NEW YORK POWER AUTHORITY

Financial Report

December 31, 2021

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KPMG LLP
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New York, NY 10154-0102

Independent Auditors' Report

Board of Trustees
New York Power Authority

Report on the Audit of the Financial Statements

Opinions

We have audited the consolidated financial statements of the business-type activities and the aggregate fiduciary fund information of the Power Authority of the State of New York *(Authority*), as of and for the year ended December 31, 2021, and the related notes to the consolidated financial statements, which collectively comprise the Authority's consolidated financial statements as listed in the table of contents.

In our opinion, the accompanying consolidated financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the aggregate fiduciary fund information of the Authority, as of December 31, 2021, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Authority and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with U.S. generally accepted accounting principles, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the Management's Discussion and Analysis and Required Supplementary Information be presented to supplement the consolidated financial statements. Such information is the responsibility of management and, although not a part of the consolidated financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the consolidated financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the consolidated financial statements, and other knowledge we obtained during our audit of the consolidated financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated March 30, 2022 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

KPMG LLP

New York, New York
March 30, 2022

Management Report

Management is responsible for the preparation, integrity and objectivity of the consolidated financial statements of the Authority, as well as all other information contained in the Annual Report. The consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (U.S. GAAP) and, in some cases, reflect amounts based on the best estimates and judgments of management, giving due consideration to materiality. Financial information contained in the Annual Report is consistent with the financial statements.

The Authority maintains a system of internal controls to provide reasonable assurance that transactions are executed in accordance with management's authorization, that financial statements are prepared in accordance with U.S. generally accepted accounting principles and that the assets of the Authority are properly safeguarded. The system of internal controls is documented, evaluated and tested on a continuing basis. No internal control system can provide absolute assurance that errors and irregularities will not occur due to the inherent limitations of the effectiveness of internal controls; however, management strives to maintain a balance, recognizing that the cost of such system should not exceed the benefits derived.

The Authority maintains an internal auditing program to independently assess the effectiveness of internal controls and to report findings and recommend possible improvements to management. This program includes a comprehensive assessment of internal controls to ensure that the system is functioning as intended. Management has considered the recommendations of its internal auditors, the Office of the State Comptroller (OSC), and the independent auditors concerning the system of internal controls and has taken actions that it believed to be cost-effective in the circumstances to respond appropriately to these recommendations. Based on its structure and related processes, management believes that, as of December 31, 2021, the Authority's system of internal controls provides reasonable assurance related to material items, as to the integrity and reliability of the financial statements, the protection of assets from unauthorized use or disposition and the prevention and detection of fraudulent financial reporting.

The members of the Authority's Board of Trustees (the Authority's Trustees), appointed by the Governor, by and with the advice and consent of the Senate, are not employees of the Authority. The Authority's Trustees' Audit Committee meets with the Authority's management, its Sr. Vice President of Internal Audit and its independent auditors periodically, throughout the year, to discuss internal controls and accounting matters, the Authority's financial statements, the scope and results of the audit by the independent auditors and the periodic audits by the OSC, and the audit programs of the Authority's internal auditing department. The independent auditors and the Sr. Vice President of Internal Audit have direct access to the Audit Committee.

Adam Barsky
Executive Vice President and Chief Financial Officer

March 30, 2022

Overview of the Consolidated Financial Statements

The New York Power Authority (the "Power Authority") is considered a special-purpose government entity engaged in business-type activities and follows financial reporting for enterprise funds. Effective January 1, 2017, the New York State Canal Corporation (the "Canal Corporation") became a subsidiary of the Power Authority, and the Power Authority assumed certain powers and duties relating to the Canal System to be exercised through the Canal Corporation. The Power Authority and its subsidiary (collectively "the Authority") follow financial reporting for enterprise funds. The consolidated financial statements of the Authority are prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP) as prescribed by the Governmental Accounting Standards Board (GASB). Under the criteria set forth in GASB Statement No. 14, *The Financial Reporting Entity*, as amended by Governmental Accounting Standard (GAS) No. 39, *Determining Whether Certain Organizations Are Component Units* and GAS No. 61, *The Financial Reporting Entity: Omnibus--an amendment of GASB Statements No. 14 and No. 34*, the Authority considers its relationship to the State to be that of a related organization. The Power Authority and its subsidiary the Canal Corporation are referred to collectively as the "Authority" in the consolidated financial statements, except where noted.

This consolidated report consists of three parts: management's discussion and analysis, the basic consolidated financial statements, and the notes to the consolidated financial statements. Following the consolidated report is the Authority's required supplementary information.

The consolidated financial statements provide summary information about the Authority's overall financial condition. The notes provide explanation and more details about the contents of the consolidated financial statements. The required supplementary information includes unaudited information required by GASB and relate to the Authority's OPEB and pension plans.

Forward Looking Statements

The statements in this management's discussion and analysis (MD&A) that are not purely historical facts are forward-looking statements based on current expectations of future events. Such forward-looking statements are necessarily based on various assumptions and estimates and are inherently subject to various risks and uncertainties, including, but not limited to, risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes to or development in various important factors. Accordingly, actual results may vary from those we presently expect and such variations may be material. We therefore caution against placing undue reliance on the forward-looking statements contained in this MD&A. All forward-looking statements included in this MD&A are made only as of the date of this MD&A and we assume no obligation to update any such forward-looking statements as a result of new information, future events or other factors.

Summary of Consolidated Revenues, Expenses and Changes in Net Position

The following is a summary of the Authority's consolidated financial information for 2021 and 2020:

	2021	2020	2021 vs. 2020 favorable (unfavorable)	
	($ In millions)		($ In millions)	(In Percentages)
Operating revenues	$ 2,741	$ 2,265	$ 476	21%
Operating expenses:				
Purchased power	539	484	55	(11)
Fuel oil & gas	190	109	81	(74)
Wheeling	849	650	199	(31)
Operations and maintenance	743	683	60	(9)
Depreciation	281	258	23	(9)
Total operating expenses	2,602	2,184	418	(19)
Operating income	139	81	58	72
Nonoperating revenues	17	26	(9)	(35)
Nonoperating expenses	84	124	(40)	32
Net income (loss) and change in net position	72	(17)	89	524
Net position – beginning	4,743	4,760		
Net position – ending	$ 4,815	$ 4,743	$ 72	2

The following summarizes the Authority's consolidated financial performance for the years 2021:

The Authority had a net income and change in net position of $72 million for the year ended December 31, 2021 compared to $17 million net loss in 2020, an increase of $89 million (524%). The 2021 increase in net income compared to 2020 was primarily due to higher operating income of $58 million (72%), lower nonoperating expenses of $40 million (32%), and partially offset by lower nonoperating revenues of $9 million (35%). Operating income increased by $58 million (72%) compared to 2020 primarily due to higher prices on market-based sales of energy and capacity. Operating expenses were $418 million (19%) higher in 2021, primarily due to increases in purchased power and fuel costs related to mostly higher prices and volumes that are substantially offset by the recovery of such costs through operating revenues. The operations and maintenance expenses were $60 million (9%) higher compared to 2020 primarily due to maintenance repairs and other various expenses.

Operating Revenues

Operating revenues of $2,741 million in 2021 were $476 million, or 21%, higher than the $2,265 million in 2020, primarily due to higher market energy prices and the pass through of higher power costs to customers, partially offset by lower hydro production.

Purchased Power and Fuel

Purchased power costs increased by $55 million or 11% in 2021 to $539 million from $484 million in 2020. The increase was primarily due to higher fuel costs resulting from higher gas prices as well as an increase in volume due to higher demand. Purchased power costs increased primarily due to higher market prices as well as an increase in volume.

Operations and Maintenance (O&M)

O&M expenses increased by $60 million or 9% in 2021 compared to 2020, primarily due to increases in maintenance repairs and other various expenses.

Nonoperating Revenues

Nonoperating revenues decreased by $9 million, or 35% to $17 million from $26 million in 2020, primarily due to lower investment income and decreased market value on the Authority's investment portfolio.

Nonoperating Expenses

Nonoperating expenses decreased by $40 million, or 32%, as a result of higher interest capitalized due to the increased construction work in progress.

EBIDA

Reconciliation of Net Income (Loss) to EBIDA

	2021	2020
	(In millions)	
Net (loss) income	$ 72	$ (17)
Add: Interest, net	84	124
Depreciation	281	258
EBIDA	437	365

EBIDA represents net income (loss) before interest expense, depreciation and amortization and is a non-GAAP financial measure. EBIDA does not represent net income (loss), as that term is defined under Generally Accepted Accounting Principles (GAAP) and should not be considered as an alternative to net income (loss) as an indicator of the Authority's operating performance or any other measure of performance derived in accordance with GAAP. EBIDA is not intended to be a measure of cash flows, as depicted on the statement of cash flows, available for management or discretionary use as such measures do not consider certain cash requirements such as capital expenditures and debt service requirements. EBIDA as presented herein is not necessarily comparable to similarly titled measures presented by the Authority.

Cash Flows

Cash and cash equivalents in 2021, was a decrease of $356 million compared to an increase of $813 million in 2020, due primarily to the issuance of bonds in 2020. Net cash flows provided by operating activities were $364 million in 2021, an increase of $168 million compared to 2020 primarily due to increased operating revenues.

Net Generation

Net generation was 29.7 million megawatt-hours (MWh) in 2021 and 31.5 million MWh in 2020. Net generation from the Niagara and St. Lawrence hydroelectric plants in 2021 (23.5 million MWh) was 6% lower than 2020 (25.0 million MWh) due to the reduced hydro flows to the Niagara and St. Lawrence hydroelectric plants. For 2021, net hydro generation was approximately 116% of long-term average and below 2020, which was 123%. Combined net generation of the fossil fuel plants for 2021 was 6.2 million MWh, or 4% lower than 2020 (6.5 million MWh).

Summary of Consolidated Statements of Net Position

The following is a summary of the Authority's consolidated statements of net position for 2021 and 2020:

	2021	2020	2021 vs. 2020	
	($ In millions)		($ In millions)	(In Percentage)
Current assets	$ 1,930	$ 1,101	$ 829	75 %
Capital assets	6,488	6,032	456	8
Other noncurrent assets	1,598	2,667	(1,069)	(40)
Deferred outflows of resources	386	261	125	48
Total assets and deferred outflows	$ 10,402	$ 10,061	$ 341	3
Current liabilities	$ 1,352	$ 1,037	$ 315	30
Noncurrent liabilities	3,292	3,690	(398)	(11)
Total liabilities	4,644	4,727	(83)	(2)
Deferred inflows of resources	943	591	352	60
Net position	4,815	4,743	72	2
Total liabilities, deferred inflows and net position	$ 10,402	$ 10,061	$ 341	3

The following summarizes the Authority's consolidated statements of net position variances for the years 2021:

In 2021, current assets increased by $829 million (75%) to $1,930 million due to increase in allocation of funds to be used for operating and capital commitments. Capital assets increased by $456 million (8%) to $6,488 million, compared to last year, due to continuing investments in generating assets at existing facilities and transmission upgrades necessary to maintain reliability. Other noncurrent assets, decreased by $1,069 million (40%), compared to last year, primarily due to allocation of funds for capital investments and energy efficiency programs. Deferred outflows increased by $125 million (48%) primarily due to changes in deferral of pension resources and decrease in fair value of hedging derivatives. Current liabilities increased by $315 million (30%) to $1,352 million compared to last year. This increase is attributable primarily to timing of accounts payable and accrued liabilities related to capital projects and increase in short-term debt by $103 million. Noncurrent liabilities were lower by $398 million (11%), primarily due to lower liability related to Pension ($200 million) and OPEB ($198 million) compared to last year. Effective January 2021, the Authority's Trustees approved an amendment to the Power Authority's OPEB Trust allowing its OPEB trust to be used to pay benefits for both the Power Authority's OPEB Plan and the Canal Retiree Health Plan. Deferred inflows increased by $352 million, primarily due to the changes in the deferral of Pension and OPEB resources. The changes in net position for 2021 and 2020 are discussed in the summary of revenues, expenses and changes in net position in this Management's Discussion and Analysis.

Capital Asset and Long-Term Debt Activity

The Authority currently estimates that it will expend approximately $4.7 billion ($3.1 billion for various capital improvements, which includes Reimagine the Canals Initiative capital projects of approximately $219 million, and $1.6 billion for energy services projects) over the five-year period 2022-2026. The Authority anticipates that these expenditures will be funded using existing construction funds, internally generated funds and additional borrowings. Such additional borrowings are expected to be accomplished through the issuance of commercial paper notes and/or the issuance of long-term fixed rate debt.

The Authority's capital plan includes the provision of approximately $1.6 billion, the amount of which will be reimbursed subsequently back to the Authority, in financing for Energy Services projects to be undertaken by the Authority's governmental customers and other public entities in the State. It should also be noted that due to projects currently under review as well as energy initiatives announced in the Governor's State of the State address, there is a potential for significant increases in the capital expenditures indicated in the table below. Such additional capital expenditures would be subject to evaluation and Trustee approval.

Projected capital requirements during this period include (in millions):

Smart Path Connect	$	598
RM Mechanical & Electrical LEM		183
Smart Path		161
Y-49 LEM		136
Central East Energy Connect		134
Strategic EV Charging Stations Installs		97
Transmission LEM (Nia, Massena)		95
Centroplex Garage Upgrade		46
RM Controls LEM		45
Convertible Static Compensator		44
Cyber Resilience		40
TLEM Tower Coating Upgrades		36
RM 630 Ton Crane LEM		35
Enterprise Resource Planning		34
TLEM: STL Remote Substations		33
RM Penstock LEM		32
Customer Digital Experience		22
Common Application LEM		21
Core IT Infrastructure LEM		20
Reimagine Canals initiatives		219
Canal Corporation		198
All Other (Projects Below $20.0 Million)		825
	$	3,054

In 2012, the Authority's Trustees approved a $726 million Transmission Life Extension and Modernization Program (Transmission LEM Program) on the Authority's Transmission system through 2025. As of December 31, 2021, the Authority has spent approximately $455.3 million. The Transmission LEM Program encompasses transmission assets in the Central, Northern and Western regions of New York and will include work to be done such as upgrades, refurbishments and replacements associated with switchyards and substations, transmission line structures or towers and associated hardware and replacement of the submarine cable on the PV-20 line. Reinvestment in this strategic component of the Authority's overall mission supports the repair, upgrade and/or expansion of the transmission infrastructure. The Transmission LEM Program will be financed with internal funds and proceeds from debt obligations issued by the Authority. The work on the Transmission LEM Program is underway and is expected to continue through 2025.

The Authority's Trustees approved a $460 million Life Extension and Modernization Program at the Niagara project's Lewiston Pump-Generating Plant, (Lewiston LEM Program) of which approximately $381.7 million has been spent as of December 31, 2021. The work to be done includes a major overhaul of the plant's 12 pump turbine generator units. The Lewiston LEM Program will increase pump and turbine efficiency, operating efficiency, and the peaking capacity of the overall Niagara project. The Authority filed an application with the Federal Energy Regulatory Commission (FERC) for a non-capacity license amendment in connection with the program. The amendment was approved with a FERC order issued in 2012. The Lewiston LEM Program will be financed with internal funds and proceeds from debt obligations issued by the Authority. The unit work began in late 2012 and is on-going, with the final unit expected to be completed in 2023.

More detailed information about the Authority's capital assets is presented in Note 2(d) "Summary of Significant Accounting Policies – Capital Assets" and Note 5 "Capital Assets" of the notes to the consolidated financial statements.

Capital Structure

	2021	2020
	(In millions)	
Long-term debt, net of current maturities:		
Senior:		
Revenue bonds	$ 1,626	$ 1,629
Subordinated:		
Subordinated Notes, Series 2017 and 2012 (1)	38	40
Commercial paper	—	5
Total long-term debt, net of current maturities	1,664	1,674
Net position	4,815	4,743
Total capitalization	$ 6,479	$ 6,417

(1) The Subordinated Notes, Series 2017 and 2012, which were issued in 2017 and 2012, respectively, are subordinate to the Series 2003A Revenue Bonds, the Series 2007B Revenue Bonds, the Series 2020A Revenue Bonds and 2020B Revenue Bonds.

During 2021, long-term debt, net of current maturities, decreased by $10 million, primarily due to a $5 million repayment of Extendible Municipal Commercial Paper ("EMCP") and approximately $3 million of amortized debt premium/discount.

Long-term debt to equity (long-term debt/net position) ratio as of December 31, 2021 and 2020, was at 0.35-to-1 for each period. Long-term debt of 0.35 cannot exceed 1 to maintain weighted average cost of capital formula rate approved by FERC in 2016 rate filing. Short-term debt of $605 million, consisting of the Series 1 CP Notes and certain Series 2 and Series 3A and 3B CP Notes and the Direct Purchase Note, is excluded from the long-term debt to equity ratio, as it is used by the Authority to finance the Authority's current and future energy efficiency programs.

Debt Ratings

	Moody's	Standard & Poor's	Fitch
NYPA's underlying credit ratings:			
Senior debt:			
Long-term debt (a)	Aa2	AA	AA
Subordinate debt:			
Subordinate Notes, Series 2017	N/A	AA-	N/A
Subordinate Notes, Series 2012	N/A	N/A	AA
Commercial paper	P-1	A-1+	F1+

(a) Long term debt includes certain bonds – Series 2007B Revenue Bonds and Series 2003A Revenue Bonds – the principal and interest when due is guaranteed under insurance policies issued by MBIA Insurance Corporation and Assured Guaranty Municipal Corporation, respectively. The credit ratings of MBIA Insurance Corporation and Assured Guaranty Municipal Corporation are currently at or below the Authority's underlying credit ratings.

In 2021, Standard & Poor's Ratings Service affirmed the Authority's commercial paper rating, senior debt rating and Subordinated Notes rating (Series 2017). In 2021, Moody's Investors Service affirmed the Authority's commercial paper rating and senior debt rating (Moody's did not reconfirm or review the Authority's Subordinated Notes, Series 2017 or Series 2012). In 2021, Fitch Ratings affirmed the Authority's commercial paper rating, senior debt rating and Subordinated Notes (Series 2012).

The Authority has a line of credit under a 2019 revolving credit agreement (the "2019 RCA"), with a syndicate of banks, to provide liquidity support for the Series 1-3A CP Notes, under which the Authority may borrow up to $700 million in aggregate principal amount outstanding at any time for certain purposes, including the repayment of the Series 1–3A CP Notes. The 2019 RCA has been extended to January 13, 2023. There are no outstanding borrowings under the 2019 RCA.

Under the hybrid revolving credit agreement and note purchase agreement supporting the Authority's Commercial Paper Notes and liquidity effective April 22, 2020, each between the Authority and a single bank as Administrative Agent and sole lender thereunder (Hybrid Credit Agreement), the Authority is able to borrow up to $250 million in aggregate principal amount outstanding at any time for the repayment of the Commercial Paper Notes and/or Direct Purchase Note(s) under the Hybrid Credit Agreement. The Hybrid Credit Agreement expires April 20, 2022, unless extended by the parties. At December 31, 2021, the Authority has an outstanding $100 million Direct Purchase Note under its note purchase agreement connected to its Hybrid Credit Agreement. The Authority repaid the $100 million in January 2022 and as of January 2022, there were no outstanding borrowings under the Hybrid Credit Agreement.

Economic Conditions

In December 2020, the Authority's Board of Trustees approved its new strategic plan, VISION2030. VISION2030 provides a roadmap for transforming the state's energy infrastructure to a clean, reliable, resilient, and affordable system over the next decade. VISION2030 focuses on five strategic priorities to achieve the clean energy goals of the Authority's customers and the state. They include Authority's intention to preserve the value of hydroelectric generation; facilitate the rapid development of transmission assets; pioneer the path to decarbonization while ensuring reliability, resilience, and affordability of the state's electric grid; partner with customers to deliver clean and affordable energy solutions and adaptively reimagine the New York State canal system. Five foundational pillars: digitalization, best-in-class environmental, social and governance (ESG) performance and reporting; leadership in diversity, equity and inclusion priorities; enterprise resilience; and resource alignment (i.e., process excellence, workforce planning and knowledge management initiatives) support VISION2030. The costs and revenues with respect to the plan are reflected in the Authority's 2022-2025 financial plan.

