

# 2022–2025

## Approved 2022 Budget and 2022–2025 Financial Plan

In Compliance with 2 NYCRR Chapter 5, Part 203



**NY Power  
Authority**

**Canal  
Corporation**

# Approved 2022 Budget and 2022–2025 Financial Plan

Mission and Background of the Power Authority of the State of New York	1
Documentation and Exhibits Supporting the Budget and Financial Plan	2
(a) NYPA's Relationship With New York State Government	2
(b) Budget Process	2
(c) Budget Assumptions	6
(d) Self-Assessment of Budgetary Risks	15
(e) Revised Forecast of 2021 Budget	21
(f) Reconciliation of 2021 Budget and 2021 Revised Forecast	21
(g) Statement of 2020 Financial Performance	22
(h) Employee Data	23
(i) Gap-Closing Initiatives	23
(j) Material Non-Recurring Resources	23
(k) Shift in Material Resources	23
(l) Debt Service	23
(m) Capital Commitments and Sources of Funding	26
(n) Credit Agency Rating Discussion	32
Certificate of Assumptions and Method of Estimation	33

## Mission of the Power Authority of the State of New York

The mission of the Power Authority of the State of New York (“NYPA” or the “Authority,”) which was 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 mission statement adheres to maintaining NYPA’s core operating businesses while also moving to support the energy goals of New York State, codified in the Clean Energy Standard, New York State Climate Leadership and Community Protection Act (“CLCPA”), our Enhanced Authority under the Power Authority Act as a result of the changes enacted in 2019, and the Accelerated Renewable Energy Growth and Community Benefit Act.

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

## VISION2030: 10-Year Strategic Outlook

NYPA is currently executing [VISION2030](#), the ten-year strategic plan approved by the Trustees in December 2020. VISION2030 is organized around five strategic priorities and five foundational pillars. The five priorities are: Preserving the value of hydropower, Decarbonizing natural gas plants, Growing transmission, Partnering with customers and the state, and Reimagining the Canals. The five pillars are: Digitalization, Environmental, Social, and Governance (“ESG”), Diversity, Equity, and Inclusion (“DEI”), Enterprise Resilience, and Resource Alignment.

## Sustainability

Sustainability encompasses the ESG performance of a company that contributes to long-term value creation. The [2021-2025 Sustainability Plan](#) serves as a roadmap to help bring our ESG ambition to life over the next five years. The plan outlines the ESG goals, strategies, and initiatives that we are committed to across each of our fifteen material ESG focus areas, that align with and support VISION2030 objectives. The Sustainability Plan is an integrated, cross functional, and collaborative living document that will be revisited and refreshed as our sustainability journey evolves, our targets are achieved, and our ambitions grow.

In reporting our ESG progress and doubling down on our commitments, annual sustainability reports provide the platform to transparently communicate and disclose our performance in alignment with leading ESG reporting and disclosure framework standards. To reinforce our commitment to transparency and accountability, we are adopting the Integrated Reporting (<IR>) framework and will issue our first <IR> report in 2023, combining our Annual Report (with financial disclosures) and our Sustainability Report into one comprehensive report. Annual reports provide the platform to transparently communicate and disclose our performance in alignment with leading ESG reporting and disclosure frameworks and standards.

## Background of the Power Authority of the State of New York

The Authority is a corporate municipal instrumentality and political subdivision of the State of New York (the “State”) created in 1931 by Title 1, 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”), and has its principal office located at 30 South Pearl Street, Albany, New York 12207-3425.

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, 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.

The Authority owns and operates five major generating facilities within the state, eleven small electric generating units located at seven facilities, and four small hydroelectric facilities, with a total installed capacity of approximately 6,051 megawatts (“MW”), and a number of transmission lines, including major 765-kilovolt (“kV”) and 345kV transmission facilities. The Authority’s major generating facilities consist of two large hydroelectric facilities (the Niagara Power Project and St. Lawrence-FDR Power Project), a large pumped-storage hydroelectric facility (the Blenheim-Gilboa Power Project) and two gas-and-oil-fired facilities (the Flynn Power Plant located in Holtsville, New York and a combined-cycle electric generating plant, the Eugene W. Zeltmann Power Project, located in Queens, New York, previously known as the 500-MW Plant).

Effective January 1, 2017, the New York State Canal Corporation (the “Canal Corporation” or “NYCC”) became a subsidiary of the Authority. The Canal Corporation is responsible for a 524-mile canal system consisting of the Erie, Champlain, Oswego, and Cayuga-Seneca canals (the “Canal System”). The Board of Trustees of the Authority (the “Board of Trustees”) is the governing board of the Canal Corporation and the Authority has assumed certain powers and duties relating to the New York State Canal System to be exercised through the Canal Corporation.

## Documentation and Exhibits Supporting the Budget and Financial Plan

### (a) NYPA's Relationship With New York State Government

The Authority is a corporate municipal instrumentality and political subdivision of the State created in 1931 by the Public Authorities Act ("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 internally generated funds and the sale of bonds and notes to investors, and it 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

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 subject to electric market price and fuel cost variability, and volatility in water flows have a direct effect on the Authority's hydroelectric generation levels. This Approved 2022 Budget and 2022-2025 Financial Plan ("Four-Year Financial Plan") relies on data and projections developed throughout the following time frame:

- July 2021–November 2021, developed preliminary forecasts of electric prices (both energy and capacity), ancillary services revenue and expenses, and fuel expenses, customer power and energy use; customer rates; Annual Transmission Revenue Requirement; generation levels at NYPA power projects reflecting scheduled outages; and purchased energy and power requirements and sources
- November 1, 2021, the Proposed 2022 Budget and 2022–2025 Financial Plan was posted for public inspection at five convenient locations and on NYPA's website
- October 2021–November 2021, updated and finalized all forecasts and cost estimates
- November 2021–December 2021, integrated input data to produce the final 2022 Budget and 2022-2025 Financial Plan
- Seek authorization of NYPA's Board of Trustees to approve the final 2022 Budget and 2022-2025 Financial Plan at their meeting scheduled for December 7, 2021
- Submit the Approved 2022 Budget and 2022-2025 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 website upon Board of Trustee approval.

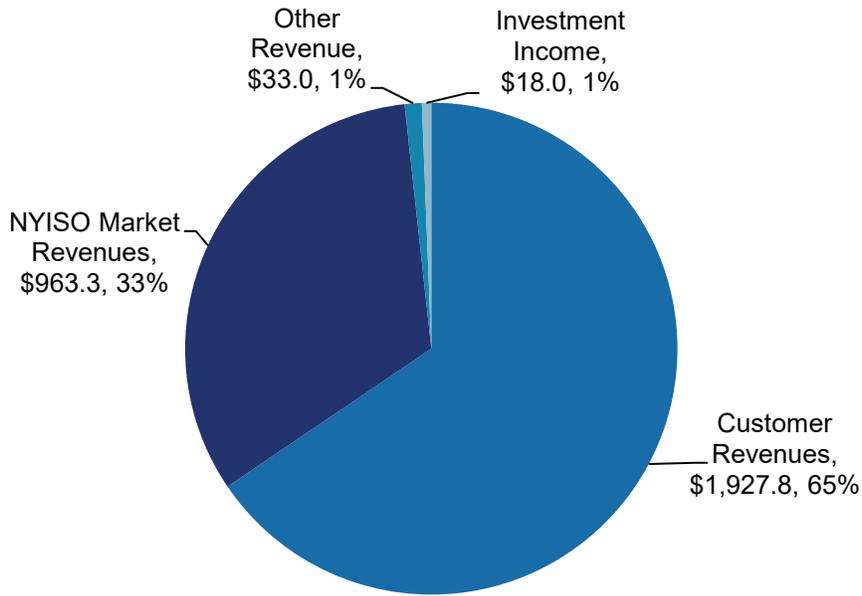
**NYPA's Four-Year Projected Income Statements**  
(In \$ Millions)

<b>NYPA &amp; CANALS</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>Operating Revenue</b>				
Customer Revenue	\$1,927.8	\$1,897.9	\$1,922.2	\$1,939.3
Market-Based Power Sales	705.3	591.8	661.1	716.4
Ancillary Service Revenue	28.9	29.5	29.7	30.0
NTAC and Other	229.2	289.3	338.3	380.3
Non Utility Revenue	33.0	43.0	51.9	62.7
<b>Operating Revenue Total</b>	<b>2,924.2</b>	<b>2,851.5</b>	<b>3,003.2</b>	<b>3,128.7</b>
<b>Operating Expense</b>				
Purchase Power	(816.1)	(752.8)	(784.4)	(821.6)
Ancillary Service Expense	(61.1)	(63.6)	(63.4)	(64.9)
Fuel Consumed	(272.3)	(208.3)	(227.5)	(247.6)
Wheeling	(643.7)	(643.6)	(643.5)	(643.7)
Operations & Maintenance	(584.7)	(607.3)	(639.7)	(666.1)
Other Expense	(83.8)	(72.2)	(72.3)	(70.6)
<b>Operating Expense Total</b>	<b>(2,461.7)</b>	<b>(2,347.8)</b>	<b>(2,430.8)</b>	<b>(2,514.5)</b>
<b>EBIDA</b>	<b>462.5</b>	<b>503.7</b>	<b>572.4</b>	<b>614.2</b>
<b>Compounded Annual Growth Rate (CAGR)</b>		<b>9%</b>	<b>11%</b>	<b>10%</b>
<b>Non Operating Income &amp; Expenses</b>				
Depreciation & Amortization	(321.1)	(349.0)	(377.9)	(408.3)
Investment and Other Income	18.0	21.8	25.1	28.9
Mark to Market Adjustments	0.0	0.0	0.0	0.0
Interest & Other Expenses	(97.6)	(107.2)	(145.4)	(139.3)
<b>Non Operating Income &amp; Expenses Total</b>	<b>(400.7)</b>	<b>(434.4)</b>	<b>(498.2)</b>	<b>(518.7)</b>
<b>CONSOLIDATED NET INCOME (NYPA &amp; CANALS)</b>	<b>\$61.8</b>	<b>\$69.3</b>	<b>\$74.2</b>	<b>\$95.5</b>

