2022 Financial Statements

Independent Auditors' Report

The Board of Directors
The New York Independent System Operator, Inc.:

Opinion

We have audited the financial statements of The New York Independent System Operator, Inc. (the Company), which comprise the statements of financial position as of December 31, 2022 and 2021, and the related statements of activities and cash flows for the years then ended, and the related notes to the financial statements.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). 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 Company and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the 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 financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date that the financial statements are issued.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the 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 opinion. 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 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 financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the 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 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 Company'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 financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company'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.

KPMG LLP

Albany, New York
March 15, 2023

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Statements of Financial Position

December 31, 2022 and 2021

Assets		2022	2021
Current assets:			
Cash and cash equivalents	$	49,956,914	52,428,301
Restricted cash		686,855,825	435,540,925
Marketable securities (note 8)		2,931,463	3,090,453
Accounts receivable – net (note 2)		8,583,243	5,064,098
Prepaid expenses		9,239,204	8,557,156
Other current assets		58,140	54,362
Total current assets		757,624,789	504,735,295
Noncurrent assets:			
Regulatory assets (note 3)		20,425,968	24,330,526
Property and equipment – net (note 4)		95,320,827	99,107,009
Other noncurrent assets (note 7)		3,807,413	407,614
Total noncurrent assets		119,554,208	123,845,149
Total	$	877,178,997	628,580,444
Liabilities			
Current liabilities:			
Accounts payable and accrued expenses	$	31,279,698	25,380,525
Market participant settlements		224,311,116	124,689,227
Market participant security deposits		376,070,994	238,081,267
Market participant prepayments		22,798,734	20,784,234
Working capital reserve (note 11)		35,512,840	33,034,551
Long-term debt – current portion (note 6)		27,508,965	22,576,266
Regulatory liabilities – current portion (note 3)		14,035,098	13,089,151
Deferred revenue (note 10)		46,003,096	42,022,799
Other current liabilities (note 8)		3,046,209	3,335,761
Total current liabilities		780,566,750	522,993,781
Noncurrent liabilities:			
Accrued pension liability (note 8)		1,888,710	5,687,702
Accrued postretirement liability (note 8)		4,501,960	6,909,836
Regulatory liabilities (note 3)		30,101,620	28,599,042
Other noncurrent liabilities (notes 7 and 8)		5,217,563	8,278,724
Long-term debt (note 6)		54,902,394	56,111,359
Total noncurrent liabilities		96,612,247	105,586,663
Total liabilities		877,178,997	628,580,444
Net assets without donor restrictions		—	—
Total liabilities and net assets	$	877,178,997	628,580,444

See accompanying notes to financial statements.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Statements of Activities

Years ended December 31, 2022 and 2021

		2022	2021
Revenues:			
Rate Schedule 1 Budgeted tariff charge	$	169,187,350	167,419,840
Regulatory Adjustments to Rate Schedule 1 budget charge		(6,919,849)	(10,941,348)
Application of Overcollections		10,747,323	10,113,103
Rate Schedule 1 tariff charge, net		173,014,824	166,591,595
Federal Energy Regulatory Commission fees recovery		15,120,369	15,361,866
Planning studies revenue		15,952,803	9,107,411
Fees and services		1,177,866	1,026,763
Interest income		1,581,146	10,065
Total revenues		206,847,008	192,097,700
Operating expenses:			
Compensation and related benefits (note 8)		99,707,955	94,258,757
Depreciation (note 4)		25,580,943	25,249,731
Professional fees and consultants		31,737,418	24,157,937
Maintenance, software licenses and facility costs		26,342,468	22,824,114
Federal Energy Regulatory Commission fees		15,120,369	15,361,866
Administrative and other expenses		4,517,019	4,831,924
Insurance expense		3,415,906	3,177,252
Interest expense		2,826,689	2,845,081
Telecommunication expenses		2,746,684	2,649,607
Training, travel, and meeting expenses		838,638	318,950
Northeast Power Coordinating Council fees		157,909	168,659
Change in fair value of marketable securities		533,941	(338,265)
Change in fair value of interest rate swaps (note 7)		(6,678,931)	(3,407,913)
Total operating expenses		206,847,008	192,097,700
Change in net assets without donor restrictions		—	—
Net assets without donor restrictions, beginning of year		—	—
Net assets without donor restrictions, end of year	$	—	—

See accompanying notes to financial statements.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Statements of Cash Flows

