authority's Risk group and through legal review. During the annual budgeting process, the Financial Planning team is responsible for consolidating information received from various departments at NYPA that are inputs into our financial forecast. The team actively engages and challenges all assumptions as we work toward representing the most likely future financial outcome. Additionally, the Trustees have authorized an enterprise-wide risk management program and through an established Risk Management group supporting the business lines with the identification, assessment, mitigation and monitoring of risks.

Enterprise Level Risks

Regulatory Environment Risks

On August 1, 2016, the NYPSC issued an order establishing a Clean Energy Standard (the "CES Order") to implement the clean energy goals of the State Energy Plan. Pursuant to the CES Order, load serving entities identified in the order are required to purchase "Zero Emission Credits" ("ZECs") from the NYSERDA to support the preservation of existing at risk zero emissions nuclear generation. The Authority is not subject to NYPSC jurisdiction for purposes of the CES Order but has assumed an obligation to purchase ZECs consistent with the terms of the CES Order and intends to seek recovery of such costs from the Authority's customers. On January 31, 2017, the Authority's Trustees authorized (a) participation in the NYPSC's ZEC program and (b) execution of an agreement with NYSERDA to purchase ZECs associated with the Authority's applicable share of energy sales. On April 1, 2020, the Authority and NYSERDA executed an agreement under which the Authority committed to purchase ZECs in a quantity based on its proportional load in the New York control area. The agreement is in effect until April 1, 2029. As of August 2020, the Authority estimates that it will incur ZEC purchase costs associated with participation in the ZEC program of approximately \$268.5 million in aggregate over the 2020-2023 period, of which approximately \$14.4 million is not expected to be recovered under customer contracts that predate the adoption of the CES Order. As of June 30, 2020, the Authority has paid \$167.5 million in ZEC purchase costs.

The Regional Greenhouse Gas Initiative is a cooperative effort by Northeastern and Mid-Atlantic states, including New York, to reduce carbon dioxide emission levels. Participating states have established a regional carbon dioxide emissions cap from the power sector (fossil fuel-fired power plants 25 MW or greater). The emissions cap reduces by 2.5% annually until 2020. Central to this initiative is the implementation of a multi-state cap-and-trade program with a market-based emissions trading system. The program requires electricity generators to hold carbon dioxide allowances in a compliance account in a quantity that matches their total emissions of carbon dioxide for the compliance period. The Authority's Flynn plant, the SCPPs, and Zeltmann plant are subject to the RGGI requirements as is the Astoria Energy II plant. The Authority has participated in program auctions to acquire carbon dioxide allowances, which the Authority requires to cover operation of its fossil-fueled power plants and the Astoria Energy II plant and expects to recover RGGI costs through its power sales revenues. The number of allowances offered in the auction by RGGI cap and trade program was reduced from allowances covering 165 million tons of carbon dioxide emissions in 2013 to 60.3 million tons in 2018 and will decline by 2.5% each year through 2020. On December 19, 2017, the RGGI states released an updated Model Rule that includes a further decline of 2.275 million tons each year beginning in 2021, resulting in an additional 30% regional cap reduction between 2020 and 2030. The Authority is monitoring federal legislation and proposed programs that would impact RGGI.

On June 19, 2019, the United States Environmental Protection Agency ("EPA") released its final Affordable Clean Energy ("ACE") rule. This rule replaces the Clean Power Plan ("CPP") rule. The ACE rule established guidelines for states, including New York, to use for carbon dioxide emissions from coal-fired plants and other regulations for implementation of the Clean Air Act Section 111 (d) for existing power plants. Previously, the CPP Rule was stayed by the U.S. Supreme Court on February 9, 2016 pending disposition of petitions for review before the U.S. Court of Appeals for the District of Columbia Circuit. Thereafter, the D.C. Circuit Court granted EPA's motion to suspend cases challenging the CPP Rule, which the EPA has now rescinded and replaced, and is likely moot pending the D.C. Circuit



Court formally ending the litigation. On August 13, 2019, twenty-two states, including New York, and seven local governments filed a petition with the U.S. Court of Appeals for the D.C. Circuit challenging the ACE rule (on August 14, 2019, a coalition of health and environmental groups followed suit by filing a petition challenging ACE). With regard to greenhouse gas emissions in New York, on July 18, 2019, Governor Andrew Cuomo signed the New York State Climate Leadership and Community Protection Act that sets a goal of net-zero carbon emissions for the entire state, not limited to the energy sector, by 2050 (85% reduction of greenhouse gas emissions from 1990 levels and implement measures to offset the remaining 15%), with a requirement for 70% of the state's electricity to be from renewable sources by 2030 (see discussion in "New Legislation Affecting the Authority"). The Authority continues to monitor developments in this area.

During 2011, the EPA issued a series of rulings to establish the Cross-State Air Pollution Rule ("CSAPR"), which was updated in 2016. The CSAPR establishes emission allowance budgets for sulfur dioxide and nitrogen oxides for eastern states, including New York, and requires power plants in those states to hold allowances to cover their emissions. Certain trading of allowances is authorized under the CSAPR. In July 2018, a proposed determination published by the EPA found that the 2016 CSAPR Update to the National Ambient Air Quality Standards ("NAAQS") was sufficient to address the good neighbor provisions of the Clean Air Act, and that no further rulemaking is required to address out-of-state emissions as additional upwind reductions are not required to meet the 2008 ozone NAAQS. The U.S. Court of Appeals for the D.C. Circuit has not yet decided the legality of the CSAPR 2016 update (oral arguments were heard by the Court in October 2018). The Authority continues to operate its fossil-fueled plants within the allocated allowances and anticipates that operation of its fossil-fueled plants will not be impacted by CSAPR.

Congressional, state, and regulatory action for the increased regulation of air, water and contaminants is periodically considered, and there are potential legislative and regulatory proposals which may affect the electric utility industry, including the Authority, in the future. The impact on the Authority's operations of any such proposals is not presently predictable or quantifiable.

On July 18, 2019, the State enacted the "New York State Climate Leadership and Community Protection Act" as Chapter 106 of the Laws of 2019 ("Chapter 106"). As presently drafted, the date upon which most provisions of Chapter 106 will become effective will depend on the date that related legislation becomes effective.

In its present form, several provisions of Chapter 106 could potentially impact the Authority's business and operations, such as the following: (1) provisions authorizing the New York State Department of Environmental Conservation to promulgate regulations establishing limits State-wide greenhouse gas ("GHG") emissions and to ensure compliance with such limits; (2) a requirement that specified State entities, including the Authority, adopt regulations to contribute to achieving statewide GHG emissions; (3) a requirement that State entities, including the Authority, assess and implement strategies to reduce GHG emissions; (4) consideration of whether actions that the Authority would undertake in the course of its operations are consistent with State GHG emission limits that will be established pursuant the enactment; and (5) potential allocation or realignment of resources to support State clean energy and energy efficiency goals for disadvantaged communities.

Many of the provisions of Chapter 106 that could impact the Authority are not likely to be implemented for years based on deadlines established in the enactment. Therefore, the Authority is not in a position at this time to evaluate the impact of any particular provision of Chapter 106 on the Authority's business and operations.

The Authority has flexible rate-setting authority for many of its power sales agreements with customers; however, due to FERC's jurisdiction over the Authority's transmission revenue requirement, the Authority's transmission cost recovery must adhere to FERC standards. In 2017, the Authority filed for a formula rate annual TRR consistent with those standards. The formula rate annual TRR is incorporated into the NYISO Open Access Transmission Tariff ("OATT"). This Proposed Four-Year Plan assumes full recovery of eligible future costs under the provisions of the NYISO OATT.

Legislative Environment Risks

A series of legislative enactments have called for the Authority to subsidize business customers and the State's general fund. Legislation enacted into law, as part of the 2000-2001 State budget, as amended up to the present time, has authorized the Authority as deemed feasible and advisable by the Trustees, to make a series of voluntary contributions into the State treasury.

In the past, the Authority has, from time to time, made voluntary contributions or payments to the State or as otherwise authorized by legislation. Such payments were authorized by legislation and have been conditional upon the Trustees' determination that such payments are "feasible and advisable". Any such contribution or transfer of funds must (i) be



authorized by law (typically, legislation enacted in connection with the State budget), and (ii) satisfy the requirements of the Bond Resolution. The Bond Resolution requirements to withdraw moneys "free and clear of the lien and pledge created by the (Bond) Resolution" are as follows: (1) such withdrawal must be for a "lawful corporate purpose as determined by the Authority," and (2) the Authority must determine "taking into account, among other considerations, anticipated future receipt of Revenues or other moneys constituting part of the Trust Estate, that the funds to be so withdrawn are not needed" for (a) payment of reasonable and necessary operating expenses, (b) an Operating Fund reserve for working capital, emergency repairs or replacements, major renewals, or for retirement from service, decommissioning or disposal of facilities, (c) payment of, or accumulation of a reserve for payment of, interest and principal on senior debt, or (d) payment of interest and principal on subordinate debt.

In May 2011, the Authority's Trustees adopted a policy statement (Policy Statement) which relates to, among other things, voluntary contributions, transfers, or other payments to the State by the Authority after that date. The Policy Statement provides, among other things, that in deciding whether to make such contributions, transfers, or payments, the Authority shall use as a reference point the maintenance of a debt service coverage ratio of at least 2.0 (this reference point should not be interpreted as a covenant to maintain any particular coverage ratio), in addition to making the other determinations required by the Bond Resolution. The Policy Statement may at any time be modified or eliminated at the discretion of the Authority's Trustees.

The 2020-2021 Enacted State Budget contains a provision authorizing the Authority as deemed "feasible and advisable by its trustees" to transfer to the State treasury to the credit of the general fund \$20 million for the State fiscal year commencing April 1, 2020, the proceeds of which will be utilized to support energy-related State activities. This amount will be fully accrued by December 31, 2020 but is not expected to be paid by that date.

The Authority cannot predict what additional contributions to the State may be authorized in the future. The Trustees' decision as to whether and to what extent such payments are feasible and advisable will be made based on the exercise of their fiduciary responsibilities and in light of the requirements of the Authority's Bond Resolution, other legal requirements, and all the facts and circumstances known to them at the time of the decision.

In addition to the authorization for the voluntary contributions, as a result of budget legislation enacted in February 2009, the Authority was requested to make certain temporary asset transfers to the State of funds held in reserves. Pursuant to the terms of a Memorandum of Understanding dated February 2009 (the "MOU") between the State, acting by and through the State's Director of Budget, and the Authority, the Authority transferred \$215 million associated with its Spent Nuclear Fuel Reserves ("Asset B") in March 2009 and \$103 million of funds set aside for future construction projects ("Asset A") in September 2009. The Authority subsequently executed amendments to the MOU in 2014 and 2017 that extended the return date for the Asset A and Asset B, respectively, and provided for their return in installments over several years, subject to annual appropriation by the State Legislature. The Authority received cumulative payments of \$103 million with respect to Asset A through 2018. As of June 30, 2020, the Authority has received cumulative payments of \$86 million on Asset B. Pursuant to the amended MOU, the remaining payments on Asset B of \$129 million are to be made by the State from 2020-2024, subject to annual appropriation by the State Legislature.

Both temporary transfers were authorized by the Authority's Trustees and made in 2009.

In lieu of interest payments, the State waived certain future payments from the Authority to the State, including payments to which the State was entitled, pursuant to Public Authorities Law §2975, under a governmental cost recovery process for the costs of central governmental services.

On April 24, 2014, the Authority and the State executed an Amendment to the MOU which provides that the State shall, subject to appropriation by the State Legislature, return the \$103 million (Asset A) in five annual installments through State Fiscal Year 2018-2019. As of September 30, 2018, the Authority has received all installment payments, totaling \$103 million on Asset A.

The Authority and the State executed a Second Amendment to the MOU, dated as of June 30, 2017, that provides for the return to the Authority of the \$215 million (Asset B) in the following amounts and by no later than September 30 of each of the following State fiscal years: (1) \$22 million for State Fiscal Year 2017-18, (2) \$21 million for State Fiscal Year 2018-19, (3) \$43 million for State Fiscal Year 2019-20, (4) \$43 million for State Fiscal Year 2020-21, (5) \$43 million for State Fiscal Year 2021-22, and (6) \$43 million for State Fiscal Year 2022-23. The obligation of the State to return the moneys transferred by the Authority to the State is subject to annual appropriation by the State Legislature. As of October 1, 2019, the Authority has received installment payments of \$86 million on Asset B. In the Second Amendment to the MOU, the Authority and the State also agreed to enter into alternative cost recovery agreements for each of State Fiscal Year 2017-18 through State Fiscal Year 2022-23 that the asset transfers have not been fully



returned to the Authority. The alternative cost recovery agreements would relieve the Authority of any obligation to make up to \$5 million in cost recovery assessment payments to the State in each year. In the event that the cost recovery assessment pursuant to Public Authorities Law §2975 for a given year exceeds \$5 million, the assessment due from the Authority would be limited to the difference between the assessment and \$5 million. This Proposed Four-Year Plan assumes no such assessments during the 2021-2024 forecast period.

Section 1011 of the Power Authority Act ("Act") constitutes a pledge of the State to holders of Authority obligations not to limit or alter the rights vested in the Authority by the Act until such obligations together with the interest thereon are fully met and discharged or unless adequate provision is made by law for the protection of the holders thereof. Several bills have been introduced into the State Legislature, some of which propose to limit or restrict the powers, rights and exemption from regulation which the Authority currently possesses under the Act and other applicable law, or otherwise would affect the Authority's financial condition or its ability to conduct its business, activities, or operations, in the manner presently conducted or contemplated by the Authority. It is not possible to predict whether any of such bills or other bills of a similar type which may be introduced in the future will be enacted. In addition, from time to time, legislation is enacted into New York law which purports to impose financial and other obligations on the Authority, either individually or along with other public authorities or governmental entities. The applicability of such provisions to the Authority would depend upon, among other things, the nature of the obligations imposed and the applicability of the pledge of the State set forth in Section 1011 of the Act to such provisions. There can be no assurance that the Authority will be immune from the financial obligations imposed by any such provision.

Actions taken by the State Legislature or the Executive Branch to cause voluntary contributions or other obligation upon the Authority and which attempt to constrain the discretion of or bypass the Authority's Trustees could negatively affect net income and possibly harm the Authority's credit ratings.

Hydro Generation Risk

The Authority's net income is highly dependent upon generation levels at its Niagara and St. Lawrence-FDR Projects. The generation levels themselves are a function of the hydrological conditions prevailing on the Great Lakes, primarily, Lake Erie (Niagara Project) and Lake Ontario (St. Lawrence-FDR Project). Long-term generation level at the two hydroelectric projects is approximately 20.3 terawatt-hours ("TWH") annually. The Authority's hydroelectric generation forecast is 24.5 TWH in 2021, 24.0 TWH in 2022, 23.7 TWH in 2023, and 23.5 TWH in 2024.

However, these generation amounts are forecasted values and environmental / external factors (e.g., climate change, flooding, ice, storm frequency and duration) can cause hydrological conditions to vary considerably from year to year. Hydro Generation may potentially also face risks due to transmission line constraints within the region (e.g., spilling extra hydro flow; high transmission prices) and increased competitiveness of other types of renewable generation.

The Authority conducted high and low hydroelectric generation sensitivities for 2021-2024 that estimated the potential net income that could result over a reasonable range of hydroelectric generation occurrences. The sensitivities were calculated only for merchant generation as merchant revenues has significant impact on Authority's net income. The effects on estimated net income, assuming all other factors remain unchanged, were as follows:

	Low Go	eneration	High G	eneration
Year	Net Merchant Hydroelectric Generation	NYPA Net Income Change	Net Merchant Hydroelectric Generation	NYPA Net Income Change
	(In TWH)	(In \$ Millions)	(In TWH)	(In \$ Millions)
2021	7.7	(\$14.9)	9.2	\$17.0
2022	6.6	(\$30.7)	9.0	\$28.0
2023	6.2	(\$40.4)	8.9	\$26.0
2024	5.7	(\$53.9)	8.3	\$47.1



Sustained Margin Reduction and Commodity Market Volatility Risk

Through its participation in the NYISO and other commodity markets, NYPA is subject to electric energy price, fuel price and electric capacity price risks that impact the revenue and purchased power streams of its facilities and customer market areas. Such volatility can potentially have detrimental effects on NYPA's financial condition. To moderate cost impacts to its customers and itself, NYPA, at times, hedges market risks via the use of financial instruments and physical contracts. Hedges are transacted by NYPA to mitigate the cost of energy or related products needed; to mitigate risk related to the price of energy and related products sold by NYPA; to mitigate risk related to electric margins (electric sales versus fuel use) where NYPA owns generation or other capacity; and mitigation of geographic cost differentials of energy procured or sold for transmission or transportation to an ultimate location. Hedges effectuated on behalf of NYPA's customers are passed through, at cost, as provided for in customer contracts. Commodities able to be hedged include, but are not limited to, natural gas, natural gas basis, electric energy, electric capacity and congestion costs associated with the transmission of electricity.

On July 21, 2010, President Obama signed into law the Dodd-Frank Wall Street Reform and Consumer Protection Act ("DF Act") which addresses, among other things, interest rate and energy related commodity swap transactions of the type in which the Authority engages. The requirements and processes are set forth in regulations promulgated by the Commodities Futures Trading Commission ("CFTC"). Pursuant to CFTC rules, the Authority, as a public entity and electric utility which uses swaps solely to manage its risk, is exempted from posting collateral beyond that of any existing credit support annexes in support of its open over-the-counter hedge positions. These CFTC rules are not anticipated to have significant impact on the Authority's liquidity and/or future risk mitigation activities. CFTC DF Act rules are still being promulgated, and the Authority will continue to monitor their potential impact on the Authority's liquidity and/or future risk mitigation activities.

Disruptive Innovation and Customer Energy Choices

Transformative technologies and customer empowerment are creating uncertainty for the Authority and the electric utility industry that can produce new business opportunities or reduced demand for electric energy. Through its Strategic Planning and Risk Management processes, the Authority regularly evaluates its mission, objectives, and customer needs and seeks to appropriately position the Authority to effectively meet the challenges of the transforming electric industry through implementation of initiatives such as a long-term asset management strategy and a suite of customer solutions including new/modified product offerings. The impact on the Authority's operations of any such industry transformation is not presently predictable or quantifiable.

Attract and Retain a Qualified Workforce

Like many other industries, the power and utility sector is realizing increased competition for, and a general shortage of, talent in high skilled areas. This trend is expected to continue and be further impacted by transformations in the industry where new technologies are being developed and deployed. The Authority recognizes the uncertainty with being able to attract and retain the skills and competencies needed to meet stated objectives and regularly evaluates and positions its recruiting, talent development and benefits programs accordingly, through its workforce planning strategic initiative and other ongoing efforts.