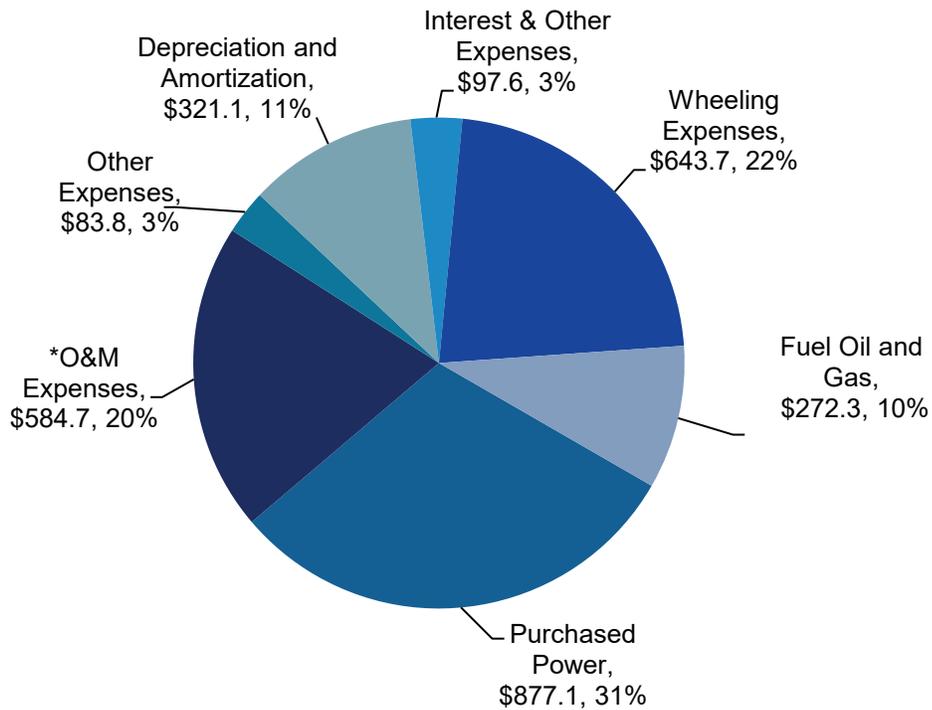
**NYPA's Gross Margin Analysis**  
(In \$ Millions)

<b>NYPA &amp; CANALS</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
Merchant Margin	\$266.9	\$261.3	\$288.4	\$320.6
Customer Margin	610.6	628.5	643.2	621.1
Transmission Margin	218.5	248.6	299.4	344.8
Other Margin	34.9	44.8	53.4	64.4
<b>TOTAL MARGIN</b>	<b>1,130.9</b>	<b>1,183.2</b>	<b>1,284.4</b>	<b>1,350.9</b>
Operations & Maintenance	(584.7)	(607.3)	(639.7)	(666.1)
Other Expenses	(83.7)	(72.2)	(72.3)	(70.6)
<b>EBIDA</b>	<b>\$462.5</b>	<b>\$503.7</b>	<b>\$572.4</b>	<b>\$614.2</b>

**2022 NYPA's Budget – Sources**  
(In \$ Millions)



**2022 NYPA's 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)

NYPA	2020	2021	2022	2023	2024	2025
<b>Revenue Receipts</b>						
Sale of Power, Use of Transmission Lines, Wheeling Charges and other receipts	\$2,205.6	\$2,728.7	\$2,920.0	\$2,855.9	\$3,016.9	\$3,152.5
Earnings on Investments and Time Deposits	<u>30.0</u>	<u>14.9</u>	<u>18.0</u>	<u>21.8</u>	<u>25.1</u>	<u>28.9</u>
<b>Total Revenues</b>	<b>2,235.6</b>	<b>2,743.6</b>	<b>2,938.0</b>	<b>2,877.7</b>	<b>3,042.0</b>	<b>3,181.4</b>
<b>Expenses</b>						
Operation and Maintenance, including Transmission of Electricity by others, Purchased Power and Fuel Purchases	(2,009.8)	(2,422.8)	(2,643.4)	(2,533.6)	(2,623.7)	(2,714.6)
<b>Debt Service</b>						
Interest on Bonds and Notes	(60.2)	(30.4)	(28.2)	(46.9)	(65.6)	(64.7)
Bonds and Notes Retired	<u>(342.9)</u>	<u>(1.4)</u>	<u>(1.5)</u>	<u>(1.5)</u>	<u>(17.5)</u>	<u>(18.4)</u>
<b>Total Debt Service</b>	<b>(403.1)</b>	<b>(31.8)</b>	<b>(29.7)</b>	<b>(48.4)</b>	<b>(83.1)</b>	<b>(83.1)</b>
<b>Total Requirements</b>	<b>(2,412.9)</b>	<b>(2,454.6)</b>	<b>(2,673.1)</b>	<b>(2,582.0)</b>	<b>(2,706.8)</b>	<b>(2,797.7)</b>
<b>Net Operations</b>	<b>(177.3)</b>	<b>289.0</b>	<b>264.9</b>	<b>295.7</b>	<b>335.2</b>	<b>383.7</b>
<b>Capital Receipts</b>						
Sale of Bonds, Promissory Notes & Commercial Paper	1,277.4	0.0	0.0	288.6	0.0	0.0
Less: Repayments	0.0	0.0	0.0	0.0	0.0	0.0
Temporary Asset Transfer Return from NYS	0.0	86.0	43.0	0.0	0.0	0.0
Other	<u>57.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
<b>Total Capital Receipts</b>	<b>1,334.4</b>	<b>86.0</b>	<b>43.0</b>	<b>288.6</b>	<b>0.0</b>	<b>0.0</b>
<b>Capital Additions &amp; Refunds</b>						
Additions to Electric Plant in Service and Construction Work in Progress, Other costs	(507.1)	(709.4)	(883.7)	(733.0)	(565.2)	(488.3)
Construction Funds - Net Transfer	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
<b>Total Capital Additions &amp; Refunds</b>	<b>(507.1)</b>	<b>(709.4)</b>	<b>(883.7)</b>	<b>(733.0)</b>	<b>(565.2)</b>	<b>(488.3)</b>
<b>Net Capital</b>	<b>827.3</b>	<b>(623.4)</b>	<b>(840.7)</b>	<b>(444.4)</b>	<b>(565.2)</b>	<b>(488.3)</b>
<b>Net Increase/(Decrease)</b>	<b>\$650.0</b>	<b>(\$334.4)</b>	<b>(\$575.8)</b>	<b>(\$148.7)</b>	<b>(\$230.0)</b>	<b>(\$104.6)</b>

\* 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 results from sales of its generation into the NYISO market. The energy and capacity revenues are projected based on published forward prices, exchanges, broker information and/or internal pricing models.

### **Customer and Project Revenue**

The customers served by the Authority and the rates they pay 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 Board of Trustees.

### **St. Lawrence-FDR and Niagara Customers**

Energy from the St. Lawrence-FDR and Niagara facilities are sold under contract to municipal electric systems, rural electric cooperatives, industrial and other business customers, certain public bodies, investor-owned utilities, and out-of-state customers. The remaining available energy is sold into the NYISO market.

The charges for firm power, firm peaking power and associated energy sold by the Authority, as applicable to the 51 municipal electric systems, rural electric cooperatives in New York State, two public transportation agencies, two investor-owned utilities for the benefit of rural and domestic customers, and seven out-of-state public customers have been established based on the cost to serve these loads. This Four-Year Plan, models Board of Trustee-approved rate changes and prospective rate changes for these customers.

Niagara and St. Lawrence-FDR's Expansion & Replacement Power, ReCharge New York, 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 hydropower 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 economic development programs, Power For Jobs and Energy Cost Savings Benefit. RNYPP is a permanent power program administered by the Authority and the Economic Development Power Allocation Board ("EDPAB"). 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 Board of Trustees, to provide annual funding of \$30 million for a Residential Consumer Discount Program ("RCDP") 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 Board of Trustees have authorized the release of a total \$624 million for the period from August 2011 to December 2021 in support of RCDP. The Authority supplemented the market revenues used to fund the RCDP with internal funds, totaling cumulatively \$54 million from August 2011 through June 30, 2021.