The Authority believes, based on evaluations it has performed, that the impact, if any, the current economic conditions related to inflation, supply chain constraints and the conflict in the Ukraine are not expected to be material to the Authority's future financial condition or operations.

Climate Leadership and Community Protection Act

New York State's nation-leading climate plan is one of the most aggressive climate and clean energy initiative in the nation, calling for an orderly and just transition to clean energy that creates jobs and continues fostering a green economy as New York State. Enshrined into law through the Climate Leadership and Community Protection Act ("CLCPA"), New York is on a path to achieving its mandated goal of a zero-emission electricity sector by 2040, including 70 percent renewable energy generation by 2030, and to reach economy wide carbon neutrality. CLCPA's targets for decarbonizing power generation include bringing 28 GW (16 GW of land-based renewables, 6 GW of offshore wind, and 6 GW of distributed solar) of renewables to market by 2030; accelerating transmission network investment to integrate renewables and alleviate load pockets; and ensuring grid reliability and flexibility through an integrated set of solutions including 3 GW of storage, dispatchable clean generation, and demand-side solutions. Targets for decarbonizing beyond the power sector include reduction of statewide energy use by 185 TBtu; electrification of transportation; and coordinated electrification of building heating and industrial processes. Fundamental to the CLCPA and Power Authority's participation in achieving its goals is ensuring an equitable transition to a thriving clean energy.

Accelerated Renewable Energy Growth and Community Benefit Act

The Accelerated Renewable Energy Growth and Community Benefit Act (the "Renewable Energy Act") was enacted as part of the 2020-21 Enacted State Budget. In summary, the Renewable Energy Act:

- Establishes a new Office of Renewable Energy Siting, through which the State will consolidate the environmental review of major renewable energy facilities.
- Provides accelerated timetables for review of applications for major utility transmission facilities.
- Authorizes New York State Energy Research and Development Authority ("NYSERDA") to undertake several "host community benefit" programs to provide benefits to residents of local communities where new renewable general projects are slated for development.
- Directs the Department of Public Service ("DPS"), in consultation with NYSERDA, the Authority, the Long Island Power Authority, the New York Independent System Operator ("NYISO"), and the state's regulated utilities, to undertake a comprehensive study of the power delivery system in the state, for the purpose of identifying investor-owned utility distribution and local transmission upgrades, and bulk transmission system investments necessary to help the State meet the environmental goals of the CLCPA.
- Requires the PSC to identify bulk transmission projects that need to be developed expeditiously to meet CLCPA goals ("Priority Transmission Project(s)" or "PTP(s)").
- Declares that it is appropriate for the Authority, by itself or in collaboration with other parties to develop those bulk transmission investments designated as PTPs that are needed expeditiously to achieve CLCPA targets.
- Authorizes the Authority, through a public process, to solicit interest from potential co-participants in each PTP it has agreed to develop and assess whether any joint development would provide for significant additional benefits in achieving the CLCPA targets, and thereafter determine to undertake the development of the PTP on its own, or undertake the PTP jointly with one or more other parties and enter into such agreements and take such other actions the Authority determines to be necessary in order to develop the PTP. For PTPs substantially within the Authority's existing rights of way, the Renewable Energy Act authorizes the Authority to select private sector participants through a competitive bidding process.

Sustainability

Sustainability encompasses the ESG performance of a company that contributes to long-term value creation. The 2021-2025 Sustainability Plan (https://www.nypa.gov/innovation/initiatives/sustainability) serves as a roadmap to help bring the Authority's ESG ambition to life over the next five years. The plan outlines the ESG goals, strategies, and initiatives that the Authority is committed to in aligning with and supporting its VISION2030 objectives. The Sustainability Plan is an integrated, cross functional, collaborative and continuously revisited plan as the Authority's sustainability journey evolves and targets are achieved.

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 ESG reporting framework. The Authority is in the process of evaluating the integrated reporting framework for future publications.

Transmission Congestion and System Operation

Infrastructure limitations in the vicinity of the Authority's Niagara Project contribute to transmission congestion that limits the amount of Niagara Project output that can be accommodated on the transmission system. Transmission congestion prevents the full and efficient use of this asset, as well as other generation assets located in Western New York. To begin alleviating this congestion, on July 20, 2015, the NYPSC issued an order that granted requests from the Authority and National Grid to establish a Public Policy Requirement driving the need for transmission additions to, among other things, enable the Authority to fully operate the Niagara Project and support the import of capacity from Ontario during emergency conditions. This order initiated the NYISO's competitive solicitation process which resulted in the NYISO Board of Directors selection of the NextEra Energy Transmission New York, Inc. (NextEra) Empire State Line transmission project on October 17, 2017. The Nextera project, a partial solution to the identified congestion issues, has received its regulatory approvals and is under construction. This project is expected to be completed by June of 2022.

In 2020, New York State passed the Accelerated Renewable Energy Growth and Community Benefit Act ("Renewable Energy Act"), the purpose of which is to help prioritize the planning, investment, and responsible development of a state-of-the-art grid infrastructure the Renewable Energy Act focuses on grid planning and energy delivery constraint relief and calls for a comprehensive study to identify cost-effective distribution, local and bulk electric system upgrades and a bulk transmission investment program that draws upon the Power Authority's capability to expeditiously construct new transmission (Renewable Energy Act discussed herein). On October 15, 2020, the New York Public Service Commission ("NYSPSC"), acting through its authority under the Renewable Energy Act, designated the Smart Path Connect Project ("SPC") also known as Northern New York ("NNY") as a Priority Project. This project will complete the transmission upgrades in the Moses – Marcy corridor and enable higher amount of integration of renewable energy in New York Grid.

Regional Greenhouse Gas Initiative

The Regional Greenhouse Gas Initiative (the "RGGI") is a cooperative effort by Northeastern and Mid-Atlantic states, including New York, to reduce carbon dioxide emission levels. Participating states have established a regional carbon dioxide emissions cap from the power sector (fossil fuel-fired power plants 25MW or greater). RGGI States make periodic adjustments to the RGGI cap to account for banked CO2 allowances accumulated through the third control period. The size of the adjustment was last calculated in March 2021 and the adjustment will be made over a five-year period (2021-2025), as specified in the 2017 Model Rule. Central to this initiative is the implementation of a multi-state cap-and-trade program with a market-based emissions trading system. The program requires electricity generators to hold carbon dioxide allowances in a compliance account in a quantity that matches their total emissions of carbon dioxide for the three-year compliance period. The program also provides for (1) an annually replenished cost containment reserve that is used if emission reduction costs are higher than projected, and (2) an emission containment reserve to withhold allowances from circulation if credit prices fall below an established trigger price (i.e., when emission reduction costs are lower than expected). The Authority's Flynn plant, the Small Clean Power Plants ("SCPPs"), and 500-MW Plant are subject to the RGGI requirements as is the Astoria Energy II plant. The Authority has participated in program auctions to acquire carbon dioxide allowances and expects to recover RGGI costs through its power sales revenues. The Authority is monitoring proposed federal and state legislation, regulations and programs (including any changes to RGGI) that would impact carbon dioxide emission levels.

Competitive Environment

The Authority's mission statement that was ratified by the Trustees in December 2020, 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 Power Authority'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, our Enhanced Authority under changes to the Power Authority Act 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.

To maintain its position as a reliable provider of power in a changing environment, the Authority has undertaken and continues to carry out a multifaceted program, including: (a) the upgrade and relicensing of the Niagara, St. Lawrence-FDR, and Blenheim-Gilboa ("BG") projects; (b) long-term supplemental electricity supply agreements with the Power Authority's governmental customers located in Southeastern New York (NYC and Westchester Governmental Customers); (c) construction and operation of the Eugene W. Zeltmann Power Project (the Power Authority's 500-MW combined cycle electric generating plant) located at the Power Authority's Poletti plant site; (d) a long-term electricity supply contract with Astoria Energy II LLC for the purchase of the output of a 550-MW power plant in Astoria, Queens, ("AEII"), in which the Authority's net costs associated with the AEII power purchase agreement are recovered under a separate contract with the NYC Governmental Customers who are served by the output; (e) a firm transmission capacity purchase agreement with Hudson Transmission Partners, LLC ("HTP") for a portion of the output of the 660 MW, seven mile, underground and underwater transmission line connecting into the transmission system operated by PJM Interconnection LLC; (f) construction and maintenance of new transmission lines to relieve congestion and increase transfer capability from central to eastern New York addressing NYISO's AC Transmission Public Policy Need ("AC Proceeding"); (g) implementation of an enterprise-wide risk management program; and (h) implementation of an enterprise-wide resiliency program to embed resilience culture and to prepare for a more uncertain operating environment. As a component of the Authority's strategic plan, efforts to modernize the Authority's generation and transmission infrastructure are being developed and implemented to increase flexibility and resiliency, and to serve customers' needs in an increasingly dynamic energy marketplace.

To achieve its goal of promoting clean energy and efficiency, the Authority implements energy efficiency services for the benefit of its power supply customers and for various other public entities throughout the State. The Authority finances the installation of energy saving greenhouse measures and equipment which are owned by the customers and public entities to focus on the reduction of the demand for electricity and the efficient use of energy.

The Authority operates in a competitive and sometimes volatile energy market environment. Through its participation in the NYISO and other commodity markets, the Authority is subject to electric energy prices, fuel prices and electric capacity price risks that impact the revenue and purchased power streams of its facilities and customer market areas. Such volatility can potentially have adverse effects on the Authority's financial condition. To mitigate downside effects, many of the Authority's customer contracts provide for the complete or partial pass-through of these costs.

To moderate cost impacts to the Authority and its customers, the Authority, at times, hedges market risks through the use of financial instruments and physical contracts. Hedges are transacted by the Authority to mitigate volatility in the cost of energy or related products needed to meet customer needs; to mitigate risk related to the price of energy and related products sold by the Authority; to mitigate risk related to margins (electric sales versus fuel use) where the Authority owns generation or other capacity; and to mitigate geographic cost differentials of energy procured or sold for transmission or transportation to an ultimate location. Commodities to be hedged include, but are not limited to, natural gas, natural gas basis, electric energy, electric capacity, congestion costs associated with the transmission of electricity and non-energy commodities. Any such actions are taken pursuant to policies approved by the Authority's Trustees and under the oversight of an Executive Risk & Resilience Management Committee.

The Authority can give no assurance that, even with these measures, it will retain its competitive status in the marketplace in the future as a result of the restructuring of the State's electric utility industry and the emergence of new competitors or increased competition from existing participants.

Smart Path Connect

In meeting the advancement of the State's energy goals and supporting the Authority's VISION2030 goals, in 2020, the New York State Public Service Commission's ("NYSPSC") approved the Smart Path Connect Project ("Project") as a PTP with an in-service date of December 2025. The Project will be developed in cooperation with a third-party co-participant. Together the Authority and co-participant will rebuild approximately 100 miles of 230kV and 345kV transmission lines, construct three new substations, and expand and/or upgrade eight existing substations. The goal of the Project is to allow for renewable generation from northern New York regions to be transmitted down-state, improving the NYS renewable energy consumption, as well as the efficiency of energy pricing throughout the state. Construction on a portion of the Project, which will require an Article VII certificate, is anticipated to begin in mid-2022. The start of construction has been modified but does not impact the overall in-service date. The Article VII application of the Project was submitted to the NYSPSC in June of 2021 and is expected to be approved in mid-2022 at which time construction will begin consistent with permits requirements. In 2021, the Authority's Trustees authorized capital expenditures for the Authority's portion of the Project in the amount of $605 million. As of December 31, 2021, the Authority has spent approximately $22 million.

Smart Path

The Authority is moving forward with its plans to update a major section of the Moses Adirondack line ("Smart Path") project, one of the Authority's backbone transmission facilities. The project covers 78 miles of 230 kV transmission line from Massena to the town of Croghan in Lewis County. In July 2017, the Authority received authorization under the New York Independent System Operator (NYISO) tariff to include the costs of this project in its Transmission Adjustment Charge mechanism for cost recovery of the Authority's transmission system costs, which means that the costs will be allocated to all ratepayers in the State. The project includes the update of obsolete wood pole structures with higher, steel pole structures, as well as update of failing conductor with new conductor and insulation. The line will operate at its current 230 kV level, but the conductor and insulation design will accommodate future 345 kV operation. The Authority anticipates that the Moses Adirondack line will support the transmission of growing levels of renewable generation located in upstate New York and Canada, such as wind and hydroelectricity, and assist in meeting the State's renewable energy goals. The rebuilt line is also expected to enhance grid reliability by supporting the NYISO's black start plan. On September 21, 2018, the Public Service Commission (PSC) determined that the Authority's April 2018 Article VII application was complete. The PSC granted the Certificate of Compatibility and Public Need for the project on November 14, 2019, approving the Joint Proposal. On February 6, 2020, the PSC issued an order approving Part One of the Environmental Management and Construction Plan. Additionally, the Authority has received its Nationwide Permit from the U.S. Army Corps of Engineers and the New York State Department of Public Service has issued a Notice to Proceed. The Authority estimates a project cost of $484 million through project completion in 2023. As of December 31, 2021, the Authority has spent approximately $311 million on the Smart Path project.

Clean Path

In September of 2021 Governor Hochul announced the award of the Clean Path NY (CPNY) project. The award was a result of Forward Power- a joint venture between energyRe, LLC and Invenergy, LLC- submitting a proposal to NYSERDA in response to the Tier 4 solicitation for the delivery of renewable energy into the NYISO Zone J (New York City) area. The Power Authority and Forward Power are collaborating on the project. The proposed project plans to deliver power from new and existing solar and wind generation projects in Upstate and Western New York through a newly constructed High Voltage Direct Current transmission line into New York City. The NYSERDA contract for the project is currently under review with the New York State Public Service Commission and is expected to be approved by mid-2022. Preparation of permitting applications, engineering and procurement are ongoing. The project is expected to be in-service in 2027.

Rate Actions

Power and energy from the St. Lawrence-FDR and Niagara hydroelectric facilities are sold to municipal electric systems, rural electric cooperatives, industrial and other business customers, certain public bodies, investor-owned utilities, out-of-state customers, and into the wholesale market. The charges for firm and/or firm peaking power and associated energy sold by the Authority, as applicable, to the fifty-one municipal electric systems and rural electric cooperatives in New York State, two public transportation agencies, two investor-owned utilities for the benefit of rural and domestic customers, nine host communities and seven out-of-state public customers have been established based on the costs to serve these loads.

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. Their rates are subject to annual adjustment based on the average of three contractually agreed-upon economic indices reflecting changes in industrial energy prices.

In 2019, the Authority's 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 the Power Authority purchases which are attributable to Alcoa's load. The contract specifies a sharing mechanism for the CES charges between Alcoa, New York State and the Power Authority, 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, with future activities based upon prevailing economic conditions as appropriate.

ReCharge New York ("RNY") is the Governor's statewide economic development electric power program, designed to retain and create jobs through the allocation of low-cost power. The RNY program allocates 455 MW of hydropower from the Authority's Niagara and St. Lawrence-FDR projects at Preservation Power rates, which are similar to the Expansion and Replacement power customer rates, with certain adjustments. An additional 455 MW of market power can also be procured for RNY customers upon request.

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 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.

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.") The Power Authority has entered into an evergreen supplemental electricity supply agreement with all 103 Westchester Governmental Customers. Westchester Governmental Customers are partially served by the Power Authority's four small hydroelectric plants. The remainder of the Westchester Governmental Customers' load requirements are supplied through energy and capacity purchased from the NYISO markets. Sales 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.

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

In July 2012, the Authority filed for its first requested increase in the revenue requirement with FERC since the 1999 implementation of the NYISO. This filing resulted in FERC's October 4, 2013 order accepting an uncontested settlement agreement establishing a new $175.5 million TRR for the Authority effective August 1, 2012.

In January 2016, the Authority filed with FERC to convert from a Stated Rate to a Formula Rate to ensure recovery of its TRR based upon operating and maintenance expenses as well as the capital spending necessary to maintain the reliability of its transmission system. FERC accepted the filing and made it effective April 1, 2016, as requested, subject to hearing and settlement judge procedures. 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. The settlement was approved by FERC on January 19, 2017. Separately, the annual TRR under the formula of $190 million initially made effective April 1, 2016 was updated on July 1, 2016 to $198.2 million pursuant to the formula rate annual update process. The TRR is updated annually prior to the start of each rate year (July 1st - June 30th). 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.

Certain New Legislation Affecting the Authority

Bills are periodically introduced or passed in the New York State Legislature which propose to limit or restrict the powers, rights and exemptions from regulation which the Authority currently possesses under the Power Authority Act and other laws, or could otherwise affect the Authority's financial condition or its ability to conduct its business, activities, or operations in the manner presently conducted or contemplated hereby. It is not possible to predict whether any such bills, or other bills of a similar type which may be introduced or passed in the future, will be enacted.

As more specifically described in the enactment, and subject to limitations described therein, the 2019-20 Enacted State Budget (2019-20 ESB) amended the Power Authority Act to authorize the Authority, subject to feasible and advisable determinations by the Authority's Trustees, to: (1) design, finance, develop, construct, install, lease, operate and maintain electric vehicle charging stations throughout the state for use by the public; (2) plan, finance, construct, acquire, operate, improve and maintain, either alone or jointly with one or more other entities, transmission facilities for the purpose of transmitting power and energy generated by renewable wind energy generation projects that are located in State territorial waters, and/or in waters under the jurisdiction or regulation of the U.S.; (3) supply certain market power and energy and renewable energy products to any Authority customer, public entity, or community choice aggregation ("CCA") community in the State (collectively, "Eligible Entities); and (4) alone or jointly with one or more other entities, finance the development of renewable energy generating projects that are located in the State, including its territorial waters, and/or on property or in waters under the jurisdiction or regulatory authority of the United States, purchase power, energy or related credits or attributes produced from such renewable energy generating projects, and allocate and sell such products to Eligible Entities. The Authority may exercise any of this authority at its discretion, and the amendments made by 2019-20 ESB do not affect the Authority's previously existing statutory authority.

On July 18, 2019, the State enacted CLCPA. CLCPA directs the New York State Department of Environmental Conservation (the "NYSDEC") to develop regulations to reduce statewide greenhouse gas emissions ("GHG") to 60% of 1990 levels by 2030 and 15% of 1990 levels by 2050. NYSDEC is currently drafting regulations that would implement these and other related goals.

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

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

As part of the 2020-2021 Enacted State Budget, legislation was enacted that is expected to expedite the siting and construction of clean energy projects to combat climate change in an effort to improve the State's economic recovery from the COVID-19 health crisis. The Renewable Energy Act will create an Office of Renewable Energy Siting to improve and streamline the process for environmentally responsible and cost-effective siting of large-scale renewable energy projects across the State while delivering significant benefits to local communities. The Renewable Energy Act, which will be implemented by the Authority and New York State Department of State, NYSERDA, the Department of Public Service ("DPS"), NYSDEC and the Empire State Development Corporation, will accelerate progress towards the State's clean energy and climate goals, including the goal to obtain 70% of the State's electricity from renewable sources by 2030.

Renewable Energy Certificate (REC) Purchase Agreement

The CLCPA establishes a goal to produce 70% of the state's electricity by renewable energy sources. To meet this goal the Authority has engaged with NYSERDA to procure RECs. On August 30, 2021, both the Authority and NYSERDA entered into a long term agreement for the purchase of RECs. On an annual basis, NYSERDA and the Authority will communicate the available REC supply and offtake ratios. The Authority 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. The Authority intends to seek recovery of costs associated with the agreement through sales of renewable energy credits by the Authority to the Authority's customers.

Commitments and contingencies

The Authority's commitments and contingencies are more fully detailed in Note 13 "Commitments and Contingencies" of the notes to the consolidated financial statements.

Canal Corporation

Effective January 1, 2017, the New York State Canal Corporation (the "Canal Corporation") became a subsidiary of the Power Authority pursuant to the Canal Transfer Legislation enacted in April 2016, which authorized, but does not require, the Authority, to the extent that the Authority's Trustees deem it feasible and advisable as required by the General Bond Resolution, to transfer moneys, property and personnel to 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. For the year ended December 31, 2021, the Canal Corporation recognized $2 million in revenues, $69 million in operations and maintenance expenses and $33 million in depreciation expense.