Years ended December 31, 2022 and 2021

		2022	2021
Cash flows from operating activities:			
Change in net assets without donor restrictions	$	—	—
Adjustments to reconcile change in net assets without donor restrictions to net cash provided by operating activities:			
Depreciation		25,580,943	25,249,731
Amortization of debt issuance costs		31,254	41,432
Loss on disposition of assets		—	100,021
Change in fair value of interest rate swaps		(6,678,931)	(3,407,913)
Change in fair value of marketable securities		533,941	(338,265)
Change in operating assets and liabilities that provide (use) cash:			
Accounts receivable		(3,519,145)	44,930,886
Market participant settlements		99,621,889	41,608,221
Deferred revenue and other liabilities		7,308,515	17,852,299
Market participant prepayments		2,014,500	14,670,207
Regulatory liabilities		2,448,525	7,337,053
Regulatory assets		3,904,558	6,534,329
Accounts payable and accrued expenses		3,428,432	1,748,211
Prepaid expenses and other assets		(4,085,625)	(159,634)
Working capital reserve		2,478,289	(221,781)
Marketable securities		(374,951)	(298,119)
Pension and postretirement liabilities		(6,206,868)	(2,673,559)
Market participant security deposits		137,989,727	(4,165,611)
Net cash provided by operating activities		264,475,053	148,807,508
Cash flows from investing activities:			
Acquisition of property and equipment (including capitalized interest)		(19,324,020)	(15,796,269)
Proceeds on disposition of assets		—	220,047
Net cash used in investing activities		(19,324,020)	(15,576,222)
Cash flows from financing activities:			
Proceeds from revolving credit facility loan		10,000,000	10,000,000
Repayment of revolving credit facility loan		(10,000,000)	(10,000,000)
Proceeds from 2019 – 2023 budget facility loan		32,000,000	28,400,000
Repayment of 2019 – 2023 budget facility loan		(24,033,333)	(26,333,257)
Repayment of 2014 – 2018 budget facility loan		—	(8,443,000)
Repayment of 2016 – 2019 EMS/BMS facility loan		—	(5,588,333)
Repayment of 2012 Infrastructure Loan		(2,646,316)	(2,761,126)
Repayment of Mortgage and Renovations loans		(1,627,871)	(1,534,224)
Net cash provided by (used in) financing activities		3,692,480	(16,259,940)
Net increase in cash, cash equivalents and restricted cash		248,843,513	116,971,346
Cash, cash equivalents and restricted cash – beginning of year		487,969,226	370,997,880
Cash, cash equivalents and restricted cash – end of year	$	736,812,739	487,969,226
Supplemental disclosure of cash flow information – cash paid during the year for interest, net of capitalized interest	$	2,811,323	2,870,758
Noncash investing activities:			
Property and equipment additions which were accrued but not paid	$	2,790,697	319,957
Property and equipment additions previously accrued which were paid		319,957	1,168,407

See accompanying notes to financial statements.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

(1) Summary of Significant Accounting Policies

(a) Business Description

The New York Independent System Operator, Inc. (NYISO) was formed in April 1997 and commenced operations on December 1, 1999. NYISO is incorporated in the state of New York as a not-for-profit organization. NYISO assumed the responsibilities of its predecessor, the New York Power Pool (NYPP), which had coordinated the reliability of New York State's electric power grid for more than 30 years. The NYISO operates under tariffs and agreements regulated by the Federal Energy Regulatory Commission (FERC). NYISO monitors a network of 11,000 circuit miles of high-voltage transmission lines and serves approximately 400 market participants.

NYISO, in collaboration with its stakeholders, serves the public interest and provides benefit to consumers by maintaining and enhancing regional reliability, operating open, fair and competitive wholesale electricity markets, planning the power system for the future, and providing factual information to policy makers, stakeholders and investors in the power system. The NYISO facilitates fair and open competition in the wholesale electricity markets in which electricity and related services are purchased and sold on the basis of competitive bidding. Billing invoices are issued by NYISO to each market participant to settle transactions occurring in the NYISO markets.

NYISO is governed by an independent board of directors, as well as a committee structure consisting of market participant representatives. In addition to FERC oversight, NYISO is also subject to regulation in certain aspects by the New York State Department of Public Service Commission.

(b) Basis of Accounting and Presentation

The accompanying financial statements have been prepared on an accrual basis of accounting in accordance with U.S. generally accepted accounting principles and Financial Accounting Standards Board Accounting Standards Codification (FASB ASC) Topic 980, *Regulated Operations,* and FASB ASC 958, *Not-for-Profit Entities*.