In March 2019, the Board of 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 Energy Rate adjustments based upon on the price of aluminum on the London Metal Exchange and contains provisions for employment (450 jobs) and capital commitments (\$14 million).

Changes from the previous contract include: a reduced allocation of 240 MW, with the additional 5 MW being allocated to Arconic, a 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 aluminum contracts 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 an approximate total of \$227 million, of which approximately \$215 million has already been spent as of June 30, 2021. These total costs could increase in the future because of authorities reserved by the Federal Energy Regulatory Commission (“FERC”) in the license for the St. Lawrence-FDR Project issued in 2003. The Authority collects the amounts necessary to fund such relicensing costs through its rates from the sale of St. Lawrence-FDR power.

The Authority has also executed the relicensing of the Niagara Project in 2005 for a period of 50 years. The total approximate cost of \$520 million, of which approximate of \$479 million has already been spent as of June 30, 2021. The Authority is collecting in its rates for the sale of Niagara power amounts necessary to fund such relicensing costs.

Chapter 545 of the laws of 2014 enacted the “Northern New York Power Proceeds Act” (“NNYPPA.”) NNYPPA authorizes the Authority, as deemed feasible and advisable by the Board of 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. 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 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”).

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 five 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 Approved 2022 Budget and 2022-2025 Financial 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 Board of Trustees.

WNYPPA defines “Net earnings” 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. NYPA’s estimates of payments from the Authority to the WNY Fund have been incorporated into this Approved 2022 Budget and 2022-2025 Financial Plan.

### **SENY (Southeastern New York) Customers**

Various municipalities, school districts and public agencies in New York City are served by the Authority’s combined-cycle Eugene W. Zeltmann Power Project (“Zeltmann”), the contracted output of the Astoria Energy II plant, and capacity and energy purchased by the Authority in the NYISO markets.

In 2017 and 2018, the Authority executed new supplemental long-term electricity supply agreements (Supplemental 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 these 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 12 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 contractually 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, NYPA 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 commenced commercial operations 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.

The energy generated by the Zeltmann and Astoria Energy II plants is sold into the NYISO market, and the 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 35% and 23% of the NYC Governmental Customer load requirements are covered by Astoria Energy II and Zeltmann plants respectively, while the remainder, more than 41%, remain open to be sourced from the open market.

The Authority's other SENY customers are Westchester County and numerous municipalities, school districts and other public agencies located in Westchester County (collectively, the "Westchester Governmental Customers.") NYPA has entered into an evergreen supplemental electricity supply agreement with all 103 Westchester Governmental Customers. Among other things, provided by the agreement, customers can partially terminate service from the Authority with at least two months' notice prior to the start of the NYISO capability periods. Full termination is allowed with at least one year's notice, effective no sooner than January 1 following the one-year notice.

Westchester Governmental Customers are partially served by NYPA'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 of energy generated by the small hydroelectric resources into the NYISO markets, 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**

The Blenheim-Gilboa project operates as a merchant plant, with all energy sold to the NYISO markets generally at the market-clearing price. This forecast assumes Blenheim-Gilboa will operate as a merchant plant for the upcoming years.

### **Small Clean Power Plants ("SCPPs")**

In the summer of 2001, NYPA placed into operation eleven (11) natural-gas-fueled SCPPs, ten (10) units in New York City and one (1) unit on Long Island, with a total nameplate rating of 47 MW. These units were put into operation 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 litigation relating to the Vernon Blvd., Queens, NY SCPP, the Authority has agreed under the settlement agreement to cease operations at the Vernon location, which houses two (2) units, under certain conditions and if the mayor of New York City directs such cessation. No such cessation direction has occurred. The settlement agreement also allows a landowner adjacent to the Vernon Blvd. SCPP to "put" their real property to the Authority under certain conditions. To date, no formal "put" notice has been received. The Authority and the adjacent landowner may enter into buy, sell or other types of agreements outside the terms of the settlement agreement.

For this Approved 2022 Budget and 2022-2025 Four-Year Plan, it is assumed that the capacity of the SCPPs may be used to meet NYPA's 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 plant currently operates as a merchant plant, with capacity and energy output sold into the NYISO market. NYPA is in the process of finalizing an agreement with the Long Island Power Authority ("LIPA") to attain at-cost reimbursement for the rewind of the combustion turbine generator and a power purchase agreement in which revenues will be shared.

### **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-Chateaugay)

#### **345kV**

- UE1-7 (Marcy-Edic)
- UNS-18 (Marcy-New Scotland)
- VU19 (Volney-Marcy)
- NR-2 (Niagara-Rochester)
- NS-1 (Niagara-Somerset)
- 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)

### Cost Recovery for NYPA's Backbone Transmission System

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's Backbone Transmission System costs on a statewide basis after accounting for NYPA's revenues received from pre-existing customer transmission service contracts, Transmission Service Charge ("TSC") 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 was necessary to cover increased operating and maintenance expenses of NYPA's bulk transmission system, and to make necessary capital improvements.

In January 2016, the Authority filed for a TRR 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 resolved the issues raised by interested parties in settlement negotiations concerning the formula rate. Separately, the annual TRR under the formula of \$190 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, 2021, the Transmission Revenue Requirement is \$278.9 million, which includes the revenue requirements for the Marcy South Series Compensation and AC Transmission (renamed as Central East Energy Connect) projects. Annual updates commensurate with projected costs are assumed to continue throughout the forecast period.

### Smart Path Reliability Project

NYPA is replacing a major section of the Moses Adirondack line, one of the Authority's Backbone Transmission System lines. This project is known as The Smart Path Reliability Project, and it 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 for 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, which means the costs will be allocated to all ratepayers in the state. On November 14, 2019, the PSC granted the Authority's Article VII certificate for the project. The Authority estimates a total project cost of \$484 million. This Approved Budget and Four-Year Plan includes revenues and costs associated with this project.

### Smart Path Connect Project

In October 2020, the PSC adopted criteria for identifying urgently needed transmission projects to meet the renewable energy goals of the Climate Leadership and Community Protection Act. The PSC identified the Authority's proposed Northern New York Project (renamed the Smart Path Connect 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 Smart Path Connect 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, and 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 Smart Path Connect Project earlier this year as work that is urgently needed to help unbundle existing renewable energy in the region.

The project is estimated to result in a reduction of more than 1.16 million tons of carbon dioxide emissions annually on a statewide basis, and an annual reduction of approximately 160 tons of nitrogen oxide emissions from downstate emissions sources. NYPA estimates that this project will result in more than \$447 million in annual congestion savings in Northern New York and it is estimated to create hundreds of jobs in the North Country during construction. The costs and revenues associated with the Smart Path Connect Project are included as part of this Approved Budget and Four-Year Plan.

## Central East Energy Connect

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 includes the construction of more than 90 circuit-miles of new 345kV and 115kV transmission lines and two substations.

In August 2019, LS Power and the Authority submitted an Article VII application to the PSC. If the PSC authorizes the project, construction is targeted to begin early 2021. The transmission lines to be rebuilt as part of the Segment A project are expected to be energized as part of New York State’s electrical system by the end of 2023.

NYPA originally funded 33% of the Segment A project development costs and exercised its 37.5% purchase option in July 2021, bringing the Authority’s total estimated project costs to \$276 million.

FERC authorized NYPA’s recovery of a facility charge for Central East Energy Connect project costs, adopted per a NYISO filing made on behalf of NYPA. The Authority is recovering its costs associated with Segment A of the project through its FERC-approved cost-recovery mechanisms in its TRR formula rate, which include an incentive rate of return applied to the Authority’s “Construction Work in Progress” balances for the project. This Approved Budget and Four-Year Plan models estimated revenues and costs associated with the project.

## Y-49 Transmission Line

In October of 2021, the NYPA Board of Trustees authorized the Y-49 Transmission Line (Long Island Sound Cable) – Nassau Segment Reconductoring Project.

The Long Island Sound Cable traverses Westchester County, the Long Island Sound, and Nassau County, delivering 600 MW of power from upstate regions to Long Island communities. The circuit was commissioned in 1991 and throughout its near 30-year operating history has seen minimal investment outside of normal operational, maintenance, and emergent expenditures. Given the history of cable faults seen within the past few years, an effort was put into place to mitigate future faults by reconductoring.

The Reconductoring Project’s priority consists of the replacing the Y-49 cable segment in Nassau County, approximately 10 miles from Port Washington to East Garden City. This will alleviate the risk of cable faults. In addition to the reconductoring, the project includes enhancement of the cable system’s ancillary cable components and substation equipment, including upgrades to steel-pipe protection, fiber-optic replacements, manhole refurbishment, and replacement, or refurbishment of the oil-pump plants at two substation locations on the Nassau segment. This project’s estimated cost is \$141.7M and will be recovered through NYPA’s Transmission Revenue Requirement.

## Hudson Transmission Project

In 2011, the Board of Trustees authorized NYPA to enter into an agreement with Hudson Transmission Partners, LLC (“HTP”). The agreement known as the Firm Transmission Capacity Purchase Agreement (“FTCPA”) was entered into 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. The agreement is meeting this need through the transmission rights associated with HTP’s transmission line. The line extends from Bergen County, New Jersey at the PJM Interconnection, LLC (“PJM”) transmission system, to the Consolidated Edison Company of New York, Inc.’s (“Con Edison”) West 49th Street substation.