By resolution adopted December 7, 2021, the Canal Corporation's Board of Directors adopted a budget for 2022-2025 that consisted of expenditures for operations and maintenance expenses and for capital expenses. The Authority's budget and financial plan for 2022-2025 includes Canal-related operating expenditures averaging approximately $89 million per year and capital expenditures of approximately $40 million per year and $2 million per year for Canal Development Fund expenses.

Contacting the Authority

This financial report is designed to provide our customers and other interested parties with a general overview of the Authority's finances. If you have any questions about this report or need additional financial information, contact the New York Power Authority, 123 Main Street, White Plains, New York 10601. Email: info@nypa.gov

NEW YORK POWER AUTHORITY

Consolidated Statement of Net Position

(In millions)

Assets and Deferred Outflows	**December 31, 2021**
Current Assets:	
Cash and cash equivalents	$ 533
Investment in securities	767
Receivables - customers	253
Materials and supplies, at average cost:	
Plant and general	85
Fuel	27
Miscellaneous receivables and other	265
Total current assets	1,930
Noncurrent Assets:	
Restricted funds:	
Cash and cash equivalents	58
Investment in securities	15
Total restricted funds	73
Capital Assets:	
Capital assets not being depreciated	979
Capital assets, net of accumulated depreciation	5,509
Total capital assets	6,488
Other Noncurrent Assets:	
Other long-term assets	1,525
Total other noncurrent assets	1,525
Total noncurrent assets	8,086
Total assets	10,016
Deferred outflows of resources:	
Asset retirement obligation	17
Accumulated decrease in fair value of derivative hedging	87
Pensions	188
Postemployment benefits other than pensions	94
Total deferred outflows of resources	386
Total assets and deferred outflows of resources	$ 10,402

See accompanying notes to the consolidated financial statements.

(Continued)

NEW YORK POWER AUTHORITY

Consolidated Statement of Net Position

(In millions)

Liabilities, Deferred Inflows and Net Position	December 31,2021
Current liabilities:	
Accounts payable and accrued liabilities	$ 688
Short-term debt	605
Long-term debt due within one year	1
Capital lease obligation due within one year	58
Total current liabilities	1,352
Noncurrent liabilities:	
Long-term debt:	
Senior:	
Revenue bonds	1,626
Subordinated:	
Subordinated Notes	38
Commercial paper	–
Total long-term debt	1,664
Other noncurrent liabilities:	
Capital lease obligation	926
Disposal of spent nuclear fuel	229
Relicensing	250
Postemployment benefits other than pensions	–
Other long-term liabilities	223
Total other noncurrent liabilities	1,628
Total noncurrent liabilities	3,292
Total liabilities	4,644
Deferred inflows of resources:	
Cost of removal obligations	402
Accumulated increase in fair value of derivative hedging	–
Pensions	225
Postemployment benefits other than pensions	316
Total deferred inflows of resources	943
Net position:	
Net investment in capital assets	3,181
Restricted	63
Unrestricted	1,571
Total net position	4,815
Total liabilities, deferred inflows of resources and net position	$ 10,402

See accompanying notes to the consolidated financial statements.

NEW YORK POWER AUTHORITY

Consolidated Statement of Revenues, Expenses and Changes in Net Position

(In millions)

	Year Ended December 31, 2021
Operating revenues:	
Power sales	$ 1,697
Transmission charges	328
Wheeling charges	688
Other	28
Total operating revenues	2,741
Operating Expenses:	
Purchased power	539
Fuel oil and gas	190
Wheeling	849
Operations	572
Maintenance	171
Depreciation	281
Total operating expenses	2,602
Operating income	139
Nonoperating revenues and expenses:	
Nonoperating revenues:	
Investment income	12
Other	5
Total nonoperating revenues	17
Nonoperating expenses:	
Interest on long-term debt	52
Interest - other	59
Interest capitalized	(26)
Amortization of debt premium	(1)
Total nonoperating expenses	84
Net income and change in net position	72
Net position, January 1	4,743
Net position, December 31	$ 4,815

See accompanying notes to the consolidated financial statements.

NEW YORK POWER AUTHORITY

Consolidated Statement of Cash Flows

(In millions)

	Year Ended December 31, 2021
Cash flows from operating activities:	
Received from customers for the sale of power, transmission and wheeling	$ 2,719
Disbursements for:	
Purchased power	(536)
Fuel, oil and gas	(178)
Wheeling of power by other utilities	(847)
Operations and maintenance	(794)
Net cash provided by operating activities	364
Cash flows from capital and related financing activities:	
Gross additions to capital assets	(641)
Issuance of commercial paper	90
Issuance of direct purchase note	100
Repayment of commercial paper	(5)
Repayment of notes	(2)
Interest paid, net	(69)
Net cash used in capital and related financing activities	(527)
Cash flows from noncapital–related financing activities:	
Energy conservation program payments received from participants	351
Energy conservation program costs	(260)
Issuance of commercial paper	113
Repayment of commercial paper	(200)
Interest paid on commercial paper	(4)
Payment received from New York State	86
Empire State Trailways and other	26
Margin deposits	(95)
Net cash provided by noncapital-related financing activities	17
Cash flows from investing activities:	
Earnings received on investments	13
Purchase of investment securities	(2,126)
Sale of investment securities	1,903
Net cash used in investing activities	(210)
Net decrease in cash	(356)
Cash and cash equivalents, January 1	947
Cash and cash equivalents, December 31	$ 591
Reconciliation to net cash provided by operating activities:	
Operating income	$ 139
Adjustments to reconcile operating income to net cash provided by operating activities:	
Change in assets, deferred outflows, liabilities and deferred inflows:	
Provision for depreciation	281
Net increase in miscellaneous payments and other	(206)
Net increase in receivables and materials and supplies	(55)
Net increase in accounts payable/accrued liabilities and other	205
Net cash provided by operating activities	$ 364

See accompanying notes to the consolidated financial statements.

NEW YORK POWER AUTHORITY

Statement of Fiduciary Net Position

(In millions)

		June 30, 2021
Assets		
Assets:		
Cash and cash equivalents	$	68
Receivables:		
Due from broker for investments sold		–
Investment income		1
Total receivables		1
Investments at fair value:		
Domestic equity		121
International equity		107
Global Index Fund		224
International contrarian value fund		52
Real Estate (REIT)		45
Fixed Income		167
Total investments		716
Total assets		785
Liabilities:		
Payables:		
Due to broker for investments purchased		–
Total liabilities		–
Net position available for postemployment benefits other than pensions	$	785

See accompanying notes to the consolidated financial statements

NEW YORK POWER AUTHORITY

Statement of Changes in Fiduciary Net Position

(In millions)

	Year Ended June 30, 2021
Additions:	
Employer contributions	$ 34
Investment income:	
Net increase in fair value of investments	130
Interest and dividend income	8
Less: investment expense	(2)
Net investment income	136
Total additions	170
Deductions:	
Benefits payments	34
Total deductions	34
Changes in net position	136
Net position available for postemployment benefits other than pensions – beginning of year	649
Net position available for postemployment benefits other than pensions – end of year	$ 785

See accompanying notes to the consolidated financial statements.

(1) General

The Power Authority of the State of New York (the Power Authority), doing business as the New York Power Authority, is a corporate municipal instrumentality and political subdivision of the State of New York (State) created in 1931 by Title 1 of Article 5 of the Public Authorities Law, Chapter 43-A of the Consolidated Laws of the State, as amended (Power Authority Act or Act).

The Power Authority's mission 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 the Power Authority's core operating businesses while also moving to support the energy goals of New York State set forth in New York State Climate Leadership and Community Protection Act, additional authority provided to the Power Authority in Chapter 58 of the Laws of 2019, and the Accelerated Renewable Energy Growth and Community Benefit Act enacted in 2020. The Authority's financial performance goal is to have the resources necessary to achieve its mission, to maximize opportunities to serve its customers better and to preserve its strong credit rating.

The Power Authority is authorized by the Power Authority Act to help provide a continuous and adequate supply of dependable electricity to the people of the State. The Power Authority generates, transmits and sells electricity principally at wholesale. The Power Authority's primary customers are municipal and investor-owned utilities, rural electric cooperatives, high load factor industries and other qualifying businesses located throughout New York State, various public corporations located primarily in Southeastern New York within the metropolitan area of New York City, and certain out-of-state entities. In addition to contractual sales to customers, the Power Authority also sells power into an electricity market operated by the NYISO.

To provide electric service, the Power Authority owns and operates five major generating facilities, eleven small gas-fired electric generating facilities, and four small hydroelectric facilities in addition to more than 1,400 circuit miles of transmission lines, including major 765-kV and 345-kV transmission facilities. The Power Authority's five major generating facilities consist of two large hydroelectric facilities (Niagara and St. Lawrence-FDR), a large pumped-storage hydroelectric facility (Blenheim-Gilboa), the Eugene W. Zeltmann (Zeltmann or 500-MW Plant) combined cycle electric generating plant located in Queens, New York and the Richard M. Flynn combined cycle plant located on Long Island (Flynn). To provide additional electric generation capacity to the Power Authority's NYC Governmental Customers, the Power Authority entered into a long-term electricity supply agreement with Astoria Energy II LLC in 2008 for the purchase of the output of an Astoria, Queens based natural-gas fueled 550-MW generating plant, which entered service in the summer of 2011.

The Power Authority acts through a Board of Trustees. The Power Authority's Trustees are appointed by the Governor of the State of New York, with the advice and consent of the State Senate. The Power Authority is a fiscally independent public corporation that does not receive State funds nor tax revenues nor credits. The Power Authority generally finances construction of new projects through a combination of internally generated funds and sales of bonds and notes to investors and pays related debt service with revenues from the generation and transmission of electricity. Accordingly, the financial condition of the Authority is not controlled by or dependent on the State or any political subdivision of the State. Under the criteria set forth in Governmental Accounting Standards Board (GASB) the Authority considers its relationship to the State to be that of a related organization.

Income of the Power Authority and properties acquired by it for its projects are exempt from taxation. However, the Power Authority is authorized by the Power Authority Act to enter into agreements to make payments in lieu of taxes with respect to property acquired for any project where such payments are based solely on the value of the real property without regard to any improvement thereon by the Authority and where no bonds to pay any costs of such project were issued prior to January 1, 1972.

Article XV of the New York State Constitution provides, in part, that the barge canal, the divisions of which are the Erie canal, the Oswego canal, the Champlain canal, and the Cayuga-Seneca canal, and the terminals constructed as part of the barge canal system (collectively, the "Canal System") shall remain the property of the State and under its management and control forever. Legislation enacted in 1992 (the "1992 Legislation") transferred jurisdiction of the Canal System, among other assets and properties, from the New York State Commissioner of Transportation to the New York State Thruway Authority (the Thruway Authority), to be held by the Thruway Authority in the name of the people of the State. Such Canal System remained the property of the State and under its management and control as exercised by and through the Thruway Authority, through its then newly created subsidiary, the New York State Canal Corporation (the "Canal Corporation"). The 1992 Legislation deemed the Canal Corporation to be the State for the purposes of such management and control of the canals but for no other purposes.

Legislation was enacted on April 4, 2016 (the "Canal Transfer Legislation") which provided for (1) the transfer, effective January 1, 2017, of the New York State Canal Corporation (Canal Corporation) from the Thruway Authority to the Power Authority, and (2) as of January 1, 2017, the Power Authority's assumption from the Thruway Authority of powers and duties relating to the Canal System, and jurisdiction over the Canal System and state assets, equipment and property in connection with the planning, development, construction, reconstruction, maintenance and operation of the Canal System, which the Power Authority is authorized to exercise through the Canal Corporation. The Canal Corporation is responsible for a 524-mile Canal System consisting of the Erie, Champlain, Oswego and Cayuga-Seneca canals and the terminals constructed as part of the barge canal system (the "Canal System").

(2) Summary of Significant Accounting Policies

Significant accounting policies include the following:

(a) *Basis of Reporting*

The operations of the Power Authority and its subsidiary the Canal Corporation, a blended component unit, are presented as an enterprise fund following the accrual basis of accounting in order to recognize the flow of economic resources. Accordingly, revenues are recognized in the period in which they are earned and expenses are recognized in the period in which they are incurred. The accounts and transactions of the Canal Corporation are included in the consolidated financial statements and notes to the consolidated financial statements. All significant transactions between the Power Authority and the Canal Corporation have been eliminated. The Power Authority and the Canal Corporation are referred to collectively as the "Authority" in the consolidated financial statements, except where noted.

The Authority complies with all applicable pronouncements of the Governmental Accounting Standards Board (GASB). In accordance with Governmental Accounting Standards (GAS) Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements,* (GAS No. 62) the Authority applies all authoritative pronouncements applicable to nongovernmental entities (i.e., Accounting Standards Codification (ASC) of the Financial Accounting Standards Board) that do not conflict with GASB pronouncements.

(b) *Regulatory Accounting*

The Power Authority's Board of Trustees has broad rate setting authority for its power sales agreements with customers. The sale of transmission service over the Power Authority's facilities is provided pursuant to New York Independent System Operator (NYISO) tariffs and under contracts that pre-dated existence of the NYISO. The Power Authority files its transmission system revenue requirement with the Federal Energy Regulatory Commission (FERC) for inclusion in the NYISO's open access tariff.

The Authority accounts for its regulated operations under the provisions of GAS No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre November 30, 1989 FASB and AICPA*

Pronouncements, paragraphs 476-500. These provisions recognize the economic ability of regulators, through the ratemaking process, to create future economic benefits and obligations affecting rate-regulated entities. Accordingly, the Authority records these future economic benefits and obligations as regulatory assets and regulatory liabilities, respectively. Regulatory assets represent probable future revenues associated with previously incurred costs that are expected to be recovered from customers. Regulatory liabilities represent amounts that are collected from customers through the ratemaking process associated with costs to be incurred in future periods. Based on the action of the Board of Trustees, the Authority believes the future collection of the costs held over through regulatory assets is probable. For regulatory assets see Note 2(l) "Summary of Accounting Polices – Other Long-Term Assets" of the notes to the consolidated financial statements.

(c) *Estimates*

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(d) *Capital Assets*

Capital assets are recorded at original cost and consist of amounts expended for labor, materials, services and indirect costs to license, construct, acquire, complete and place in operation the projects of the Authority. Interest on amounts borrowed to finance construction of the Authority's projects charged to the project prior to completion is recorded as a regulatory asset. The costs of current repairs are charged to operating expense, and renewals and betterments are capitalized. The cost of capital assets retired less salvage is charged to accumulated depreciation. 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 at December 31, 2021 expressed as a percentage of average depreciable capital assets on an annual basis are:

	Average depreciation rate 2021
Type of plant:	
Production:	
Hydro	2.3%
Gas turbine/combined cycle	2.1
Transmission	1.7
General	3.9
Canal system	3.7
	2.7%

(e) *Asset Retirement and Cost of Removal Obligations*

The Authority has recorded a liability at fair value to recognize legal obligations for asset retirements in the period incurred and to capitalize the cost by increasing the carrying amount of the related long-lived asset. The Authority determined that it had legal liabilities for the retirement of certain Small Clean Power Plants (SCPPs) in New York City and, accordingly, has recorded a liability for the retirement of these assets. In connection with these legal obligations, the Authority has also recognized a liability for the remediation of certain contaminated soils discovered during the construction process. The Authority records asset retirement obligations in accordance with GAS Statement No. 83 (GAS No. 83), *Accounting for Certain Asset Retirement Obligations*.

The Authority also applies GAS No. 49 *Accounting and Financial Reporting for Pollution Remediation Obligations,* to asset retirement obligations involving pollution remediation obligations, which upon the occurrence of any one of five specified obligating events, requires an entity to estimate the components of expected pollution remediation outlays and determine whether outlays for those components should be accrued as a liability or, if appropriate, capitalized when goods and services are acquired.

In addition to asset retirement obligations, the Authority has other cost of removal obligations that are being collected from customers and accounted for under the provisions of GAS Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre November 30, 1989 FASB and AICPA Pronouncements*, paragraphs 476-500. These cost of removal obligations are reflected in deferred inflows of resources in the statement of net position.

Asset retirement obligations (ARO) amounts included in deferred outflows and cost of removal obligation amounts included in deferred inflows are as follows:

	ARO amounts	Cost of removal obligation
	(In millions)	
Balance – December 31, 2020	$ 17	$ 383
Depreciation Expense	–	19
Balance – December 31, 2021	$ 17	$ 402

(f) *Long-Lived Assets*

The Authority applies GAS No. 42, *Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries*, which states that asset impairments are generally recognized only when the service utility of an asset is reduced or physically impaired. There were no impairments during 2021.

GAS No. 42 states that asset impairment is a significant, unexpected decline in the service utility of a capital asset. The service utility of a capital asset is the usable capacity that at acquisition was expected to be used to provide service, as distinguished from the level of utilization which is the portion of the usable capacity currently being used. Decreases in utilization and existence of or increases in surplus capacity that are not associated with a decline in service utility are not considered to be impairments.

(g) *Cash, Cash Equivalents and Investments*

Cash includes cash and cash equivalents and short-term investments with maturities, when purchased, of three months or less. The Authority accounts for investments at their fair value. Fair value is determined using quoted market prices. Investment income includes changes in the fair value of these investments. Realized and unrealized gains and losses on investments are recognized as investment income in accordance with GAS No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools*.

(h) *Derivative Instruments*

The Authority uses financial derivative instruments to manage the impact of energy and capacity price, fuel cost changes, non-energy commodities and interest rate when applicable, on its earnings and cash flows. The Authority recognizes the fair value of all financial derivative instruments as either an asset or liability on its consolidated statement of net position with the offsetting gains or losses recognized in earnings or deferred charges. The Authority applies GAS No. 53, *Accounting and Financial Reporting for Derivative Instruments*, which establishes accounting and reporting requirements for derivative instruments (see note 8 "Risk Management and Hedging Activities" of the notes to the consolidated financial statements).

(i) *Accounts Receivable*

Accounts receivable are classified as current assets and are reported net of an allowance for uncollectible amounts.

(j) *Materials and Supply Inventory*

Material and supplies are valued at weighted average cost and are charged to expense during the period in which the material or supplies are used.

(k) *Debt Refinancing Charges*

Debt refinancing charges, representing the difference between the reacquisition price and the net carrying value of the debt refinanced, are amortized using the interest method over the life of the new debt or the old debt, whichever is shorter, in accordance with GAS No. 23, *Accounting and Financial Reporting for Refundings of Debt Reported by Proprietary Activities.* See Note 6 "Long-Term Debt" of the notes to the consolidated financial statements.

(l) *Other Long-Term Assets*

Other long-term assets at December 31, 2021 consist of the following:

	December 31, 2021 (In millions)
Other long-term assets:	
Regulatory assets (a):	
Recoverable electricity supply market costs	$ 395
Allowance for funds used during construction	36
Other regulatory assets	32
Total regulatory assets	463
Energy efficiency program costs (b)	318
Other long-term receivables	343
Transmission line interconnection costs	203
Other postemployment employee benefits	171
Other	27
Total other long-term assets	$ 1,525

(a) Regulatory assets reflect previously incurred costs that are expected to be recovered from customers through the ratemaking process.

(b) Energy efficiency program costs will be recovered from certain customers through the terms of contracts.

In 2017, a Memorandum of Understanding was entered between the Authority and five investor-owned utility companies to provide Hurricane Relief assistance in Puerto Rico. The Authority's deployment cost associated with the assistance efforts are subject to reimbursement by the Emergency Management Assistant

Compact (EMAC) program. As of December 31, 2021, the related costs are included in other long-term assets in the consolidated statement of net position.

(m) *Compensated Absences*

The Authority accrues the cost of unused sick leave which is payable upon the retirement of its employees. The Authority has accrued $52 million and $7 million in other non-current liabilities and in current liabilities at December 31, 2021, respectively, on the statement of net position. The current year's cost is accounted for as a current operating expense in the consolidated statement of revenues, expenses, and changes in net position.

(n) *Net Position*

Net Position represents the difference between assets plus deferred outflows and liabilities plus deferred inflows and is classified into three components:

a. Net investment in capital assets – This consists of capital assets, net of depreciation reduced by related outstanding debt and accounts. This indicates that these assets are not accessible for other purposes.

b. Restricted – This represents restricted assets reduced by related liabilities and deferred inflows of resources that are not accessible for general use because their use is subject to restrictions enforceable by third parties.

c. Unrestricted – This represents the net amount of assets, deferred outflows of resources, liabilities and deferred inflows of resources that are not included in the components noted above and that are available for general use.