Cyber Security

The Federal Government recognizes the electric utility industry as critical infrastructure for the United States and works closely with the industry to ensure awareness of ongoing threats and that appropriate protections are in place against both physical and cyber-attacks. The Authority constantly assesses the nature of the Physical and Cyber Security risks and adjusts its resources to best anticipate and respond to any threats. With over 1,400 circuit-miles of high voltage transmission lines and 16 power generation facilities across New York State, the Authority recognizes the critical nature of its assets. Investments to harden both physical and cyber assets and their related infrastructure are continually needed to minimize potential adverse impacts to the bulk electric system, detect and deter sabotage attempts, and protect the Authority and customer information. In addition to the infrastructure investments the Authority further mitigates its Cyber risk through the purchase of insurance.



Business Continuity

A catastrophic natural event such as severe weather, flooding or earthquake can negatively affect the operability of Authority assets and the bulk electric system. The Authority regularly evaluates the resiliency of its assets. In addition, the Authority has implemented disaster planning programs relating to Emergency Management, Disaster Recovery and Business Continuity. These plans are based on the specific, unique natural threats at each of its generation facilities. The Authority regularly conducts drills and exercises in order to ensure advance preparation for these types of events. The Authority maintains close working relationships with local first responders and government agencies to ensure its ongoing preparedness.

An outbreak of disease or similar public health threat, such as the COVID-19 pandemic, or fear of such an event, could have an adverse impact on the Authority's financial condition and operating results.

Canal Corporation

The Authority has identified key risk areas relating to the Canal Corporation and continues to employ and assess risk mitigation options across multiple enterprise risk fronts in an effort to manage or reduce potential exposures. As part of the ongoing Canals management strategy, the Authority will adjust and allocate resources accordingly.

COVID-19

The COVID-19 pandemic has changed societal and business operation norms and impacted the risk profiles of organizations globally. Despite the uncertainty associated with COVID-19 (i.e. vaccine development, treatment advancements, phase 2 and 3 infection waves) NYPA is mitigating its risk through proactive and robust pandemic responses plans. The Authority is well positioned to address future pandemic and business concerns by employing mitigation strategies such as an Incident Command System, Business Continuity Plans, and Return to Work procedural and physical modifications.

Critical Infrastructure

As a generation and transmission business, the Authority is exposed to potential critical infrastructure failure that may lead to service disruption, injury and/or degradation of system reliability impacting financial results. The Authority engages in several activities, including the recent ISO-55001 Asset Management Certification, in an effort to mitigate these risks such as the purchase of insurance, redundancy of major equipment, capital investments, and a robust operational maintenance program.

Workforce Health and Safety

As a generation and transmission business, the Authority is exposed to a variety of health and safety risks. The health and safety of NYPA's workforce, customers, contractors and the citizens of New York are of the highest priority to the Authority. The Authority has put in place multiple levels of controls, policies, procedures, and training programs in support of reducing and/or eliminating health and safety incidents.

Litigation Risk

St. Regis Litigation

In 1982 and again in 1989, several groups of Mohawk Indians, including a Canadian Mohawk tribe, filed lawsuits (the St. Regis litigation) against the State, the Governor of the State, St. Lawrence and Franklin counties, the St. Lawrence Seaway Development Corporation, the Authority and others, claiming ownership to certain lands in St. Lawrence and Franklin counties and to Barnhart, Long Sault and Croil islands. These islands are within the boundary of the Authority's St. Lawrence-FDR Project and Barnhart Island is the location of significant Project facilities. Settlement discussions were held periodically between 1992 and 1998. In 1998, the Federal government intervened on behalf of all Mohawk plaintiffs.

The parties agreed to a land claim settlement, dated February 1, 2005, which if implemented would have included, among other things, the payment by the Authority of \$2 million a year for 35 years to the tribal plaintiffs and the provision



of up to 9 MW of low cost Authority power for use on the reservation. The legislation required to effectuate the settlement was never enacted and the litigation continued.

In 2013, all claims against the Authority were dismissed and the lawsuit against the Authority was concluded. On May 28, 2014, the State of New York, the St. Regis Mohawk Tribe, St. Lawrence County and the Authority executed a Memorandum of Understanding ("St. Regis MOU") that outlined a framework for the possible settlement of all the St. Regis land claims. In the St. Regis MOU, the Authority endorses a negotiated settlement that, among other terms and conditions, would require the Authority to pay the Tribe \$2 million a year for 35 years and provide up to 9 MW of its hydropower at preference power rates to serve the needs of the Tribe's Reservation. The St. Regis MOU would require an Act of Congress to forever extinguish all Mohawk land claims prior to such a settlement becoming effective.

Any settlement agreement, including the terms endorsed in the St. Regis MOU, would in the first instance need to be negotiated and agreed upon by all parties to the St. Regis litigation, including parties that did not execute the St. Regis MOU, such as the two other Mohawk groups, the federal government and Franklin County. In addition, before any settlement becomes effective and the Authority is obligated to make any payments contemplated by the St. Regis MOU, federal and state legislation must be enacted which approves the settlement and extinguishes all Mohawk land claims. The Authority is in continuing settlement discussions with some of the parties to the St. Regis litigation.

Long Island Sound Cable Project

In January 2014, one of the Long Island Sound Cable Project underwater cables was severely impacted by an anchor and/or anchor chain dropped by one or more vessels, causing the entire electrical circuit to fail and the circuit breaker to trip. As a result of the impact to the cable, dielectric fluid was released into Long Island Sound. At December 31, 2019 and December 31, 2018, the consolidated statements of net position includes approximately \$19 million and \$18 million, respectively, in other long-term assets, reflecting the cost of damages net of insurance recoveries. The Authority believes that it will be able to recover the full amount of its damages through legal proceedings, insurance coverage and contractual obligations.

Helicopter Incident near the Authority's Transmission Lines in Beekmantown, New York

In April 2014, Authority contracted with Northline Utilities, LLC ("Northline") to install fiber optic ground wire along the Authority's transmission system. Thereafter, Northline engaged Catalyst Aviation, LLC ("Catalyst") to provide helicopter services. On October 30, 2018, a Catalyst helicopter was destroyed when it collided with a wooden utility pole and power lines near Beekmantown, New York. Members of the helicopter crew were injured, and two members of that crew died as a result of their injuries. The Authority has received two notices of claim arising out of this incident. The Authority has pursued insurance coverage under Northline's insurance policies that name the Authority as an additional insured. The Authority tendered its defense of these notices of claim to Northline's insurer and the insurer has accepted the Authority's tender. The Authority believes that there exists sufficient insurance coverage to cover these claims. In any event, to the extent that the insurance coverage limitations are insufficient, Northline is responsible under the defense and indemnification provisions of its contract with the Authority.

Miscellaneous

In addition to the matters described above, other actions or claims against the Authority are pending for the taking of property in connection with its projects, for negligence, for personal injury (including asbestos-related injuries), in contract, and for environmental, employment and other matters. All of such other actions or claims will, in the opinion of the Authority, be disposed of within the amounts of the Authority's insurance coverage, where applicable, or the amount which the Authority has available therefore and without any material adverse effect on the business of the Authority.

Economic Outlook and View on Energy Markets

Energy markets indicate an expectation that in 2021 prices will rebound somewhat from 2020's mild winter and the impact of COVID-19. Achieving long term CLCPA goals will depress wholesale power prices, so upstate forward power prices are stagnant or declining from 2021 through 2023. Downstate, however, forward markets indicate that in the near-term wholesale price depression due to CLCPA is not expected to overcome the effects of awaited unit retirements (Indian Point 3, as well as New York City peakers retiring due to the DEC's new NOx rule). Consequently, downstate power prices are foreseen as mildly rising over the next four years.



Capacity prices are expected to remain low for upstate supply, and to decline off current highs in New York City. Both cases are driven by the quadrennial Demand Curve Reset resulting in lower Reference Points, and by reductions in peak loads due in part to COVID-19 impacts.

Ancillary Services prices are expected to mildly decline over the next few years, as more flexible generation replaces Indian Point, and over the longer-term as responsive energy storage comes online. Ancillary Services could rebound beyond the next few years as intermittent renewables represent a larger share of supply.

Overall, revenues from NYISO sales are expected to remain fairly static over the next few years. As always, such a statement is subject to the usual fluctuations due to weather. An additional source of energy market uncertainty is the potential for a more robust CO₂ price. The Regional Greenhouse Gas Initiative (RGGI) is a mature program at this point, but efforts by the NYISO to support decarbonization by assessing a CO₂ charge commensurate with the social cost of carbon, or a Federal assessment at such levels, could shift wholesale power prices upwards and so represent an opportunity for renewable generators and providers of energy efficiency and energy management services.

Customer expectations are continuously evolving, as the needs for improved service levels, as well movements toward decarbonization, are growing. These increasingly complex needs are not fully met by current offerings and domestic and international entrants into the NY energy market are beginning to take share, raising the bar for all players with sophisticated customer solutions. In addition, through continuous technology improvements, renewable energy sources are becoming more cost-competitive than traditional power sources, such as hydro and gas, and disrupting wholesale markets. New technologies such as electric vehicles, storage, and hydrogen are either beginning to scale or starting to emerge and change the landscape. In parallel, players across the power value chain are embracing digitization and automation in pursuit of efficiency and growth, enabling a more decentralized, two-way power ecosystem.

Competition in the NYS ecosystem is taking shape as offshore wind solicitations are gathering momentum and downstream solar and storage are growing rapidly. The large and well-planned expansion of the transmission grid is widely recognized as a critical need and distribution utilities are taking actions to modernize their grids and provide new services, while new entrants are competing for business. With the adoption of the Climate Leadership and Community Protection Act, New York State has set one of most ambitious decarbonization agendas in the US, with significant implications for all participants in the NY energy and cross-sector ecosystems. The outcome of the US Presidential election in November could accelerate implementing national decarbonization plans.

Lastly, high uncertainty around a macroeconomic recovery from COVID-19 pandemic remains, while NYPA customers are facing new challenges and financial strains. The ways of working are being re-defined and remote working may create substantial value even after COVID-19, in areas such as access to talent and operational efficiencies.



(e) Revised Forecast of 2020 Budget

Revised Forecast of 2020 Budget (In \$ Millions)

	Original Budget	Forecast 2020	Variance Favorable / (Unfavorable) 2020
Operating Revenues:			
Customer Revenues	\$1,785.9	\$1,632.2	(\$153.7)
NYISO Market Revenues	764.2	636.5	(127.7)
Other Revenue	<u>30.1</u>	<u>24.2</u>	(5.9)
Total Operating Revenues	2,580.2	2,292.9	(287.3)
Operating Expenses:			
Purchased Power	681.7	531.2	150.5
Fuel - Oil and Gas	147.7	97.0	50.7
Wheeling Expenses	644.1	640.9	3.2
O&M Expenses	590.4	574.7	15.7
Other Expenses	<u>119.8</u>	<u>130.6</u>	<u>(10.8)</u>
Total Operating Expenses	2,183.7	1,974.4	209.3
NET OPERATING INCOME	396.5	318.5	(78.0)
Other Income:			
Investment Income	28.4	31.1	2.7
Other Income	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total Other Income	28.4	31.1	2.7
Non-Operating Expenses:			
Depreciation and Amortization	262.5	258.6	3.9
Interest & Other Expenses	<u>120.9</u>	<u>117.4</u>	<u>3.5</u>
Total Non-Operating Expense	383.4	376.0	7.4
NET INCOME:	\$41.5	(\$26.4)	(\$67.9)

(f) Reconciliation of 2020 Budget and 2020 Revised Forecast

The 2020 year-end net income forecast is (\$26.4) million, which is (\$67.9) million below budget. This negative variance is primarily due to lower market prices and the resulting decrease of projected market-based power sales. It is additionally driven by higher than budgeted HTP RTEP payments, lower than budgeted Energy Efficiency revenue, and potential increase of expenses related to NYPA's response to COVID-19, offset by a realized gain on sale of securities and lower than budgeted depreciation.



(g) Statement of 2019 Financial Performance

Net Income - Actual vs. Budgeted for the Year ended December 31, 2019 (In \$ Millions)

	Actual	۷۶ Budget	ariance Favorable / (Unfavorable)
	2019	2019	2019
Operating Revenues:			
Customer Revenues	\$1,671.2	\$1,825.2	(\$154.0)
NYISO Market Revenues	671.2	762.7	(91.5)
Other Revenue	<u>27.7</u>	<u>20.9</u>	<u>6.8</u>
Total Operating Revenues	2,370.0	2,608.8	(238.7)
Operating Expenses:			
Purchased Power	528.0	696.9	168.9
Fuel Consumed - Oil & Gas	139.8	189.2	49.4
Wheeling	647.0	644.1	(2.9)
Operations & Maintenance	601.2	596.3	(5.0)
Other Expenses	118.3	117.2	(1.2)
Depreciation & Amortization	250.1	244.1	(6.0)
Allocation to Capital	(18.6)	(18.3)	0.3
Asset Impairment Charge	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total Operating Expenses	2,265.9	2,469.4	203.6
NET OPERATING INCOME	104.2	139.4	(35.2)
Other Income:			
Investment Income	47.4	30.5	16.9
Other Income	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total Other Income	47.4	30.5	16.9
Non-Operating Expenses:			
Contribution to New York State	0.0	0.0	0.0
Interest and Other Expenses	<u>128.6</u>	<u>149.0</u>	<u>20.4</u>
Total Non-Operating Expenses	128.6	149.0	20.4
NET INCOME	\$23.0	\$20.9	\$2.1

Net Income for the year ended December 31, 2019 was \$23 million, which was \$2.1 million higher than the budget of \$20.9 million. The increase in net income was primarily attributable to higher investment income due to an increase in the market value of the Authority's investment portfolio, lower interest expenses due to lower interest rate, and offset by lower operating income due to lower margins resulting from lower energy prices.



(h) Employee Data – number of employees, full-time, FTEs and functional classification

NYPA Headcount Projections 2021-2024

	2021	2022	2023	2024
Headquarters	857	857	857	857
Power Generation	974	974	974	974
Transmission	203	203	203	203
R&D	<u>14</u>	<u>14</u>	<u>14</u>	<u>14</u>
Total NYPA:	2,048	2,048	2,048	2,048
Canals	482	482	482	482
Total NYPA & CANALS*:	2,530	2,530	2,530	2,530

^{*} Authorized positions including vacancies.

(i) Gap-Closing Initiatives – revenue enhancement or cost-reduction initiatives

When building a multi-year operating plan, NYPA management has developed a series of contingency plans to adapt to unforeseen changes in its financial results. The Authority is currently projecting positive net income for the 2021-2024 period, constructed upon a level of expenses outlined within this preliminary Budget and Financial Plan. Should that net income projection materially change during the forecast period, management will evaluate the situation and take appropriate actions if deemed appropriate.

The Authority has been and continues to be impacted by the ongoing COVID-19 pandemic, with effects including the shift of the majority of the employee base to a remote work configuration, a halt and subsequent restart of the planned Capital and O&M work portfolio, the temporary sequestration of operations' staff to maintain reliable electric service, and increased employee/facility health and safety measures to mitigate any potential infection – to name a few. An incremental \$28M in total costs, both Capital and O&M, is the current projected impact to NYPA for costs directly associated with these efforts in the 2020 budget year, however efforts are underway to recover a significant portion of those expenses (approximately 40%) via reimbursement through FEMA.

In addition to the direct financial costs of addressing COVID-19 outlined above, NYPA experienced additional financial impacts related to lower energy prices, which reduced our merchant revenues, and a decline in Energy Efficiency project completions, which reduced revenues for that business line. In an effort to lessen the effect of these revenues drops, NYPA undertook a comprehensive approach of reviewing and reducing operating costs throughout the Authority in order to mitigate the financial impact of the pandemic.

Moving into 2021 the risk of additional COVID-19 "waves" does exist, and could again result in similar actions taken by NYPA, however it is expected that any impact either financially or operationally should be much reduced considering the amount of planning that has been conducted in preparation for such an event. This plan does not assume another shutdown within the financial forecast.

(j) Material Non-Recurring Resources - source and amount

Except as discussed elsewhere in this report, there are no material non-recurring resources expected in the 2021-2024 period.

(k) Shift in Material Resources

There are no anticipated shifts in material resources from one year to another.