Under the FTCPA, the Authority received entitlement to 75% of the line’s 660 MW capacity for 20 years while reimbursing HTP for the cost of interconnection and transmission upgrades in New York and New Jersey associated with the line. These upgrades have been completed at a total cost to the Authority of \$335 million. NYPA’s obligations under the FTCPA also include payment of the Regional Transmission Enhancement Plan (“RTEP”) charges allocated to HTP, which are significant.

On March 31, 2017, the Authority and HTP amended the FTCPA to, among other changes, (a) create a mechanism for HTP to relinquish its Firm Transmission Withdrawal Rights and (b) increase the Authority’s leased portion of the line’s capacity to from 75% to 87.12% 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.

PJM’s RTEP cost allocation methodology for certain upgrades was challenged at FERC in numerous proceedings by Con Edison, the Authority, HTP and other New York parties. These challenges are pending before the D.C. Circuit Court of Appeals. It is estimated that the revenues derived from NYPA’s rights under the FTCPA will not be sufficient to cover the Authority’s costs during the 20-year term of the FTCPA. The Authority estimates HTP to be approximately \$100 million per year net cost.

## Renewable Energy Certificate (REC) Purchase Agreement

The CLCPA and NYPA's VISION2030 establish the goal to meet 70% of electricity demand from renewable resources by 2030. To meet this goal NYPA has engaged with the New York State Energy Research and Development Authority (NYSERDA) to procure RECs. Both NYPA and NYSEDA executed an agreement for purchase of RECs on August 30, 2021. On an annual basis, NYSEDA and NYPA will communicate the available REC supply and offtake ratios. NYPA will continue to evaluate its forecasted annual customer load and adjust the REC ratio appropriately. The initial REC offtake under the agreement will be for compliance year 2024.

## Energy Efficiency - Bond Conduit Program

Long Term Financing Supplements ("LTFS") have been prepared to conform with existing documentation for bond financing. Six customers have been identified for round one of this program, and the customers are working through their own processes to either repay their long-term debt obligations via their own financing or agree to proceed with the conduit financing program introduced. One on one customer discussions are ongoing. Potential round one offtake is sizing up to \$250 million dependent on customer interest. Bond conduit rates are in line with market for each customer's respective credit rating allowing for 10, 20, or 30-year amortizations tied to the remaining useful life of the project assets plus a NYPA servicing fee of 0.25%. Notice of discontinuance of NYPA's previous post construction financing program has been distributed to all customers in line with the introduction of this fixed-rate replacement option. A conversion of those loans on our balance sheet to a rate aligned with NYPA's long-term cost of borrowing is expected to be implemented in Q1 2022 when the long-term variable rate of financing is scheduled to reset. The targeted first issuance will be for Q1 2022.

## Purchased Power Expenses

Energy, capacity, 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 Approved Budget and 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 Approved Budget and Four-Year Plan are based on expected net generation levels determined with 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.

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

Given the age of the Canal System, the Authority expects significant maintenance and capital investments will be required to assure the Canal System's continuing operation. The Authority's budget and financial plan for the Canal System and the Reimagine the Canals initiative combined, for 2022-2025, includes operating expenditures and capital expenditures necessary to maintain the health, safety, and good repair of the system. 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.

## AGILe

The Authority, in collaboration with the State utilities, NYSEDA and NYISO, developed the Advanced Grid Innovation Laboratory for Energy (“AGILe”) to create tools to better monitor, control, accommodate and respond to the evolving energy sector. On July 25, 2017, the Board of Trustees authorized capital expenditures 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 the AGILe participants. As of June 30, 2021, approximately \$6.6 million has been spent by the Authority.

## Electric Vehicle Acceleration Initiative

In May 2018, the Authority’s Board of Trustees approved an allocation of up to \$250 million to be used through 2025 for an electric vehicle acceleration initiative called EVolve NY 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, 2021, approximately \$11.5 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 within 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 guaranteed by the United States government.

## Interest

After languishing for much of 2020 at multi-year lows, U.S. Treasury market rates have begun to creep ahead in recent months, driven by strong inflation, job gains and the fading of delta variant concerns. The Federal Open Market Committee is expected to raise the target range of the Federal Funds rate as early as late 2022, according to committee member projections.

US Treasury Yield Curve Forecast				
	2 Year	5 Year	10 Year	30 Year
Current	0.4	1.1	1.6	2.1
4Q '21	0.3	1.0	1.6	2.2
1Q '22	0.4	1.1	1.6	2.2
2Q '22	0.4	1.1	1.6	2.2
3Q '22	0.4	1.1	1.6	2.2
4Q '22	0.5	1.3	1.8	2.3

Source: Goldman Sachs Global Investment Research, Bloomberg

## Operations and Maintenance Expenses

NYPA's O&M plan for 2022-2025 is as follows:

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

NYPA and Canals	2022	2023	2024	2025
<b>Payroll</b>				
Regular Pay	\$262.4	\$269.4	\$276.6	\$284.1
Overtime	13.6	14.0	14.4	14.8
Other Payroll	<u>7.1</u>	<u>7.2</u>	<u>7.3</u>	<u>7.4</u>
<b>Total Payroll</b>	<b>283.1</b>	<b>290.6</b>	<b>298.3</b>	<b>306.3</b>
<b>Other O&amp;M</b>				
Benefits	93.9	107.5	110.4	113.5
Materials/Supplies	27.6	28.3	29.0	29.8
Fees	10.9	11.3	11.6	11.9
Office & Stationary	27.6	28.3	29.1	29.9
Maintenance Repair, Service Contracts & Consultants	<u>222.2</u>	<u>228.7</u>	<u>238.0</u>	<u>243.7</u>
<b>Total Other</b>	<b>382.2</b>	<b>404.0</b>	<b>418.1</b>	<b>428.8</b>
<b>Charges to</b>				
Outside Agencies	10.0	8.9	9.1	9.3
Capital Programs	<u>(53.1)</u>	<u>(54.5)</u>	<u>(55.9)</u>	<u>(57.4)</u>
<b>Total Charges</b>	<b>(43.1)</b>	<b>(45.6)</b>	<b>(46.9)</b>	<b>(48.1)</b>
<b>Research &amp; Development</b>	<b>12.7</b>	<b>12.7</b>	<b>12.7</b>	<b>12.7</b>
<b>Total NYPA/Canals O&amp;M</b>	<b>\$635.0</b>	<b>\$661.8</b>	<b>\$682.3</b>	<b>\$699.6</b>

**Detailed Breakout of 2022 O&M by Facility**  
(In \$ Millions)

Profit Center	Site O&M	HQ	R&D	Total
Niagara	\$65.5	\$59.4	\$3.2	\$128.1
St. Lawrence	33.8	36.2	2.5	72.5
Blenheim-Gilboa	20.7	22.2	0.7	43.6
Small Clean Power Plants	22.9	4.1	0.1	27.1
Flynn	0.0	7.8	0.2	8.0
Small Hydro	6.1	6.7	0.2	13.0
Zeltmann	36.7	21.4	0.6	58.7
Recharge NY	2.8	4.6	0.1	7.5
SENY	25.9	8.3	0.3	34.5
Transmission	56.9	60.7	4.7	122.3
<b>Total Sites, HQ and R&amp;D</b>	<b>\$271.3</b>	<b>\$231.4</b>	<b>\$12.7</b>	<b>\$515.4</b>

Other O&M Categories	
CES	\$22.0
NYEM	\$6.6
Nonchargeable Profit Centers*	\$5.8
<b>Total NYPA O&amp;M</b>	<b>\$549.8</b>
<b>Total Canals O&amp;M</b>	<b>\$85.2</b>

\* Nonchargeable profit centers include: Green Power Supply Products and EV Charging Stations.

**Further Breakout of NYPA 2022 Headquarters Expenses**  
**NYPA Corporate & Operations Headquarters \$231.4M**



## 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, 2020, 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 and WNY funds) some of which require Board of 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.

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 input into our financial forecast. The team actively engages and challenges all assumptions as we work toward representing the most likely future financial outcome for the Authority. Additionally, the Board of Trustees authorized an enterprise-wide risk management program through an established Risk Management group that supports the business with the identification, assessment, mitigation and monitoring of risks.

## Enterprise Level Risks

### Regulatory Environment Risks

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. The impact on the Authority's operations of any such proposals is not predictable or quantifiable.

On July 18, 2019, the state enacted the CLCPA as Chapter 106 of the Laws of 2019 ("Chapter 106"). The date upon which most provisions of Chapter 106 will become effective are dependent on the date that related legislation becomes effective.

Several provisions of Chapter 106 could potentially impact the Authority's business and operations, such as the following: (1) provisions authorizing the state Department of Environmental Conservation to promulgate regulations establishing limits on statewide 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 the state's 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 a number of years, based on deadlines established in the enactment. Therefore, the Authority cannot evaluate the impact of any particular provision of Chapter 106 on the Authority's business and operations at this point.

## Legislative Environment Risks

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 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 will be enacted. In addition, from time to time, legislation is enacted into New York State Law that 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 NYPA 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 NYPA 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 Board of Trustees, could negatively affect net income and possibly harm the Authority’s credit ratings.