(o) *New York Independent System Operator (NYISO)*

The Power Authority is a member and a customer of the New York Independent System Operator (NYISO). The NYISO schedules the use of the bulk transmission system in the State, which normally includes all the Power Authority's transmission facilities, and collects ancillary services, losses and congestion fees from customers. In addition, the Power Authority schedules power from its generating facilities in conjunction with the NYISO. The NYISO coordinates the reliable dispatch of power and operates a market for the sale of electricity and ancillary services within the State.

Based upon the Power Authority's scheduled customer power needs and available electricity generated by the Power Authority's operating assets, the Authority buys and sells energy in an electricity market operated by the NYISO. A significant amount of the Power Authority's energy and capacity revenues result from sales of the Power Authority's generation into the NYISO market. A significant amount of the Power Authority's operating expenses consist of various NYISO purchased power charges in combination with generation related fuel expenses.

(p) *Operating Revenues*

The customers served by the Power Authority and the rates paid by such customers vary with the Power Authority facilities designated to serve such loads. These customers are served under contracts and tariffs approved by the Trustees.

The principal operating revenues are generated from the sale, transmission, and wheeling of power. Revenues are recorded when power is delivered or service is provided. Customers' meters are read, and bills are rendered, monthly. Wheeling charges are for costs the Authority incurred for the transmission and/or delivery of power and energy to customers over transmission lines owned by other utilities. Sales to the

Authority's five largest customers operating in the State accounted for approximately 46% of the Authority's operating revenues in 2021.

In addition to contractual sales to customers, the Power Authority also sells power into an electricity market operated by the NYISO. These sales are affected by market prices and are not subject to rate regulation by the Power Authority's Board of Trustees or other regulatory bodies.

(q) *Operating Expenses*

The Authority's operating expenses include fuel, operations and maintenance, depreciation, purchased power costs, and other expenses related to the sale of power. Energy costs are charged to expense as incurred.

Purchased power costs include capacity, energy and ancillary service purchases made in the wholesale market on behalf of its customers (except for those made through previously approved purchased power agreements). Wheeling expenses are based on contractual and/or tariff rates of the service provider and are recovered through pass-through provisions in customer contracts.

(r) *Pension Plans*

The Authority is a cost-sharing employer that participates in the New York State and Local Employees' Retirement System (NYSLERS), which is a cost-sharing multiple-employer plan in which the participating government employers pool their assets and their obligations to provide defined benefit pensions. The plan assets of this type of plan can be used to pay the pensions of the retirees of any participating employer. The amounts reported by the Authority for its proportionate share of the net pension liability, pension expense and deferred outflows and deferred inflows have been provided by the New York State and Local Employees' Retirement System to employers participating in the NYSLERS in accordance with Statement No. 68, *Accounting and Financial Reporting for Pensions*, and have been determined on the same basis as reported by the NYSLERS. See Note 10 "Pension Plans" of the notes to the consolidated financial statements.

(s) *Postemployment Benefits Other Than Pensions (OPEB)*

The Power Authority provides certain health care and life insurance benefits for eligible retired employees and their dependents under a single employer noncontributory (except for certain optional life insurance coverage) health care plan (Power Authority OPEB Plan). The Power Authority has an established trust for its OPEB obligations (OPEB Trust) that is separate from the Power Authority and is held by an independent custodian for the exclusive benefit of the OPEB Trust beneficiaries and not of the Power Authority. The ownership of the OPEB Trust assets are held by the independent custodian at all times and the OPEB Trust assets are not considered funds or assets of the Power Authority for any purpose. All of the OPEB Trust assets are irrevocably dedicated to, and are used for the exclusive purpose of, making payments of benefits to or for the benefit of the Power Authority OPEB Plan beneficiaries and for paying administrative expenses of the Power Authority OPEB Plan and the OPEB Trust and will not be available to any creditors of the Power Authority. The OPEB Trust does not issue a stand-alone financial report and its financial statements are reported as a fiduciary fund in the Authority's financial report.

The Canal Corporation provides health care and death benefit for eligible retired employees. Substantially all employees may become eligible for these benefits if they reach normal retirement age while working for the Canal Corporation. The Canal Corporation participates, pursuant to the provision of Section 163(4) of the New York State Civil Service Law, in the New York State health Insurance Program (NYSHIP). NYSHIP does not issue a standalone financial report since there are no assets legally segregated for the sole purpose of paying benefits under the plan.

Effective January 2021, the Authority's Trustee approved an amendment to the OPEB Trust allowing the trust to be used to pay benefits for both the Power Authority OPEB Plan and the Canal Retiree Health Plan. This change has been reflected as of the June 30, 2021 measurement date.

The Power Authority has changed their reporting period under GAS No. 74 and No. 75 from January 1 through December 31 to July 1 through June 30, effective for the 2021 reporting period. Instead of using a reporting period of January 1, 2021 through December 31, 2021, the Authority will use the period July 1, 2020 through June 30, 2021. The measurement date was also changed to the end of the updated reporting period (i.e. June 30, 2021 for the first year of reporting).

Management has determined the change in measurement date to June 30 to be a more preferable measurement date as it results in more timely information being reported in the consolidated financial statements as of the year end of December 31 and it gives the Authority adequate time to finalize the consolidated financial statements of the OPEB trust to be accounted for in the Authority's enterprise fund consolidated financial statements.

Actuarial valuations are performed biennially. For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expenses, information about the fiduciary net position of the OPEB Trust and additions to/deductions from OPEB Trust's fiduciary net position have been determined on the same basis as they are reported by the Power Authority OPEB Plan as of the same measurement date. For this purpose, the Power Authority OPEB Plan recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value, except investments that have a maturity at the time of purchase of one year or less, which are reported at cost.

(t) *New Accounting Pronouncements*

GASB issued GAS Statement No. 87 (GAS No. 87), *Leases*, which was effective for reporting periods beginning after December 15, 2019 prior to issuance of (GAS No.95). GAS No. 87 requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows or outflows of resources based on payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right-to-use an underlying asset. Under GAS No. 87, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. The Authority is currently evaluating the impact of GAS No. 87 on its consolidated financial statements.

GASB issued GAS Statement No. 89 (GAS No. 89), *Accounting for Interest Cost Incurred Before the End of a Construction Period*, which is effective for reporting periods beginning after December 15, 2019 and will be applied prospectively. GAS No. 89 addresses (1) enhancement of the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) simplifies accounting for interest cost incurred before the end of a construction period. GAS No. 89 requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. Based on the Authority's evaluation and FERC accounting, the Authority, being a GAAP regulated utility, is exempt from the certain provisions of GAS No. 89 and will continue capitalizing interest cost incurred before the end of construction period as a regulatory asst. The Authority adopted GAS No. 89 and at December 31, 2021, the Authority recorded a $36 million allowance for use during construction (AFUDC) as a regulatory asset in its consolidated statement of net position.

GASB issued GAS Statement No. 91 (GAS No. 91), *Conduit Debt Obligations*, which was effective for reporting periods beginning after December 15, 2020, however, the effective date has been postponed to 2022 for the Authority due to the issuance of GASB Statement 95 (GAS No. 95). GAS No. 91 provides a single method of reporting conduit debt obligations by issuers associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. This statement clarifies the definition of a conduit debt obligation, establishes that a conduit debt obligation is not a liability of the issuer, establishes standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations and improves required note disclosures. The Authority is evaluating the impact of GAS No. 91 on its consolidated financial statements.

In May 2020, in response to challenges arising from the COVID-19 virus, GASB issued Statement No. 95 (GAS No. 95), *Postponement of the Effective Dates of Certain Authoritative Guidance*, in which GASB approved an 18-month postponement for Statement 87, *Leases*. In addition, GAS No. 95 postponed for one-year effective dates for all statements and implementation guides with a current effective date of reporting periods beginning after June 15, 2018, and later. As such GAS No. 87 will be effective for reporting periods beginning after June 15, 2021 and GAS No. 91 will be effective for reporting period beginning after December 31, 2021.

GASB issued GAS Statement No.92 (GAS No. 92), *Omnibus 2020*, which originally had an effective date for reporting periods beginning after June 15, 2020. This effective date has been postponed to periods beginning after June 15, 2021 due to the issuance of GAS No.95. GAS No.92 establishes accounting and financial reporting requirements for specific issues related to leases, intra-entity transfers of assets, postemployment benefits, government acquisitions, risk financing and insurance-related activities of public entity risk pools, fair value measurements, and derivative instruments. The Authority is evaluating the impact of GAS No.92 on its consolidated financial statements.

GASB issued GAS Statement No. 93 (GAS No. 93) *Replacement of Interbank Offered Rates*, which originally had an effective date for reporting periods beginning after June 15, 2020. This effective date has been postponed to periods beginning after June 15, 2021 due to the issuance of GAS No.95. Some governments have entered into agreements in which variable payments made or received depend on an interbank offered rate (IBOR)—most notably, the London Interbank Offered Rate (LIBOR). As a result of global reference rate reform, LIBOR is expected to cease to exist in its current form at the end of 2021, prompting governments to amend or replace financial instruments for the purpose of replacing LIBOR with other reference rates, by either changing the reference rate or adding or changing fallback provisions related to the reference rate. GASB 93 objective is to address those and other accounting and financial reporting implications that result from the replacement of an IBOR. The Authority is evaluating the impact of GAS No.93 on its consolidated financial statements.

GASB Issued GASB Statement No. 96 (GAS No. 96), *Subscription-Based Information Technology Arrangements*, which is effective for reporting periods beginning after June 15, 2022. GAS No.96 requires recognition of certain subscription assets and liabilities for Subscription-based information Technology Arrangements (SBITA) which were previously either capitalized or expensed. It establishes that a SBITA results in a right-to-use subscription asset—an intangible asset—and a corresponding subscription liability. The Authority is evaluating the impact of GAS No.96 on its consolidated financial statements.

GASB Issued GASB Statement No. 97 (GAS No. 97), C*ertain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans-an amendment of GASB Statements No.14 and No.84 and superseded of GASB Statement No.32*, which is effective for reporting periods beginning after June 15, 2021. The primary objectives of this Statement are to increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board, mitigate costs associated with the reporting of certain defined contribution pension plans, defined contribution other postemployment benefit (OPEB) plans, and employee benefit plans other than pension plans or OPEB plans and to enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans. The Authority is evaluating the impact of GAS No.97 on its consolidated financial statements.

(3) Bond Resolutions and Related Matters

On February 24, 1998, the Authority adopted its "General Resolution Authorizing Revenue Obligations" (as amended and supplemented up to the present time, the General Bond Resolution). The General Bond Resolution covers all of the Authority's projects, which it defines as any project, facility, system, equipment or material related to or necessary or desirable in connection with the generation, production, transportation, transmission, distribution, delivery, storage, conservation, purchase or use of energy or fuel, whether owned jointly or singly by the Authority, including any output in which the Authority has an interest authorized by the Act or by other applicable State statutory provisions, provided, however, that the term "Project" shall not include any Separately Financed Project as that term is defined in the General Bond Resolution. The Authority has covenanted with bondholders under the General 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 therefore (including the anticipated receipt of proceeds of sale of Obligations, as defined in the General Bond Resolution, issued under the General 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 General 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 General Bond Resolution. Revenues of the Authority (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 General Bond Resolution and the payment of Parity Debt issued under the General Bond Resolution.

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

On December 7, 2021, the Authority adopted its "General Resolution Authorizing Transmission Project Revenue Obligations" (as amended and supplemented up to the present time, the Transmission Bond Resolution). The Transmission Bond Resolution authorizes the issuance of Obligations to finance the costs of certain projects, facilities, systems, equipment, and/or materials related to or necessary or desirable in connection with the transmission or distribution of electric energy, whether owned or leased jointly or singly by the Authority, including any transmission capacity in which the Authority has an interest or which it has a contractual right to use, as authorized by the Act or by other applicable State statutory provisions which have been designated by Authority pursuant to a supplemental resolution as a Separately Financed Project under the General Bond Resolution and a transmission project for purposes of the Transmission Bond Resolution. No Obligations have been issued under the Transmission Bond Resolution as of December 31, 2021.

Collateral **-** Under the Authority's General Bond Resolution, a Trust Estate was created and pledged for the payment of the principal and redemption price of, and interest on, the Authority's Obligations issued under the General Bond Resolution and, on a parity basis, other Parity Debt as defined in the General Bond Resolution. The Authority's subordinated debt, including the Commercial Paper Notes, loans issued under the 2019 Revolving Credit Agreement and Hybrid Credit Agreement described below, the Extendible Municipal Commercial Paper Notes, the Subordinated 2012 Notes and Subordinated 2017 Notes, are not Obligations under the General Bond

Resolution but share a subordinated lien in the Trust Estate. The Trust Estate means, collectively: (i) all Revenues (as defined in the General Bond Resolution, which excludes revenues from Separately Financed Projects) of the Authority; (ii) the proceeds of the sale of Obligations until expended for the purposes authorized in the supplemental resolution authorizing the issuance of such Obligations; (iii) all funds, accounts and subaccounts established by the General Bond Resolution, including investment earnings thereon; and (iv) all funds, moneys, and securities and any and all other rights and interests in property, whether tangible or intangible, conveyed as and for additional security pursuant to the General Bond Resolution by the Authority, or by anyone on its behalf, or with its written consent, to the Trustee.

Under the Authority's Transmission Bond Resolution, a Trust Estate was created and pledged for the payment of the principal and redemption price of, and interest on, the Authority's Obligations issued under the Transmission Bond Resolution and, on a parity basis, other Parity Debt as defined in the Transmission Bond Resolution. The Trust Estate means, collectively: (i) all Revenues (as defined in the Transmission Bond Resolution) of the Authority; (ii) the proceeds of the sale of Obligations until expended for the purposes authorized in the supplemental resolution authorizing the issuance of such Obligations; (iii) all funds, accounts and subaccounts established by the Transmission Bond Resolution, including investment earnings thereon; and (iv) all funds, moneys, and securities and any and all other rights and interests in property, whether tangible or intangible, conveyed as and for additional security pursuant to the Transmission Bond Resolution by the Authority, or by anyone on its behalf, or with its written consent, to the Trustee.

***Events of Default/Termination* -** Pursuant to the General Bond Resolution, upon an Event of Default so long as such Event of Default shall not have been remedied, either the Trustee or the owners of 25% in principal amount of the Obligations then outstanding may declare the principal and accrued interest on all Obligations due and payable immediately.

Under the revolving credit agreement supporting the Authority's Commercial Paper Notes effective January 16, 2019, as amended, among the Authority, a single bank as Administrative Agent, and the lenders thereunder (2019 Revolving Credit Agreement), the Authority is able to borrow up to $700 million in aggregate principal amount outstanding at any time for the repayment of the Commercial Paper Notes. In the case of an Event of Default (as defined in the 2019 Revolving Credit Agreement), the lenders under the 2019 Revolving Credit Agreement holding 66 2/3% of the commitments thereunder will be able to: terminate their commitments; direct the Authority to cease issuing Commercial Paper Notes; and declare the principal and accrued interest on obligations under the 2019 Revolving Credit Agreement due and immediately payable.

Under the hybrid revolving credit agreement and note purchase agreement supporting the Authority's Commercial Paper Notes and liquidity effective April 22, 2020, each between the Authority, and a single bank as Administrative Agent and sole lender thereunder (Hybrid Credit Agreement), the Authority is able to borrow up to $250 million in aggregate principal amount outstanding at any time for the repayment of the Commercial Paper Notes and/or Direct Purchase Note(s) under the Hybrid Credit Agreement. In the case of an Event of Default (as defined in the Hybrid Credit Agreement), the sole lender under the Hybrid Credit Agreement holding 100% of the commitment thereunder will be able to: terminate their commitment; direct the Authority to cease issuing Commercial Paper Notes; and declare the principal and accrued interest on obligations under the Hybrid Credit Agreement due and immediately payable. The were no events of default during 2021.

(4) Cash and Investments

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

(a) *Investment Credit Risk*

The Authority's investments are restricted to (a) authorized collateralized certificates of deposit, Certificate of Deposit Account Registry Service ("CDARS") program or similar FDIC-insured, reciprocal products, time deposits and money market funds, which shall not exceed 40% of the Authority's invested funds and no more than $50 million invested in any one fund, (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, (e) Guaranteed Investment Contracts or GIC Funds issued by creditworthy insurance companies and collateralized by issuer's general or separate account assets, with no more than $50 million invested in any one contract or fund. The Authority's investments in the senior debt securities of Federal National Mortgage Association (FNMA), Federal Home Loan Bank (FHLB), Federal Farm Credit Bank (FFCB) Federal Agricultural Mortgage Corporation (FAMC) and Federal Home Loan Mortgage Corporation (FHLMC) were rated Aaa by Moody's Investors Services (Moody's), AAA by Fitch Ratings (Fitch) and AA+ by Standard & Poor's (S&P).

(b) *Interest Rate Risk*

Securities that are the subject of repurchase agreements or reverse repurchase agreements must have a market value at least equal to the cost of the investment. The agreements are limited to a maximum fixed term of 30 days and may not exceed $250 million or $50 million with any one dealer or bank. Monies will not be invested for terms in excess of the projected use of funds. As of December 31, 2021, the Authority had $50 million invested in repurchase agreements.

(c) *Concentration of Investment Credit Risk*

There is no limit on the amount that the Power Authority may invest in any one issuer; however, investments in authorized certificates of deposit shall not exceed 25% of the Authority's invested funds and shall not exceed $25 million from any one bank. At December 31, 2021, the Authority's total investment portfolio of $1,355 million, excluding the Canal Development Fund, consists of investments of $10 million (1%), $119 million (9%), $221 million (16%) $79 million (6%), $259 million (19%) and $94 million (7%) in securities of FNMA, FHLMC, FHLB, FFCB, U.S. government and other various municipal debt securities, respectively, with the remaining balance of the Authority's investment portfolio in cash and cash equivalents.

(d) *Other*

All investments are held by designated custodians in the name of the Authority. The bank balances at December 31, 2021 was $43 million of which $42 million were uninsured but were collateralized by assets held by the bank in the name of the Authority.

Cash and Investments of the Authority at December 31, 2021 are as follows:

			Restricted		
December 31, 2021	**Total**	**Total restricted**	**Canal Development Fund**	**WNYEDF, POCR, projects and other**	**Unrestricted**
			(In millions)		
Cash and investments:					
Cash and cash equivalents	$ 591	$ 58	$ 18	$ 40	$ 533
U.S. government:					
U.S. Treasury bills	66	15	—	15	51
U.S. Treasury notes	193	—	—	—	193
	259	15	—	15	244
Other debt securities:					
FNMA	10	—	—	—	10
FHLMC	119	—	—	—	119
FHLB	221	—	—	—	221
FFCB	79	—	—	—	79
All other	94	—	—	—	94
	523	—	—	—	523
Total investments	782	15	—	15	767
Total cash and investments	$ 1,373	$ 73	$ 18	$ 55	$ 1,300
Summary of maturities (years):					
0 – 1	$ 895	$ 73	$ 18	$ 55	$ 822
1 – 5	417	—	—	—	417
5 – 10	16	—	—	—	16
10+	45	—	—	—	45
	$ 1,373	$ 73	$ 18	$ 55	$ 1,300

As of December 31, 2021, restricted funds include the POCR fund ($7 million), the Lower Manhattan Energy Independence Initiative fund ($6 million) and the Fish & Wildlife Habitat Enhancement fund related to the Niagara relicensing ($13 million), the Western New York Economic Development Fund ($11 million), the Northern New York Economic Development Fund ($5 million) (see Note 13(a) “Commitments and Contingencies – Power Programs”), Canal Development Fund ($18 million) and other ($13 million).

(5) Capital Assets

The following schedule summarizes the capital assets activity of the Authority for the year ended December 31, 2021.