(I) Debt Service

New York Power Authority Projected Debt Outstanding (FYE) (In \$ Thousands)

	2021	2022	2023	2024
Revenue Bonds	\$1,624,840	\$1,624,840	\$1,864,486	\$2,061,815
Adjustable Rate Tender Notes	-	-	-	-
Subordinated Notes	\$41,185	\$38,530	\$37,635	\$36,715
Commercial Paper Notes	\$505,270	\$505,270	\$505,270	\$505,270
Grand Total:	\$2,171,296	\$2,168,640	\$2,407,391	\$2,603,800

Debt Service as Percentage of Pledged Revenues (Accrual Based) (In \$ Thousands)

	20	21	20	22	20	23	20	24
	Debt	% of						
	Service	Revenue	Service	Revenue	Service	Revenue	Service	Revenue
Revenue Bonds	\$31,279	1%	\$31,279	1%	\$50,452	2%	\$85,405	3%
Adjustable Rate Tender Notes	\$0	0%	\$0	0%	\$0	0%	\$0	0%
Subordinated Debt	\$2,421	0%	\$4,200	0%	\$2,370	0%	\$2,371	0%
Commercial Paper Notes	\$2,935	0%	\$2,935	0%	\$2,935	0%	\$2,935	0%
Grand Total Debt Service:	\$36,636	1%	\$38,414	1%	\$55,757	2%	\$90,711	3%
Debt Service Coverage Ratio:	11.2X		10.5X		8.1X		5.6X	



Scheduled Debt Service Payments (Accrual Basis) Outstanding (Issued) Debt (In \$ Thousands)

Year	Principal	Interest	Total
2021	\$855	\$36,607	\$37,462
2022	\$2,655	\$38,385	\$41,040
2023	\$895	\$55,728	\$56,623
2024	\$16,815	\$90,682	\$107,497

Proposed Debt

Year	Principal	Interest	Total
2021	\$0	\$0	\$0
2022	\$0	\$0	\$0
2023	\$0	\$4,530	\$4,530
2024	\$0	\$8,904	\$8,904

Total Debt

Year	Principal	Interest	Total
2021	\$855	\$36,607	\$37,462
2022	\$2,655	\$38,385	\$41,040
2023	\$895	\$60,258	\$61,153
2024	\$16,815	\$99,586	\$116,401



New York Power Authority Planned Use of Debt Issuances (In \$ Thousands)

TYPE	Amount	Interest Rate	Project / Description
Period January 1, 2021 - December 31, 2021:			
Tax Exempt Commercial Paper	\$0	1%	Energy Efficiency Program
Taxable Commercial Paper	\$0	1%	Energy Efficiency Program
Tax Exempt Revenue Bonds	\$0	4%	Transmission
Taxable Revenue Bonds	\$0	5%	Robert Moses Power Plant /
			Lewiston Pump Generating Plant
Total Issued 2021	\$0		
Period January 1, 2022 - December 31, 2022:			
Tax Exempt Commercial Paper	\$0	1%	Energy Efficiency Program
Taxable Commercial Paper	\$0	1%	Energy Efficiency Program
Tax Exempt Revenue Bonds	\$0	4%	Transmission
Taxable Revenue Bonds	\$0	5%	Robert Moses Power Plant /
			Lewiston Pump Generating Plant
Total Issued 2022	\$0		
Period January 1, 2023 - December 31, 2023:			
Tax Exempt Commercial Paper	\$0	1%	Energy Efficiency Program
Taxable Commercial Paper	\$0	1%	Energy Efficiency Program
Tax-Exempt Revenue Bonds	\$206,072	4%	Transmission
Taxable Revenue Bonds	\$33,575	5%	Robert Moses Power Plant /
			Lewiston Pump Generating Plant
Total Issued 2023	\$239,646		
Period January 1, 2024 - December 31, 2024:			
Tax Exempt Commercial Paper	\$0	1%	Energy Efficiency Program
Taxable Commercial Paper	\$0	1%	Energy Efficiency Program
Tax-Exempt Revenue Bonds	\$148,947	4%	Transmission
Taxable Revenue Bonds	\$64,282	5%	Robert Moses Power Plant /
			Lewiston Pump Generating Plant
Total Issued 2024	\$213,230		

Note: The full faith and credit of the Authority are pledged for the payment of bonds and notes in accordance with their terms and provisions of their respective resolutions. The Authority has no taxing power, and its obligations are not debts of the State or any political subdivision of the State other than the Authority. The Authority's debt does not constitute a pledge of the faith and credit of the State or of any political subdivision thereof, other than the Authority.



Capital Commitments and Sources of Funding

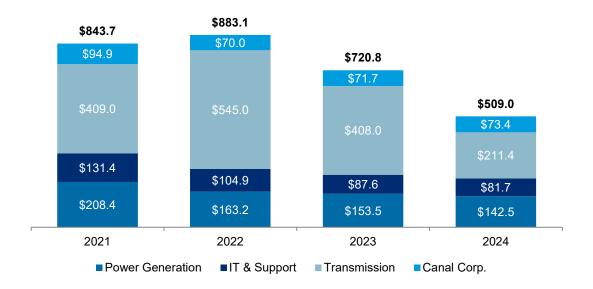
The Authority's commitments for various capital improvements are approximately \$4.2 billion over the financial period 2021-2024. The Authority anticipates that these improvements will be funded using existing construction funds, internally generated funds and additional borrowings. Such additional borrowings are expected to be accomplished through the issuance of additional commercial paper notes and/or the issuance of long-term fixed rate debt. Projected capital commitments during this period include those listed in the table below.

2021-2024 Capital Commitments by Function (In \$ Millions)

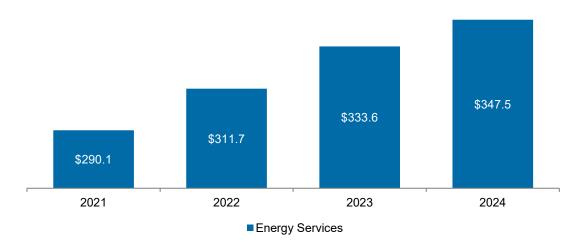
	2021	2022	2023	2024
Northern New York Transmission	\$7.0	\$175.0	\$226.1	\$133.1
Moses Adirondack Upgrade (Smartpath)	\$113.6	\$121.1	\$53.6	\$0.0
Marcy-Scott Yard Upgrade (AC Project)	\$95.1	\$113.4	\$47.8	\$0.0
Communications Backbone	\$53.2	\$26.5	\$21.6	\$0.3
Robert Moses LEM (NextGen Niagara)	\$44.3	\$36.3	\$51.7	\$54.8
Sensor Deployment	\$19.4	\$0.0	\$0.0	\$0.0
Transmission Life Extension & Modernization	\$73.6	\$48.4	\$43.9	\$25.6
Canals	\$94.9	\$70.0	\$71.7	\$73.4
Reimagine Canals	\$25.2	\$64.8	\$70.2	\$7.9
Digital, Network & Cyber	\$59.4	\$28.7	\$19.6	\$18.8
Other NYPA Capital	\$258.1	\$199.0	\$114.6	\$195.2
Total NYPA & Canals Funded:	\$843.7	\$883.1	\$720.8	\$509.0
Energy Services - Separately Financed:	\$290.1	\$311.7	\$333.6	\$347.5



2021-2024 Capital Commitments by Function (In \$ Millions)



2021-2024 Capital Commitments by Function (In \$ Millions)





(m) Credit Discussion

Maintaining a strong relationship with the capital markets is critical to how NYPA operates. Fitch Ratings and S&P Global Ratings currently assign a AA rating to the Authority's long-term bonds, while Moody's Investor Services currently assign a Aa2 rating to the Authority's long-term bonds, which is among the highest rating give to public electric utilities. This allows us to borrow money for capital projects at competitive rates, and to continue to offer low-cost financing to qualified customers to help fund impactful energy initiatives.

The Authority's long-term bonds are issued pursuant the "General Resolution Authorizing Revenue Obligations" (as amended and supplemented up to the present time, the Bond Resolution). The Bond Resolution covers all of the Authority's projects, which it defines as any project, facility, system, equipment or material related to or necessary or desirable in connection with the generation, production, transportation, transmission, distribution, delivery, storage, conservation, purchase or use of energy or fuel, whether owned jointly or singly by the Authority, including any output in which the Authority has an interest authorized by the Act or by other applicable State statutory provisions, provided, however, that the term "Project" shall not include any Separately Financed Project as that term is defined in the Bond Resolution. The Authority has covenanted with bondholders under the Bond Resolution that at all times the Authority shall maintain rates, fees or charges, and any contracts entered into by the Authority for the sale, transmission, or distribution of power shall contain rates, fees or charges sufficient together with other monies available therefor (including the anticipated receipt of proceeds of sale of Obligations, as defined in the Bond Resolution, issued under the Bond Resolution or other bonds, notes or other obligations or evidences of indebtedness of the Authority that will be used to pay the principal of Obligations issued under the Bond Resolution in anticipation of such receipt, but not including any anticipated or actual proceeds from the sale of any Project), to meet the financial requirements of the Bond Resolution. Revenues of the Authority (excluding revenues attributable directly or indirectly to the ownership or operation for Separately Financed Projects and after deductions for operating expenses and reserves, including reserves for working capital, operating expenses or compliance purposes) are applied first to the payment of, or accumulation as a reserve for payment of, interest on and the principal or redemption price of Obligations issued under the Bond Resolution and the payment of Parity Debt issued under the Bond Resolution.

The Bond Resolution also provides for withdrawal for any lawful corporate purpose as determined by the Authority, including but not limited to the retirement of Obligations issued under the Bond Resolution, from amounts in the Operating Fund in excess of the operating expenses, debt service on Obligations and Parity Debt issued under the Bond Resolution, and subordinated debt service requirements.

In order to support our Aa2/AA/AA bond ratings and all of the advantages it offers the Authority and its customers, NYPA sets certain internal targets which are consistent with other peer rated organizations. In May 2011, the Authority's Trustees adopted a policy statement (Policy Statement) which relates to, among other things, voluntary contributions, transfers, or other payments to the State by the Authority after that date. The Policy Statement provides, among other things, that in deciding whether to make such contributions, transfers, or payments, the Authority shall use as a reference point the maintenance of a debt service coverage ratio of at least 2.0 (this reference point should not be interpreted as a covenant to maintain any particular coverage ratio), in addition to making the other determinations required by the Bond Resolution. The Policy Statement may at any time be modified or eliminated at the discretion of the Authority's Trustees.



123 Main Street White Plains, NY 10601-3170 www.nypa.gov







Date: November 17, 2020

To: THE FINANCE COMMITTEE

From: THE PRESIDENT and CHIEF EXECUTIVE OFFICER

Subject: <u>2021 Canal Corporation Budgets</u>

SUMMARY

The Canal Corporation Board of Directors ("Canal Board") will be requested at their December 9, 2020 meeting to approve the 2021 Budget for the Canal Corporation, specifically including expenditures for the (i) 2021 Operations and Maintenance ("O&M") Budget (attached as Exhibit "A"), (ii) 2021 Capital Budget (attached as Exhibit "B"), (iii) 2021 Canal Development Fund Budget (collectively, with Exhibits "A" and "B" the "2021 Canal Corporation Budgets").

The 2021 O&M and Capital Budgets set forth the expected expenses of the Canal Corporation and include the recommended expenditures in the following amounts:

2021 Canal Corporation Budgets	<u>(\$ million)</u>
O&M (Inc. CDF)	\$ 111.6
Capital	\$ 40.3

The Finance Committee is requested to recommend that the Canal Board approve the 2021 Canal Corporation Budgets.

BACKGROUND

The Canal Corporation is authorized to operate, maintain, construct, reconstruct, improve, develop, finance, and promote the New York State canal system (the 'Canal System').

The 2021 Canal Corporation Budgets are intended to provide the Canal Corporation with the resources needed to meet the Canal Corporation's overall mission and objectives.

DISCUSSION

2021 Canal Corporation O&M Budget

The 2021 O&M Budget of \$111.6 million reflects a concentration on the effective operation and maintenance of the Canal Corporation's critical investments in the Canal System. This figure is comprised of \$109.7 million in O&M for Canal Corporation in 2021 and \$1.9 million for the Canal Development Fund in 2021.

The 2021 O&M Budget for Operations provides appropriations for baseline, or recurring work, along with programs which have been created to more safely and effectively manage ongoing operations. Significant projects in 2021 are: State Wide Public Safety (\$1.7 million), Fairport

Lift Bridge (\$1.0 million), EAR Dev 9 Waste Weir Dams (\$1.0 million), and Dam Safety Consultants and Engineering (\$0.6 Million).

2021 Canal Development Fund Budget

The 2021 Canal Development Fund Budget totals \$1.9 million, representing ongoing costs associated with the New York State Canal System Development Fund ("Canal Development Fund").

The Canal Development Fund, created by State Finance Law §92-u, is a fund established in the joint custody of the State Comptroller and the Commissioner of Taxation and Finance. The Canal Development Fund consists largely of revenues received from the operation of the Canal System. Monies of the Canal Development Fund, following appropriation by the legislature, is made available to the Power Authority, and may be expended by the Power Authority or the Canal Corporation for the maintenance, construction, reconstruction, development or promotion of the Canal System. In addition, monies of the Canal Development Fund may be used for the purposes of interpretive signage and promotion for appropriate historically significant Erie Canal lands and related sites. Monies from the Canal Development Fund are paid out by the State Comptroller on certificates issued by the Director of the Budget.

2021 Capital Budget

The 2021 Capital Budget totals \$40.3 million, representing on going, and new capital projects. Significant projects in 2021 are Embankment Rehabilitation Program (\$3.1 million), Court Street Dam Rehabilitation (\$1.9 Million), and the Lock E-7 Pump-out (\$1.7 Million).

FISCAL INFORMATION

The Canal Corporation's O&M, Capital and Canal Development Fund expenses are expected to be funded by transfers of funds from the Power Authority. Any transfers of funds from the Power Authority to the Canal Corporation would be subject to approval by the Power Authority's Board of Trustees and compliance with the Power Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented.

Canal Development Fund expenses are expected to be reimbursed to the Power Authority by the State Comptroller with monies held in the Canal Development Fund as discussed above.

RECOMMENDATION

The Chief Financial Officer recommends the Finance Committee recommends that the Canal Board approve the 2021 Canal Corporation Budgets, specifically including the expenditures for (i) 2021 Operations and Maintenance Budget, (ii) 2021 Capital Budget, and (iii) 2021 Canal Development Fund Budget, each as discussed herein.

For the reasons stated, I recommend the approval of the above-requested actions by adoption of a resolution in the form of the attached draft resolution.

Gil C. Quiniones
President and Chief Executive Officer

RESOLUTION

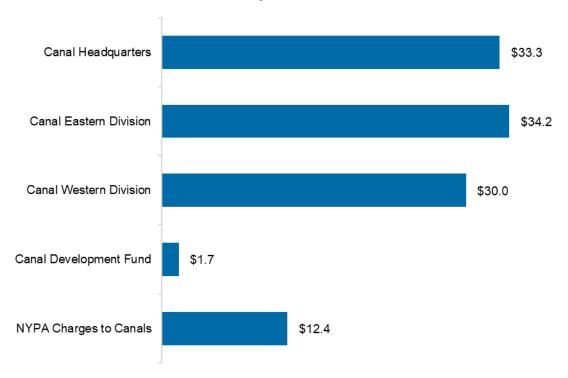
RESOLVED, That the Finance Committee hereby recommends that the Canal Corporation Board of Directors approve the 2021 Canal Corporation Budgets, specifically including the expenditures for the (i) 2021 Operations and Maintenance Budget, (ii) 2021 Capital Budget, and (iii) 2021 Canal Development Fund Budget, each as discussed in the attached memorandum of the President and Chief Executive Officer; and be it further

RESOLVED, That the Finance Committee recommends that the Canal Corporation Board of Directors acknowledge that any transfers of funds from the Power Authority to the Canal Corporation would be subject to approval by the Power Authority's Board of Trustees and compliance with the Power Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented

Exhibit A

	2020 A	dopted Budget	2021	Requested Budget	Inc/(Dec) Change (\$)		Inc/(Dec) Change (%)	
Canal HQ	\$	22.6	\$	33.3	\$	10.7	47.3%	
Canal East	\$	28.7	\$	34.2	\$	5.5	19.0%	
Canal West	\$	27.7	\$	30.0	\$	2.3	8.3%	
Canal CDF	\$	2.5	\$	1.7	\$	(0.8)	-31.2%	
NYPA Direct Charges to Canals	\$	5.4	\$	6.4	\$	1.0	18.8%	
NYPA Direct Assess to Canals	\$	6.7	\$	6.0	\$	(0.7)	-10.2%	
Total Canal Corporation	\$	93.6	\$	111.6	\$	18.0	19.2%	

Canal Corporation - \$111.6M

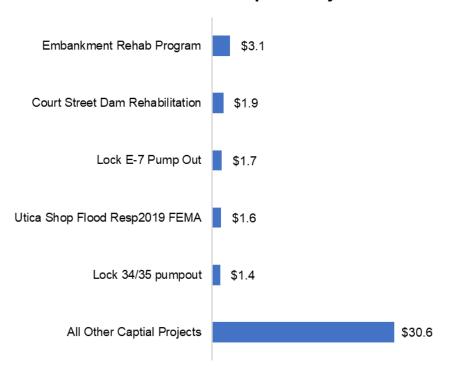


Canal Corporation O&M by Cost Element Grouping - \$111.6M



Exhibit B

Canals Capital Projects: \$40.3M







Date: November 17, 2020

To: THE FINANCE COMMITTEE

From: THE PRESIDENT and CHIEF EXECUTIVE OFFICER

Subject: Release of Funds in Support of the

New York State Canal Corporation

SUMMARY

The Trustees will be requested at their December 9, 2021 meeting to authorize the release of an additional up to \$27.9 million in funding to the New York State Canal Corporation ("Canal Corporation") to support the operations of the Canal Corporation in calendar year 2021. The amount requested is 25% of the Canal Corporation's 2021 O&M Budget. 2021

The Finance Committee is requested to recommend to the Trustees the release of this additional funding.

BACKGROUND

The Authority has been authorized to provide financial support for the Canal Corporation. See, e.g., Public Authorities Law § 1005-b(2). However, certain expenditures associated therewith do not constitute Capital Costs or Operating Expenses ('Operating Expenses') as defined in the Authority's General Resolution Authorizing Revenue Obligations dated February 24, 1998, as amended and supplemented ('Bond Resolution'). Expenditures for the Canal Corporation's operating purposes that do not constitute Capital Costs or Operating Expenses must satisfy the requirements of the Authority's Bond Resolution relating to the release of funds from the trust estate created by the Bond Resolution for lawful corporate purposes. In addition, as set forth in the Trustees' Policy Statement dated May 24, 2011, a debt service coverage ratio of 2.0 is to be used as a reference point in considering any such release of funds.

The Bond Resolution permits the Authority to withdraw monies 'free and clear of the lien and pledge created by the [Bond] Resolution' provided that (a) such withdrawals must be for a 'lawful corporate purpose as determined by the Authority,' and (b) the Authority must determine, taking into account among other considerations anticipated future receipt of revenues or other moneys constituting part of the Trust Estate, that the funds to be so withdrawn are not needed for (i) payment of reasonable and necessary operating expenses, (ii) an Operating Fund reserve in amounts determined by the Authority to be adequate for working capital, emergency repairs or replacements, major renewals or for retirement from service, decommissioning or disposal of facilities, (iii) payment of, or accumulation of a reserve for payment of, interest and principal on senior debt or (iv) payment of interest and principal on subordinate debt.

Under the Bond Resolution, Capital Costs (which includes capital costs related to the Canal Corporation) may be paid without satisfying the provision described above.

DISCUSSION

With this authorization, the Trustees will have authorized the release of a cumulative \$27.9 million, an amount equal to 25% of the Canal Corporation's 2021 O&M Budget. With regard to Canal Corporation's operating expenses in excess of \$111.6 million in calendar year 2021, staff is not requesting any action at this time, but will return to the Board to request additional releases as needed.

Staff has reviewed the effect of releasing up to an additional \$27.9 million in funding at this time on the Authority's expected financial position and reserve requirements. In accordance with the Board's Policy Statement adopted May 24, 2011, staff calculated the impact of this release, together with the last 12 months releases including (i) the release of \$30 million in Recharge New York Discounts for 2020, (ii) the release of up to \$91.0 million in Canal-related operating expenses for 2020, (iii) the release of up to \$2 million in Western NY Power Proceeds net earnings, and (iv) the release of up to \$1 million in Northern NY Power proceeds net earnings, on the Authority's debt service coverage and determined it would not fall below the 2.0 reference level. Based on the Authority's Four-Year Budget and Financial Plan, the 2.0 reference point level is forecasted to be met at each year-end of the forecast period 2021-2024. Given the current financial condition of the Authority, its estimated future revenues, operating expenses, debt service and reserve requirements, staff is of the view that it will be feasible for the Authority to release such amounts from the trust estate created by the Bond Resolution consistent with the terms thereof.