## Hydropower Generation Risk

The Authority’s net income is highly dependent upon generation levels at its Niagara and St. Lawrence-FDR power projects. The generation levels are a function of the hydrological conditions prevailing on the Great Lakes; primarily, Lake Erie (Niagara Project) and Lake Ontario (St. Lawrence-FDR Project). The long-term generation level at the two projects is approximately 20.3 terawatt-hours (“TWH”) annually. NYPA’s hydroelectric generation forecasts are as follows, 22.7 TWH in 2022, 22.6 TWH in 2023, 23.0 TWH in 2024, and 23.3 TWH in 2025.

Environmental or external factors (e.g., climate change, precipitation, flooding and ice conditions) can cause hydrological conditions to vary considerably from year to year. Hydropower generation may also face risks due to transmission line constraints within the region impacting the ability to generate energy and increased competitiveness of other types of renewable generation.

NYPA conducted high and low hydroelectric generation sensitivities for 2022-2025 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, the portion of the portfolio that would be most impacted by varying hydroelectric levels. The effects on estimated net income, assuming all other factors remain unchanged, were as follows:

### Hydropower Generation

Year	Low Generation		High Generation	
	Net Merchant Hydro-electric Generation (In TWH)	NYPA Net Income Change (In \$ Millions)	Net Merchant Hydro-electric Generation (In TWH)	NYPA Net Income Change (In \$ Millions)
2022	6.1	(\$19.9)	7.3	\$21.2
2023	5.7	(\$27.1)	7.6	\$23.9
2024	6.5	(\$36.6)	8.5	\$35.2
2025	6.6	(\$45.3)	9.1	\$45.8

### **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. Volatility can 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 mitigate the cost of energy or related products needed; to mitigate uncertainty in the price of energy and related products sold by NYPA; to mitigate risk related to electric margins from 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 Barack 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 NYPA 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 exempt 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 NYPA's liquidity and/or future risk mitigation activities. CFTC and DF Act rules are still being promulgated, and the Authority will continue to monitor their potential impact on its liquidity and/or future risk mitigation activities.

### **Disruptive Innovation and Customer Energy Choices**

Transformative technologies and customer empowerment create 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, NYPA regularly evaluates its mission, objectives, and customer needs, and seeks to appropriately position itself to effectively meet the challenges of the transforming electric industry. This is done through initiatives such as a long-term asset management strategy and a suite of customer solutions, including new/modified product offerings. The impact on NYPA's operations of any such industry transformation is not predictable or quantifiable.

### **Attract and Retain a Qualified Workforce**

Like many other industries, the power and utility sectors are seeing increased competition for, and a general shortage of, talent in high-skilled areas. This 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 objectives. NYPA 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 and works closely with the industry to ensure awareness of ongoing threats and that appropriate protections are in place against physical and cyber-attacks. NYPA constantly assesses the nature of these risks and adjusts its resources to best anticipate and respond to any threats.

Investments to harden physical and cyber assets, and their related infrastructure, are continually assessed to minimize potential adverse impacts to the bulk electric system, detect and deter sabotage attempts, and protect the Authority and its customer information. NYPA further mitigates its cyber risk through the purchase of insurance.

## **Business Continuity**

A catastrophic natural event such as severe weather, flooding or an earthquake can negatively affect the operations of Authority assets and the bulk electric system. NYPA 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 utilize an all-hazards approach to ensure the Authority's operating facilities and corporate offices are prepared to respond to any natural or man-made threat.

The Authority regularly conducts drills and exercises to ensure advance preparation for these types of events. NYPA 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 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 changed societal and business operation norms and impacted the risk profiles of organizations globally. Despite the uncertainty associated with COVID-19 (i.e., further vaccine development, vaccination status, treatment advancements, or additional COVID-19 variants) 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**

NYPA is exposed to potential critical infrastructure failure that may lead to service disruption, injury and/or degradation of system reliability, all of which could impact financial results. The Authority engages in several activities to mitigate these risks, including ISO 55001 Asset Management certification, the purchase of insurance, redundancy of major equipment, capital investments and a robust operations maintenance program.

## **Workforce Health and Safety**

NYPA 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 State are of the highest priority to the Authority. NYPA has multiple levels of controls, policies, procedures, and training programs in place to reduce and/or eliminate health and safety incidents.

## **Litigation Risk**

### **St. Regis Litigation**

In 1982 and 1989, several groups of Mohawk Indians, including a Canadian Mohawk tribe, filed lawsuits (the St. Regis litigation) against the state, the state's governor, St. Lawrence and Franklin counties, the St. Lawrence Seaway Development Corporation, the Authority, and others. The plaintiffs claimed ownership of certain lands in St. Lawrence and Franklin counties and to Barnhart, Long Sault and Croil islands. The islands are within NYPA's St. Lawrence-FDR Power Project and Barnhart Island is the location of significant NYPA 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 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 NYPA power for use on the reservation. The legislation required to effectuate the settlement was not enacted and the litigation continued.

In 2013, all claims against NYPA were dismissed and the lawsuit against the Authority was concluded. On May 28, 2014, New York State, 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 NYPA 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 NYPA would be 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. NYPA is continuing settlement discussions with some of the parties to the St. Regis litigation.

### **Miscellaneous**

Additional 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 such other actions or claims will, in NYPA’s opinion, be disposed of within the amounts of the Authority’s insurance coverage, where applicable, or the amount which NYPA has available therefore and without any material adverse effect on its business.

### **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 anticipated to be stagnant or decline 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 the retirement of Indian Point 3 this past year and the awaited unit retirements of New York City “peaker” plants due to the DEC’s new nitrogen oxide rule. Downstate energy prices will continue to correlate with natural gas prices.

Capacity prices are expected to remain low for New York City, and to decline off current highs in Upstate New York. Both cases are driven by the quadrennial Demand Curve Reset resulting in lower Reference Points. In 2021, the increase in the Installed Reserve Margin (“IRM”) raised Rest of State (“ROS”) prices, while the decrease in NYC’s Locational Capacity Requirement collapsed NYC prices. The current expectation for 2022 is that ROS prices will decline from the current highs, while NYC will recover somewhat.

Ancillary Services prices are expected to decline slightly 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.

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 carbon dioxide price.

The Regional Greenhouse Gas Initiative is a mature program at this point, but efforts by the NYISO to support decarbonization by assessing a carbon dioxide charge commensurate with the social cost of carbon, or a federal assessment at such levels, could shift wholesale power prices upwards. This represents 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 and movements toward decarbonization, are growing. These increasingly complex needs are not fully met by current offerings and domestic and international entrants into New York State’s 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 New York State's 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 CLCPA, the state has set one of the most ambitious decarbonization agendas in the U.S., with significant implications for all participants in the state's energy and cross-sector ecosystems.

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 redefined 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 2021 Budget

#### Revised Forecast of 2021 Budget (In \$ Millions)

	Original Budget 2021	Forecast 2021	Variance Fav. / (Unfav.) 2021
<b>Operating Revenues</b>			
Customer Revenues	\$1,817.6	\$1,852.2	\$34.6
NYISO Market Revenues	695.6	861.3	165.6
Other Revenue	<u>27.4</u>	<u>27.0</u>	<u>(0.4)</u>
<b>Total Operating Revenues</b>	<b>2,540.6</b>	<b>2,740.5</b>	<b>199.8</b>
<b>Operating Expenses</b>			
Purchased Power	691.8	738.0	(46.2)
Fuel - Oil and Gas	119.2	222.2	(103.0)
Wheeling Expenses	642.2	655.3	(13.1)
O&M Expenses	548.8	539.9	8.9
Other Expenses	<u>129.7</u>	<u>154.4</u>	<u>(24.7)</u>
<b>Total Operating Expenses</b>	<b>2,131.7</b>	<b>2,309.9</b>	<b>(178.2)</b>
<b>NET OPERATING INCOME</b>	<b>408.9</b>	<b>430.6</b>	<b>21.6</b>
<b>Other Income</b>			
Investment Income	19.6	17.3	(2.3)
Other Income	<u>0.0</u>	<u>(0.2)</u>	<u>(0.2)</u>
<b>Total Other Income</b>	<b>19.6</b>	<b>17.1</b>	<b>(2.5)</b>
<b>Non-Operating Expenses</b>			
Depreciation and Amortization	258.4	269.1	(10.7)
Interest & Other Expenses	<u>129.3</u>	<u>120.4</u>	<u>8.9</u>
<b>Total Non-Operating Expense</b>	<b>387.6</b>	<b>389.5</b>	<b>(1.9)</b>
<b>NET INCOME</b>	<b>\$40.9</b>	<b>\$58.2</b>	<b>\$17.3</b>

### (f) Reconciliation of 2021 Budget and 2021 Revised Forecast

As of September 2021, year-end net income is forecasted to be \$58.2 million, which is \$17.3 million above budget. This variance is primarily due to higher than budgeted net generation at the SCPPs, increased value of capacity sales, favorable energy market prices and ancillary service revenue, which are partially offset by unfavorable hedge settlements, and lower than budgeted net generation at Niagara and St. Lawrence.