	Beginning balance	Additions	Retirements/ Transfers	Ending balance
		(In millions)		
Capital assets, not being depreciated:				
Land	$ 193	$ —	$ —	$ 193
Construction in progress	791	691	(696)	786
Total capital assets not being depreciated	984	691	(696)	979
Capital assets, being depreciated:				
Production – Hydro	2,313	114	—	2,427
Production – Gas turbine/combined cycle	2,385	13	—	2,398
Transmission	2,551	370	(6)	2,915
General	1,405	114	(5)	1,514
Canal System	802	117	—	919
Total capital assets being depreciated	9,456	728	(11)	10,173
Less accumulated depreciation for:				
Production – Hydro	924	47	—	971
Production – Gas turbine/combined cycle	1,381	87	—	1,468
Transmission	1,371	42	(6)	1,407
General	492	57	(4)	545
Canal System	240	33	—	273
Total accumulated depreciation	4,408	266	(10)	4,664
Net value of capital assets, being depreciated	5,048	462	(1)	5,509
Net value of all capital assets	$ 6,032	$ 1,153	$ (697)	$ 6,488

(6) Long-Term Debt

a. Components

	Amount 2021	Interest rate (a)	Maturity		Earliest redemption date prior to maturity
	(In millions)				
Senior debt:					
Series 2020A Revenue Bonds:					
Term Bonds	1,121	3.25% to 4.00%	11/15/2045 - 2060	**	5/15/2030
Revenue Bonds (Taxable):*					
Series 2003A Revenue Bonds:					
Term Bonds	117	5.649% to 5.749%	11/15/2023 to 2033	**	Any date
Series 2007B Revenue Bonds:					
Term Bonds	210	5.905% to 5.985%	11/15/2037 and 2043	**	Any date
Series 2020B Revenue Bonds:					
Term Bonds	114	2.818%	11/15/2039	**	Any date
	1,562				
Plus unamortized premium and discount	64				
Less deferred refinancing costs	—				
	1,626				
Less due in one year	—				
Long-term senior debt, net of due in one year	$ 1,626				

(a) interest rate at issuance
* All outstanding taxable term bonds are subject to Make-Whole Call provisions.
** Bonds are subject to sinking fund provisions.

		Amount 2021 (In millions)	Interest rate (a)	Maturity	Earliest redemption date prior to maturity
Subordinate debt:					
Subordinated Notes, Series 2017	$	21	2.61% to 4.27%	2022 to 2041	Any date
Subordinated Notes, Series 2012		18	2.65% to 4.05%	2022 to 2037	Any date
		39			
Less due within one year		1			
		38			
Total Long-term debt		1,665			
Less due within one year		1			
Long-term debt, net of due in one year	$	1,664			

(a) interest rate at issuance

Interest on Series 2003A, 2007B and 2020B Revenue Bonds and Subordinated Notes, Series 2012 and Subordinated Notes, Series 2017 is not excluded from gross income for bondholders' Federal income tax purposes.

The Revenue Bonds outstanding at December 31, 2021 have an average interest rate of 4.25% and mature through 2060.

As indicated in Note 3 "Bond Resolution and Related Matters" of the notes to the consolidated financial statements, the Authority has pledged future revenues to service the Obligations and Parity Debt (Senior Debt) issued under the Bond Resolution. The total principal and interest remaining to be paid on the Senior Debt is $3.3 billion as of December 31, 2021. Principal and interest paid for 2021 and operating income plus depreciation were $69.4 million and $420 million, respectively.

Senior revenue bonds are subject to redemption prior to maturity in whole or in part as provided in the supplemental resolutions authorizing the issuance of each series of bonds, beginning for each series on the date indicated in the table above, at principal amount or at various redemption prices according to the date of redemption, together with accrued interest to the redemption date.

At December 31, 2021, the current market value of the senior debt was approximately $2.0 billion. Market values were obtained from a third party that utilized a matrix-pricing model.

Subordinate Debt:

Subordinate Notes – In 2016, the Authority's Trustees authorized the issuance of Subordinated Notes, Series 2017 and in 2012, the Authority's Trustees authorized the issuance of Subordinated Notes, Series 2012, in a principal amount not to exceed $30 million for each note for the purpose of accelerating the funding for the State Parks Greenway Fund, which was established pursuant to the Niagara Relicensing Settlement entered into by the Authority and the New York State Office of Parks, Recreation & Historic Preservation in connection with the Niagara Project's relicensing. The Authority issued the Subordinated Notes, Series 2017 on February 24, 2017 in the amount of $25.2 million and the Subordinated Notes, Series 2012 on December 18, 2012 in the amount of $25 million. These Subordinated Notes, Series 2017 and Series 2012 are subordinate to the Series 2003A Revenue Bonds, the Series 2007B, and the Series 2020A and 2020B Revenue Bonds.

Commercial Paper – Under the Extendible Municipal Commercial Paper (EMCP) Note Resolution, adopted December 17, 2002, and as subsequently amended and restated, the Authority may issue a series of notes, designated EMCP Notes, Series 1, maturing not more than 270 days from the date of issue, up to a maximum amount outstanding at any time of $200 million (EMCP Notes). The Authority has the option to extend the maturity of the EMCP Notes and would exercise such right in the event there is a failed remarketing. This option serves as a substitute for a liquidity facility for the EMCP Notes. During 2021, the Authority repaid the then outstanding $5 million of EMCP. The are no outstanding borrowings under the EMCP at December 31, 2021.

Under the provisions of the Second Amended and Restated Resolution Authorizing Commercial Paper Notes, adopted by the Authority on March 30, 2021 (the "Second Amended and Restated Resolution") and the Certificate of Determination dated April 21, 2021 (the "Certificate of Determination" and together with the Second Amended and Restated Resolution, the "Resolution"), the Authority may issue from time to time a separate series of notes maturing not more than 270 days from the date of issue, up to a maximum amount outstanding at any time of $200 million (Series 1 CP Notes), $300 million (Series 2 CP Notes), and $450 million (Series 3A ($200 million) and 3B ($250 million) CP Notes). See Note 7 "Short-Term Debt" of the notes to the consolidated financial statements in the Authority's December 31, 2021 Financial Report for Series 1, and certain Series 2 and Series 3A and 3B CP Notes designated as short-term debt. There were no Series 4 CP Notes outstanding as of December 31, 2021.

The Authority has a line of credit under a 2019 revolving credit agreement (the 2019 RCA), with a syndicate of banks, to provide liquidity support for the Series 1-3A CP Notes, under which the Authority may borrow up to $700 million in aggregate principal amount outstanding at any time for certain purposes, including the repayment of the Series 1–3 CP Notes. The 2019 RCA has been extended to January 13, 2023. There were no outstanding borrowings under the 2019 RCA.

The Authority has a hybrid revolving credit agreement and note purchase agreement supporting the Authority's Commercial Paper Notes and liquidity effective April 22, 2020, each between the Authority, and a single bank as Administrative Agent and sole lender thereunder (Hybrid Credit Agreement), the Authority is able to borrow up to $250 million in aggregate principal amount outstanding at any time for the repayment of the Commercial Paper Notes and/or Direct Purchase Note(s) under the Hybrid Credit Agreement. The term of the Hybrid Credit Agreement is through April 20, 2022, unless extended by the parties. At December 31, 2021, the Authority has an outstanding $100 million Direct Purchase Note under its note purchase agreement connected to its Hybrid Credit Agreement. The Authority repaid the $100 million in January 2022 and as of January 2022, there were no outstanding borrowings under the Hybrid Credit Agreement.

As of December 31, 2021, the CP Notes and the Direct Purchase Note are subordinate to the Series 2003A Revenue Bonds, the Series 2007B, the Series 2020A and 2020B Revenue Bonds.

Currently, interest on the CP (Series 3A and 3B) is taxable to holders for Federal income tax purposes.

The interest rate used to calculate future interest expense on variable rate debt is the interest rate at issuance.

Maturities and Interest Expense:	Long-Term Debt (In millions)			Capitalized Lease Obligations (In millions)		
	Principal	Interest	Total	Principal	Interest	Total
Years ending December 31:						
2022	$ 1	$ 68	$ 69	$ 58	$ 77	$ 135
2023	2	68	70	66	72	138
2024	16	68	84	76	66	142
2025	17	67	84	86	60	146
2026	18	66	84	97	52	149
2027– 2031	108	314	422	601	119	720
2032 – 2036	143	281	424			—
2037 – 2041	207	246	453	—	—	—
2042 – 2046	252	196	448	—	—	—
2047 - 2051	297	140	437			
2052 - 2056	300	80	380			
2057 - 2060	240	23	263			
	1,601	1,617	3,218	984	446	1,430
Plus unamortized bond premium	64	—	64	—	—	—
Total	$ 1,665	$ 1,617	$ 3,282	$ 984	$ 446	$ 1,430

In 2008, the Authority entered into a long-term power supply contract with Astoria Energy II LLC for the purchase of all the output of Astoria Energy II, a new 550-MW plant, which entered into commercial operation on July 1, 2011 in Astoria, Queens. The delivery period under the contract is through 2031. The Authority entered into a separate contract with its' New York City Governmental Customers to purchase the output of Astoria Energy II and is coterminous with the power purchase agreement with Astoria Energy II LLC. All net costs of the Authority under the power purchase agreement with Astoria Energy II LLC pass through to the New York City Governmental Customers for the full term of the power purchase agreement. See Note 13(b) "Commitments and Contingencies – Governmental Customers in the New York City Metropolitan Area" of the notes to the consolidated financial statements.

b. Terms by Which Interest Rates Change for Variable Rate Debt

CP Notes

The Authority determines the rate for each rate period which is the minimum rate necessary to remarket the notes at par in the Dealer's opinion.

If the Authority exercises its option to extend the maturity of the EMCP Notes, the reset rate will be the higher of (SIFMA + E) or F, where SIFMA is the Securities Industry and Financial Markets Association Municipal Swap Index, which is calculated weekly, and where "E" and "F" are fixed percentage rates expressed in basis points (each basis point being 1/100 of one percent) and yields, respectively, that are determined based on the Authority's debt ratings subject to a cap rate of 12%. As of December 31, 2021, the reset rate would have been 7%.

c. *Changes in Noncurrent Liabilities*

Changes in the Authority's noncurrent liabilities for the year ended December 31, 2021 are comprised of the following:

	Beginning balance	Additions	Maturities/ refundings and other (In millions)	Ending balance	Due within one year
Senior debt:					
Revenue bonds	$ 1,562	$ —	$ —	$ 1,562	$ —
Subtotal	1,562	—	—	1,562	—
Subordinate debt:					
Subordinated Notes, Series 2017	22	—	1	21	1
Subordinated Notes, Series 2012	19	—	1	18	—
Commercial paper	5	—	5	—	—
Subtotal	46	—	7	39	1
Net unamortized discounts/ premiums and deferred losses	67	—	3	64	—
Total debt, net of unamortized discounts/ premiums/ deferred losses	$ 1,675	$ —	$ 10	$ 1,665	$ 1
Other noncurrent liabilities:					
Capitalized lease obligation	$ 984	$ —	$ 58	926	$ 58
Disposal of nuclear fuel	229	—	—	229	—
Relicensing	251	17	18	250	—
Other	552	—	329	$ 223	$ —
Total other noncurrent liabilities	$ 2,016	$ 17	$ 405	$ 1,628	$ 58

(7) Short-Term Debt

CP Notes (short-term portion) outstanding was as follows:

	December 31, 2021			
	Authorized		Outstanding	
	(In millions)			
CP Notes (Series 1)	$	200	$	114
CP Notes (Series 2)		300		166
CP Notes (Series 3A)		200		135
CP Notes (Series 3B)		250		90

Under the provisions of the Second Amended and Restated Resolution Authorizing Commercial Paper Notes, adopted by the Authority on March 30, 2021 (the "Second Amended and Restated Resolution") and the Certificate of Determination dated April 21, 2021 (the "Certificate of Determination" and together with the Second Amended and Restated Resolution, the "Resolution"), the Authority may issue from time to time a separate series of notes maturing not more than 270 days from the date of issue, up to a maximum amount outstanding at any time of $200 million (Series 1 CP Notes), $300 million (Series 2 CP Notes), and $450 million (Series 3A ($200 million), and 3B ($250 million) CP Notes). There were no Series 4 CP Notes outstanding as of December 31, 2021. It had been and shall be the intent of the Authority to use the proceeds of the Series 1 CP Notes and certain Series 2 and Series 3 CP Notes to finance the Authority's current and future energy efficiency programs and for other corporate purposes.

Direct Purchase Note − At December 31, 2021, the Authority has an outstanding $100 million Direct Purchase Note under its note purchase agreement connected to its Hybrid Credit Agreement. The Authority repaid the $100 million in January 2022.

The changes in short-term debt are as follows:

	Beginning balance		Increases	Decreases	Ending balance	
	(In millions)					
Year:						
2021	$	502	303	200	$	605

(8) Risk Management and Hedging Activities

Overview

The Authority deploys a robust risk management program spanning its enterprise and operational risk profile. Using a well-defined governance process the escalation of risks and the corresponding risk informed decisions are made to accept, mitigate, transfer, or avoid risks consistent with the execution of its strategic vision. For example, the transfer of risk is typically executed through the purchase of insurance coverage for its operations, and in certain instances, is self-insured. Property insurance protects the various real and personal property owned by the Authority and the property of others while in its care, custody and control for which it may be held liable. Liability insurance protects the Authority from third-party liability related to its operations, including general liability, automobile, aircraft, marine and its officers and directors. Cyber liability insurance protects the Authority against first- and third-party losses. Insured losses by the Authority did not exceed coverage for any of the four preceding fiscal years. The Authority self-insures a certain amount of its general liability coverage, the physical damage claims for its owned and leased vehicles and for portions of its medical, dental and workers' compensation insurance programs. The Authority pursues subrogation claims as appropriate against any entities that cause damage to its property.

Another aspect of the Authority's risk management program is to manage risk and related volatility on its earnings and cash flows associated with electric energy prices, fuel prices, electric capacity prices and certain non-energy commodity prices. Through its participation in the NYISO and other commodity markets, the Authority is subject to electric energy price, fuel price, electric capacity price and certain non-energy commodity price risks that impact the revenue and purchased power streams of its facilities and customer market areas. Such volatility can potentially have adverse effects on the Authority's financial condition. To mitigate potential adverse effects and to moderate cost impacts to its customers (many of the Authority's customer contracts provide for the complete or partial pass-through of these costs), the Authority manages market risks by utilizing financial derivative instruments and/or physical forward contracts. These instruments are transacted by the Authority to mitigate the volatility in the cost of energy or related products needed to meet customer needs; the risk related to the price of energy and related products sold by the Authority; the risk related to margins (electric sales versus fuel use) where the Authority owns generation or other capacity; and to geographic cost differentials of energy procured or sold for transmission or transportation to an ultimate location. Commodities to be hedged include, but are not limited to, natural gas, natural gas basis, electric energy, electric capacity, congestion costs associated with the transmission of electricity and non-energy commodities.

To achieve the Authority's risk management program objectives, the Authority's Trustees have authorized the use of various derivative instruments for hedging purposes that are considered derivatives under GAS No. 53, *Accounting and Financial Reporting for Derivative Instruments* (GAS No. 53).

The fair values of all Authority derivative instruments, as defined by GAS No. 53, are reported in current and noncurrent assets or liabilities on the consolidated statement of net position as risk management activities. For designated hedging derivative instruments, changes in the fair values are deferred and classified as deferred outflows or inflows on the consolidated statement of net position. The fair value for over-the-counter and exchange-traded energy, capacity and non-energy commodity derivative instruments are determined by end-of-trading-month forward prices over the lifetime of each outstanding energy derivative instrument using the prices published by Standard & Poor's Global Platt's ("Platts"), market sources and/or internal pricing models.

Derivative Instruments

The following table shows the fair value of outstanding derivative instruments for 2021:

Derivative instrument description		Fair value balance December 31, 2020		Net change in fair value ($ in millions)		Fair value balance December 31, 2021	Type of hedge or transaction	Financial statement classification for changes in fair value	Notional amount December 31, 2021	Unit of Measure
Energy swaps/futures (sales)	$	2	$	(80)	$	(78)	Cash Flow	Deferred outflow	(10,678,384)	MWh
Energy capacity futures		(13)		4		(9)	Cash Flow	Deferred outflow	(16,458,000)	KWm
Totals	$	(11)	$	(76)	$	(87)				

Energy swaps and futures –The Authority sells energy swaps and futures to manage the revenue stream from forecasted merchant hydro generation through 2024. Net settlement payments were $46 million in 2021

Energy capacity futures – The Authority sells forward installed capacity futures intended to mitigate the volatility of market prices for transactions in the NYISO markets through 2024. Net settlement payments were $19.4 million in 2021.

Non-energy commodities swaps – During 2021, the Authority sold certain non-energy commodities swaps to mitigate volatilities of specific commodity market prices effecting electric rates in certain customers' energy supply contracts. Net settlement payments were $33.7 million in 2021.

Other – Over the lifetime of each outstanding energy derivative instrument certain derivative instruments may become ineffective due to changes in the hedged item. The change in fair market value of such derivative instruments would be recognized as other nonoperating charges or credits in the statements of revenues, expenses and changes in net position. In 2021, all derivative instruments were determined to be effective.

Counterparty Credit Risk

The Authority imposes thresholds, based upon agency-published credit ratings and/or analysis, for unsecured credit that can be extended to counterparties to the Authority's commodity derivative transactions. The thresholds are established in bilateral credit support agreements with counterparties and require collateralization of mark-to-market values in excess of the thresholds. In addition, the Authority regularly monitors each counterparty's market-implied credit ratings and the Authority may restrict transactions with counterparties on the basis of that monitoring, even if the applicable unsecured credit threshold is not exceeded

Based upon the fair values as of December 31, 2021, the Authority's individual or aggregate exposure to derivative instrument counterparty credit risk is not significant.

Other Considerations

The Authority from time to time may be exposed to any of the following risks:

Basis risk – The Authority is exposed to other basis risk in a portion of its electrical commodity-based swaps where the electrical commodity swap payments received are based upon a reference price in a NYISO Market Zone that differs from the Zone in which the hedged electric energy load is forecasted. If the correlation between these Zones' prices should weaken, the Authority may be exposed to risk as a result of the hedging inability of the electrical commodity swaps to offset the delivery price of the related energy.

Rollover risk – Certain electrical commodity swaps are based upon projected future customer loads or facility operations. Beyond the terms of these swaps, the Authority is subject to the corresponding market volatilities.

Termination risk – The Authority or its counterparties may terminate a derivative instrument agreement if either party fails to perform under the terms of the agreement. The risk that such termination may occur at a time which may be disadvantageous to the Authority has been mitigated by including certain terms in these agreements by which the counterparty has the right to terminate only as a result of certain events, which includes a payment default by the Authority; other Authority defaults which remain uncured within a defined time-frame after notice; bankruptcy or insolvency of the Authority (or similar events); or a downgrade of the Authority's credit rating below investment grade. If at the time of termination the Authority has a liability position related to its hedging derivative instruments, the Authority would be liable to the counterparty for a payment equal to the liability, subject to netting arrangements.

Market access risk – The Authority remarkets its CP Notes on a continuous basis. Should the market experience a disruption or dislocation, the Authority may be unable to remarket its Notes for a period of time. To mitigate this risk, the Authority has entered into liquidity facilities with highly rated banks to provide loans to support the CP Note programs. See Note 6 "Long-Term Debt" of the notes to the consolidated financial statements.

Dodd Frank Act

The Dodd-Frank Wall Street Reform and Consumer Protection Act (DF Act) which was enacted into law addresses, among other things, interest rate and energy related commodity swap transactions of the type in which the Authority engages. The requirements and processes are set forth in regulations promulgated by the Commodities Futures Trading Commission (CFTC). Pursuant to CFTC rules, the Authority, as a public entity and electric, which has policies authorizing the use of financial derivatives solely to manage its risk, and in certain instances, the risk of its customers, is exempted from posting collateral beyond that of any existing credit support annexes in support of its open over-the-counter hedge positions. These CFTC rules are not anticipated to have significant impact on the Authority's liquidity and/or future risk mitigation activities. CFTC DF Act rules are continually being reviewed for updates and the Authority will continue to monitor their potential impact on the Authority's liquidity and/or future risk mitigation activities.

(9) Fair Value Measurements

GAS No. 72 establishes a hierarchy of valuation inputs based on the extent to which the inputs are observable in the marketplace. Inputs are used in applying the various valuation techniques and take into account the assumptions that market participants use to make valuation decisions. Inputs may include price information, credit data, interest and yield curve data, and other factors specific to the financial instrument. Observable inputs reflect market data obtained from independent sources. In contrast, unobservable inputs reflect the entity's assumptions about how market participants would value the financial instrument.