The preparation of financial statements in conformity with U.S. 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 financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant items subject to such estimates and assumptions include the useful lives of fixed assets, recoverability of regulatory assets, the valuation of derivative instruments, and assumptions utilized in the accounting for employee benefit obligations such as discount rates, return on assets, fair value of investments and other contingencies.

(c) Regulatory Accounting

NYISO's financial statements are prepared in accordance with generally accepted accounting principles for rate-regulated entities. As such, regulators may permit specific incurred costs, typically treated as expenses by unregulated entities, to be deferred and expensed in future periods when it is probable that such costs will be recovered in customer rates. Incurred costs are deferred as regulatory assets when NYISO concludes that it is probable future revenues will be provided to permit recovery of

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

the previously incurred cost. A regulatory liability is recorded when amounts that have been recorded by NYISO are likely to be refunded to customers through the rate-setting process.

(d) Revenue Recognition

Settlements of market participants' energy transactions are not reflected in NYISO's Statements of Activities since they do not represent revenues or expenses of NYISO, as NYISO acts solely as an intermediary in the settlement process. In this role, NYISO receives and disburses funds from and to market participants for each settlement period.

Effective July 1, 2012, NYISO's two FERC-approved tariffs, the Open Access Transmission Tariff (OATT) and the Market Administration and Control Area Services Tariff (Services Tariff), were amended to clarify NYISO's role as the single counterparty to market participant transactions in the NYISO markets. For all market participant transactions in the NYISO markets, flash title passes through NYISO immediately prior to passing to the ultimate buyer and seller of the product. This arrangement reinforces NYISO's authority to continue to net a market participant's offsetting financial positions in NYISO markets for credit and billing purposes; provides clarity in NYISO's legal standing to pursue collection from a bankrupt market participant; and, also complies with the FERC directives on credit policy requirements for competitive wholesale electricity markets.

NYISO's tariffs allow recovery of NYISO's capital requirements, operating expenses and debt service costs through a surcharge assessed to market participants. The revenue from this surcharge, Rate Schedule 1, is earned when energy is scheduled and dispatched. Market participants are then billed for such charges in the subsequent settlement period's invoice.

NYISO's Rate Schedule 1 includes a timing mechanism that effectively meets the requirements of an alternative revenue program set forth in FASB ASC Topic 980, *Regulated Operations*, Subtopic 605, *Revenue Recognition*. Accordingly, revenue is recognized for net financing obligations and capital costs incurred during the reporting period, funding for pension and postretirement benefits, and other rate schedule adjustments, as appropriate, based on the revenue requirement formula in the tariffs.

NYISO also recognizes revenue and an offsetting expense for the annual FERC Assessment Fee (the Assessment Fee). The FERC generally invoices transmission providers in June of each year and payment is due in August. NYISO bills the Assessment Fee based on an estimated rate per megawatt hour applied to each individual transmission customer's actual megawatt hours of transmission usage for the month. Once the FERC invoice is received, NYISO calculates a true up and recovers (or refunds) this true up amount over a six month period following receipt of the invoice. NYISO recognizes the revenue and an offsetting expense each month as the Assessment Fee is billed.

Revenues recorded as planning studies revenues arise from billing and collection services in the study service agreement process performed by NYISO. These revenues are offset by the corresponding study expenses, recorded in operating expenses, which were incurred in performing such studies. A portion of the deposits related to planning studies are nonrefundable and recorded as revenue when received.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

(e) Cash and Cash Equivalents

NYISO considers short-term marketable securities with original maturities of three months or less to be cash equivalents. The cash equivalents at December 31, 2022 and 2021 were held in money market accounts invested primarily in short-term U.S. government obligations. NYISO's cash and cash equivalents consist primarily of funds accumulated for the working capital reserve, for general operating purposes, and amounts for funding certain employee benefit plans.

(f) Restricted Cash

Restricted cash consists primarily of market participant security deposits held in escrow accounts, amounts prepaid by market participants in advance of settlement billing dates, amounts collected on settlement invoices, amounts collected for Transmission Congestion Contract (TCC) auctions, amounts deposited for planning studies, amounts collected for the estimated annual FERC fee and amounts collected for voltage support services. Market participant security deposits are invested at the market participant's choice in taxable money market funds.