In addition, higher than budgeted Flexible Alternating Current Transmission Systems (“FACTS”) revenue of around \$14 million resulting from higher congestion pricing, as well as an increase to NYPA’s ATRR of around \$11 million effective with the new rate year beginning July 2021 and higher than budgeted HTP revenue of around \$4 million along with a reduction in site operating and maintenance expense of around \$16 million are all contributing to this favorable variance. This favorable variance is expected to continue through the remainder of 2021.

(g) Statement of 2020 Financial Performance

Net Income - Actual vs. Budgeted for the Year ended December 31, 2020  
(In \$ Millions)

	Actual 2020	Budget 2020	Variance Fav. / (Unfav.) 2020
<b>Operating Revenues</b>			
Customer Revenues	\$1,594.7	\$1,786.5	(\$191.7)
NYISO Market Revenues	651.5	763.7	(112.1)
Other Revenue	<u>18.7</u>	<u>30.1</u>	<u>(11.4)</u>
<b>Total Operating Revenues</b>	<b>2,265.0</b>	<b>2,580.3</b>	<b>(315.3)</b>
<b>Operating Expenses:</b>			
Purchased Power	483.6	670.7	187.1
Fuel Consumed - Oil & Gas	109.0	158.7	49.7
Wheeling	649.9	644.1	(5.8)
Operations & Maintenance	599.0	612.6	13.6
Other Expenses	127.5	119.8	(7.7)
Depreciation & Amortization	258.1	262.5	4.4
Allocation to Capital	(38.7)	(22.2)	16.5
Asset Impairment Charge	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
<b>Total Operating Expenses</b>	<b>2,188.3</b>	<b>2,446.2</b>	<b>257.9</b>
<b>NET OPERATING INCOME</b>	<b>76.7</b>	<b>134.1</b>	<b>(57.4)</b>
<b>Other Income:</b>			
Investment Income	26.8	28.4	(1.6)
Other Income	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
<b>Total Other Income</b>	<b>26.8</b>	<b>28.4</b>	<b>(1.6)</b>
<b>Non-Operating Expenses:</b>			
Contribution to New York State	0.0	0.0	0.0
Interest and Other Expenses	<u>120.5</u>	<u>120.9</u>	<u>0.4</u>
<b>Total Non-Operating Expenses</b>	<b>120.5</b>	<b>120.9</b>	<b>0.4</b>
<b>NET INCOME:</b>	<b>(\$17.0)</b>	<b>\$41.5</b>	<b>(\$58.5)</b>

Net Income for the year ended December 31, 2020, was negative \$17 million, which was \$58.5 million lower than the budget of \$41.5 million. The decrease in operating income resulted from lower market-based energy sales due to lower market prices and the pass through of lower power costs to customers as well as lower customer consumption. The decrease in operating expenses was primarily due to lower purchase power costs and lower fuel prices, partially offset by RTEP charges allocated to the HTP. The decreases in O&M expenses were primarily due to lower direct operating costs associated with a decline in operating revenue and cost containment measures, initiated by management across broad categories of expenses, partially offset by incremental expenses of \$20 million, net related to the COVID-19 pandemic.

## (h) Employee Data – Number of Employees, Full Time, FTEs, and Functional Classification

### NYPA Headcount Projections 2022-2025

NYPA	2022	2023	2024	2025
Headquarters	639	639	639	639
Power Generation	1,177	1,177	1,177	1,177
Transmission	218	218	218	218
R&D	14	14	14	14
<b>Total NYPA:</b>	<b>2,048</b>	<b>2,048</b>	<b>2,048</b>	<b>2,048</b>
Canals	482	482	482	482
<b>Total NYPA &amp; CANALS*:</b>	<b>2,530</b>	<b>2,530</b>	<b>2,530</b>	<b>2,530</b>

\* Authorized positions including vacancies.

## (i) Gap-Closing Initiatives – Revenue Enhancement or Cost-Reduction Initiatives

When building a multi-year operating plan, NYPA has developed a series of contingency plans to adapt to unforeseen changes in its financial results. The Authority projects positive net income for the 2022-2025 period, constructed upon a level of expenses outlined within this Four-Year Financial Plan. If that net income projection materially changes during the forecast period, NYPA will take actions if deemed appropriate.

Moving into 2022, the risk of additional COVID-19 waves does exist; however, it is expected that any impact on finances or operations should be greatly reduced, due to the amount of planning 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 2022-2025 period.

## (k) Shift in Material Resources

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

## (l) Debt Service

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

NYPA	2022	2023	2024	2025
Revenue Bonds	\$1,562,240	\$1,850,817	\$1,835,927	\$1,820,182
Adjustable Rate Tender Notes	\$0	\$0	\$0	\$0
Subordinated Notes	\$38,530	\$37,010	\$35,440	\$33,825
Commercial Paper Notes	\$436,771	\$436,771	\$436,771	\$436,771
<b>Grand Total:</b>	<b>\$2,037,541</b>	<b>\$2,324,598</b>	<b>\$2,308,138</b>	<b>\$2,290,778</b>

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

	2022		2023		2024		2025	
	Debt Service	% of Revenue						
<b>Revenue Bonds</b>	\$28,258	1%	\$54,149	2%	\$81,360	3%	\$81,359	3%
<b>Adjustable Rate Tender Notes</b>	\$0	0%	\$0	0%	\$0	0%	\$0	0%
<b>Subordinated Notes</b>	\$2,999	0%	\$2,996	0%	\$2,999	0%	\$2,996	0%
<b>Commercial Paper Notes</b>	\$4,368	0%	\$4,368	0%	\$4,368	0%	\$4,368	0%
<b>Grand Total Debt Service:</b>	<b>\$35,625</b>	<b>1%</b>	<b>\$61,513</b>	<b>2%</b>	<b>\$88,727</b>	<b>3%</b>	<b>\$88,723</b>	<b>3%</b>
<b>Debt Service Coverage Ratio:</b>	<b>13.2X</b>		<b>9.5X</b>		<b>6.6X</b>		<b>7.1X</b>	

\*2022-2025 excludes Capitalized Interest expense.

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

Year	Principal	Interest	Total
2022	\$1,490	\$34,135	\$35,625
2023	\$3,430	\$58,083	\$61,513
2024	\$16,576	\$72,151	\$88,727
2025	\$17,484	\$71,240	\$88,723

**Proposed Debt**

Year	Principal	Interest	Total
2022	\$0	\$0	\$0
2023	\$0	\$0	\$0
2024	\$0	\$0	\$0
2025	\$0	\$0	\$0

**Total Debt**

Year	Principal	Interest	Total
2022	\$1,490	\$34,135	\$35,625
2023	\$3,430	\$58,083	\$61,513
2024	\$16,576	\$72,151	\$88,727
2025	\$17,484	\$71,240	\$88,723

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

TYPE	Amount	Interest Rate	Project / Description
<b>Period January 1, 2022 - December 31, 2022:</b>			
Tax Exempt Commercial Paper	\$0	0%	Energy Efficiency Program
Taxable Commercial Paper	\$0	0%	Energy Efficiency Program
Tax Exempt Revenue Bonds	\$0	0%	Transmission
Taxable Revenue Bonds	\$0	0%	Robert Moses Power Plant
Total Issued 2022	\$0		
<b>Period January 1, 2023 - December 31, 2023:</b>			
Tax Exempt Commercial Paper	\$0	0%	Energy Efficiency Program
Taxable Commercial Paper	\$0	0%	Energy Efficiency Program
Tax Exempt Revenue Bonds	\$249,089	4%	Transmission
Taxable Revenue Bonds	\$39,488	5%	Robert Moses Power Plant
Total Issued 2023	\$288,577		
<b>Period January 1, 2024 - December 31, 2024:</b>			
Tax Exempt Commercial Paper	\$0	0%	Energy Efficiency Program
Taxable Commercial Paper	\$0	0%	Energy Efficiency Program
Tax-Exempt Revenue Bonds	\$0	0%	Transmission
Taxable Revenue Bonds	\$0	0%	Robert Moses Power Plant
Total Issued 2024	\$0		
<b>Period January 1, 2025 - December 31, 2025:</b>			
Tax Exempt Commercial Paper	\$0	0%	Energy Efficiency Program
Taxable Commercial Paper	\$0	0%	Energy Efficiency Program
Tax-Exempt Revenue Bonds	\$0	0%	Transmission
Taxable Revenue Bonds	\$0	0%	Robert Moses Power Plant
Total Issued 2025	\$0		