The fair value hierarchy prioritizes the inputs used to measure fair value into three broad Levels (Levels 1, 2, and 3), moving from quoted prices in active markets in Level 1 to unobservable inputs in Level 3. A financial instrument's level within the fair value hierarchy (where Level 1 is the highest and Level 3 is the lowest) is based on the lowest level of any input that is significant to the fair value measurement. The categorization of a financial instrument within the fair value hierarchy is based upon pricing transparency and is not necessarily an indication of the Authority's perceived risk of that financial instrument.

The following describes the fair value hierarchy of inputs used by the Authority to measure fair value and the primary valuation methodologies used for financial instruments measured at fair value on a recurring basis:

- Level 1 – quoted prices for identical assets or liabilities in active markets that the Authority can access at the measurement date.

- Level 2 – quoted prices other than quoted prices included within Level 1 and other inputs that are observable for an asset or liability, either directly or indirectly.

- Level 3 – pricing inputs are unobservable for the asset or liability and may rely on inputs using the best available data under the circumstances, including the Authority's own data.

The following describes the valuation methodologies used by the Authority for assets and liabilities measured at fair value:

- U.S. government obligations – The fair value is based on institutional bond quotes and evaluations based on various market data/inputs.

- U.S. government agencies and instrumentalities – The fair value of government agencies and instrumentalities are based on institutional bond quotes and evaluations based on various market and industry inputs.

- Corporate obligations – The fair value is based on institutional bond quotes and evaluations on various market and industry inputs.

- Derivative instruments – The Authority hedges market risks through the use of derivative instruments. Derivative instruments are traded on both exchange-based and non-exchange based markets. A detail disclosure on derivatives is included in Note 8 "Risk Management and Hedging Activities" of notes to the consolidated financial statements.

    - The fair values for over-the-counter and/or exchange-traded derivative instruments are determined by the latest end-of-trading-month forward prices over the lifetime of each outstanding derivative instrument using prices published by Platts, market sources and/or internal pricing models.

The following tables summarize the Authority's outstanding assets and liabilities, of which there are no Level 3, within the fair value hierarchy at December 31, 2021:

	Fair Value Measurements (in millions)			
December 31, 2021	**Total**	**Level 1**	**Level 2**	**Level 3**
Assets				
Cash and cash equivalents	$ 591	$ 591	$ -	$ -
Treasury bills	66	66	-	-
Treasury notes	193	193	-	-
Federal Agency securities:				
FNMA	10	-	10	-
FHLMC	119	-	119	-
FHLB	221	-	221	-
FFCB	79	-	79	-
Municipal Bonds	41	-	41	-
All other	53	3	50	-
Total cash and investments at fair value	1,373	853	520	-
Derivative instruments:(a)				
Energy swaps/futures	78	-	78	
Energy capacity futures	9	-	9	-
Total derivative assets at fair value	87	-	87	-
Total assets at fair value	$ 1,460	$ 853	$ 607	$ -

(a) The accounting rules for fair value measurements and disclosures require consideration of the impact of nonperformance risk (including credit risk) from a market participant perspective in the measurement of the fair value of assets and liabilities. At December 31, 2021, the Authority determined that nonperformance risk would have no material impact on the financial position or results of operations.

(10) Pension Plans

General Information

The Authority and substantially all of the Authority's employees participate in the New York State and Local Employees' Retirement System (NYSLERS) and the Public Employees' Group Life Insurance Plan (the Plan). These are cost-sharing multiple-employer defined benefit retirement plans.

The NYSLERS uses a tier concept to distinguish membership classes (i.e., tiers 1 through 6) with tier membership based on the date an employee joins the System. The ERS is non-contributory for tiers 1 and 2 employees who joined the NYSLERS on or prior to July 27, 1976. Tiers 3 and 4 employees, who joined the NYSLERS between July 28, 1976 and December 31, 2009 and have less than ten years of service, contribute 3% of their salary. Tier 5 employees who joined the NYSLERS on or after January 1, 2010 contribute 3% of their salary during their entire length of service. Tier 6 employees who joined the NYSLERS on or after April 1, 2013 contribute 3% of their salary through March 31, 2013 and up to 6% thereafter, based on their annual salary, during their entire length of service. Members become vested in the plan after ten years of service and generally are eligible to receive benefits at age 55. The benefit is generally 1.67% of final average salary (FAS) times the number of years of service, for members who retire with less than 20 years of service, and 2% of FAS for members who retire with 20 or more years of service. The NYSLERS provides an annual automatic cost of living adjustment to members or surviving spouses based on certain eligibility criteria.

The NYSLERS and the Plan provide retirement benefits as well as death and disability benefits. Obligations of employers and employees to contribute and benefits to employees are governed by the New York State Retirement and Social Security Law (NYSRSSL). As set forth in the NYSRSSL, the Comptroller of the State of New York (Comptroller) serves as sole trustee and administrative head of the NYSLERS and the Plan. The Comptroller adopts and may amend rules and regulations for the administration and transaction of the business of the NYSLERS and the Plan, and for the custody and control of their funds. Under the authority of the NYSRSSL, the Comptroller shall certify annually the rates expressed as proportions of payroll of members, which shall be used in computing the contributions required to be made by employers.

The Authority is required to contribute at an actuarially determined rate. The average contribution rate relative to payroll for the NYSLERS fiscal year ended March 31, 2021 was 15%. The average contribution rates relative to payroll for the NYSLERS fiscal years ending March 31, 2022 and 2023 have been set at approximately 16% and 12%, respectively. The required contributions for 2021 was $36 million. The Authority's contributions to the NYSLERS were equal to 100% of the required contributions for each year.

The NYSLERS and the Plan issue a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing to the New York State and Local Employees' Retirement System, 110 State Street, Albany, NY 12244 or may be found on the internet at www.osc.state.ny.us/retire/publications/index.php.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At December 31, 2021, the Authority reported a liability of $1 million for its proportionate share of the net pension liability. The NYSLERS total pension liability, which was used to calculate the NYSLERS net pension liability, was determined by the NYSLERS actuarial valuation as of March 31, 2021 (measurement date). The Authority's proportion of the net pension liability was based on a projection of the Authority's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The Authority's proportionate share of the net pension liability was 0.673% as of March 31, 2021. The Canal Corporation's proportionate share was 0.091% at March 31, 2021.

For the year ended December 31, 2021, the Authority recognized pension expense of $18 million. At December 31, 2021, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows	Deferred Inflows
	(In millions)	
Difference between expected and actual experience	$ 9	$ –
Net difference between projected and actual earnings on investments	–	219
Change of assumptions	140	2
Net difference between employer contributions and proportionate share of contributions	3	4
Employer contributions subsequent to the measurement date	36	–
Total	$ 188	$ 225

The $36 million reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2022. The other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as a credit to pension expense as follows (in millions):

Year ending December 31,	
2022	$ (13)
2023	(5)
2024	(12)
2025	(43)
Total	$ (73)

Actuarial Assumptions

The NYSLERS total pension liability at March 31, 2021 was determined by using the NYSLERS actuarial valuation as of April 1, 2020 with updated procedures to roll forward the NYSLERS total pension liability to March 31, 2021. The following actuarial assumptions were used for the April 1, 2020 NYSLERS actuarial valuation:

Actuarial cost method:	Entry age normal
Inflation rate:	2.7%
Salary increases:	4.4% annually
Investment rate of return:	5.9% compounded annually, net of investment
Cost of living adjustments:	1.4 % annually

The NYSLERS Annuitant mortality rates are based on April 1, 2015 – March 31, 2020 NYSLERS experience with adjustments for mortality improvements based on the Society of Actuaries' Scale MP-2020.

The NYSLERS long term expected rate of return on pension plan investments was determined using a building block method in which best estimate ranges of expected future real rates of return (expected returns net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Long-Term Expected Rate of Return

Asset Type	Target Allocation	Long-term Expected Real Rate
Domestic Equity	32%	4.05%
International Equity	15	6.30
Private Equity	10	6.75
Real Estate	9	4.95
Credit	4	3.63
Opportunistic/ARS Portfolio	3	4.50
Real Asset	3	5.95
Fixed Income	23	0.00
Cash	1	0.50
	100%	

Discount Rate

The discount rate used to calculate the total pension liability was 5.9 percent. The projection of cash flows used to determine the discount rate assumes that contributions from plan members will be made at the current contribution rates and that contributions from employers will be made at statutorily required rates, actuarially. Based upon the assumptions, the NYSLERS fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the Authority's proportionate share of the net pension liability calculated using the discount rate of 5.9 percent, as well as what the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (4.9 percent) or one percentage point higher (6.9 percent) than the current rate:

	1% Decrease	Current Assumption	1% Increase
Discount rate	4.9%	5.9%	6.9%
The Authority's proportionate share of the net pension liability (asset)	$ 211 million	$1 million	$(193) million

The NYSLERS actuary has not recommended any future changes to the actuarial assumptions used in the NYSLERS August 2020 actuarial valuation report.

(11) Postemployment Benefits Other Than Pensions, Deferred Compensation and Savings

(a) *Power Authority*

The Power Authority provides certain health care and life insurance benefits for eligible retired employees and their dependents under a single employer noncontributory (except for certain optional life insurance coverage) health care plan (Power Authority OPEB Plan). Employees and/or their dependents become eligible for these benefits when the employee has at least 10 years of service and retires or dies while working at the Power Authority. Salaried employees hired after December 31, 2015 and IBEW employees hired after October 15, 2015, become eligible after 15 years of service. In addition, they will be required to contribute 50% of the active plan contribution.

The Power Authority has an established trust for OPEB obligations (OPEB Trust), with the trust to be held by an independent custodian. Plan members are not required to contribute to the OPEB Trust. The OPEB Trust is set-up to pay for the exclusive benefit of the OPEB Trust plan participants. The funding of the Power Authority's OPEB Trust is at the discretion of management. Changes to the Power Authority OPEB Plan or OPEB Trust agreement are approved by the Board of Trustees. The Power Authority made contributions on a pay-as you go basis in 2021 and did not contribute any amount beyond these contributions to the OPEB Trust.

The Canal Corporation provides health care and death benefits for eligible retired employees. Substantially all employees may become eligible for these benefits if they reach normal retirement age while working for the Canal Corporation. The Canal Corporation participates, pursuant to the provision of Section 163(4) of the New York State Civil Service Law, in the New York State Health Insurance Program (NYSHIP). NYSHIP does not issue a standalone financial report since there are no assets legally segregated for the sole purpose of paying benefits under the plan. To be eligible an employee must (1) retire as a member of Canal Corporation or be at least 55 years old at time of termination; (2) be enrolled in the NYSHIP on date of retirement; and (3) complete at least 5 years of service for the retiree and dependent to have coverage while the employee is living. Ten years of service are needed for continued dependent coverage upon death of the employee. The Plan currently pays a portion of the medical premium cost for retired employees and covered dependents. Additionally, the Plan reimburses retirees and covered dependents for their Medicare Part B premiums.

Amendment to the Authority's OPEB Trust − Prior to 2021, an OPEB Trust was established to pay benefits for those covered under the Power Authority's OPEB Plan. The Canal Retiree Health Plan operated on a pay-as-you-go basis, as no OPEB Trust existed for this plan. Effective January 2021, the Authority's Trustees approved an amendment to the Power Authority's OPEB Trust allowing the trust to be used to pay benefits for both the Power Authority's OPEB Plan and the Canal Retiree Health Plan. This change has been reflected as of the June 30, 2021 measurement date for Fiscal Year Ending June 30, 2021 reporting, with both plans being accounted for as a single plan under GASB 75. The trust amendment resulted in an increase in the discount rate used for the Canal Plan liabilities to 7.00% as of the June 30, 2021 measurement date; if this change had not occurred, a rate of 2.18% would have been selected. This amendment resulted in a combined net OPEB liability reduction of $100 million.

Change to Measurement Date − The Authority has elected to change their reporting period under GAS No. 74 and No. 75 from January 1 through December 31 to July 1 through June 30, effective for the 2021 reporting period. Instead of using a reporting period of January 1, 2021 through December 31, 2021, the Authority has used the period July 1, 2020 through June 30, 2021. The measurement date was changed to the end of the updated reporting period (i.e. June 30, 2021 for the first year of reporting).

As of the June 30, 2021 measurement date (using December 31, 2019 census information), the following current and former employees were covered by the benefit terms, under the Power Authority Plan. It is assumed that 100% of future retirees who meet the eligibility requirements will participate in the Power Authority OPEB plan.

Active employees	1,789
Inactive employees and beneficiaries, receiving and or entitled to benefits	2,798
Total	4,587

As of the June 30, 2021 measurement date (using census information as of May 1, 2020), the following current and former employees were covered by the benefit terms, under the Canal Retiree Health Plan. It is assumed that 100% of future retirees who meet the eligibility requirements will participate in the OPEB plan.

Active employees, including opt-out (actives not in medical plan)	458
Inactive employees and beneficiaries, receiving and or entitled to benefits	654
Total	1,112

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended December 31, 2021, the Authority recognized OPEB expense credit of $(46.2) million. At December 31, 2021, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
	(In millions)	
Differences between expected and actual experience	$ 1	$ 6
Changes in assumptions	13	190
Differences between projected & actual investment earnings	65	120
Employer contributions subsequent to the measurement date	15	–
Total	$ 94	$ 316

The $15 million reported as deferred outflows of resources related to OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the total OPEB liability in the following year. The remaining $237 million reported as net inflows of resources related to OPEB will be recognized as a credit in OPEB expense as follows:

Year ending December 31,	(In millions)
2022	$ (58)
2023	(62)
2024	(55)
2025	(43)
2026	(19)
	$ (237)

Net OPEB Liability

The Authority's net OPEB liability (asset) was measured as of June 30, 2021 based on valuation results as of December 31, 2019 for the Power Authority's plan and May 1, 2020 for the Canal plan, projected to the measurement date on a no gain/loss basis. The Authority's net OPEB asset of $171 million is recorded in in other noncurrent assets in the Authority's consolidated statement of net position.

The following table shows the components of the Authority's changes in its total OPEB liability, the OPEB fiduciary net position, and the net OPEB (asset) during the measurement period ending June 30, 2021.

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB (Asset)
		Increase (Decrease) (In millions)	
Balance – beginning of year	$ 524	$ 649	$ (125)
Canal transfer to the Power Authority OPEB Plan	218	–	218
Service Cost	20	–	20
Interest	42	–	42
Change of Benefit Terms	(2)	–	(2)
Differences between expected and actual experience	(1)	–	(1)
Changes of Assumptions	(153)	–	(153)
Contributions – employer	–	34	(34)
Net investment income	–	137	(137)
Benefit payments	(34)	(34)	–
Administrative expense	–	(1)	1
Net changes	90	136	(46)
Balance – end of year	$ 614	$ 785	$ (171)

The components of the net OPEB asset at June 30, 2021, were as follows (in millions):

Total OPEB liability	$ 614
Plan fiduciary net position	(785)
Net OPEB (Asset)	$ (171)
Plan fiduciary net position as a percentage of the total OPEB liability	128%

Actuarial Assumptions

The total OPEB liability in the June 30, 2021 measurement was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Investment rate of return: 7.00%

Healthcare Cost Trend Rates:	The Power Authority: Pre-Medicare - 7.0 percent for 2020, decreasing 0.5 percent per year to an ultimate rate of 4.5 percent for 2025 and later years. Post-Medicare – 4.9 percent for 2020, decreasing to an ultimate rate of 4.5 percent for 2025. Prescription drugs (Rx) – 7 percent for 2020, decreasing to an ultimate rate of 4.5 percent for 2025. Medicare Advantage – 3.5 percent for gross costs, 2.0 percent for Medicare reimbursements, reimbursement assumed to cover a minimum of 85 percent of gross costs. Canal: Same as for the Power Authority except the Pre-Medicare 2020 trend is 5.75 percent, decreasing to an ultimate rate of 4.5 percent in 2026.
Salary increases:	Varies by service, average of 8.0 percent for first year of service, 4.5 percent for 5 years of service, 3.8 percent for 10 years of service, 3.3 percent for 15 years of service, and 3.0 percent for 20 years or more of service.
Mortality:	The General Pub-2010 headcount weighted tables were used for active employees and healthy retirees and dependents, while the corresponding Contingent Survivor mortality tables were used for surviving spouses and the corresponding Disabled Retiree mortality tables were used for disabled participants. To project mortality improvement for years after 2010, the MP-2020 Projection Scale is applied on a fully generational basis to the base rates.

Long-Term Expected Rate of Return

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best estimate ranges of expected future real rates (expected returns net of inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Type	Target Allocation		Long-term Expected Real Rate of Return	
Domestic Equity	37	%	6.8	%
International Equity	24		7.5	
Fixed Income	30		3.3	
Real Estate	6		6.5	
Cash	3		2.4	
Total	100	%		

Rate of Return

For the Power Authority OPEB Plan year ended June 30, 2021, the annual money-weighted rate of return on investments, net of investment expense, was 21 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Discount Rate

The discount rate used to calculate the total OPEB liability was 7.0%, the long-term rate of return on the OPEB Trust assets. The projection of cash flows used to determine the discount rate assumed that the Authority will contribute at a rate equal to the average of contributions made over the most recent five-year period (2016 through 2021), and that contributions apply first to service cost of current and future plan members and then to past service costs. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected OPEB payments for current active and inactive employees for the foreseeable future.

Sensitivity of the Net OPEB (Asset) to Changes in the Discount Rate

Changes in the discount rate affect the measurement of the total OPEB liability. The following table depicts the Authority's Net OPEB liability / (asset), as well as the sensitivity of using a discount rate that is 1 percentage point lower (6.0 percent) or 1 percentage point higher (8.0 percent) than the current discount rate:

	1% Decrease (6.0%)	Current Discount Rate (7.0%)	1% Increase (8.0%)
Net OPEB Liability / (Asset)	$ (91) million	$ (171) million	$ (237) million

Sensitivity of the Net OPEB Liability / (Asset) to Changes in the Healthcare Cost Trend Rates

Changes in the healthcare cost trends affect the measurement of the total OPEB liability. The table below shows the sensitivity of the net OPEB liability / (asset) to the changes in the healthcare cost trends:

	1% Decrease	Current Healthcare Trend Rate	1% Increase
Net OPEB Liability / (Asset)	$ (244) million	$ (171) million	$ (81) million

Deferred Compensation and Savings Plans

The Power Authority offers union employees and salaried employees a deferred compensation plan created in accordance with Internal Revenue Code, Section 457. This plan permits participants to defer a portion of their salaries until future years. Amounts deferred under the plan are not available to employees or beneficiaries until termination, retirement, death or unforeseeable emergency.

The Power Authority also offers salaried employees a savings plan created in accordance with Internal Revenue Code, Section 401(k). This plan also permits participants to defer a portion of their salaries. The

Power Authority matches contributions of employees up to limits specified in the plan. Matching annual contributions were approximately $4.5 million for 2021.

Both the deferred compensation plan and the savings plan have a loan feature.

Independent trustees are responsible for the administration of the 457 and 401(k) plan assets under the direction of a committee of union representatives and nonunion employees and a committee of nonunion employees, respectively. Various investment options are offered to employees in each plan. Employees are responsible for making the investment decisions relating to their savings plans.

(12) Nuclear Plant Divestiture and Related Matters

On November 21, 2000, the Power Authority sold the James A. Fitzpatrick nuclear plant (JAF) and the Indian Point 3 nuclear plant (IP3) to two subsidiaries of Entergy Corporation (collectively, Entergy or the Entergy Subsidiaries). On March 31, 2017, Entergy transferred JAF to Exelon Generation Company, LLC (Exelon).

In accordance with the Nuclear Waste Policy Act of 1982, in June 1983, the Power Authority entered into a contract with the U.S. Department of Energy (DOE) under which DOE, commencing not later than January 31, 1998, would accept and dispose of spent nuclear fuel. In conjunction with the sale of the nuclear plants, the Power Authority's contract with the DOE was assigned to Entergy. Entergy assigned the portion of the pre-1983 spent fuel obligation applicable to JAF to Exelon in connection with the sale of JAF to Exelon. The Power Authority remains liable for the pre-1983 spent fuel obligation to Exelon for JAF and to Entergy for IP3 (see Note 13(e) "Commitments and Contingencies – New York State Budget and Other Matters" relating to a temporary transfer of such funds to the State). As of December 31, 2021, the pre-1983 spent fuel liability for JAF and IP3 totaled $229 million.