The following table details the ending balances for Cash, Cash Equivalents and Restricted Cash amounts as reported on the Statements of Cash Flows:

	2022	2021
Cash and cash equivalents	$ 49,956,914	52,428,301
Restricted cash	686,855,825	435,540,925
Cash, cash equivalents and restricted cash end of year	$ 736,812,739	487,969,226

(g) Property and Equipment

Property and equipment are recorded at cost. NYISO capitalizes property and equipment additions in excess of $5,000 with a useful life greater than one year. Depreciation is computed on the straight-line method over the assets' estimated useful lives of three to five years, except for building and building improvements, which are depreciated on a straight-line basis over 20 years. When assets are retired or otherwise disposed of, the cost and related depreciation are removed, and any resulting gain or loss is reflected in expense for the period. Repairs and maintenance costs are charged to expense when incurred.

The NYISO capitalizes the cost of payroll and payroll-related costs, third-party consulting fees, overhead and interest incurred in the direct development or enhancement of solutions as internal-use software. Development costs incurred during the preliminary project stage and costs incurred for requirements gathering, data conversion activities, training, maintenance and minor enhancements are expensed as incurred. Development costs incurred for the coding, configuration, interfacing, automation and testing of new functionality after the preliminary project stage is complete are capitalized. Capitalized software costs are amortized on a straight-line basis over three years, based on the nature and estimated useful life of the applicable asset. Amortization of capitalized software costs is included in depreciation and amortization expense within the Statements of Activities.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

Long-lived assets are recorded at cost and are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amounts of the assets may not be recoverable. Management is not aware of any events or changes in circumstances that would necessitate a review of any long-lived assets as of the years ended December 31, 2022 and 2021.

(h) Working Capital Reserve

In order to maintain the liquidity and stability of NYISO's markets, NYISO has accumulated a working capital reserve through amounts charged to market participants under the Rate Schedule 1. Any change to NYISO's working capital needs would be billed to market participants in future Rate Schedule 1 charges. Market participants are entitled to interest on their principal contributions to the working capital reserve. Each market participant is allocated interest based on the respective ratio share of each market participant's principal contributions to the total working capital reserve. Accumulated interest on the working capital reserve is distributed annually to market participants.

(i) Market Participant Prepayments

To reduce certain energy and ancillary services credit requirements, Market Participants may choose to prepay to the NYISO, in advance of settlement billing dates, their energy and ancillary services financial obligations. Moreover, certain market participants choose to make advance payments to the NYISO to be applied to future settlement invoices. Market participant prepayments are presented within restricted cash and current liabilities on the accompanying Statements of Financial Position.

(j) Deferred Revenue

Advance payments from developers for planning studies and governance participation fees are reflected as deferred revenue.

Planning study revenue is recognized as earned when costs are incurred and billed to developers to complete such studies. Fees for participation in NYISO's governance process are billed to market participants in advance of the year for which they apply and are amortized over the related governance period. All such unamortized amounts are included in deferred revenue.

(k) Income Taxes

NYISO has been recognized by the Internal Revenue Service as an organization described in Internal Revenue Code (The Code) Section 501(c)(3) and is generally exempt from income taxes under Section 501(a) of the Code. During the calendar years 2022 and 2021, no material unrelated business taxable income was generated by NYISO, and therefore no disclosure is made for federal or state income taxes.

The NYISO has determined prior to recording any benefit in the financial statements that it is more likely than not that the tax position will be sustained upon examination by the appropriate taxing authorities, as required by the Accounting for Uncertainty in Income Taxes Topic within FASB ASC 740, *Income Taxes*. A tax position is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon settlement.

(l) Fair Value

NYISO utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. Fair value is determined based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between the observable and unobservable inputs, which are categorized in one of the following levels:

Level 1: Quoted or published prices (unadjusted) in active markets for identical assets as of the measurement date. An active market is one in which transactions occur with sufficient frequency and volume to provide pricing information on an ongoing basis. Market price data is generally obtained from exchanges or dealer markets.

Level 2: Pricing inputs from other than Level 1 that are observable, either directly or indirectly, such as quoted or published prices for similar assets; quoted or published prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the same term of assets. Inputs are obtained from various sources including market participants, dealers and brokers.

Level 3: Pricing inputs are unobservable and include little, if any, market activity for the investments.

The level in the fair value hierarchy within which a fair value measurement in its entirety falls is based on the lowest-level input that is available for that particular financial instrument.

NYISO's financial instruments consist primarily of cash and cash equivalents, restricted cash, marketable securities, accounts receivable, prepaid expenses, accounts payable and accrued expenses, short-term and long-term debt, and benefit plan assets such that carrying value approximates fair value. The fair value of derivative instruments and benefit plan assets is discussed in notes 7 and 8, respectively.