FISCAL INFORMATION

Staff has determined that sufficient funds are available in the Operating Fund to release an additional up to \$27.9 million in funding to support the operation of the Canal Corporation in calendar year 2021. Staff has further determined that the amounts presently held in reserves in the Operating Fund are adequate for the purposes specified in Section 503.2 of the Authority's Bond Resolution and that such Authority funds are not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's Bond Resolution.

The expenses associated with the operations of the Canal Corporation for calendar year 2021 were included in the Canal Corporation's 2021 O&M Budget and the Authority's 2021 Budget.

RECOMMENDATION

The Chief Financial Officer requests that the Finance Committee recommend that the Trustees authorize the release of an additional up to \$27.9 million in funding to the Canal Corporation to support the operations of the Canal Corporation in calendar year 2021. The Chief Financial Officer further recommends that the Finance Committee recommend the Trustees affirm that such release is feasible and advisable, that the amounts presently set aside as reserves in the Operating Fund are adequate for the purposes specified in Section 503.2 of the Authority's Bond Resolution, and that the amount of up to \$27.9 million is not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's Bond Resolution.

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

Gil C. Quiniones
President and Chief Executive Officer

RESOLUTION

RESOLVED, That the Finance Committee recommends that the Trustees authorize the release of an additional up to \$27.9 million in funding to the Canal Corporation to support operations of the Canal Corporation in calendar year 2021, as discussed in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Finance Committee recommends that the Trustee affirm that the amounts presently set aside as reserves in the Operating Fund are adequate for the purposes specified in Section 503.2 of the Authority's Bond Resolution, that the amount of up to \$27.9 million in funding as described in the foregoing report is not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented, and that the release of such amount is feasible and advisable; and be it further

RESOLVED, That the Finance Committee recommends that the Trustee affirm that as a condition to making the payments specified in the foregoing report, on the day of such payments, the Treasurer shall certify that such monies are not then needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented; and be it further

RESOLVED, That the Finance Committee recommends that the Trustee affirm that the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer, the Executive Vice President and General Counsel, the Executive Vice President and Chief Financial Officer, the Corporate Secretary, the Treasurer and all other officers of the Authority be, and each of them hereby is, authorized and directed, for and in the name and on behalf of the Authority, to do any and all things and take any and all actions and execute and deliver any and all certificates, agreements and other documents that they, or any of them, may deem necessary or advisable to effectuate the foregoing

resolution, subject to approval as to the form thereof by the Executive Vice President and General Counsel.





Date: November 17, 2020

To: THE FINANCE COMMITTEE

From: THE PRESIDENT and CHIEF EXECUTIVE OFFICER

Subject: Release of Funds in Support of the Residential

Consumer Discount Program Created in Connection

with the Recharge New York Power Program

SUMMARY

The Trustees will be requested, at their December 9, 2020 meeting, to approve the release of \$30.0 million in funds during 2020 in support of the monthly Residential Consumer Discount Program created in connection with the Recharge New York ("Recharge NY") Power Program, as authorized by Chapter 60 of the Laws of 2011 ("Chapter 60"). The funds are to be released monthly at a level of \$2.5 million per month. It is estimated that the \$30.0 million authorized for the Residential Discounts in 2020 will be entirely off-set from (1) Recharge NY hydropower allocated and sold to Recharge NY customers, and (2) unallocated Recharge NY hydropower sold into the wholesale market.

The Finance Committee is requested to recommend that the Trustees approve the release of \$30 million in funds during 2020 in support of the Residential Consumer Discount Program.

BACKGROUND

The Authority is requested, from time to time, to make financial contributions and transfers of funds to the State or to otherwise provide financial support for various State programs including the Residential Consumer Discount Program related to Recharge NY.

Any such contribution or transfer of funds must (1) be authorized by the Legislature; (2) be approved by the Trustees "as feasible and advisable," and (3) satisfy the requirements of the Authority's General Resolution Authorizing Revenue Obligations dated February 24, 1998, as amended and supplemented ("Bond Resolution"). Further, as set forth in the Trustees' Policy Statement dated May 24, 2011, a debt service coverage ratio of 2.0 shall be used as a reference point in considering any such payments or transfers.

The Bond Resolution's requirements to withdraw monies "free and clear of the lien and pledge created by the [Bond] Resolution" are such that withdrawals (a) must be for a "lawful corporate purpose as determined by the Authority," and (b) the Authority must determine, taking into account, among other considerations, anticipated future receipt of revenues or other moneys constituting part of the Trust Estate, that the funds to be so withdrawn are not needed for (i) payment of reasonable and necessary operating expenses, (ii) an Operating Fund reserve for working capital, emergency repairs or replacements, major renewals or for retirement from service, decommissioning or disposal of facilities, (iii) payment of, or accumulation of a reserve for payment of, interest and principal on senior debt or (iv) payment of interest and principal on

subordinate debt.

DISCUSSION

In March 2011, Governor Cuomo signed into law legislation creating the Recharge NY Power Program. The Program utilizes 455 megawatts ("MW") of the firm power from the Authority's Niagara and St. Lawrence hydroelectric facilities, combined with market-based power purchases, forming a new, 910-megawatt economic development power program to replace and expand upon the Power For Jobs ("PFJ") and Energy Cost Savings Benefits ("ECSB") economic development programs.

As part of the Recharge NY Power Program, the Authority, on August 1, 2011, withdrew all 455 MW of the firm hydroelectric power previously sold to certain utility companies for the benefit of their residential consumers. To mitigate the price impacts of this withdrawal on the residential consumers, the Authority was authorized by Chapter 60, as deemed feasible and advisable by the Trustees, to fund monthly "Residential Consumer Discount Program" payments for the benefit of such consumers on a declining schedule. For each of the first three years following the withdrawal, the Authority is authorized to provide \$100 million per year to fund the discounts. In years four and five following the withdrawal, the Authority is authorized to fund discounts of \$70 million and \$50 million, respectively. Beginning in year six following the withdrawal, and for each year thereafter, the Authority is authorized to fund discounts of \$30 million per year.

The Authority is authorized to use the revenues from the sale of the withdrawn power, together with any other funds of the Authority as the Trustees may deem feasible and advisable, to support the Residential Consumer Discount Program. The net cost to the Authority of the Residential Discounts after taking into account the resale of the power following the withdrawal from its prior use to supply certain utility companies for the benefit of their residential consumers, is projected to be entirely off-set from (1) Recharge NY hydropower allocated and sold to Recharge NY customers, and (2) unallocated Recharge NY hydropower sold into the wholesale market during 2021. Given the volatility in market prices, however, there is no assurance that the sale of this power will produce sufficient revenues to cover this amount of the residential discounts.

The Trustees have previously approved the release of funds in support of the Residential Consumer Discount Program, the most recent action being taken at the January 2020 meeting. Under consideration today are payments for 2021. Staff intends to return to the Trustees with a recommendation as to the release of any future amounts related to the Residential Consumer Discount Program based on how the overall program is progressing as well as the financial circumstances of the Authority at the time such payments are to be considered.

Staff has reviewed the effects of the \$30.0 million in anticipated payments of the Residential Consumer Discount Program on the Authority's projected financial position and reserve requirements. In addition, in accordance with the Board's Policy Statement, staff calculated the impact of this release, together with the last 12 months' releases, including (i) the release of up to \$91.0 million in Canal-related operating expenses for, (ii) the release of up to \$27.9 million in Canal-related operating expenses for 2021 to be authorized on December 9, 2020; (iii) the release of up to \$2 million in Northern NY Power Proceeds net earnings authorized in September 2020, and (iii) the release of up to \$1 million in Western NY Power Proceeds net earnings authorized in September 2020, on the Authority's debt service coverage ratio and determined it would not fall below the 2.0 reference level. Based on the Authority's Four Year Budget and Financial Plan, the 2.0 reference point level is forecasted to be met for

each year-end of the forecast period 2021-2024. Given the current financial condition of the Authority, its estimated future revenues, operating expenses, debt service and reserve requirements, staff is of the view that it will be feasible for the Authority to provide \$30.0 million of the Residential Consumer Discount Program at this time.

FISCAL INFORMATION

Staff has determined that sufficient funds are available in the Operating Fund to provide \$30.0 million in support for the Residential Consumer Discount Program authorized by Chapter 60 at this time, and that such Authority funds are not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's Bond Resolution. The release of \$30.0 million associated with the Residential Consumer Discount Program payments was anticipated and reflected in the Power Authority's 2021 Operating Budget approved by the Trustees at their December 9, 2020 meeting. The net cost to the Authority of the Residential Consumer Discounts, after taking into account the resale of the power following the withdrawal from its prior use to supply certain utility companies for the benefit of their residential consumers, is projected to be entirely off-set from Recharge NY hydropower allocated and sold to Recharge NY customers and unallocated Recharge NY hydropower sold into the wholesale market during 2020. These monthly payments will be recorded as an expense at the time of payment.

RECOMMENDATION

It is requested that the Finance Committee recommend that the Trustees approve that the release of \$30.0 million during 2021 to support the Residential Consumer Discount Program.

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

Gil C. Quiniones
President and Chief Executive Officer

RESOLUTION

RESOLVED, That the Finance Committee hereby recommends that the Trustees authorize the release of \$30.0 million from the Operating Fund during 2021 to support the monthly Residential Consumer Discount Program as authorized by Chapter 60 of the Laws of 2011 and as discussed in the foregoing memorandum of the President and Chief Executive Officer.

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Risk Management Update

Soubhagya Parija

SVP & Chief Risk Officer

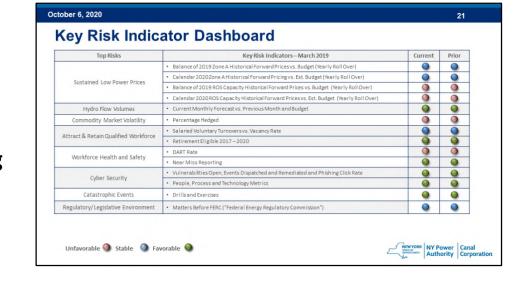
Tom Spencer

Senior Director – Risk Management

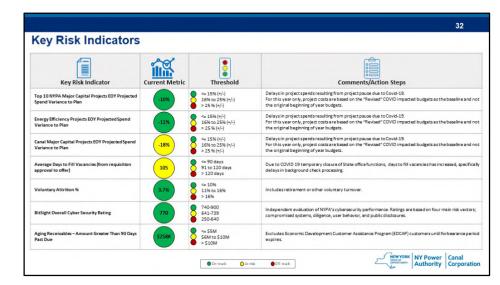
November 17, 2020

Board Reporting of KRIs

Previous Reporting



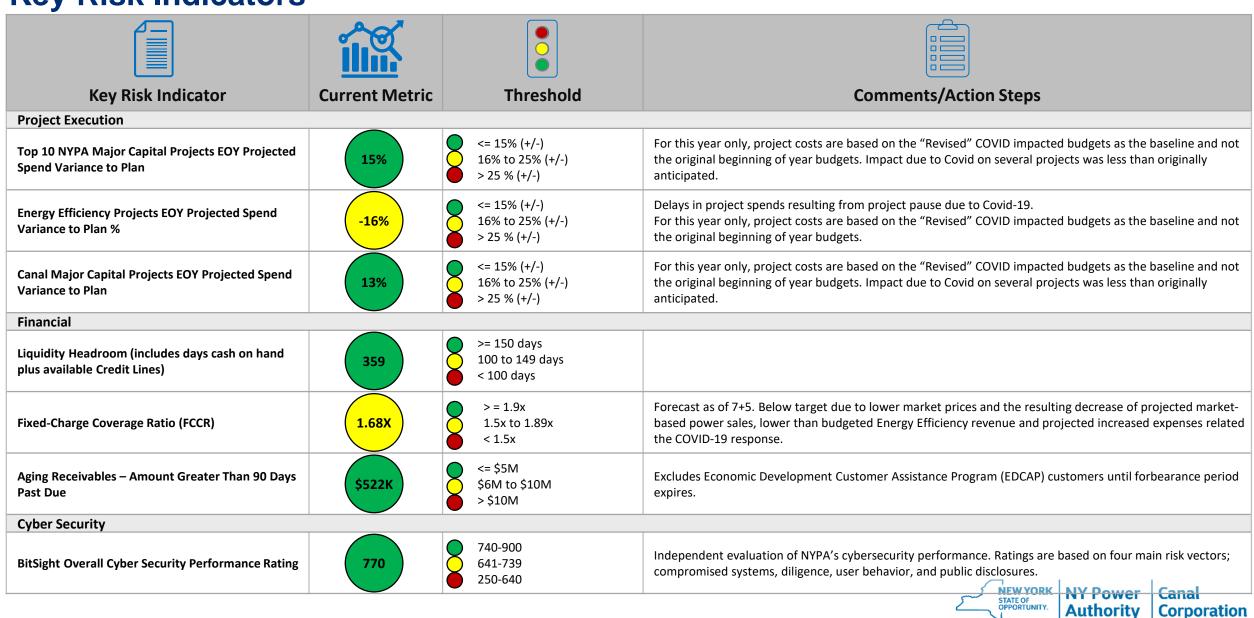
New Reporting



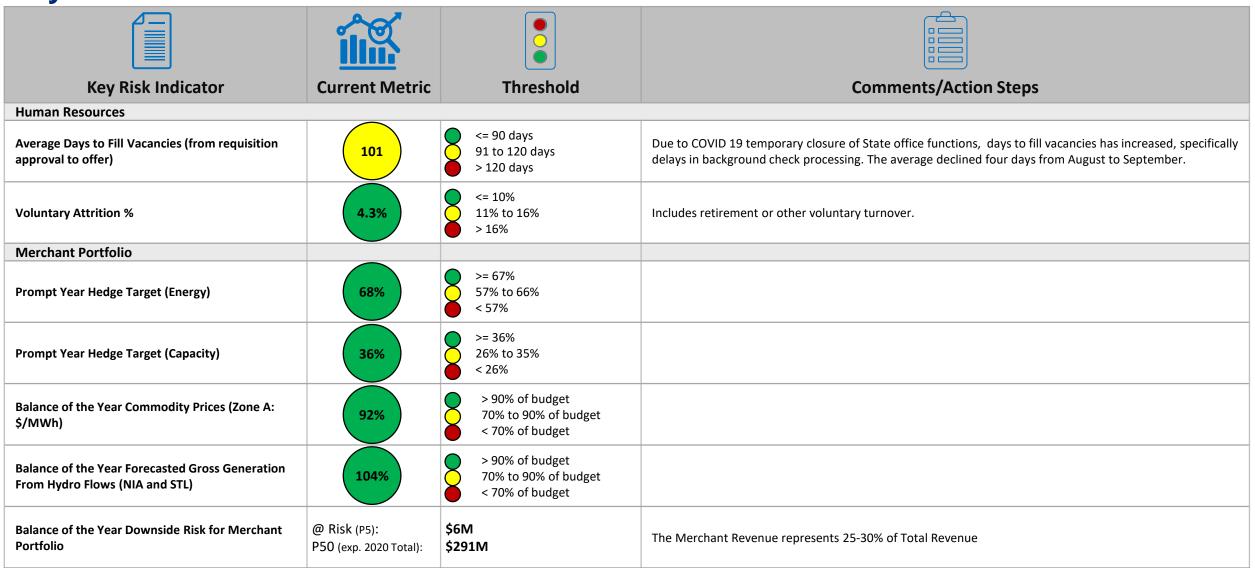
- Enhanced KRIs
 - Quantitative thresholds
- More dynamic
- Better insight and increased reporting and/or commentary
- 13 Top Enterprise KRIs evolved from ~100 previously identified KRIs
 - Financial
 - Operational
 - Human Resources
 - Cyber Security
 - Merchant Portfolio



Key Risk Indicators



Key Risk Indicators





Key Risk Management Initiatives

Enterprise Risk Management

- EGRC Implementation
 - 120+ people trained
 - 80% of Business Units
- Annual Risk Assessment
 - Key Risk Indicator Update
 - Risk Rating Matrix Review
- Strategy Review
- Multiple Project Risk Assessments
 - COVID-19, Canal Staycations, Reimagine Canals, Return to Work, North Country Energy Storage

Operations & Commodities Risk

- Hedge Strategy Governance
 - Energy & Non-Energy Commodity Programs
 - Enhanced Analytics Energy Commodity Risk Management Software Phase II
- Business Development
 - New Customer Product Offerings
 - Large Scale Renewables Project Review
- Project Risk
 - Energy Efficiency
 - Support ISO 55500 Initiative
- Model Risk Governance

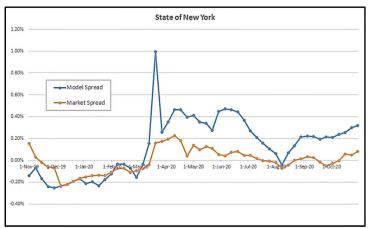
Insurance & Credit Risk

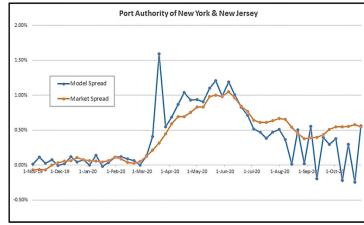
- Annual Insurance Portfolio Risk Review
- Annual Insurance Renewals
- Owner Controlled Insurance Program (OCIP)
 - Support Diversity and Inclusiveness Goals
- Enterprise-Wide Credit Program
 - Counterparty Credit Monitoring

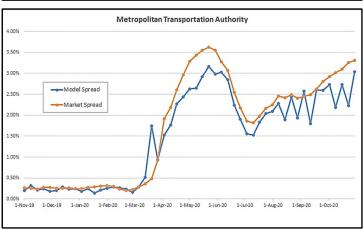


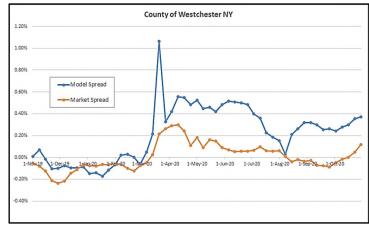
Credit Monitoring

Credit Spread Examples









- Monitoring Multiple Counterparties including:
 - 218 Governmental & Municipal (Energy Efficiency)
 - 35 Corporates (Trading counterparties)
- Monitored Metrics:
 - Credit ratings S&P and Moody's
 - Credit spreads Modeled and Market
 - Automated alerts
 - Bloomberg analytics





NEW YORK STATE OF OPPORTUNITY. Authority Canal Corporation



MINUTES OF THE JOINT MEETING OF THE FINANCE COMMITTEE September 23, 2020

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Minutes of the joint meeting of the New York Power Authority and Canal Corporation's Finance Committee held via videoconference at approximately 8:00 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.