(13) Commitments and Contingencies

(a) *Power Programs*

Recharge New York Power Program

Chapter 60 (Part CC) of the Laws of 2011 (Chapter 60) established the "Recharge New York Power Program" (RNYPP), administered by the Authority, which has as its central benefit up to 910 MW of low cost power comprised of up to 455 MW of hydropower from the Niagara and St. Lawrence-FDR Projects and up to 455 MW of other power procured by the Authority from other sources. The 910 MW of power is available for allocation as provided by Chapter 60 to eligible new and existing businesses and not-for-profit corporations under contracts of up to seven years. RNYPP was effective beginning July 1, 2012.

The hydropower used for the RNYPP was power formerly used to provide low-cost electricity to domestic and rural customers of the three private utilities that serve upstate New York. To mitigate the impacts from the redeployment of this hydropower for the RNYPP, Chapter 60 created a "Residential Consumer Discount Program" (RCDP). The RCDP authorizes the Authority, as deemed feasible and advisable by its Trustees, to provide annual funding of $100 million for the first three years following withdrawal of the hydropower from the residential and farm customers, $70 million for the fourth year, $50 million for the fifth year, and $30 million each year thereafter, for the purpose of funding a residential consumer discount program for those customers that had formerly received the hydropower that is utilized in the RNYPP. Chapter 60 further authorizes the Authority, as deemed feasible and advisable by the Trustees, to use revenues from the sales of hydroelectric power, and such other funds of the Authority, as deemed feasible and advisable by the Trustees, to fund the RCDP. The Authority's Trustees have authorized the release of a total $624 million for the period from August 2011 to December 2021 in support of the RCDP. The Authority supplemented the market revenues through the use of internal funds, from the August 2011 start of the program through December 31, 2021 totaling approximately $47 million. Operations and maintenance expenses included $30 million of residential consumer discounts in year ended December 31, 2021.

Western New York Power Proceeds Allocation Act

Effective in March 2012, Chapter 58 (Part GG) of the Laws of 2012 (Chapter 58) created the Western New York Power Proceeds Act (WNYPPA). The WNYPPA authorizes the Authority, as deemed feasible and advisable by the Trustees, to deposit net earnings from the sale of unallocated Expansion Power and Replacement Power from the Authority's Niagara project into an account administered by the Authority known as the Western New York Economic Development Fund (WNYED Fund). Net earnings are defined as any excess revenues earned from such power sold into the wholesale market over the revenues that would have been received had the power been sold at the Expansion Power and Replacement Power rates. Proceeds from the Fund may be used to support eligible projects undertaken within a 30-mile radius of the Niagara power project that satisfy applicable criteria. Chapter 58 also establishes a five-member Western New York Power Allocations Board, which is appointed by the Governor. Chapter 58 also repealed Chapter 436 of the Laws of 2010 which had created a similar program that could not be effectively implemented.

The Authority's Trustees have approved the release of up to $66 million in net earnings, calculated for the period August 30, 2010 through December 31, 2021 as provided in the legislation, for deposit into the WNYED Fund. As of December 31, 2021, approximately $47 million has been deposited into the Fund. As of December 31, 2021, the Authority has approved awards of Fund money totaling approximately $40 million to businesses that have proposed eligible projects and has made payments totaling $36 million to such businesses. Payment of these awards is contingent upon the execution of acceptable contracts between the Authority and individual awardees.

Northern New York Power Proceeds Allocation Act

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

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

As of December 31, 2021, the Authority's Trustees approved the release of funds, of up to $15 million, into the NNYED Fund representing "net earnings" from the sale of unallocated SLCEDP into the wholesale energy market for the period December 29, 2014 through December 31, 2021. As of December 31, 2021, approximately $6 million has been deposited into the Fund. As of December 31, 2020, the Authority has approved awards of NNYED Fund money totaling approximately $2 million to businesses that have proposed eligible projects has made payments totaling approximately $1 million to such businesses. Payment of approved awards of the NNYED Fund money is contingent upon the execution of acceptable contracts between the Authority and individual awardees.

Economic Development Customer Assistance Program

Based upon the current economic conditions relating to COVID-19, the Authority's Trustees on March 31, 2020 approved an Economic Development Customer Assistance Program ("EDCAP") consisting of two temporary measures to provide financial relief to its customers in the Authority's Economic Development Power Programs (Recharge New York, Western New York, Expansion Power & Replacement Power, and Preservation Power programs) that are subject to the Annual Adjustment Factor ("AAF"). The AAF, whether it represents an increase or decrease, is normally applied to program base rates annually on July 1st in accordance with the applicable tariffs. Each of the Economic Development Power Programs require a commitment from the recipients of job growth within their business, job retention and/or capital commitment.

These two temporary measures include (1) suspension of the AAF which is otherwise scheduled under applicable tariffs to be applied to energy and demand rates annually on July 1st, for a period of one year from July 1, 2020 through June 30, 2021; and (2) provision to such customers of the option to defer payment of energy bills to the Authority, beginning with the April 2020 invoice, for up to 6 months, with repayment of deferred amounts to occur in equal installments over the subsequent 18-month period. As of December 31, 2021, 358 customers had applied for this program resulting in interest free deferred payments of approximately $50 million with no corresponding increase in interest rates. As of December 31, 2021, there are 112 remaining customers with $6.1 million EDCAP balance.

In addition, as an enhancement to the aforementioned EDCAP, the Authority's Trustees authorized a Temporary Power Assistance ("TPA") initiative to make available for sale to Authority customers receiving power under the RNY, Expansion Power, Replacement Power and Preservation Power programs (collectively, EDP Programs) supplemental power increases as part of a TPA initiative. The amount of supplemental power increases shall be determined as a percentage of the customer's current allocation(s) and in accordance with other eligibility and allocation criteria and sold pursuant to the rates and other terms and conditions provided for in the customer's contract, provided that the total amount of supplemental power made available under each EDP Program shall not exceed in aggregate 230 megawatts of unallocated EDP Program power (subject to statutory allocation limits). Sales of supplemental power under TPA shall not be made beyond January 31, 2024. As of December 31, 2021, 230 customers had applied for this program. The net impact of the TPA initiative was approximately $29 million as of December 31, 2021.

(b) *Governmental Customers in the New York City Metropolitan Area*

In 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 the Supplemental LTAs, the NYC Governmental Customers agreed to purchase their electricity from the Authority through December 31, 2027, with the NYC Governmental Customers having the right to (1) terminate at any time upon at least 12 months' notice or (2) terminate effective December 31, 2022 upon at least 6 months' notice. Under the Supplemental LTAs, fixed costs were set for each customer and are subject to renegotiation in 2022.

Variable costs, including fuel, purchased power and NYISO related costs, will be passed through to each customer by an energy charge adjustment.

The Authority's other Southeastern New York (SENY) Governmental Customers are Westchester County and numerous municipalities, school districts, and other public agencies located in Westchester County (collectively, the "Westchester Governmental Customers"). The Authority has entered a supplemental electricity supply agreement with all 103 Westchester Governmental Customers. Among other things, under the agreement, an energy charge adjustment mechanism is applicable, and customers are allowed to partially terminate service from the Authority on at least two months' notice prior to the start of the NYISO capability periods. Full termination is allowed on at least one year's notice, effective no sooner than January 1 following the one year notice.

Astoria Energy II

In 2008, the Authority entered into a long-term power supply contract with Astoria Energy II LLC for the purchase of all the output of Astoria Energy II, a new 550-MW plant, which entered into commercial operation on July 1, 2011 in Astoria, Queens. The delivery period under the contract is through 2031. The Authority entered into a separate contract with its' New York City Governmental Customers to purchase the output of Astoria Energy II and is coterminous with the power purchase agreement with Astoria Energy II LLC. All net costs of the Authority under the power purchase agreement with Astoria Energy II LLC pass through to the New York City Governmental Customers for the full term of the power purchase agreement.

The Authority is accounting for and reporting this lease transaction as a capital lease in the amount of $984 million as of December 31, 2021 which reflects the present value of the monthly portion of lease payments allocated to real and personal property. The balance of the monthly lease payments represents the portion of the monthly lease payment allocated to operations and maintenance costs which are recorded monthly. As of December 31, 2021, the Authority has a recorded capital asset (net of depreciation) of $589 million and a regulatory asset with respect to the recoverable cost associated with the lease obligation of $395 million (see Note 2 (l) "Summary of Accounting Policies – Other Long-Term Assets" of the notes to the consolidated financial statements).

HTP Transmission Line

In 2011 the Trustees authorized Authority staff to enter into an agreement with Hudson Transmission Partners, LLC ("HTP") for the purchase of capacity to meet the long-term requirements of the Authority's NYC Governmental Customers and to improve the transmission infrastructure serving New York City through the transmission rights associated with HTP's transmission line (the "Line") extending from Bergen County, New Jersey in the PJM Interconnection, LLC (PJM) transmission system, to Consolidated Edison Company of New York, Inc.'s ("Con Edison") West 49th Street substation. Specifically, the Authority executed a Firm Transmission Capacity Purchase Agreement (FTCPA) with HTP under which the Authority gained the entitlement to 75% of the Line's 660 MW capacity, or 495 MW, for 20 years. 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 ("FTWRs") as discussed below and (b) increase the Authority's leased portion of the Line's capacity to 87.12%, or 575 MW, at a monthly capacity charge rate that represents a decrease in the unit price (on a $/MW-month basis) paid to HTP in the original FTCPA.

The Authority's payment obligations under the FTCPA include capacity payments, interconnection and transmission upgrades, and Regional Transmission Expansion Plan ("RTEP") charges allocated to HTP in accordance with the PJM tariff. Interconnection and transmission upgrades were completed in 2018 at a total cost to the Authority of $334.9 million. The RTEP charges imposed upon HTP, which are still subject to legal challenge, are discussed in more detail below.

It is estimated that the revenues derived from the Authority's rights under the FTCPA will not be sufficient to fully cover the Authority's costs under the FTCPA during the 20-year term of the FTCPA. In December 2021, the Authority estimated that its under-recovery of costs for the Line could be in the range of approximately $104 million to $110 million per year over the period from 2022-2025. The under-recovery estimates were based on projections of the capacity payment obligations, the costs of interconnection and transmission upgrades and energy revenues.

The Authority's obligations under the FTCPA include payment of the RTEP charges allocated to HTP. From June 2013 through December 2021, the Authority has paid approximately $141.6 million in RTEP charges for the Line. Effective 2018, HTP relinquished the FTWRs held by HTP on the Line that were the basis for a significant share of its RTEP allocations. PJM's annual RTEP cost allocation update for 2018 eliminated the Authority's obligation in 2018 and beyond to pay RTEP charges related to the Bergen Linden Corridor project, which accounted for the bulk of the projected RTEP allocations to HTP.

While PJM had determined that the Authority had no RTEP payment responsibility starting in 2018 as a result of HTP's FTWR relinquishment, in 2020, FERC reversed PJM's determination over the Authority's objections, and held that a portion of the RTEP charges assignable to the HTP facility dating back to 2018 had to be reinstated as they were unrelated to whether HTP had retained FTWRs. These reinstated RTEP charges were for projects other than the Bergen Linden Corridor project. FERC authorized PJM to begin collection for the back periods starting in August 2020. The Authority is accruing approximately $1.1 million per month through the term of the agreement which ends in 2033. Depending on PJM TO's Annual Revenue Requirement, the RTEP charges could trend downward during the out years. The Authority is contesting the ruling.

(c) *Small, Clean Power Plants*

To meet capacity deficiencies and ongoing load requirements in the New York City metropolitan area in the early 2000s, the Authority placed into operation the Small, Clean Power Plants (SCPPs), consisting of eleven natural-gas-fueled combustion-turbine electric units located at six sites in New York City and one site in the service region of LIPA.

As a result of the settlement of litigation relating to one SCPP site (the "Site"), the Authority has agreed under the settlement agreement to cease operations at the Site, which houses two units, under certain conditions and if the Mayor of New York City directs such cessation. No such cessation has occurred. Regarding the Site, the settlement agreement also allows an adjacent landowner to put its real property to the Authority under certain conditions. No formal put notice has been received. Also, regarding the Site, the Authority and an adjacent landowner may enter into buy, sell or other types of agreements outside the terms of the settlement agreement.

(d) *Legal and Related Matters*

St. Regis Litigation

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

The parties agreed to a land claim settlement, dated February 1, 2005, which if implemented would have included, among other things, the payment by the Authority of $2 million a year for 35 years to the tribal plaintiffs and the provision of up to 9 MW of low cost Authority power for use on the reservation. The legislation required to effectuate the settlement was never enacted and the litigation continued.

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

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

Long Island Sound Cable Project

In 2014, one of the Sound Cable Project underwater cables was severely impacted by an anchor and /or anchor chain dropped by one or more vessels, causing the entire electrical circuit to fail and the circuit to trip. As a result of the impact to the cable, dielectric fluid was released into Long Island Sound. At December 31, 2021, the consolidated statement of net position includes approximately $9.1 million, in other long-term assets, reflecting the cost of damages net of insurance recoveries. The Authority believes that it will recover the remainder through contractual obligations.

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

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

Other Actions or Claims

In addition to the matters described above, other actions or claims against the Authority are pending for the taking of property in connection with its projects, for negligence, for personal injury (including asbestos-related injuries), in contract, and for environmental, employment and other matters. All of such other actions or claims will, in the opinion of the Authority, be disposed of within the amounts of the Authority's insurance coverage, where applicable, or the amount which the Authority has available therefore and without any material adverse effect on the business of the Authority. While the Authority cannot presently predict the outcome of the matters described above or any related litigation, the Authority believes that it has meritorious defenses and positions with respect thereto. However, adverse decisions of a certain type in the matters discussed above could adversely affect Authority operations and revenues.

(e) *New York State Budget and Other Matters*

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. Bills are periodically introduced into the State Legislature, which propose to limit or restrict the powers, rights and exemption from regulation that the Authority currently possesses under the Act and other applicable law or otherwise would affect the Authority's financial condition or its ability to conduct its business, activities, or operations, in the manner presently conducted or contemplated by the Authority. It is not possible to predict whether any such bills or other bills of a similar type which may be introduced in the future will be enacted.

In addition, from time to time, legislation is enacted into New York law 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 the Authority would depend upon, among other things, the nature of the obligations imposed and the applicability of the pledge of the State set forth in Section 1011 of the Act to such provisions. There can be no assurance that in the case of each such provision, the Authority will be immune from the financial obligations imposed by such provision. Examples of such legislation affecting only the Authority include legislation, discussed below and elsewhere herein, relating to the Authority's voluntary contributions to the State, the Authority's temporary transfer of funds to the State, and contributions and transfers to fund temporary and permanent programs administered by the Authority and other State entities.

Budget

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

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

Section 17 of Part JJJ of Chapter 59 of the Laws of 2021, part of the 2021-22 State Enacted Budget, provides that notwithstanding any provision of law to the contrary, as deemed feasible and advisable by its trustees, the Power Authority is authorized and directed to transfer to the state treasury to the credit of the general fund up to $20 million for the state fiscal year commencing April 1, 2021, the proceeds of which will be utilized to support energy-related state activities. As of December 31, 2021, there were no contributions made. The Authority cannot predict what additional contributions to the State may be authorized in the future.

Temporary Asset Transfers

As a result of budget legislation enacted in February 2009, the Authority was authorized to provide, subject to Trustee approval, temporary asset transfers to the State of certain funds held in reserves. Pursuant to the terms of a Memorandum of Understanding dated February 2009 (the "MOU") between the State and the Authority, the Authority transferred to the State in 2009 $103 million of funds set aside for future construction projects ("Asset A") and $215 million of funds associated with its Spent Nuclear Fuel Reserves ("Asset B"). The Authority subsequently executed amendments to the MOU in 2014 and 2017 that extended the return date for Asset A and Asset B and provided for the return of the Assets in installments over several years, subject to annual appropriation by the State Legislature. In the Second Amendment to the MOU in 2017, the Authority and the State agreed on a framework for alternative cost recovery agreements for each of State Fiscal Year 2017-18 through State Fiscal Year 2022-23 the asset transfers have not been fully returned to the Authority that would relieve the Authority of up to $5 million in cost recovery assessment payments to the State in each year. Asset A was returned to the Authority in 2018.

As of December 31, 2021, the Authority has received cumulative installment payments of $172 million on the return of Asset B. Pursuant to the amended MOU, the remaining portion of Asset B ($43 million) is to be returned by the State in installments in the State Fiscal Year 2022-2023, subject to annual appropriation by the State Legislature. The asset transfer is reported in miscellaneous receivables and other ($43 million at December 31, 2021) in the statement of net position.

(f) *Relicensing of Niagara*

The Federal Energy Regulatory Commission ("FERC") issued the Authority a new 50-year license for the Niagara project effective September 1, 2007. In doing so, FERC approved six relicensing settlement agreements entered into by the Authority with various public and private entities. The Authority had estimated that the capital cost associated with the relicensing of the Niagara project would be approximately $495 million. This estimate does not include the value of the power allocations and operation and maintenance expenses associated with several habitat and recreational elements of the settlement agreements. As of December 31, 2021, the balance in the recorded liability associated with the Niagara relicensing on the consolidated statement of net position is $219 million ($18 million in current and $201 million in other noncurrent liabilities). In addition to internally generated funds, the Authority had issued additional debt obligations to fund, among other things, Niagara relicensing costs. The costs associated with the relicensing of the Niagara project, including the debt issued therefore, were incorporated into the cost-based rates of the project.

The Authority executed the Relicensing Settlement Agreement Addressing New License Terms and Conditions ("Settlement Agreement") entered into by several parties to the relicensing of the Niagara Project, including The New York State Office of Parks, Recreation and Historic Preservation ("OPRHP"). The Settlement Agreement provides, among other things, for the establishment of a Relicensing Settlement Agreement State Parks Greenway Fund, which is to be funded by the Authority in the amount of $3 million per year to OPRHP for the term of the 50-year License. In 2012 and 2017, OPRHP requested that the Authority accelerate such payments by making two lump sum payments of approximately $25 million each to pay for authorized projects. In order to make the lump sum payments, the Authority issued (a) $25 million in subordinated notes in 2012 and (b) $25.2 million in subordinated notes in 2017. The proceeds of those subordinated note issuances were made available to OPRHP. See Note 6 "Long-Term Debt" of the notes to the consolidated financial statements.

(g) *St. Lawrence-FDR Relicensing – Local Task Force Agreement*

In 2003, FERC approved a Comprehensive Relicensing Settlement Agreement ("Relicensing Agreement") reached by the Authority and numerous parties and issued the Authority a new 50-year license for the St. Lawrence-FDR Project ("St. Lawrence-FDR License").

The St. Lawrence-FDR Power Project No. 2000 Relicensing Agreement ("LGTFSA") between the Authority and the Local Government Task Force ("LGTF") provided for a review of the LGTFSA every ten years to discuss issues not contemplated at the time of relicensing in 2003. The first such review commenced in December 2013. The Authority and the LGTF entered into an agreement in 2015 in which the Authority agreed to commit and the Trustees authorized up to $45.1 million over 10 years for certain actions, including to: (1) fund an economic development strategic marketing study (the "Marketing Study"); (2) temporarily reduce electricity costs for certain farms and businesses (the "Discount Program"); (3) initiate an energy efficiency and renewable energy program for the LGTF communities; and (4) enhance certain recreational facilities in the LGTF communities.

In 2016, the Authority's Trustees approved a proposal to terminate the Discount Program early and repurpose funding to be used to support a collaborative marketing effort between the Authority and North Country communities through the St. Lawrence County Economic Development Study Advisory Board created in connection with the Marketing Study at the rate of $2 million/year for five years ($10 million total) commencing in 2017. In 2017, the Authority's Trustees approved: (1) a new temporary business incentive program consisting of a monetary discount or rebate that would be payable to eligible private business applicants who agree to establish new business operations in certain North Country counties ("Business Incentive Discount Program"); and (2) the repurposing of funds previously approved for the marketing effort to include funding for the Business Incentive Discount Program. Funding repurposed for the marketing effort, including the Business Incentive Discount Program, would not exceed a total of $10 million.