*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.*

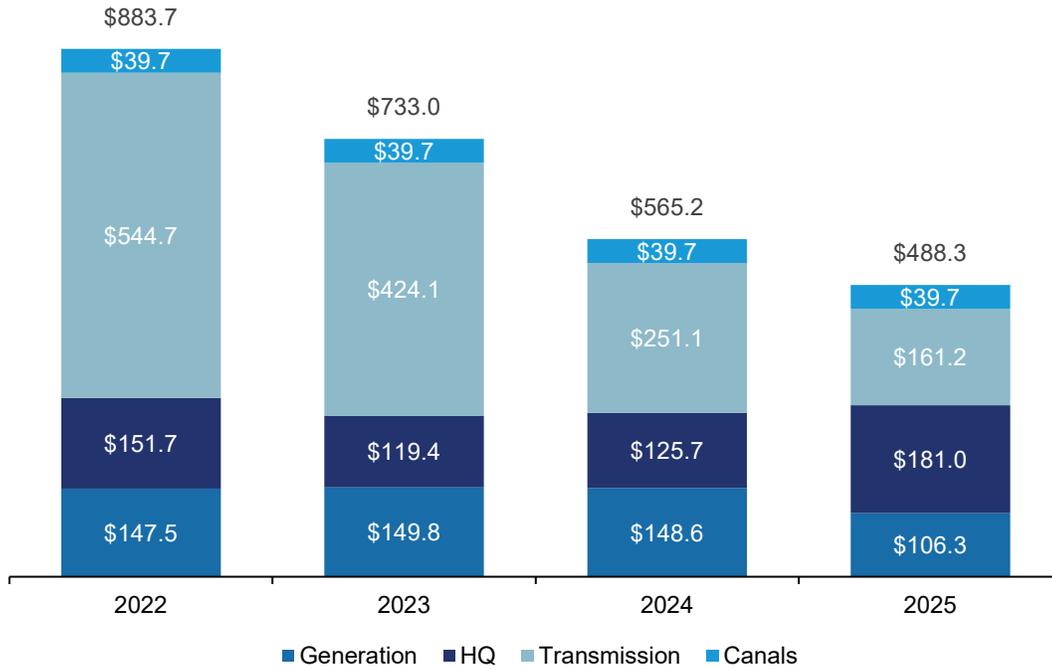
### (m) Capital Commitments and Sources of Funding

The Authority's commitments for various capital improvements are approximately \$2.7 billion over the financial period 2022-2025. NYPA anticipates these improvements will be funded with existing construction funds, internally generated funds, and additional borrowings. Additionally, the Authority is projecting to spend approximately \$1.3 billion in Energy Efficiency Services projects for our customers, which will be separately financed. Projected capital commitments during this period include those listed in the table below.

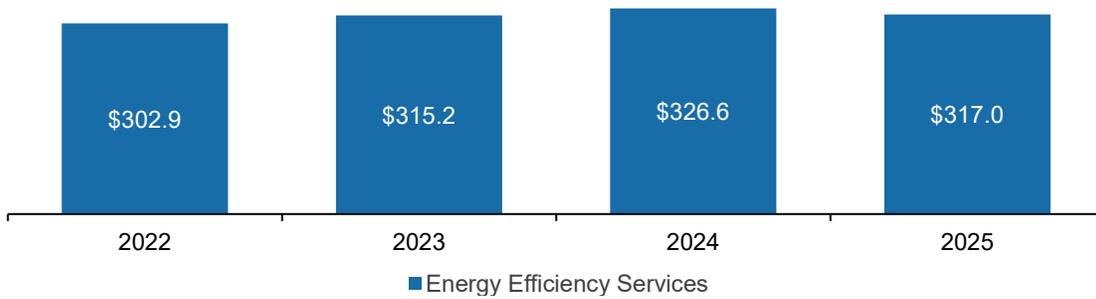
#### 2022-2025 Capital Commitments by Function (In \$ Millions)

NYPA	2022	2023	2024	2025
<b>Generation</b>				
Robert Moses LEM (NextGen Niagara)	\$38.9	\$62.1	\$73.2	\$53.1
STL 90T & 300T Crane Replacements	\$0.8	\$0.6	\$13.1	\$13.1
Lewiston Pump Generating Plant LEM	\$14.1	\$4.0	\$0.0	\$0.0
Niagara Fire Detection System	\$11.6	\$5.8	\$0.0	\$0.0
Long Sault Dam Capital Program	\$0.5	\$5.0	\$5.0	\$5.0
LPGP 150T Crane Upgrade	\$0.5	\$11.0	\$0.9	\$0.0
Other Generation	\$81.1	\$61.3	\$56.5	\$35.1
<b>Transmission</b>				
Smart Path Connect	\$158.4	\$165.0	\$165.0	\$110.0
Transmission LEM	\$51.8	\$55.9	\$44.0	\$32.8
Smart Path	\$121.6	\$39.5	\$0.0	\$0.0
Y-49 LEM	\$60.8	\$75.0	\$0.0	\$0.0
Central East Energy Connect	\$92.1	\$41.8	\$0.0	\$0.0
Convertible Static Compensator	\$3.6	\$15.3	\$25.1	\$0.0
NNY to Ontario Phase Shifter Replacement	\$11.6	\$1.2	\$0.0	\$0.0
Other Transmission	\$44.8	\$30.3	\$17.0	\$18.4
<b>Headquarters</b>				
Digital, Network & Cyber	\$64.3	\$29.9	\$23.8	\$30.2
Decarbonization (Evolve, EGT Hybrid & Battery)	\$36.8	\$22.1	\$21.9	\$41.6
White Plains Office Infrastructure	\$14.3	\$7.0	\$4.2	\$42.6
Reimagine the Canals	\$23.0	\$51.3	\$71.1	\$64.0
Other HQ	\$13.4	\$9.0	\$4.6	\$2.6
<b>Canal Corporation</b>				
Canals	\$39.7	\$39.7	\$39.7	\$39.7
<b>Total NYPA &amp; Canals Funded:</b>	<b>\$883.7</b>	<b>\$733.0</b>	<b>\$565.2</b>	<b>\$488.3</b>
<b>Energy Efficiency Services - Separately Financed:</b>	<b>\$302.9</b>	<b>\$315.2</b>	<b>\$326.6</b>	<b>\$317.0</b>

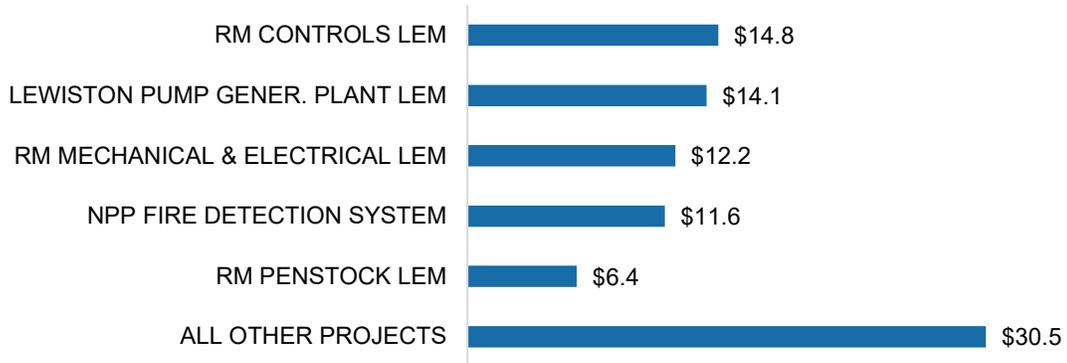
**2022-2025 NYPA & Canals Capital Commitments by Function**  
(In \$ Millions)



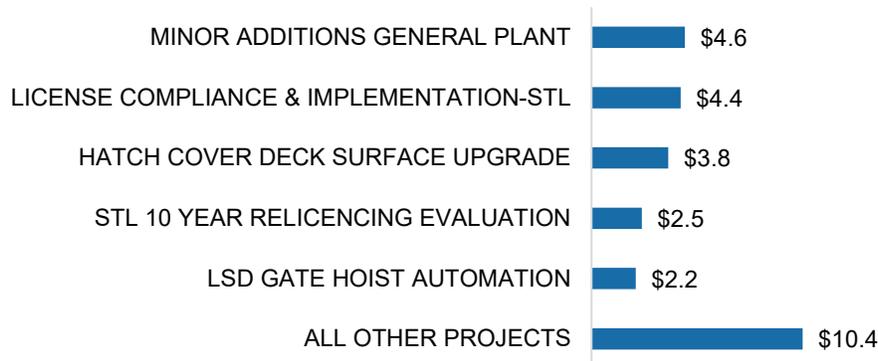
**2022-2025 Energy Efficiency Services Capital Commitments**  
(In \$ Millions)



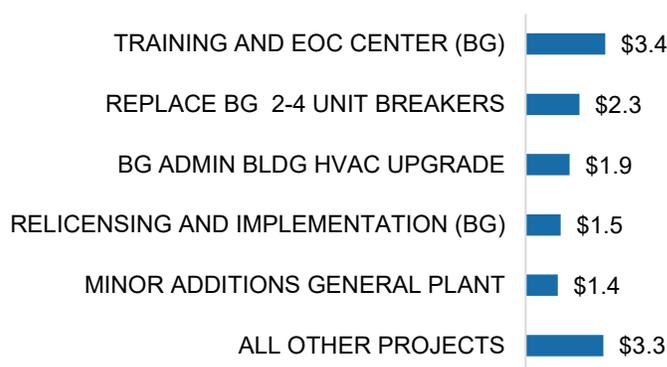
### Niagara Capital Projects: \$89.5M



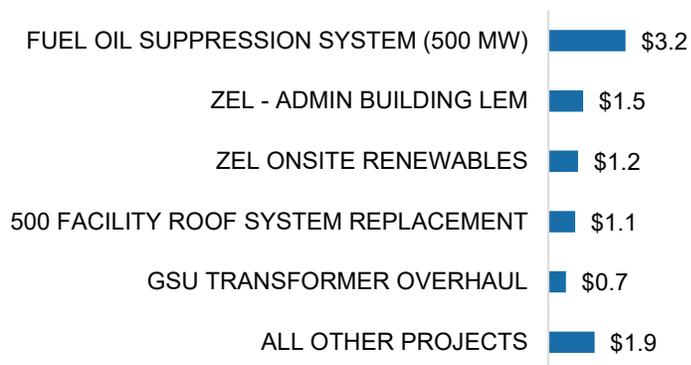
### St. Lawrence Capital Projects: \$27.7M