Also in attendance were:

Gil Quiniones President and Chief Executive Officer

Justin Driscoll

Adam Barsky

Executive Vice President and General Counsel

Executive Vice President and Chief Financial Officer

Executive Vice President and Chief Operations Officer

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 Piascik Senior Vice President and Chief Information Officer

Karen Delince Vice President and Corporate Secretary

Daniella Piper Vice President – Digital Transformation / Chief of Staff

John Canale Vice President – Strategic Supply Management

Angelyn Chandler Vice President – Planning

Patricia Lombardi Vice President – Project Manager

Scott Tetenman Vice President – Finance

Thakur Sundeep Controller

Dave Mellen Deputy Director – Canal Corporation
Thomas Spencer Senior Director – Enterprise Risk

Robert Daly Director – Licensing

Christopher Vitale Senior 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 September 23, 2020 Proposed Meeting Agenda

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

Conflicts of Interest

Chairperson McKibben and members Koelmel, Nicandri, Picente, 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 Eugene Nicandri and seconded by member John Koelmel, the members conducted and executive session.

3. <u>Motion to Resume Meeting in Open Session</u>

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. Chief Financial Officer Report

Mr. Adam Barsky, Executive Vice President and Chief Financial Officer, provided an update on the Authority's financial operations (Exhibit 4a i-A).

Year-to-Date Actuals through July 31, 2020

Year-to-Date the Authority has a reported negative Net Loss of \$18 million.

Year-end Projections

Based on the year-end projections, Net Loss is projected to be \$26 million between now and the end of the year. Given the uncertainties and the environment the Authority is in with the COVID-19 pandemic and unknowns related to a second wave, and other factors that lead to the uncertainties that the Authority is experiencing, there is a range indicating that the number could decrease \$30 million; worst case negative \$56 million, or it could increase by \$30 million to a positive \$3 million Net Income.

The unknowns related to another wave of the COVID pandemic include additional expenses associated with that new wave such as energy prices going lower than what is currently projected, and the final costs in terms of the Pension and OPEB expenses between now and the end of the year. Information related to these unknowns will be provided to the members in future meetings at which time staff will be able to have more clarity around that downside scenario.

The drivers behind the factors that can actually change the outcomes would be an improving energy market in terms of the prices, expense reductions associated with some of the delays, continuing cost-cutting measures that are currently being undertaken, and rebounding of some of the revenues associated with the energy efficiency business.

Major Drivers of the Projected Net Income Ranges

Low Case (\$56.8M) - potential (\$30 million) NI decrease from the mid-point, driven primarily by:

- Continued softening of market energy prices and the resulting lower than currently expected revenues from merchant energy sales.
- Potential increase of expenses related to NYPA's response to COVID-19.
- Increase in combined Pension and OPEB ("Other Post-Employment Benefits") expenses driven by worse than expected performance of the New York State Pension fund investment returns and somewhat offset by better than expected results of NYPA's OPEB Trust Fund. Figures have not yet been finalized by the State.

Mid-Point (26.8M)

At this point in time we believe the mid-point or better is more likely than the low case.

High Case \$3.2M - potential \$30 million NI increase from the mid-point, driven primarily by:

- Improvement in market energy prices and increased generation from the hydro and merchant fossil units.
- Continued efforts to reduce operating expenses due to modified operations, in response to COVID.
- Potential increase in revenues related to the Energy Efficiency operations should capital projects be completed earlier than currently forecasted.
- Lower than projected Interest Expenses due to a lower interest rate environment than was in the financial plan.

Based on the shutdown and restart related the COVID-19 pandemic, the Authority incurred expenses, some of which are reimbursable from FEMA. These include additional overtime expenses associated with shelter-in-place, additional PPE, and retrofitting buildings to be COVID-ready, moving forward. In addition, there were some impacts in terms of the capital in terms of labor charges; impacts of the revenues associated with the energy efficiency business; and in terms of the revenue loss associated with the Authority's economic development program.

Financial Impacts of COVID-19 (\$59 million)

Margins: \$29.5 million

- As overall electricity demand across the State and the country has declined this year due to the slowdown in industrial and commercial operations related to Covid, so have prices and NYPA's margins.
- Effect was exacerbated by an unseasonably warm winter in early 2020, a collapse of fossil fuel prices, and an oversupply of gas.

Direct Costs of Covid: \$8.5 million in non-reimbursable expenses

- Expectation of approximately \$20 million in total expenses related to Covid in 2020 for: labor, shelter-in-place, cleaning and sanitization, personal protective equipment, communications, state support, personnel testing, building improvements, and return-to-work precautionary measures. Excludes capital expenses.
- Projected FEMA reimbursements of \$11.5 million, leaving \$8.5 million as a net NYPA expense.

Labor to Capital: \$14.5 million

- NYPA employees working on capital projects allocate a portion of their time directly to those projects, and their salaries then move from being an O&M expense to being charged to capital.
- The "pause" in work resulted in an estimated decrease in capital projects being completed in 2020 from \$537 million to \$391 million, causing \$14.5 million to flow back to O&M from Budgeted levels.

Economic Development Relief: \$800,000

• Economic development customer rate increase waived in 2020.

Energy Efficiency: \$6 million

12% decline in projected completion of Energy efficiency projects.

Mr. Barsky ended by saying that, absent those extraordinary events is the regular business of the Authority which has been sound and on track.

ii. Canal Corporation Operations - Status Update

Mr. David Mellen, Deputy Director of Canal Corporation, provided an update on the Canal Corporation's operations (Exhibit 4a ii-A).

Operations Summary

• The navigation season for Canals ends on October 14, 2020. Due to COVID-19, this was an unprecedented season that was reduced due to work stoppages and then re-opened in a staggered approach, early June – August, making various parts of the canal system available to the public as quickly as possible.

Overview of Winter Work Plans

- Current focus is on planning the maintenance work for the upcoming non-navigation season.

 General maintenance work at locks and other locations is planned statewide throughout the winter.
- Significant maintenance projects at 10 locations across the state is expected to get underway in early November. This includes de-watering locks and upgrade and/or maintenance of various components such as gates, valves, electrical, mechanical, and concrete work, that have not been upgraded in approximately eight – ten years.
- Improvements continue to be made with regard to the planning, scheduling, and work practices at maintenance projects.
- Studies were done on the way Canal Corporation does "pump-outs" over the years and recommendations were made and implemented to improve the efficiency and safety of that work.
- The dredging program at various locations across the state will continue into November.

COVID-related Impacts

COVID-related impacts include the deferral of slightly more than \$20M of capital work into 2021, the
need to accelerate some of the delayed Empire State Trail ("EST") projects, and labor savings due
to the shortened navigation season where the hiring of approximately 70 seasonal workers was
delayed by approximately two months.

Empire State Trail program and other work

- There are six (6) active EST projects having a total construction value of approximately \$33M; some of these projects are being accelerated to achieve substantial completion by the end of this year.
- The \$25M Lock O-7 Rehabilitation project in Oswego, New York, the gateway to Lake Ontario, which is a signature project for the Canal Corporation, is substantially complete.
- The \$8M DeRuyter Dam Rehabilitation project is expected to be substantially complete in October
 of this year.

Public and Employee Safety

Canal Corpration places a lot of effort on safety relative the public and its own employees; most importantly, its public safety efforts related to its inspection program which is progressing well and includes:

- Structural inspection program with more than 400 inspections planned for this year by licensed engineers in the field performing formal inspections of Canals' civil infrastructure such as dams, bridges, retaining walls, locks, and guard gates.
- Development of a public safety program in terms of public access, security, and abandoned property.
- An employee safety initiative which is underway and will continue into next year.

2020 Canals Budget

• Based on July actuals, year-end forecasts are \$88.982M (-2% variance) for Operations and Maintenance and \$48.839M (-30% variance) for Capital.

iii. Reimagine the Canals - Status Update

Ms. Angelyn Chandler, Vice President of Planning-Empire Line, provided a status update on the Reimagine the Canals initiative (Exhibit 4a iii-A).

Economic Development Projects

There are five economic development projects in the first phase as follows:

1. Brockport - (\$7-9M)

- The Brockport Loop is a new pedestrian bridge that will connect the SUNY Brockport Campus to the Empire State Trail, which will create a loop that provides a recreational and connectivity amenity for the Village of Brockport
- The Owner's Architect and Engineer of Record have been selected. These are two separate contracts. Staff has an item on the Consent Agenda today requesting the Board's approval for the Owner's Architect
- Design to begin Fall 2020, with a 2023 completion.

2. Iconic Lighting – (\$3-5M)

- The first phase of the iconic lighting program includes 6 sites where the Authority is lighting up canal infrastructure
- 5 sites are currently in design: Little Falls, Tonawanda, Guy Park Manor, and the Lighthouses at Verona Beach and Brewerton at either end of Oneida Lake
- For the 6th site, Fairport, the Authority is "piggy-backing" on a Department of Transportation ("DOT") project already underway, with an anticipated Spring 2021 completion, with the other sites to follow in mid-2021.

3. Cavuga Watercourse – (\$12-15M)

- o The Cayuga Watercourse will be a whitewater facility on the Cayuga-Seneca Canal
- The Authority has completed a feasibility study for this project, and has a concept design
- o The Authority has looked at the areas where archaeological sensitivity can be anticipated
- The Authority is currently preparing a design Request for Proposal ("RFP") for a Fall 2020 release
- Completion is expected 2023/2024.

4. Guy Park Manor - (\$5M)

- The Authority is preparing a concept design that lays out a plan for a developer-built hospitality destination, providing lodging and dining facilities at Guy Park Manor
- The plan also includes ideas for using the moveable dam at this site as a bridge to connect the hospitality facility to the Empire State Trail on the opposite side of the canal where the Authority is also exploring establishing a glamping operation
- This concept design will be used to interest a developer in building out an operation at the site
- The development of this project will coordinate with, and work around a FEMA funded project at this site to elevate the historic structure out of the flood plain.

5. Canastota - (\$1.5M)

- In July, three responses were received for the Request for Qualifications ("RFQ") released in May for the Canastota Pocket Neighborhood
- The Madison County Planning Department interviewed the three developers last month, and Stage 2 RFQ proposals from these developers are due in October.

Resilience projects and other Reimagine Programs

- Ice jams [\$500K]
 - o The Authority is working with Clarkson University to develop an ice jam model
 - This will help to predict and monitor ice jams and flooding so that the Authority can give communities more time to prepare in case of a flooding event
 - A scenario model will be completed by the end of this year, and the next two years will be spent on developing and rolling out an operational model.

Ice Breaker

- To address ice jams directly, the Authority is on track to take delivery of an amphibious dredge in Dec 2020 (\$1.5M)
- The Authority is renting an additional ice breaker for the 2020/21 winter season (\$850K).

Western Water Management

- Fishing
 - The pilot fishing program is underway for a Fall 2020 start
 - The Authority will be increasing flows into two streams (Sandy and Oak Orchard Creeks) north of the canal in the western region throughout September and October
 - The Authority will drain the canal twice -- in November and December -- and over a longer period of time, to extend the fishing season, driving an increase in tourism in the Western Region
 - The Authority is developing a promotional campaign to alert communities, fishing businesses and fishers to this new program

Irrigation

- The Authority will be working with the NYS Department of Agriculture and Markets to develop an irrigation incentive program that will provide farmers with funds to install or improve infrastructure that is needed to pull water from the streams that are fed from the canal
- This additional water will allow them to have a more reliable source of water and to invest in growing more high-value crops
- To support both projects, the Authority is preparing a design RFP for a pilot project in Albion that will modify the waste weir to allow it to be remotely operated (\$3-6M).

Staycations

- The Staycations program this summer was hugely successful
- The Authority provided free kayak and bike rentals and curated itineraries for outings in six locations across the canal system that promoted the canal and the Empire State Trail as local recreation amenities
- The Authority's online promotion received more than 124,000 website hits, which has been estimated at reaching 1.2M people
- The Authority had a total of 2800 participants in the kayak rentals, and had "Sold out" situations
- This program will be repeated and expanded in 2021.

iv. Release of Funds in Support of the New York State Canal Corporation

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees will be requested at their September 23, 2020 meeting to authorize the release of an additional up to \$22.6 million in funding to the New York State Canal Corporation ("Canal Corporation") to support the operations of the Canal Corporation in calendar year 2020. The amount requested is 25% of the Canal Corporation's 2020 O&M Budget. The Trustees have previously authorized the release of \$68.4 million to support the operations of the Canal Corporation for calendar year 2020.

The Finance Committee is requested to recommend to the Trustees the release of this additional funding.

BACKGROUND

The Authority has been authorized to provide financial support for the Canal Corporation. See, e.g., Public Authorities Law §1005-b(2). However, certain expenditures associated therewith do not constitute Capital Costs or Operating Expenses ('Operating Expenses') as defined in the Authority's General Resolution Authorizing Revenue Obligations dated February 24, 1998, as amended and supplemented ('Bond Resolution'). Expenditures for the Canal Corporation's operating purposes that do not constitute Capital Costs or Operating Expenses must satisfy the requirements of the Authority's Bond Resolution relating to the release of funds from the trust estate created by the Bond Resolution for lawful corporate purposes. In addition, as set forth in the Trustees' Policy Statement dated May 24, 2011, a debt service coverage ratio of 2.0 is to be used as a reference point in considering any such release of funds.

The Bond Resolution permits the Authority to withdraw monies 'free and clear of the lien and pledge created by the [Bond] Resolution' provided that (a) such withdrawals must be for a 'lawful corporate purpose as determined by the Authority,' and (b) the Authority must determine, taking into account among other considerations anticipated future receipt of revenues or other moneys constituting part of the Trust Estate, that the funds to be so withdrawn are not needed for (i) payment of reasonable and necessary operating expenses, (ii) an Operating Fund reserve in amounts determined by the Authority to be adequate for working capital, emergency repairs or replacements, major renewals or for retirement from service, decommissioning or disposal of facilities, (iii) payment of, or accumulation of a reserve for payment of, interest and principal on senior debt or (iv) payment of interest and principal on subordinate debt.

Under the Bond Resolution, Capital Costs (which includes capital costs related to the Canal Corporation) may be paid without satisfying the provision described above.

DISCUSSION

With this authorization, the Trustees will have authorized the release of a cumulative \$91.0 million, an amount equal to 100% of the Canal Corporation's 2020 O&M Budget.

Staff has reviewed the effect of releasing up to an additional \$22.6 million in funding at this time on the Authority's expected financial position and reserve requirements. In accordance with the Board's Policy Statement adopted May 24, 2011, staff calculated the impact of this release, together with the last 12 months releases including (i) the release of \$30 million in Recharge New York Discounts for 2020, (ii) the release of up to \$91.0 million in Canal-related operating expenses for 2020 (\$22.6 million authorized in December 2019, \$22.6 million authorized in March 2020, and \$22.6 million of which the Trustees are being asked to authorize at this May 2020 meeting), (iii) the release of up to \$2 million in Western NY

Power Proceeds net earnings, and (iv) the release of up to \$1 million in Northern NY Power proceeds net earnings, on the Authority's debt service coverage and determined it would not fall below the 2.0 reference level. Based on the Authority's Four-Year Budget and Financial Plan, the 2.0 reference point level is forecasted to be met at each year-end of the forecast period 2020-2023. Given the current financial condition of the Authority, its estimated future revenues, operating expenses, debt service and reserve requirements, staff is of the view that it will be feasible for the Authority to release such amounts from the trust estate created by the Bond Resolution consistent with the terms thereof.

FISCAL INFORMATION

Staff has determined that sufficient funds are available in the Operating Fund to release an additional up to \$22.6 million in funding to support the operation of the Canal Corporation in calendar year 2020. Staff has further determined that the amounts presently held in reserves in the Operating Fund are adequate for the purposes specified in Section 503.2 of the Authority's Bond Resolution and that such Authority funds are not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's Bond Resolution.

The expenses associated with the operations of the Canal Corporation for calendar year 2020 were included in the Canal Corporation's 2020 O&M Budget and the Authority's 2020 Budget.

RECOMMENDATION

The Chief Financial Officer requests that the Finance Committee recommend that the Trustees authorize the release of an additional up to \$22.6 million in funding to the Canal Corporation to support the operations of the Canal Corporation in calendar year 2020. The Chief Financial Officer further recommends that the Finance Committee recommend the Trustees affirm that such release is feasible and advisable, that the amounts presently set aside as reserves in the Operating Fund are adequate for the purposes specified in Section 503.2 of the Authority's Bond Resolution, and that the amount of up to \$22.6 million is not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's Bond Resolution.

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

On motion made by member John Koelmel and seconded by member Eugene Nicandri, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the Finance Committee recommends that the Trustees authorize the release of an additional up to \$22.6 million in funding to the Canal Corporation to support operations of the Canal Corporation in calendar year 2020, as discussed in the foregoing report of the President and Chief Executive Officer; and be it further

RESOLVED, That the Finance Committee recommends that the Trustees affirm that the amounts presently set aside as reserves in the Operating Fund are adequate for the purposes specified in Section 503.2 of the Authority's Bond Resolution, that the amount of up to \$22.6 million in funding as described in the foregoing report is not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's General Resolution Authorizing Revenue Obligations, as amended and

supplemented, and that the release of such amount is feasible and advisable: and be it further

RESOLVED, That the Finance Committee recommends that the Trustee affirm that as a condition to making the payments specified in the foregoing report, on the day of such payments, the Treasurer shall certify that such monies are not then needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented; and be it further

RESOLVED, That the Finance Committee recommends that the Trustees affirm that the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer, the Executive Vice President and General Counsel, the Executive Vice President and Chief Financial Officer, the Corporate Secretary, the Treasurer and all other officers of the Authority be, and each of them hereby is, authorized and directed, for and in the name and on behalf of the Authority, to do any and all things and take any and all actions and execute and deliver any and all certificates, agreements and other documents that they, or any of them, may deem necessary or advisable to effectuate the foregoing resolution, subject to approval as to the form thereof by the Executive Vice President and General Counsel.

b. Legal Operations - Licensing

 St. Lawrence/FDR Power Project Relicensing – Capital Expenditure Authorization Request to Increase Authorized Spending Limit for Compliance with New License and Implementation of Settlement Agreements

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees will be requested at their September 23, 2020 meeting to authorize an additional \$13.3 million for costs related to compliance requirements of the new License for the St. Lawrence/FDR Power Project ('Project') issued by the Federal Energy Regulatory Commission ('FERC') in October 2003 and for costs related to the implementation of settlement agreements between the Power Authority and various parties as a result of the relicensing, bringing the total authorization to \$182.3 million.