As of December 31, 2021, the Authority has spent approximately $31.1 million of the $45.1 million authorized by the Trustees for the purpose of implementing the commitments in the LGTF 10-Year Review Agreement. As of December 31, 2021, the balance in the recorded liability associated with the St. Lawrence-FDR Project relicensing on the consolidated statement of net position is $32 million ($3 million in current and $29 million in other noncurrent liabilities).

(h) *Relicensing of Blenheim-Gilboa Pumped Storage Power Project*

FERC issued a new 50-year operating license, effective May 1, 2019, to the Power Authority for the Blenheim-Gilboa Pumped Storage Power Project. In 2019, the Power Authority's Trustees accepted the new license and approved the settlement package with state and federal resource agencies, the towns of Gilboa and Blenheim, and Schoharie County. The Trustees also authorized $37.1 million in capital expenditures for the period 2019-2069 for all compliance, implementation and settlement activities. The Authority has spent approximately $6.6 million through December 31, 2021. The Authority has established a Recreation Fund in the amount of $4 million (total commitment under the settlement package is $6 million) of which $2.4 million has been disbursed and an Ecological Fund in the amount of $2 million (total commitment under the settlement package is $3.5 million) of which $1 million has been disbursed. As of December 31, 2021, the balance in the recorded liability associated with the Blenheim-Gilboa Pumped

Storage Power Project relicensing on the consolidated statement of net position is $21 million ($1 million in current and $20 million in other noncurrent liabilities).

(i) *Construction Contracts and Net Operating Leases*

Estimated costs to be incurred on outstanding contracts in connection with the Authority's construction programs aggregated approximately $996 million at December 31, 2021.

Noncancelable operating leases primarily include leases on real property (office and warehousing facilities and land) utilized in the Authority's operations. Rental expense for year ended December 31, 2021 was $6.3 million. Commitments under noncancelable operating leases are as follows:

	Total	2022	2023	2024	2025	2026	Thereafter
				(In millions)			
Operating leases	$ 4.4	1.6	1.2	0.7	0.5	0.4	—

(j) *Other Developments*

Central East Energy Connect (Marcy to New Scotland Upgrade Project)

The Authority executed a Memorandum of Understanding ("MOU") with North America Transmission ("NAT") to develop and submit proposals to the solicitation. The MOU provided that, if any of the Authority/NAT proposals are accepted, the Authority, at its sole discretion, may elect to purchase an ownership share in the project(s) or operate and maintain the project(s). In December 2016, the Authority's Trustees' approved funding in the amount of approximately $1 million for the Authority's share of expenses pursuant to the MOU.

In June 2018, the Authority and NAT entered into a Participation Agreement that supersedes the MOU, which granted the Authority the option to secure an ownership interest of up to 37.5% in the jointly proposed projects. In April 2019, the NYISO board selected the project proposed by LS Power Grid New York, LLC (formerly known as NAT) and the Authority for Segment A (also known as the Marcy to New Scotland Upgrade Project) to increase transfer capability from central to eastern New York.

The NYISO estimated the total cost of the Segment A project to be about $750 million (in 2018 dollars, including 30 percent contingency). In August 2019, LS Power and the Authority submitted an Article VII application to the PSC and the Authority filed a petition for incentive rate treatment with the Federal Energy Regulatory Commission ("FERC") pursuant to FERC's regulations Section 219 of the Federal Power Act. FERC granted the Authority's its requested incentive rates effective November 21, 2019 inclusive of a 9.45% return on equity. The Commission approved the Article VII Certificate and first EM&CP on January 21, 2021. Ultimately, the upgraded transmission lines and new substations as part of the Segment A project are expected to be energized as part of the New York electrical system by the end of 2023.

In January 2021, the Authority's Trustees approved a capital expenditure of approximately $208.3 million for Segment A. Prior to this the Trustees approved a total of $31 million in capital expenditures for the Project. In December 2019, the Authority's Trustees approved a capital commitment of $275 million for the Segment A project. As of December 31, 2021, the Authority has spent approximately $75 million.

In July 2020, the Trustees approved the Authority's request to exercise its 37.5% purchase option. LS Power transferred its project assets and assigned the participation agreement to LS Power Grid New York

Corporation I (LS Corp.) on January 27, 2020. A development agreement relating to Segment A among the NYISO, LS Corp. and the Authority was executed on February 3, 2020, filed with FERC on March 4, 2020 and accepted for filing by FERC on April 16, 2020. The Authority expects its costs of the Segment A project to be recovered through FERC's cost-recovery mechanism outlined in the NYISO tariff.

Smart Path (Moses Adirondack Smart Path Reliability Project)

The Authority is moving forward with its plans to update a major section of the Moses Adirondack Line, one of the Authority's backbone transmission facilities. The project covers 78 miles of 230 kV transmission line from Massena to the Town of Croghan in Lewis County. In July 2017, the Authority received authorization under the NYISO tariff to include the costs of this project in its NYPA Transmission Adjustment Charge (NTAC) mechanism for cost recovery of the Authority's transmission system costs, which means that the costs will be allocated to all ratepayers in the State. The project includes the update of obsolete wood pole structures with higher, steel pole structures, as well as update of failing conductor with new conductor and insulation. The line will operate at its current 230 kV level, but the conductor and insulation design will accommodate future 345 kV operation. The Authority anticipates that the Moses Adirondack line will support the transmission of growing levels of renewable generation located in upstate New York and Canada, such as wind and hydroelectricity, and assist in meeting the State's renewable energy goals. The rebuilt line is also expected to enhance grid reliability by supporting the NYISO's black start plan.

All Environmental Management and Construction Plans for the 78 miles of transmission line rebuild have been approved by the PSC and construction is currently underway. As of December 31, 2021, the Authority has spent approximately $311 million of the project's estimated cost of $484 million. Construction commenced in 2020 with completion in 2023.

Smart Path Connect

In meeting the advancement of the State's energy goals and supporting the Authority's VISION2030 goals, in 2020, the New York State Public Service Commission's ("NYSPSC") approved the Smart Path Connect Project ("Project") as a Priority Transmission Project with an in-service date of December 2025. The Project will be developed in cooperation with a third-party co-participant. Together the Authority and co-participant will rebuild approximately 100 miles of 230kV and 345kV transmission lines, construct three new substations, and expand and/or upgrade eight existing substations. The goal of the Project is to allow for renewable generation from northern New York regions to be transmitted down-state, improving the NYS renewable energy consumption, as well as the efficiency of energy pricing throughout the state. Construction on a portion of the Project, which will require an Article VII certificate, is anticipated to begin in mid-2022. In 2021, the Authority's Trustees authorized capital expenditures for the Authority's portion of the Project in the amount of $605 million. As of December 31, 2021, the Authority has spent approximately $22 million.

Build Smart 2025

Build Smart 2025 is New York State's program for aggressively pursuing energy efficiency savings in New York State owned and occupied buildings of 11 tBTUs by December 31, 2025 while advancing economic growth, environmental protection, and energy security in New York State. Build Smart 2025 expands and continues the requirements of Build Smart NY to assist State entities in meeting statutory requirements established by the Climate Leadership and Community Protection Act (CLCPA), that "all state agencies shall assess and implement strategies to reduce their greenhouse gas emissions". The Authority manages the Build Smart 2025 program and monitors New York State agency performance. Since July 2021, the program has achieved 5.114 tBTUs towards the 11 tBTU goal.

Clean Energy Standard

In 2016, the NYPSC issued an order establishing a Clean Energy Standard (the "CES Order") to implement the clean energy goals of the State Energy Plan. Pursuant to the CES Order, load serving entities identified in the order are required to purchase Zero Emission Credits ("ZECs") from the New York State Energy Research Development Authority ("NYSERDA") to support the preservation of existing at-risk zero emissions nuclear generation. The Authority is not subject to NYPSC jurisdiction for purposes of the CES Order but has assumed an obligation to purchase ZECs consistent with the terms of the CES Order and intends to seek recovery of such costs from the Authority's customers. In January 2017, the Authority's Trustees authorized (a) participation in the NYPSC's ZEC program and (b) execution of an agreement with NYSERDA to purchase ZECs associated with the Authority's applicable share of energy sales. The Authority and NYSERDA executed an agreement covering a two-year period from April 1, 2017 to March 31, 2019 under which the Authority committed to purchase ZECs in a quantity based on its proportional load in the New York control area. The Authority and NYSERDA executed an additional agreement covering a nine-year period from April 1, 2020 to April 1, 2029 under which the Authority committed to purchase ZECs in a quantity based on its proportional load in the New York control area, subject to certain adjustments. As of December 31 2021, the Authority estimates that it will incur ZEC purchase costs associated with participation in the ZEC program of approximately $355.6 million in aggregate over the 2022-2025 period, of which approximately $3.5 million is not expected to be recovered under customer contracts that predate the adoption of the CES Order. As of December 31, 2021, the Authority has paid $271.3 million in ZEC purchase costs.

The current Clean Energy Standard set by the NYPSC requires that 70% of the State's electricity come from renewable sources by 2030. In support of the Clean Energy Standard goal for the State, in September 2021, the Authority entered into an agreement with the New York State Energy Research Development Authority ("NYSERDA") under which the Authority will be able to purchase renewable energy credits ("RECs") for certain of its customers starting in 2024. The Authority intends to seek recovery of costs associated with the agreement through sales of RECs by the Authority to the Authority's customers. The Authority is collaborating with its customers to help them achieve the Clean Energy Standard goals in ways that best meet their needs, which may include purchases of RECs from NYSERDA or from large-scale renewable projects contracted by the Authority in future procurements.

Niagara Parkway Redevelopment

The State plans to replace an underutilized two-mile stretch of the Robert Moses Parkway North in Niagara Falls with open space, scenic overlooks and recreational trails. Construction commenced in 2018 and is expected to take approximately three years to complete with funding to be provided by the Authority. As of December 31, 2021, the Authority had approved up to $46.3 million in funding and has disbursed approximately $46.3 million to complete the project.

Electric Vehicle Acceleration

In 2018, the Authority's Trustees approved an overall allocation of up to $250 million to be used through 2025 for an electric vehicle charging acceleration initiative of which $43 million was authorized for the first phase of the initiative. The Authority will operate a charging network of up to 800 DC fast chargers across the State by 2025. As of December 31, 2021, 60 fast chargers were in operation with approximately $25.6 million has been spent.

(14) Canal Corporation

The Canal Transfer Legislation enacted April 4, 2016, authorized, but does not require, the Authority, to the extent that the Authority's Trustees deem it feasible and advisable as required by the Resolution, to transfer moneys, property and personnel to 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. For the year ended December 31, 2021, the Canal Corporation recognized $2 million in revenues, $69 million in operations and maintenance expenses and $33 million in depreciation expense.

(15) Impact of COVID-19 Pandemic

In March 2020, the World Health Organization declared the novel strain of the coronavirus (COVID-19) a global pandemic and recommended containment and mitigation measures worldwide. As COVID-19 accelerated throughout New York State the Authority paused all non-essential efforts temporarily and focused on maintaining core operations, keeping its workforce safe and preserving cash. As the year progressed and safety precautions implemented, the Authority methodically un-paused in field construction efforts. Significant construction was able to continue on many of the Authority's major capital projects.

To support the resiliency of the generation and transmission facilities of the Authority for the people of the State and power system generally, the Authority has entered into mutual aid agreements with other utility providers in the State and in Canada and is offering assistance to such other utilities through the exchange of employees as well as the sharing of expertise, equipment and materials. These agreements are currently expected to remain in effect through September 2022.

Because of the evolving nature of the outbreak and federal, state and local responses thereto, the Authority cannot predict the extent or duration of the outbreak or what impact it may have on the Authority's financial condition or operations. There can be no assurances that the spread of the Coronavirus and COVID-19 or other highly contagious or epidemic diseases will not have an adverse impact on the Authority's, financial position, results of operations, supply chains and customers. The effects of the pandemic on the Authority's financial performance or operations could be material.

As of December 31, 2021, the Authority incurred costs totaling $31 million in response to the pandemic ranging from critical employee sequestration and sanitization/cleaning supplies to facility protective measures and equipment for a remote workforce. The Authority will pursue eligible federal reimbursement through the State Department of Homeland Security.

REQUIRED SUPPLEMENTARY INFORMATION
(UNAUDITED)

New York Power Authority

Required Supplementary Information

(Unaudited)

Schedule of Changes in the New York Power Authority's Net OPEB Liability and Related Ratios
($ in millions, except percentages)

	June 30,		December 31,		
	2021	2020	2019	2018	2017
Total OPEB liability					
Service cost	$ 20	$ 6	$ 13	$ 12	$ 12
Interest	42	18	39	38	36
Change of benefit terms	(2)	–	–	–	–
Differences between expected and actual experience	(1)	(2)	2	–	–
Change of assumptions	(153)	(3)	(72)	–	–
Canal transfer to the Power Authority OPEB Plan	218	–	–	–	–
Benefit payments	(34)	(12)	(25)	(25)	(22)
Net change in total OPEB liability	90	7	(43)	25	26
Total OPEB liability – beginning	524	517	560	535	509
Total OPEB liability – ending	$ 614	$ 524	$ 517	$ 560	$ 535
Plan Fiduciary Net Position					
Contributions – employer	34	12	25	25	22
Net investment income	136	(36)	122	(35)	88
Benefit payments	(34)	(12)	(25)	(25)	(22)
Administrative expense	–	(1)	(2)	(2)	(2)
Net change in plan fiduciary net position	136	(37)	120	(37)	86
Plan fiduciary net position – beginning	649	686	566	603	517
Plan fiduciary net position – ending	$ 785	$ 649	$ 686	$ 566	$ 603
Net OPEB liability / (asset) – ending	$ (171)	$ (125)	$ (169)	$ (6)	$ (68)
Plan fiduciary net position as a percentage of the total OPEB liability	128%	124%	133%	101%	113%
Covered-employee payroll	$ 227	$ 200	$ 200	$ 177	$ 177
Net OPEB liability / (asset) as a percentage of covered-employee payroll	(75)%	(63)%	(85)%	(3)%	(38)%

Notes to schedule:

The amounts presented for the Authority's 2021 net OPEB liability (asset) was measured as of June 30, 2021 based on valuation results as of December 31, 2019 for the Power Authority's plan and May 1, 2020 for the Canal plan, projected to the measurement date on a no gain/loss basis.

This schedule is intended to present 10 years of data. Additional years will be presented prospectively.

The 2021 amount includes the Canal Corporation transfer to the Power Authority OPEB Plan (merged plan).

New York Power Authority

Required Supplementary Information

(Unaudited)

Schedule of the New York Power Authority's OPEB Contributions

($ in millions, except percentages)

Measurement Date	(a) Contractually / Actuarially determined contribution	(b) Contributions made	Contribution deficiency / (excess)	(c) Covered employee payroll	Contributions as a percent of covered employee payroll column (b ÷ c)
June 30, 2021	$ 34	$ 34	$ –	$ 227	15%
June 30, 2020	12	12	–	200	8%
December 31, 2019	25	25	–	200	13%
December 31, 2018	25	25	–	177	14%
December 31, 2017	40	22	18	177	12%
December 31, 2016	39	24	15	161	15%
December 31, 2015	38	38	–	149	25%
December 31, 2014	33	39	(1)	145	27%
December 31, 2013	41	42	(1)	147	29%
December 31, 2012	41	41	–	143	29%

Notes to schedule:

Contributions: The Power Authority made contributions on a pay as you go basis in 2021 and did not contribute any amount beyond the contractually / actuarially required amounts.

Valuation date: December 31, 2019 for the Power Authority; May 1, 2020 for Canal

Methods and assumptions used to determine contributions:

Actuarial cost method: Entry Age Normal, Level Percent of Salary

Amortization period: Five-year period for differences between the expected earnings on plan investments and actual returns. Differences in assumptions and experience from expected are recognized over the average remaining service lives of all participants in the plan. Changes in benefit terms are recognized immediately.

Asset Valuation: Market Value

Per Capita Claims: The Power Authority - Developed using 2020 projected funding rates using the Power Authority's claims experience from January 1, 2018 through December 31, 2019.
Canal – Developed using Canal claims experience from 2017 through 2019.

Salary increases: Varies by service, 8.0 percent for first year of service, 4.5 percent for 5 years of service, 3.8 percent for 10 years of service, 3.3 percent for 15 years of service, and 3.0 percent for 20 years or more of service.

Participation rates: Assumed 100% of future retirees who meet the eligibility requirements will participate in the OPEB plan.

Discount rate: 7.0%

Mortality: The General Pub-2010 headcount weighted tables were used for active employees and healthy retirees and dependents, while the corresponding Contingent Survivor mortality tables were used for current surviving spouses and the corresponding Disabled Retiree mortality tables were used for disabled participants. To project mortality improvement for years after 2010, the MP-2020 Projection Scale is applied on a fully- generational basis to the base rates.

New York Power Authority

Required Supplementary Information

(Unaudited)

Schedule of Investment Returns for the New York Power Authority OPEB Trust

Schedule of Investment Returns

Measurement Date	Annual money-weighted rate of return, net of investment expense
June 30, 2021	21.00%
June 30, 2020	(5.30)%
December 31, 2019	21.40%
December 31, 2018	(6.30)%
December 31, 2017	16.70%
December 31, 2016	7.00%
December 31, 2015	0.41%
December 31, 2014	3.99%
December 31, 2013	20.41%
December 31, 2012	12.57%

Note:

This schedule is intended to present 10 years of data.

Average rate of return over ten-year period was 9.2%.

New York Power Authority

Required Supplementary Information

(Unaudited)

Schedule of Changes in the Canal Corporation's Net OPEB Liability and Related Ratios

($ in millions, except percentages)

	June 30,		December 31,		
	2021	2020	2019	2018	2017
Change in Net OPEB liability					
Net OPEB liability - beginning	$ 218	$ 198	$ 226	$ 234	$ 205
Service cost	–	4	8	9	7
Interest	–	3	8	8	8
Differences between expected and actual experience	–	–	(8)	–	–
Change of assumptions	–	16	(30)	(18)	20
Canal transfer to the Power Authority OPEB Plan	218	–	–	–	–
Benefit payments	–	(3)	(6)	(7)	(6)
Net change in net OPEB liability	(218)	20	(28)	(8)	29
Net OPEB liability – ending	$ –	$ 218	$ 198	$ 226	$ 234
Covered-employee payroll	N/A	$ 27	$ 27	$ 24	$ 24
Net OPEB liability as a percentage of covered-employee payroll	N/A	807%	733%	942%	975%

New York Power Authority

Required Supplementary Information

(Unaudited)

Schedules Relating to the Employees' Retirement System Pension Plan

($ in millions, except percentages)

Schedule of Proportionate Share of the Net Pension Liability

As of March 31,	Proportion of the Net Pension Liability (Asset) Percentage	Proportionate Share of the Net Pension Liability (Asset)	Covered Employee Payroll	Proportionate Share of the Net Pension Liability (Asset) as a percentage of Covered Payroll	Plan Fiduciary Net Position as a percentage of the Total Pension Liability
2021	0.76%	$ 1	$ 233	0.4%	99.9%
2020	0.77	203	219	92.8	86.4
2019	0.76	53	214	25.0	96.3
2018	0.72	23	205	11.3	98.2
2017	0.72	67	193	35.0	94.7
2016	0.60	96	166	57.4	90.7
2015	0.59	20	150	13.3	97.9
2014	0.60	27	148	18.2	97.2

Schedule of Contributions

Year Ending December 31,	Actuarially Required Contribution	Actual Contribution	Contribution (Excess) Deficiency	Covered Employee Payroll	Contribution as a Percentage of Covered Payroll
2021	$36	$36	$–	$233	15%
2020	30	30	–	219	14
2019	29	29	–	214	14
2018	28	28	–	205	14
2017	28	28	–	193	14
2016	24	24	–	166	15
2015	25	25	–	150	17
2014	28	28	–	148	19
2013	29	29	–	146	20
2012	27	27	–	146	19

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Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards*

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

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the consolidated financial statements of the business-type activities and the aggregate fiduciary fund information of the Power Authority of the State of New York, (the Authority) as of and for the year ended December 31, 2021, and the related notes to the consolidated financial statements, which collectively comprise the Authority's consolidated financial statements as listed in the table of contents, and have issued our report thereon dated March 30, 2022.

Internal Control Over Financial Reporting

In planning and performing our audit of the consolidated financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the consolidated financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's consolidated financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of consolidated financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

KPMG

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

New York, New York
March 30, 2022