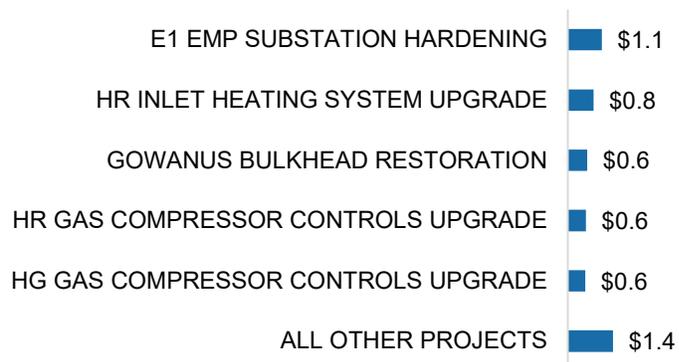
### Blenheim-Gilboa Capital Projects: \$13.7M



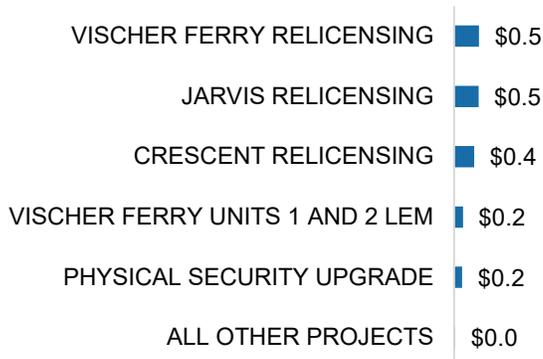
### Zeltmann Capital Projects: \$9.7M



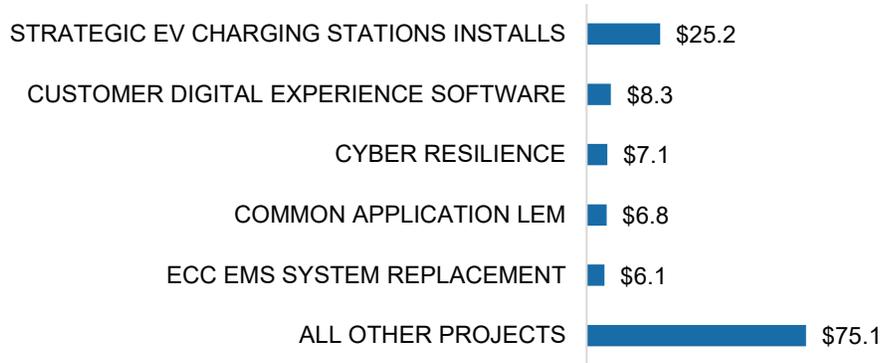
### Small Clean Power Plant Capital Projects: \$5.1M



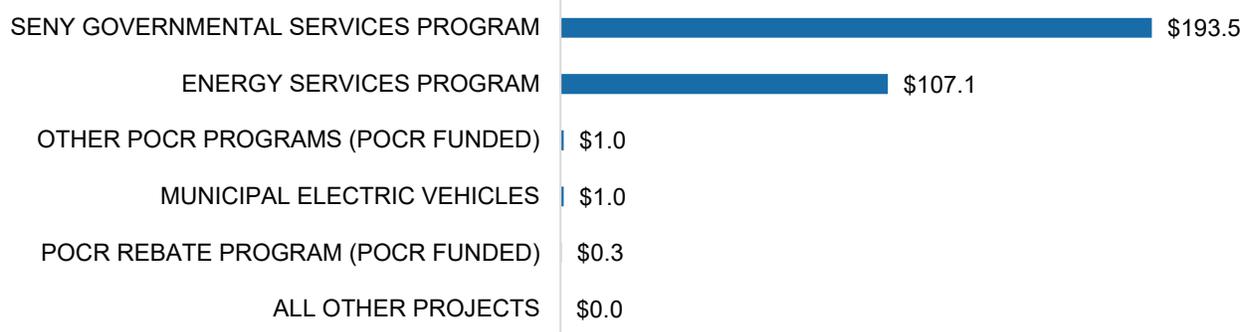
### Small Hydro Capital Projects: \$1.8M



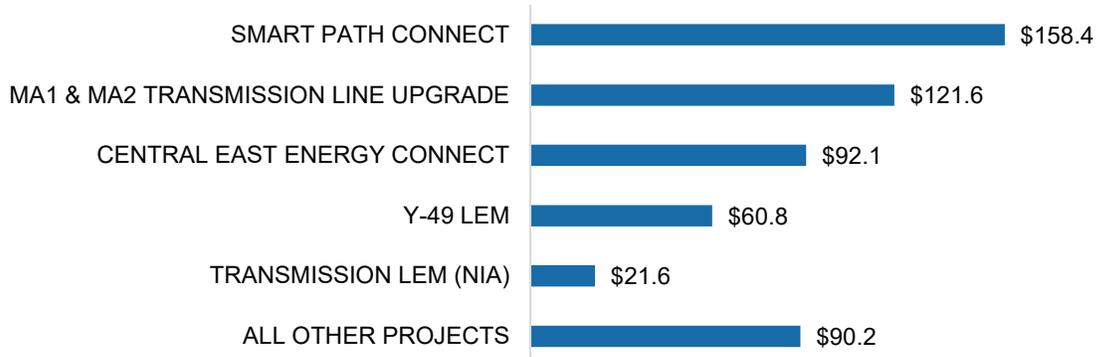
### Headquarters Capital Projects: \$128.8M



### Energy Services Capital Projects: \$302.9M



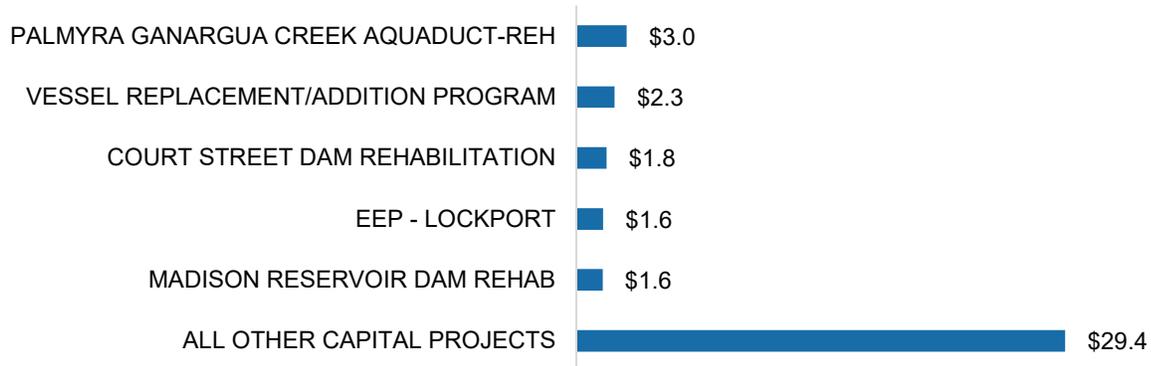
### Transmission Capital Projects: \$544.7M



### Reimagine Canals Capital Projects: \$23M



### Canals Capital Projects \$39.7M



## (n) Credit Agency Rating Discussion

Maintaining a strong relationship with the capital markets is critical to how NYPA operates. Fitch Ratings and S&P Global Ratings assign a AA rating to the Authority's long-term bonds, while Moody's Investor Services assigns a Aa2 rating to the Authority's long-term bonds, which is among the highest rating given 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 to the "General Resolution Authorizing Revenue Obligations" (as amended and supplemented up to the present time, the Bond Resolution). The Bond Resolution covers all of NYPA'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 NYPA 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.

NYPA 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.

NYPA's revenues (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 NYPA, 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.

To support our Aa2/AA/AA bond ratings and all of the advantages it offers the Authority and its customers, NYPA sets certain targets which are consistent with other peer-rated organizations. In May 2011, the Authority's Board of 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, NYPA shall use as a reference point the maintenance of a debt service coverage ratio of at least 2.0X (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 Board of Trustees.

**Certification of Assumptions and Method of Estimation for  
Approved 2022 Budget and 2022-2025 Financial Plan in accordance  
with the Comptroller's Regulation § 203.9 Certification**

December 7, 2021

To the Board of Trustees  
Power Authority of the State of New York

To the best of my knowledge and belief after reasonable inquiry, I, the undersigned, certify that the "Authority's Method of Estimation of Approved 2022 Budget and 2022-2025 Financial Plan" is based on reasonable assumptions and methods of estimation and that the regulations enumerated in Part 203, "Budget and Financial Plan Format, Supporting Documentation and Monitoring - Public Authorities" have been satisfied.

*Joseph Kessler*

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Joseph Kessler  
Chief Operating Officer

*Adam Barsky*

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Adam Barsky  
Chief Financial Officer



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**NY Power  
Authority**

**Canal  
Corporation**