BACKGROUND

On October 23, 2003, FERC issued the Order for a new License. Overall, the Order was consistent with the license application and the Offer of Settlement and, at their meeting of November 25, 2003, the Trustees approved the acceptance of the new License. Acceptance of the new License obligates the Power Authority to the conditions of the new License and the commitments in the settlement agreements.

On December 16, 2003, the Trustees authorized funding of \$169 million for costs related to compliance with requirements of the second fifty-year License for the Project. To date, \$168.7 million has been expended relating to the settlement agreements with local governments, state and federal resource agencies and non-governmental organizations, the construction of habitat improvement projects ('HIPS'), shoreline stabilization projects, and construction and refurbishment of recreational facilities. Additional funding is needed due to ongoing HIPS commitments, the construction of a field office to allow DEC staff to continue maintenance of the Wilson Hill Wildlife Management Area ('WHWMA') and several other HIPS, and additional obligations arising from ongoing regulatory compliance.

DISCUSSION

Certain HIPS have not achieved the levels required by the settlement agreements with the resource agencies, requiring additional time and funding to reach the stated goals. One such HIP is an effort to establish nesting habitat for the Common Tern, which is a New York State listed threatened species. To date, the goal of 1400 nesting pairs has not been reached, and, as required by the settlement agreements, the Power Authority consulted with the agencies on new measures to meet the goal. Accordingly, the Power Authority will incorporate a barge to provide an additional habitat for the birds and to help protect the nests from predation. The cost of acquiring a barge, positioning it, and establishing nesting habitat upon it will approach \$1 million.

Moreover, new obligations were identified requiring additional funding to meet regulatory standards and remain in compliance. Among the new mandates is the refurbishment of a historic bathhouse at the Long Sault Campground and the resubmission of the Project's Recreation Plan to better update the information of the facilities and amenities available to the public; both of these projects are a result of an environmental inspection by FERC conducted in July 2017. The cost for these two projects approaches \$800,000.

The Power Authority is pursuing the construction of a field office for DEC located on Project lands. The License requires the Power Authority to ensure ongoing management of the HIPS at certain effectiveness levels throughout the term of the License. Through a funding agreement with the Power

Authority, DEC has taken on the role to operate and manage the constructed HIPS, including those at WHWMA, to ensure each is performing as expected and remaining in compliance. This effort requires two full-time and two part-time employees along with an investment in vehicles, boats, and other equipment. The duties span over 40 miles from end-to-end and include over 25 different sites within the Project boundary. A centralized office will accommodate the personnel and equipment and will better serve the duties of DEC relative to the WHWMA and HIPS. The construction of this facility will approach \$2 million.

Other obligations that require additional funding include the Shoreline Stabilization Program \$2,500,000, Lake Sturgeon Spawning Beds \$750,000, Osprey Nesting Platforms \$100,000, and the final phase of the Little Sucker Brook HIP \$1,100,000.

FISCAL INFORMATION

The current cost of implementing the requirements of the new License and the commitments included in the settlement agreements are estimated at \$169 million. This cost includes escalation beyond 2003, an allocation for indirect costs and a contingency on environmental projects, recreation projects and implementation costs.

The Finance Committee is requested to recommend an additional \$13.3 million in funding for compliance and implementation work related to environmental projects, recreational projects and settlement payments costs, escalation, contingency and allocation for indirect costs bringing the total authorization to \$182.3 million.

As these expenditures are related to the implementation of commitments in the new License and the settlement agreements, payments will be made from St. Lawrence accounts for relicensing and construction.

RECOMMENDATION

It is requested that the Finance Committee recommend that the Trustees authorize the additional funds of \$13.3 million, bringing the total authorized capital expenditures to \$182.3 million for compliance, implementation and settlement activities associated with the new license for the St. Lawrence/FDR Power Project.

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

On motion made by member John Koelmel and seconded by member Dennis Trainor, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the Finance Committee recommends that the Trustees approve an increase in capital expenditures of \$13.3 million establishing a total authorized amount of \$182.3 million to facilitate and accomplish implementation of, and compliance with, the new License issued by the Federal Energy Regulatory Commission for the St. Lawrence-FDR Power Project, as well as the settlement agreements associated therewith.

Capital

Expenditure Authorization

STL-FDR Implementation

\$13,325,000

c. Utility Operations

i. Procurement (Services) Contract – On-Call General Maintenance Services for Southeast New York Region

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees will be requested at their September 23, 2020, meeting to approve the award of a competitively bid five-year non-personal services contract to Fresh Meadow Power, LLC ('FMP') of Queens, NY, in the amount of \$25,000,000 for on-call general maintenance services for the Southeast New York ('SENY') Region facilities.

The Finance Committee is requested to recommend to the Trustees the approval of the award of a competitively bid five-year non-personal services contract to FMP, in the amount of \$25,000,000 for on-call general maintenance services for the SENY Region facilities.

BACKGROUND

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustees' approval for procurement contracts involving services to be rendered for a period in excess of one year. Additionally, in accordance with the Authority's Expenditure Authorization procedures, the award of non-personal services contracts exceeding \$6 million requires the Trustees' approval.

The Authority has used on-call general maintenance services in the SENY Region for the last fifteen (15) years. These services include onsite welding services, electrical maintenance, balance of plant equipment maintenance, large pump and motor replacement, installation, and alignments, Heat Recovery Steam Generator ('HRSG') catalyst work and replacements, Instrumentation and Controls, and certified HRSG and power piping repairs.

DISCUSSION

On-call general maintenance service agreements (agreements) have supported the SENY Region for the past 15 years, allowing SENY to assess and preselect an organization with competitive rates, certifications and a strong reputation within the power generation industry. The agreements also ensure that the SENY plants operate reliably and with reduced outages, meeting the Authority's power generation requirements for the New York City area.

The agreements enable SENY plants to recover quickly from unplanned outages and successfully prevent outages by timely response to the Authority's needs.

Due to the ageing of the plants, HRSG repairs are increasing in frequency. The repairs are costly, and the equipment require certifications from The American Society of Mechanical Engineers and The National Board of Boiler and Pressure Vessel Inspectors. These certifications require constant attention and certified organization(s) must regularly track and maintain records for personnel proficiencies. Personnel training requirements are strict, difficult, and expensive to maintain, especially when only a few repairs are performed each year. The agreements allow SENY to utilize an organization well established in this field.

The agreements support complex repairs as well as repairs that require skills and knowledge of systems such as hydraulics, pumps, motors, fuels, scaffolding installation, electrical wiring and installation, instrument calibrations and many others.

This supplemental workforce ensures SENY remains completive and committed to its agreements to the New York Independent Systems Operator ('NYISO') and other organizations.

The Authority posted a Request for Proposal ('RFP') (Q20-6881HM) through the Ariba system, which was advertised in the New York State *Contract Reporter* on January 28, 2020. Thirty-eight (38) firms are listed as having reviewed the RFP documents.

Proposals were received from the following two bidders on March 13, 2020, via the Ariba esourcing portal:

- Fresh Meadow, LLC
- ACME Industrial, Inc.

The table below provides a comparison of the hourly rates quoted/bid by the two Bidders for their various Skill Level Labor/Craft.

Craft/Trade(s)	Fresh Meadow Power, LLC	ACME Industrial, Inc.		
Site Supervisor	\$175.00	\$160.00		
Millwright	\$160.33	\$270.00		
Steam/Pipe Fitter	\$173.04	\$285.00		
Electrician	\$165.32	\$280.00		
I&C Tech	\$195.31	\$160.00		
Laborer	\$122.29	\$215.00		

The proposals were reviewed by an Evaluation Committee composed of staff from SENY Operations and Strategic Supply Management.

Consistent with the Authority's Procurement Procedures, the proposals have been evaluated for price, completeness, exceptions to the Bid Documents, relevant experience, and safety record.

The Committee concluded that FMP, having extensive experience in providing the necessary on-call general maintenance services and meeting the Authority's Quality Assurance/Control, performance, and safety requirements are capable of performing the work required. FMP took no exceptions to the Authority's bid documents, and commercial Terms and Conditions. Any technical and commercial exceptions that required clarifications related to FMP's bid have been addressed and resolved to the satisfaction of Strategic Supply Management. FMP requested a waiver to the Minority/Women-Owned Business Enterprise ('M/WBE') and the Service Disabled Veteran-Owned Business ('SDVOB') participation goals which were reviewed and considered reasonable by the Authority's Supplier Diversity group.

ACME Industrial, Inc. ('ACME') failed to submit its own QA manual(s), ASME Certification or any proof that they are a National Board Certified Boiler Repair contractor with an 'R' and/or 'VR' stamp, essential and vital requirements for the on-call general maintenance services being performed, especially for the Eugene W. Zeltmann and Richard M. Flynn facilities. ACME quoted hourly rates higher than its competitor for the trade workers by approximately 45% on average. The M/WBE firms which ACME intended to engage for this work are not New York State certified entities. The intended SDVOB firm, DMC Industrial, did not meet the criteria to qualify as an SDVOB firm.

FISCAL INFORMATION

This award is a Value Contract, and funds will be released through individual Purchase Order Releases that will abide by, and follow all of the Authority's Expenditure Authorization Procedures. Maintenance on the SENY Facilities is budgeted for 5 years and is represented in the Regional Asset Management Plan. The contract award value of \$25,000,000 is based on historical spending data.

RECOMMENDATION

It is requested that the Finance Committee recommend that the Trustees approve the award of a five-year non-personal services contract to Fresh Meadow Power, LLC in the amount of \$25,000,000 for on-call general maintenance services for the Southeast New York ('SENY') Region facilities.

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

On motion made by member John Koelmel and seconded by member Dennis Trainor, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the Finance Committee recommends that the Trustees, pursuant to the Guidelines for Procurement Contracts adopted by the Authority and the Authority's Expenditure Authorization Procedures, award a five-year contract to Fresh Meadow Power, LLC of Queens, NY, in the amount of \$25,000,000 for the SENY facilities maintenance agreement;

Contractor

Contract Approval

Fresh Meadow Power, LLC Queens, NY

<u>\$25,000,000</u>

(Q20-6881HM)

ii. Transmission Line L33P & L34P Interconnections: Replacement of Phase Shifters – Capital Expenditure Authorization Request

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees will be requested at their September 23, 2020 meeting to approve capital expenditures in the amount of \$30 million, representing the Authority's share of the replacement costs of Phase Shifter Regulating transformer PSR33 and Phase Shifter Regulating transformer PSR34, referred to hereafter as the 'Cost-Shared Equipment Requiring Replacement' Project.

Capital Expenditures in the amount of \$600,000, for preliminary engineering and payment to Hydro-One, were previously approved by the President and Chief Executive Officer in July 2020, bringing the total estimated Project cost to \$30.6 million.

The Finance Committee is requested to recommend to the Trustees the approval of capital expenditures in the amount of \$30 million 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 the Trustees' approval.

The Project will replace the existing Phase Shifter Regulating transformers PSR33 and PSR34, which are part of the 230kV transmission lines L33P and L34P.

L33P and L34P, jointly owned by the Authority and Hydro-One, connect Hydro-One's transmission network to the Authority's transmission network. They originate from Hydro-One's St. Lawrence Transformer Station in Ontario and terminate in the Authority's Robert Moses switchyard in northern New York.

Under normal operating conditions, the phase shifters are used to regulate and maintain power flow exchange between New York State and Ontario, to provide balance between the interconnected transmission networks. Under emergency conditions, the phase shifters are used to transfer power to assist the entity experiencing reduction in power output due the loss of generation, or to help channel power flow to nearby transmission lines to relieve transmission overloads.

DISCUSSION

The Authority and Hydro-One, of 483 Bay Street, 15th floor, North Tower, Toronto, Ontario, Canada entered into and form Parties to an Interconnection Facilities Agreement ('IFA'), effective March 31, 2007, that governs the operation of L33P and L34P Interconnection facilities.

Pursuant to the terms of the IFA, the Authority and Hydro-One entered into a Memorandum of Understanding ('MOU'), on May 1, 2020, identifying phase-shifting transformer PSR34, in operation since 1978, and phase shifting transformer PSR33, in operation since 1962, to be equally-owned by the Authority and Hydro-One, and subject to cost sharing for their replacements.

PSR33 and PSR34 have experienced multiple failures throughout their operation. Most recently, PSR33 has experienced a failure deemed to be more sensible to replace than repair. Similarly, PSR34 is considered nearing the end of its useful life, requiring replacement.

The capital expenditures will cover the Authority's share of the cost of replacing transformers PSR33 and PSR34. It will also cover additional work that may be required at the St. Lawrence Robert Moses Switchyard, for the protection of lines L33P and L34P due to this equipment replacement.

Pursuant to the terms of the MOU, project execution will occur in 3 phases over a 3-year period. Phase 1 involves equipment procurement by Hydro-One in 2020 for the Cost-Shared Equipment Requiring Replacement. Phase 2 involves the installation, testing and commissioning of the new transformer PSR33 to be completed in 2022. Phase 3 involves the installation, testing and commissioning of the new transformer PSR34 and project closeout to be completed in 2023.

The proposed spending for this Project is included in the approved Four-Year Capital Plan.

FISCAL INFORMATION

Payment 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.

RECOMMENDATION

It is requested that the Finance Committee recommend that the Trustees approve capital expenditures in the amount of \$30 million for implementation of the Cost-Shared Equipment Requiring Replacement Project.

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

On motion made by member John Koelmel and seconded by member Eugene Nicandri the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the Finance Committee recommends that the Trustees, pursuant to the Authority's Capital Planning and Budgeting Procedures, approve capital expenditures in the amount of \$30 million for the Authority's share of the replacement costs of Phase Shifter Regulating transformer PSR33 and Phase Shifter Regulating transformer PSR34, collectively referred to as the Cost-Shared Equipment Requiring Replacement 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 Authority's share of the Cost-Shared Equipment Requiring Replacement Project.

Capital

Transmission Line L33P and L34P Interconnections: Replacement of Phase Shifters

\$30,000,000

Expenditure

Authorization

iii. St. Lawrence-FDR Power Project – Rotor Modification for Stress Redistribution – Phase 2 – Capital Expenditure Authorization Request

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees will be requested at their September 23, 2020, meeting to approve capital expenditures in the amount of \$24,848,200 for Phase 2 of the Rotor Modification for Stress Redistribution Project ('Project') which includes upgrades to the remaining thirteen generating units at the St. Lawrence-FDR Power Project ('Project'). The work being performed on the remaining thirteen generator units is planned to be completed by the end of 2035.

Capital Expenditures in the amount of \$1,878,216 for preliminary engineering, were previously approved by the President and Chief Executive Officer. Subsequently, capital expenditures in the amount of \$5,345,400 for upgrades to the first three generating units were approved by the Trustees in September 2017. The total project cost at this time is nearly unchanged, at \$32,017,816.

The Finance Committee is requested to recommend to the Trustees the approval of additional capital expenditures in the amount of \$24,848,200 for the Project.

BACKGROUND

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

During the final stages of the St. Lawrence Life Extension and Modernization Program, significant cracks were discovered in the arms of the generator rotors in the last two units. Further propagation of the cracks could have rendered the units inoperable or could lead to a potentially catastrophic failure. The cracks were immediately repaired, and the units returned to service without additional costs and downtime. Further investigation of the remaining units revealed propagation of smaller cracks of varying severity in the same general areas which needed to be addressed.

The Authority's staff recognized the criticality and the need for a two-phased approach for the repairs. First, implement an immediate inspection program with temporary repairs of the cracks. Second, set in place a program for a long-term solution including possible modifications to the rotor spiders.

DISCUSSION

Authority staff has performed extensive investigations and analyses relative to this condition with results and recommendations presented in the engineering reports titled, 'Engineering Assessment Generator Rotor Spider Arm Cracks,' December 15, 2014, and 'Supplement to Engineering Assessment Generator Rotor Spider Arm Cracks,' November 8, 2016. The main report attributes the cracking primarily to the number of start/stop cycles for the age of the units, which result in high stresses in critical areas of the rotor frame, particularly in areas of discontinuities. The supplemental report addresses, specifically, the potential cracking of the ledges at the outer end of the rotor spider which supports the rotor ring.

Overall, the rotor frame repair program will address specific recommendations for crack repairs, structural reinforcements, rounding of discontinuities and weld modifications to reduce stress concentrations. Compared to the cost of replacing the rotors, the proposed long-term program of repairs

and modifications to the generator rotors is the most cost-effective approach for long-term reliable operation of the units.

The sequence of work will consist of: disassembly and staging of the rotor, followed by total paint removal and abatement, crack repair and welding of gusset plates, post-weld heat treatment, final surface preparation, prime and finish coat application, and unit reassembly and testing prior to return to service. All work will be performed within the Erection Bay of the St. Lawrence-FDR Power Project. A six-month outage is anticipated per unit specifically for this work. To date, work has been completed on three rotors.

The majority of the work is performed by Authority craft personnel with support from external contractors, primarily for paint abatement and weld treatment. The external contractors' contracts were previously approved by the Trustees at the July 2020 meeting.

The work being performed on the remaining thirteen generator units is planned to be completed by the end of 2035.

FISCAL INFORMATION

Payment associated with this Project will be made from the Authority's Capital Fund. Funding in the amount of \$7,223,616 has been authorized, to date, for the Project, which is estimated at a total of \$32,017,816, to complete preliminary engineering, detailed engineering and design, procurement, implement construction, and Authority direct/indirect costs. This authorization in the amount of \$24,848,200 is projected to be the last authorization for the Project.

The total cost for Phase 2 of the Project is summarized as follows:

Preliminary Engineering and Design	\$1,878,216
Engineering/Design	\$2,095,700
Procurement	\$3,346,200
Construction/Installation	\$20,320,700
Authority Close-Out, Direct and Indirect Expenses	\$4,431,000
TOTAL	\$32,071,816

RECOMMENDATION

It is requested that the Finance Committee recommend that the Trustees approve additional capital expenditures in the amount of \$24,848,200 for Phase 2 of the Rotor Modification for Stress Redistribution Project which includes upgrades to the remaining thirteen generating units at the St. Lawrence-FDR Power Project.

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

On motion made by member Eugene Nicandri and seconded by member Dennis Trainor, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the Finance Committee recommends that the Trustees approve additional capital expenditures in the amount of \$24,848,200 for Phase 2 of the Rotor Modification for Stress Redistribution Project; 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 of the St. Lawrence-FDR Power Project Rotor Modification for Stress Redistribution Project.

Expenditure <u>Authorization</u>

Rotor Modification for Stress Redistribution

Capital

\$24,848,200

iv. Transmission Life Extension & Modernization Program
 Tower Coating Upgrades for Central NY Region –
 Capital Expenditure Authorization Request

The President and Chief Executive Officer submitted the following report:

SUMMARY

The Trustees will be requested at their September 23, 2020 meeting to approve capital expenditures in the amount of \$27,663,700, for the Transmission Life Extension and Modernization Program - Tower Coating Upgrades for the Central NY Region ('Project').

The Finance Committee is requested to recommend to the Trustees the approval of capital expenditures in the amount of \$27,663,700 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 the Trustees' approval.

The Transmission Life Extension and Modernization Program ('TLEM') 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's transmission assets require continued field assessment and recoating to extend the longevity of critical components, achieve compliance with regulatory requirements and maintain system reliability. Existing coating conditions on steel towers supporting the Central Region transmission lines warrant a new program of recoating to protect painted and galvanized steel surfaces.

DISCUSSION

The scope-of-work includes surface preparation and recoating towers on approximately 1,049 transmission structures. The transmission lines affected are: Edic to Fraser Substations ('EF'); Utica to Coopers Corner ('UCC'); Coopers Corner to Rock Tavern ('CCRT'); Roseton to Fishkill ('RFK'); Crescent, Vischer Ferry Substations, Atomic to Woodlawn river crossings, and Lock #7 tower crossings.

Project execution is planned to occur over a four-year period, with targeted completion in 2024, subject to approved outages. In support of the Project schedule, the Trustees approved a four-year construction contract award at their January 29, 2020 meeting.

The proposed spending for this Project is included in the approved Four-Year Capital Plan.

FISCAL INFORMATION

The Accounting determination for this Project recently changed to capital, based on a detailed review of the scope. As such, 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.

RECOMMENDATION

It is requested that the Finance Committee recommend that the Trustees approve capital expenditures in the amount of \$27,663,700 for implementation of the Transmission Life Extension and Modernization Program - Tower Coating Upgrades Project for the Central NY Region.

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

On motion made by member Eugene Nicandri and seconded by member Dennis Trainor, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the Finance Committee recommends that the Trustees, pursuant to the Authority's Capital Planning and Budgeting Procedures, approve capital expenditures in the amount of \$27,663,700 for the Transmission Life Extension and Modernization Program – Tower Coating Upgrades Project for the Central NY Region, 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 Transmission Life Extension and Modernization Program - Tower Coating Upgrades Project for the Central NY Region.

Expenditure <u>Authorization</u>

TLEM - Tower Coating Upgrades Central NY Region

Capital

\$27,663,700

v. Transmission Life Extension & Modernization Program
Tower Coating Upgrades for the Western NY Region –
Capital Expenditure Authorization Request

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees will be requested at their September 23, 2020 meeting to approve capital expenditures in the amount of \$29,338,700, for the Transmission Life Extension and Modernization Program – Tower Coating Upgrades for the Western NY Region ('Project').

The Finance Committee is requested to recommend to the Trustees the approval of capital expenditures in the amount of \$29.3 million 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 the Trustees' approval.

The Transmission Life Extension and Modernization Program ('TLEM') 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's transmission assets require continued field assessment and recoating to extend the longevity of critical components, achieve compliance with regulatory requirements and maintain system reliability. Existing coating conditions on steel towers supporting the Western Region transmission lines warrant a new program of recoating to protect painted and galvanized steel surfaces.

DISCUSSION

The scope-of-work includes surface preparation and recoating towers on approximately 2,826 transmission structures. The transmission lines affected are: Niagara to Syracuse ('NS'), Niagara to Rochester ('NR'), Syracuse to Rochester ('SR'), Rochester to Pannel ('RP'), Pannel to Clay ('PC'), Niagara Substation to Beck Substation ('PA'), Clay to Edic ('CE').

Surface preparation and recoating of the transmission towers in the Western NY Region commenced in 2016. To date, 1,079 tower structures have been completed. 306 towers are planned to be recoated in 2021 under an existing contract that was approved by the Trustees at their December 11, 2018 meeting.

A Request for Proposal will be issued in 2021 to complete the remaining 1,441 structures on the Clay to Edic ('CE'), and Pannel to Clay ('PC') Transmission Lines. Project execution is planned to occur over a four-year period, with targeted completion in 2025, subject to approved outages.

The proposed spending for this Project is included in the approved Four-Year Capital Plan.

FISCAL INFORMATION

The Accounting determination for this Project recently changed to capital, based on a detailed review of the scope. As such, 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.

RECOMMENDATION

It is requested that the Finance Committee recommend that the Trustees approve capital expenditures in the amount of \$29,338,700 for implementation of the Transmission Life Extension and Modernization Program – Tower Coating Upgrades for the Western NY Region.

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

On motion made by member Eugene Nicandri and seconded by member Dennis Trainor, the following resolution, as submitted by the President and Chief Executive Officer was unanimously adopted.

RESOLVED, That the Finance Committee recommends that the Trustees, pursuant to the Authority's Capital Planning and Budgeting Procedures, approve capital expenditures in the amount of \$29,338,700 for the Transmission Life Extension and Modernization Program – Tower Coating Upgrades for the Western NY Region 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 Transmission Life Extension and Modernization Program – Tower Coating Upgrades Project for the Western NY Region.

Expenditure Authorization

TLEM – Tower Coating Upgrades Project Western NY Region

Capital

\$29.338.700

d. Commercial Operations

Energy Efficiency Program –
 Contract Award for Construction Services
 LED Street Lighting Direct Install Program

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees will be requested at their September 23, 2020 to approve the award of construction services contracts to three firms, Candela Systems Corp., Hawthorne, NY, D&M Contracting, Inc. Elmsford, NY and E-J Electric T&D, LLC., Wallingford, CT in the aggregate amount of \$150 million for a term of up to 5 years for the LED Street Lighting Direct Install Program ('Program') for energy efficiency customers. The costs will be recovered directly from Program participants. The Program will be funded from amounts previously authorized by the Trustees for the Authority's Energy Efficiency Program ('EEP').

The Finance Committee is requested to recommend to the Trustees to approve the award of a five-year, competitively bid contract to the above-mentioned firms, at its September 23, 2020 meeting, for the LED Street Lighting Direct Install Program in the aggregated amount of \$150 million as part of the Authority's EEP.

BACKGROUND

Public Authorities Law §1005 (17) authorizes the Authority to finance and design, develop, construct, implement, provide, and administer energy-related projects, programs and services.

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustees' approval for procurement contracts involving services to be rendered for a period in excess of one year. Additionally, in accordance with the Authority's Expenditure Authorization Procedures, the award of construction services contracts exceeding \$6 million requires the Trustees' approval.

On February 19, 2018, the Governor announced the Smart Street Lighting NY Service which has a goal of converting 500,000 streetlights to LED technology by 2025. NYPA has been tasked with implementing 250,000 streetlight conversions in order to help achieve the State's goal. The conversions would yield estimated savings of 482 gigawatt hours annually and reduce the overall greenhouse gas emissions, which aligns with the State's goal of 40 percent reduction in emissions by 2030. The LED Street Lighting Direct Install Program will facilitate the conversion to LED street lighting and achieve associated energy savings.

The Program will provide customers with an expedited implementation model that will focus on a '1-for-1' replacement of existing street lighting systems. This service will help NYPA achieve the State's goals. Customers will be provided with a detailed street lighting evaluation and will receive contractor direct installation services to implement the LED conversions. This program will be available to all customers with qualifying projects as part of the Authority's efforts to convert standard street lights to LED technology.

DISCUSSION

The Authority issued Request for Proposal ('RFP') No. Q20-6928DKT, which was advertised in the NYS *Contract Reporter* on March 16, 2020 and via the Authority's Ariba system. Thirty-three (33) bidders were invited to bid. On April 23, 2020 seven (7) proposals were received. The RFP was broken

into ten (10) different service territories throughout New York State with bidders having the option to bid on any or all regions. As part of their proposals, bidders were asked to provide unitized pricing based on various fixture quantities as well as region(s) selected.

The evaluation team consisted of members from Clean Energy, Engineering & Construction Management, and Strategic Supply Management. Commercial evaluations of all bids were conducted by Strategic Supply Management to ensure the firms' financial viability and determine if any exceptions requested were acceptable. MBE and WBE commitments for all suppliers are 15% and SDVOB commitments for all suppliers are 6%.

The evaluation team performed a thorough technical evaluation of the firms and analyzed their pricing, experience and capacity to meet the program's deliverables. D&M Electrical Contracting, Inc. has substantial experience working on NYPA street lighting projects and was the apparent low bidder. Candela Systems Corp has been awarded previous NYPA lighting projects, are an M/WBE and was the 2nd apparent low bidder. Candela Systems Corp's bid on all regions and can cover the entirety of NYS. E-J Electric T&D LLC was selected as the Contractor for NYPA's Street Lighting O&M program and can provide project continuity by performing both the LED conversion and the post installation O&M services to Customers. E-J Electric T&D LLC was the apparent 3rd low bidder.

Based upon a thorough analysis of the proposals, as well as reference checks, the Authority staff recommends the award of contracts to Candela Systems Corp., D&M Electrical Contracting, Inc. and E-J Electric T&D LLC.

FISCAL INFORMATION

The LED Street Lighting Direct Install Program will be made available to customers participating in the Authority's EEP and will be funded from amounts previously authorized for the Authority's EEP. Funding for the Authority's EEP is provided from the Authority's operating funds and/or from the proceeds of the Authority's Commercial Paper Notes or other financing instruments, as deemed appropriate. All Authority costs, including Authority overheads and the costs of advancing funds, but excluding grants as applicable, for the LED Street Lighting Direct Install program will be recovered from the program participants.

RECOMMENDATION

It is requested that the Finance Committee recommend to the Trustees to approve the award of a competitively bid construction services contracts to Candela Systems Corp., D&M Electrical Contracting, Inc. and E-J Electric T&D LLC in the aggregate amount of \$150 million for a term of up to 5 years for the LED Street Lighting Direct Install Program for energy efficiency customers.

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

On motion made by member Dennis Trainor and seconded by member Eugene Nicandri, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the Finance Committee recommends that the Trustees, pursuant to the Guidelines for Procurement Contracts adopted by the Authority and the Authority's Expenditure Authorization Procedures, award contracts in the aggregate amount of \$150 million for a term of up to five years to Candela Systems Corp., D&M Electrical Contracting, Inc. and E-J Electric T&D LLC for

the LED Street Lighting Direct Install Program as part of the Authority's Energy Efficiency Program.

Aggregate Contract

<u>Contractor</u> <u>Amount</u>

Candela Systems Corp. (MBE) Hawthorne, NY

D&M Electrical Contracting,

Inc. <u>\$150,000,000</u>

Elmsford, NY

E-J Electric T&D LLC Wallingford, CT

ii. Energy Efficiency Program – Direct Installation Services Contract Award for Construction Services

The President and Chief Executive Officer submitted the following report:

"SUMMARY

The Trustees will be requested at their September 23, 2020 meeting to approve the award of a construction services contract for direct installation electrical and lighting services to Graybar Electric Company, Inc. ('Graybar') of Clayton, Missouri for a total authorized amount of \$10 million for a term through January 31, 2023. The direct installation model is designed to implement simple energy efficiency projects quickly and cost effectively. The costs will be recovered directly from program participants. The Program will be funded from amounts previously authorized by the Trustees for the Authority's Energy Efficiency Program ('EEP').

The Finance Committee is requested to recommend to the Trustees to approve the award of a competitively bid contract to Graybar Electric Company, Inc., at its September 23, 2020 meeting, in the amount of \$10 million for a term ending on January 31, 2023.

BACKGROUND

The Trustees' approval is being sought under Public Authorities Law §1005(17), which enables the Authority to finance and design, develop, implement, and administer energy related projects, and provide energy services for its customers. The Authority is adopting expedited project delivery methods to better meet customer needs with faster project delivery times. The Authority has been delivering small lighting projects to its customers with traditional project delivery models, including public solicitations of projects. The direct install delivery method of lighting projects will offer faster project cycle times and competitive pricing by bypassing a sometimes costly and timely design and bidding process, and standardizing recommendations.

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustees' approval of procurement contracts involving services to be rendered for a period in excess of one year. In accordance with the Authority's Expenditure Authorization Procedures, the award of construction services contracts in excess of \$6 million require the Trustees' approval.

DISCUSSION

Construction Contractor RFQ, RFP and Contract Awards

Pursuant to Section 3.F of the NYPA Guidelines for Procurement Contracts (3/31/2020) 'Certain goods and/or services may be procured pursuant to Procurement Contracts let by any department, agency, officer, political subdivision or instrumentality of the State (e.g., the New York State Office of General Services ('OGS')) or Federal government (e.g., General Services Administration ('GSA')) or any city or municipality where the White Plains SSM Department, or facility SSM Departments, and the initiating department determine that a reasonable potential exists for cost savings or other benefits to the Authority and have approved the specifications and proposed terms and conditions of such contract.'

Accordingly, OMNIA Partners is a cooperative purchasing organization that allows government entities to access other competitively solicited contracts. The Authority has been a member of OMNIA since 2006 and is a signatory to a Master Intergovernmental Cooperative Purchasing Agreement by and between the Authority and OMNIA Partners. The Authority has utilized this OMNIA service for the purchase of equipment for NYPA facilities. The Authority will be utilizing Contract EV2370 – Electrical, Lighting, Data Communications and Security Products and Related Products, Services and Solutions that

was publicly solicited and advertised by the city of Kansas City ('City') on behalf of itself and all states, local governments, school districts, and higher education institutions in the United States of America, and other government agencies and nonprofit organizations (herein 'Participating Public Agencies') under its RFP # EV2370 issued on September 6, 2017.

On October 6, 2017, the City received a response from the following offerors:

- Graybar Electric Company, Inc.
- HB (Delivering Systems LLC/DBA High Biometrics)
- SupplyFORCE

Upon evaluation, the City's committee elected to award a contract to the most responsive Proposal, Graybar, for electrical, lighting, data communications and security products and related products, services, and solutions. Using the Contract EV2370 will provide significant cost savings and other benefits including, but not limited to, an expedited implementation and delivery timeframe to the Authority. Additionally, the Authority's Business Development team reviewed the pricing provided by Graybar and validated the competitiveness and reasonableness of such pricing and terms in comparison to prior and current Authority Energy Services Programs solutions.

The delivery method being utilized is direct install with unitized pricing to expedite the project for completion in a shorter time frame. Unitized pricing was pre-negotiated to prevent the need for bidding on an individual project basis. Graybar will perform a scoping survey at assigned locations. That survey will generate a scope-of-work and cost and savings estimates. After the approval of the survey, a task order to implement the installation of lighting and other direct installation measures will be issued.

FISCAL INFORMATION

Funding for the Authority's EEP is provided from the Authority's operating funds and/or from the proceeds of the Authority's Commercial Paper Notes or other financing instruments, as deemed appropriate. All Authority costs, including Authority overheads and the costs of advancing funds, but excluding grants, as applicable, will be recovered from the customers.

RECOMMENDATION

It is requested that the Finance Committee recommend to the Trustees to approve the award of a competitively bid construction services contract to Graybar Electric Company, Inc. ('Graybar') of Clayton, Missouri, for a term ending on January 31, 2023 in the amount of \$10 million.

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

On motion made by member Dennis Trainor and seconded by member Eugene Nicandri, the following resolution, as submitted by the President and Chief Executive Officer, was unanimously adopted.

RESOLVED, That the Finance Committee recommends that the Trustees, pursuant to the Guidelines for Procurement Contracts adopted by the Authority and the Authority's Expenditure Authorization Procedures, award a contract to Graybar Electric Company, Inc., ("Graybar") of Clayton, Missouri, in the amount of \$10,000,000 for a term through January 31, 2023 for direct install electrical and lighting services throughout New York State.

Contractor Contract Amount

Graybar Electric Company, Inc. Clayton, Missouri

\$10,000,000

e. Risk Management Update

i. Risk Management Update

Mr. Thomas Spencer, Senior Director – Enterprise Risk, provided an update on the Authority's Risk Management activities (Exhibit "4e i-A"). He said the purpose of the presentation is to:

- 1) reiterate the strong governance structure the Board has installed to ensure the proper identification and escalation of risks;
- 2) highlight NYPA's alignment to common multi-industry enterprise risks supported by an external benchmarking exercise; and
- 3) highlight some key risk management initiatives that support NYPA's risk framework.

Risk Governance Structure

NYPA's Risk Governance Structure (Governing Body/Board/Audit Committee) represents what the Board has instituted regarding the risk governance and escalation processes:

- Business Units Operational Managers who own and manage risks
- Risk Management facilitates and monitors the implementation of effective risk management
- Internal Audit provides the governing body and senior management with comprehensive independent assurance

Risk Management Benchmarking Efforts

As part of the risk review process, Risk Management benchmarked the enterprise level risks against two global risk surveys conducted by North Carolina State University and Aon Global. Each survey had more than 1,000 executive-level participants across multiple industries who were asked to identify their top enterprise risks.

NYPA's top enterprise risks aligned very well with the benchmark surveys and survey participants. However, there were areas of differences where there was not in direct alignment:

1) Hydro Generation

Since hydro generation is a very specific industry risk, the Authority did not expect this risk to be identified by a bulk of the survey participants as one of their top-level risks.

2) Workplace Health and Safety

While Workforce Health and Safety was not directly identified as a top-risk for some companies, it is reasonable when you consider the lines of business of some of the participants, such as financial services or retail, where safety is less of a factor. This also makes sense for NYPA when you consider the high safety and health risk associated with operating a power plant or transmission lines.

3) Organization's Culture

An organization's culture may not sufficiently encourage timely identification and escalation of risk issues. While this may be a top risk for many of the survey participants, NYPA is certainly working to mitigate this and addressing it through its active risk culture and the Risk Governance Structure.

The bencmarking exercise provide reassurance that NYPA's Enterprise Risk Management team is working effectively to identify the right risks through its risk assessment process, as NYPA faces many of the same challenges as organizations around the globe.

Addressing Challenges with Risk Management

Key Risk Initiatives

Below are some of the key initiatives the Risk Management team is working on to help address these enterpsie level risks:

Enterprise Governance Risk and Compliance System (EGRC) – The EGRC tool is used for the training of risk information across risk audit and controls, providing a more detailed view of the Authority's risk profile on a realtime basis. The Risk Management team has been working to deploy this tool throughout 2020; and while the implementation schedule is delayed due to the COVID-19 pandemic, the Risk Management team is progressing as planned per its revised schedule.

Annual Risk Assessment – Using information collected in the EGRC tool and the Authority's Annual Risk Assessment process, the Risk Management team will be updating its risk profile and creating new Key Risk Indicator ("KRI") dashboards.

Key Risk Indicator – The Risk Management team has been working on an executive level dashboard that will provide visibility into key risks using enterprise level indicators. These high-level indicators will aid in the management of risks by monitoring those metrics and drivers that provide insight into potential shifts and risks impacting NYPA.

Risk Management will present the KRI dashboard to the members at the next meeting.

5. CONSENT AGENDA:

a. Approval of the Minutes of the Joint Meeting held on July 16, 2020

On motion made by member Michael Balboni and seconded by member Eugene Nicandri, the Minutes of the joint meeting held on July 16, 2020 were unanimously adopted.

6. Next Meeting

Chairperson Tracy McKibben said that the next regular meeting of the Finance Committee will be held on November 17, 2020 at a time to be determined.

Closing

On motion made by member Michael Balboni and seconded by member John Koelmel, the meeting was adjourned by Chairperson McKibben at approximately 10:31 a.m.

Karen Delince
Karen Delince
Corporate Secretary

EXHIBITS

For September 23, 2020 Meeting Minutes



Chief Financial Officer Report

Adam Barsky
EVP & Chief Financial Officer

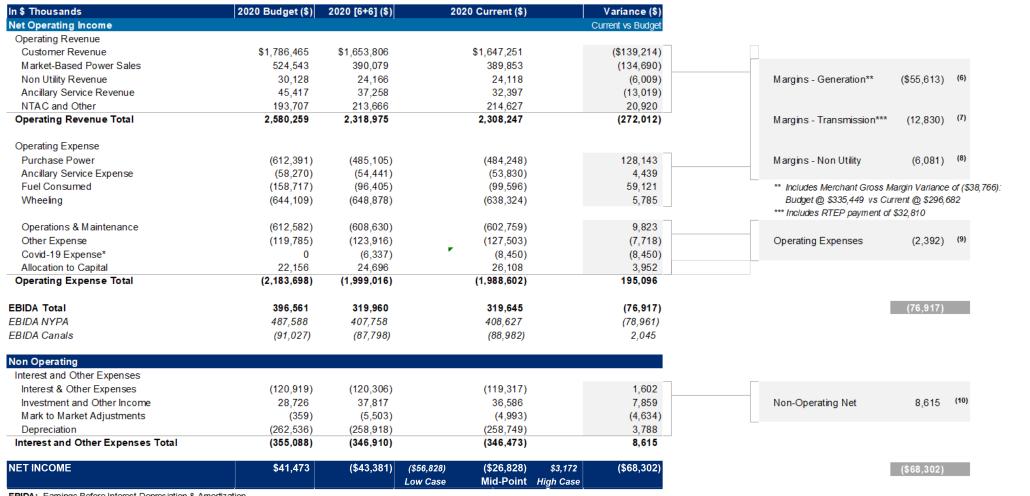
September 23, 2020

Year-to-Date Actuals Through July 31st

n \$ Thousands	2020 Budget (\$) 20	020 Current (\$)	Variance (\$)		
Net Operating Income					
Operating Revenue			_	_	
Customer Revenue	\$1,051,113	\$907,195	(\$143,917)		
Market-Based Power Sales	319,956	207,218	(112,737)		
Non Utility Revenue	15,542	10,426	(5,116)	Margins - Generation	(\$59,438
Ancillary Service Revenue	26,152	16,770	(9,382)		
NTAC and Other	114,166	118,497	4,331		
Operating Revenue Total	1,526,929	1,260,107	(266,821)	Margins - Transmission	(24,25
Operating Expense			_		
Purchase Power	(374,294)	(250,203)	124,092	Margins - Non Utility	(5,48
Ancillary Service Expense	(34,133)	(29,662)	4,471		
Fuel Consumed	(99,162)	(55,682)	43,481		
Wheeling	(367,088)	(361,493)	5,596		
Operations & Maintenance	(347,484)	(324,421)	23,063		
Other Expense	(69,930)	(76,047)	(6,117)	Operating Expenses	21,176
Allocation to Capital	12,293	16,522	4,229		
Operating Expense Total	(1,279,799)	(1,080,984)	198,815		
BIDA Total	247,130	179,123	(68,007)		(68,007
BIDA NYPA	301,126	229,583	(71,543)		
EBIDA Canals	(53,996)	(50,460)	3,536		
Ion Operating					
Interest and Other Expenses					
Interest & Other Expenses	(70,402)	(70,146)	256		
Investment and Other Income	16,392	26,501	10,109		
Mark to Market Adjustments	(209)	(4,639)	(4,430)	Non-Operating Net	9,524
Depreciation	(153,146)	(149,558)	3,588		
Interest and Other Expenses Total	(207,366)	(197,842)	9,524		
NET INCOME	\$39,764	(\$18,719)	(\$58,483)		(\$58,483



Year-End Projection



EBIDA: Earnings Before Interest Depreciation & Amortization *Covid-19: Expected incremental expenses into the forecast.



Major drivers of the Projected Net Income Ranges

Low Case (\$56.8M) – potential **(\$30 million)** NI decrease from the mid-point, driven primarily by:

- Continued softening of market energy prices and the resulting lower than currently expected revenues from merchant energy sales.
- Potential increase of expenses related to NYPA's response to Covid.
- Increase in combined Pension and OPEB ("Other Post Employment Benefits") expenses driven by worse than expected performance of the New York State Pension fund investment returns and somewhat offset by better than expected results of NYPA's OPEB Trust Fund. Figures have not yet been finalized by the State.

Mid-Point (26.8M)

At this point in time we believe the mid-point or better is more likely than the low case

High Case \$3.2M – potential **\$30 million** NI increase from the mid-point, driven primarily by:

- Improvement in market energy prices and increased generation from the hydro and merchant fossil units.
- Continued efforts to reduce operating expenses due to modified operations, in response to Covid.
- Potential increase in revenues related to the Energy Efficiency operations should capital projects be completed earlier than currently forecasted.
- Lower than projected Interest Expenses due to a lower interest rate environment than was in the financial plan.

Change in the underlying drivers since the 6+6 forecast is the downside risk of the merchant revenue has decreased but offset by increased risk of uncontrollable pension and OPEB expense. We expect the bands to narrow in future months.



Financial Impacts of Covid: \$59 million

Margins: \$29.5 million

- As overall electricity demand across the State and the country has declined this year due to the slowdown in industrial and commercial operations related to Covid, so have prices and NYPA's margins.
- Effect was exacerbated by an unseasonably warm winter in early 2020, a collapse of fossil fuel prices, and an oversupply of gas.

Direct Costs of Covid: \$8.5 million in non-reimbursable expenses

- Expectation of approximately \$20 million in total expenses related to Covid in 2020 for: labor, shelter-in-place, cleaning and sanitization, personal protective equipment, communications, state support, personnel testing, building improvements, and return-to-work precautionary measures. Excludes capital expenses.
- Projected FEMA reimbursements of \$11.5 million, leaving \$8.5 million as a net NYPA expense.

Labor to Capital: \$14.5 million

- NYPA employees working on capital projects allocate a portion of their time directly to those projects, and their salaries then move from being an O&M expense to being charged to capital.
- The "pause" in work resulted in an estimated decrease in capital projects being completed in 2020 from \$537 million to \$391 million, causing \$14.5 million to flow back to O&M from Budgeted levels.

Economic Development Relief: \$800,000

Economic development customer rate increase waived in 2020.

Energy Efficiency: \$6 million

• 12% decline in projected completion of Energy efficiency projects.





NEW YORK STATE OF OPPORTUNITY. Authority Canal Corporation



Canal Operations – Status Update

David Mellen

Deputy Director of Canal Corporation

September 23, 2020

Canal Operations Summary

- October 14th End of 2020 Navigation Season
- Overview Winter Work Plans
- 2020 Accomplishments & Challenges

COVID related impacts

Empire State Trail program & other work

Pump Out improvements

Public & Employee Safety



2020 Canals Budget July Actuals

	2020 Annual Budget ¹	YTD Budget	YTD Actuals	YTI Variai		Year-End Forecast	Year-l Varia		Status
Operations & Maintenance	91,027	55,367	52,049	3,318	6%	88,982	2,045	2%	
Capital	70,039	40,095	22,675	17,520	44%	48,839	21,200	30%	

*Top 5 Capital Project Reductions:

Embankment Rehab Program - \$3.7m Rochester West River Wall - \$3m EEP - Albion - \$2.4m Brockville Waste Weir & Culvert - \$2m Harrison Spillway - \$1.7m Court Street Dam Rehab - \$1.5m





NEW YORK STATE OF OPPORTUNITY. Authority Canal Corporation

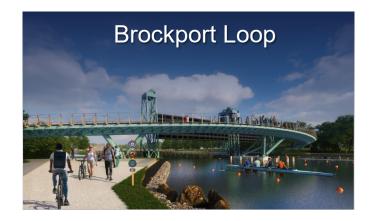


Reimagine the Canals – Status Update

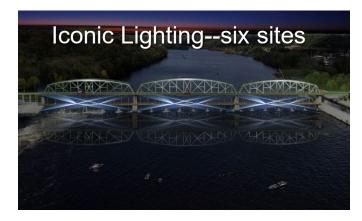
Angelyn Chandler Vice President – Planning, Empire Line

September 23, 2020

Five Economic Development Projects



- Designers selected
- Design to begin Fall 2020



- In design on 5 sites
- 6th site--Fairport in construction for November 2020 completion



 Preparing design RFP for Fall 2020 release



 Concept design will be complete November 2020



Interviewing three developers



Resilience Projects and Reimagine Programs

Resilience



Ice jam model development in progress



- Amphibious dredge on track for Dec 2020 delivery
- Rental ice breaker in procurement for Dec 2020



- Pilot fishing program underway for Fall 2020
- Irrigation incentive program in development
- Preparing design RFP for Albion waste weir modifications

Staycations

- 124,000+ website hits
- Reach estimated at 1.2M people
- Total 2800 participants
- "Sold out" situations

THE SUNDAY REGIONA

Free kayak, bike rentals boost canal staycations

Business Editor

Free kayak and bike rentals are being offered this sum-

Mohawk Harbor to the Rexford Bridge and pedaling the canal system to let people enjoy the outdoors with out journeying too far from home amid a public health

The demand is there kayaks are in short supply at some retailers and new bicycles are even harder to

several weeks inside due to COVID-19 precautions, people want to get outside.

mer along the Erie Canal in Corp. is promoting excur-Schenectady and Niskayuna. sions at six places along the It's a loop, paddling from canal system as staycation back. Similar excursions are hubs feature free rentals; being offered elsewhere on Saratoga/Schuylerville and one other do not.

In Schenectady County,

anyone can reserve a kayak through the website of Up-state Kayak Rentals, which



s helped onto the launch ramp by Tom Chase as her father. Friday, Unstate Kayal





NEW YORK STATE OF OPPORTUNITY. Authority Canal Corporation



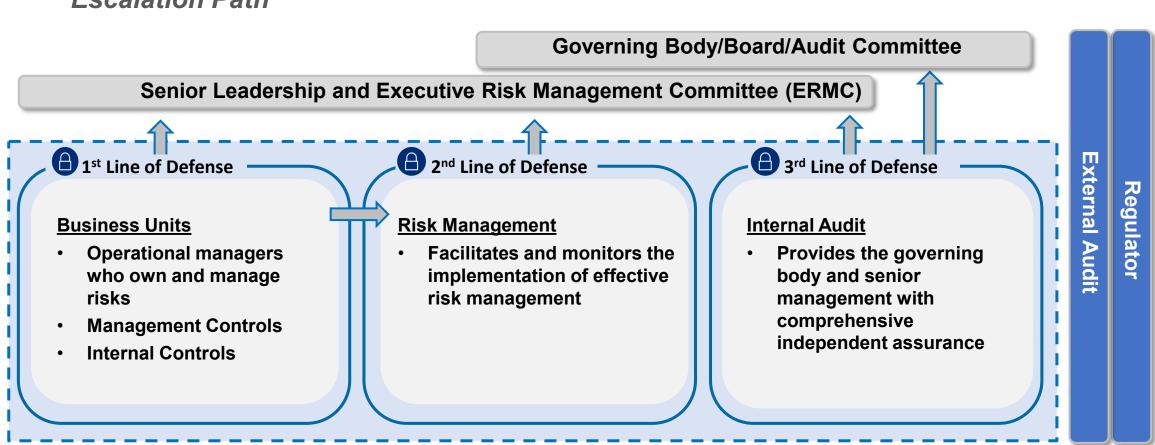
Risk Management Update

Thomas Spencer
Senior Director of Risk Management

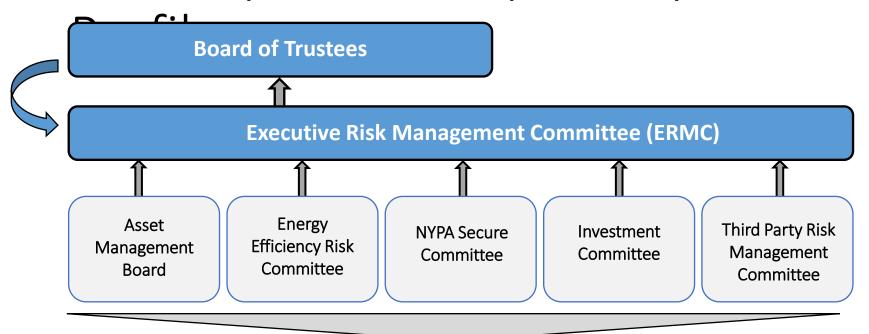
September 23, 2020

Risk Governance Structure at NYPA

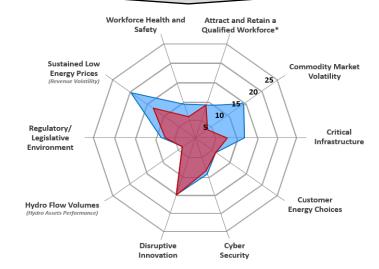
Escalation Path



Visibility and Transparency Into NYPA's Risk



NYPA and Canals Enterprise Risk Profile



- The ERMC discusses enterprise level risks on a monthly basis which includes reports from multiple individual risk committees
- Findings are escalated and reported back to the Board of Trustees as needed

Members

- Adam Barsky
- Justin Driscoll
- Joseph Kessler
- Sarah Salati
- Yves Noel
- Kristine Pizzo
- Soubhagya Parija*

*Non-voting

NIVPA Faces the Same Challenges

NYPA	North Carolina State University – Poole College of Management Global Survey	Aon Global Risk Survey		
Attract and Retain a Qualified Workforce	Impact of regulatory change and scrutiny on operational resilience, products and services	Economic slowdown/recovery		
Business Continuity	Economic conditions impacting growth	Damage to reputation/brand		
Commodity Market Volatility	Succession challenges; ability to attract and retain top talent	Accelerated rates of change in market factors		
Critical Infrastructure	Ability to compete with "born digital" and other competitors	Business interruption		
Customer Energy Choice	Resistance to change operations	Increasing competition		
Cyber Security	Cyber security threats	Cyber attacks/data breach		
Disruptive Innovation	Privacy/Identify Management and information security	Commodity price risk		
Hydro Generation	Sustaining customer loyalty and retention	Cash flow/liquidity risk		
Regulatory/Legislative	Organization's culture may not sufficiently encourage timely identification and escalation of risk issues	Failure to innovate/meet customer needs		
Sustain Margin Reduction	Adoption of digital technologies may require new skills	Regulatory/Legislative changes		
Workforce Health and Safety	of significant efforts to upskill/reskill existing employees	Failure to attract or retain top talent		

- Benchmarked against global surveys polling over 1,000 multi-industry executives and risk professionals
- NYPA's Top Enterprise risks are well-aligned with the benchmark surveys and LPPC members
- Across industries top risk focus is on:
 - Talent Management
 - Culture and Change Management
 - Cyber Security
 - Disruptive Innovation

⁼ Risks with direct alignment across benchmarks

Addressing Those Challenges With Risk

100 to 149 days

48% to 56%

25% to 52%

> 90% of budge

1.5× to 1.89×

70% to 90% of budge < 70% of budget > 90% of budget

70% to 90% of budget < 70% of budget

●On-track OAt-risk ●Off-track

Prompt Year Hedge Target (Energy)

Prompt Year Hedge Target (Capacity)

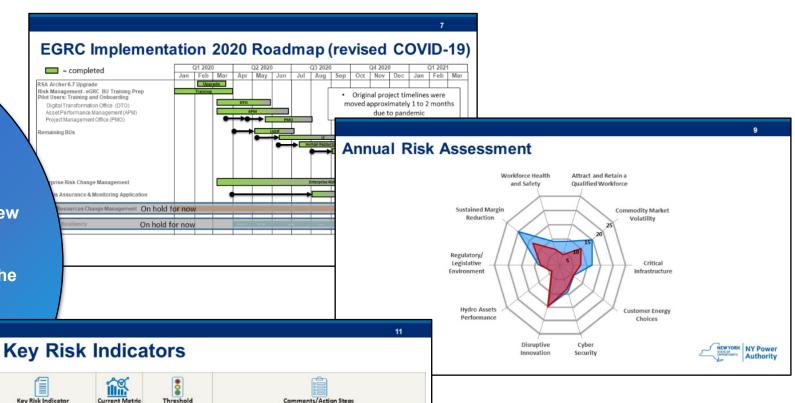
Balance of the Year Commodity Prices (Zone A

Forecasted Net Generation From Hydro Flows

Management

Key Risk Initiatives

- EGRC Training and Adaptation
- Annual Risk Assessment
- Key Risk Indicator Update
- Annual Insurance Portfolio Risk Review
- Owner Controlled Insurance Program (OCIP)
- Risk consultation and review within the parameters of climate change
- Hedging Strategy; Monitoring and Governance
- Enterprise Wide Credit Program
- Model Risk Governance



Transitioning to new Hedging Strategy, capacity is typically trading in winter and summer capability

Relow target due to lower market prices and the resulting decrease of projected market-based power

periods, so market is less liquid



NEW YORK STATE OF OPPORTUNITY. Authority Canal Corporation



November 17, 2020

Next Meeting

The next regular meeting of the Joint Finance Committee is to be determined.