(m) Pension and Other Postretirement Benefit Plans

NYISO has a defined benefit pension plan covering certain employees upon their retirement. Effective December 1, 2009, NYISO adopted changes to its pension plan to end the accrual of future benefits for most employees and replaced this benefit with equivalent contributions to employee 401(k) plan accounts after December 1, 2009. NYISO also sponsors a defined postretirement benefit medical plan for retired employees and their dependents. NYISO records annual amounts relating to its pension and postretirement plans based on calculations that incorporate various actuarial and related assumptions, including discount rates, mortality, assumed rates of return, turnover rates, and healthcare costs and trend rates. These actuarial and related assumptions are reviewed on an annual basis and modifications are made to the assumptions based on current rates and trends. The effect of modifications made to those assumptions are reasonable based on actual experience and market conditions.

The net periodic costs are recognized with respect to participants eligible for benefits in the pension and postretirement plans. Unamortized amounts expected to be recognized in rates in future years are recorded as a regulatory asset or liability.

(n) Concentration of Credit Risk

Financial instruments that subject NYISO to credit risk consist primarily of market settlement invoices and Rate Schedule 1 revenue due from market participants. As provided in the OATT and Services Tariff, NYISO reviews the creditworthiness of market participants, who are required to either

- maintain certain financial statement criteria and/or approved credit ratings;
- to post with NYISO specified financial security in an amount sufficient to cover their outstanding liability to NYISO; or
- to prepay their obligations in advance of settlement billing dates.

NYISO's tariffs establish specific periods for the adjustment of settlement invoices and for market participant challenges to amounts billed for a particular service period. The first settlement invoice issued for a given month occurs on the fifth business day of the following month. Adjustments may occur and be included on the four-month re-settlement invoice. Market Participants have a five-month period from the initial invoice to review and challenge their settlements from these invoices. The NYISO posts an advisory Final Bill Close-out within two months of the review and challenge period. Market Participants then have approximately one month to review the advisory Final Bill Close-out invoice. The Final Bill Close-out invoice is issued eight months from the initial invoice service period.

As a result, NYISO is exposed to credit risk until all settlement adjustments and final invoices for each service period are finalized and liquidated. As of December 31, 2022, the adjustments and true-ups of all settlement invoices through March 2022 were completed. However, in the event of a market participant default and bad debt loss, Rate Schedule 1 of the OATT allows NYISO to recover bad debt losses from all remaining market participants on future invoices.

(o) Derivative Instruments

NYISO recognizes all derivative instruments as either assets or liabilities in the Statement of Financial Position at their respective fair value. The fair values of NYISO's derivative instruments are quoted by external sources. The changes in the fair value of these derivatives are recorded as a change in fair value of interest rate swaps in the Statement of Activities. Due to NYISO's regulated rates, any changes in fair value of these derivative instruments are recorded as either a Regulatory Asset or Regulatory Liability, as appropriate, and ultimately deferred for recognition due to regulatory recovery of interest costs. Payments on these derivative instruments are recorded and classified as interest expense.

NYISO uses derivative instruments to hedge the effects of fluctuations in interest rates. NYISO is exposed to credit loss in the event of nonperformance by the commercial banks under the interest rate swap agreements. The credit risk related to hedge agreements is limited to the cost to NYISO to replace the aforementioned hedge arrangements with like instruments. NYISO monitors the credit

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

standing of the counterparties and anticipates that the counterparties will be able to fully satisfy their obligations under the hedge arrangements.

The fair value of NYISO's interest rate swaps are determined using pricing models developed based on the LIBOR swap rate and other observable market data (Level 2 inputs).

(p) Debt Issuance Costs

Debt issuance costs are included as a direct deduction to the corresponding debt liability and have been deferred. Debt issuance costs are amortized using the effective interest method over the period of the outstanding debt obligation.

(q) Leases

The Company determines whether an arrangement is a lease at the inception of the arrangement based on the terms and conditions in the contract. A contract contains a lease if there is an identified asset and the Company has the right to control the asset.

ASU Topic 842 was adopted in 2022 and provides a practical expedient for lessees as it relates to separating lease components from non-lease components. The company elected to use this approach with its adoption of Topic 842. In the Statements of Activities, lease expense for operating lease payments is recognized on a straight-line basis over the lease term.

(r) Accounting Pronouncements Recently Adopted

In June 2020, FASB issued ASU 2020-05, *Revenue from Contracts with Customers (Topic 606) and Leases (Topic 842)*. Topic 842 classifies accounting for operating leases on the balance sheet. The NYISO adopted FASB ASU 2020-05, Topic 842 in 2022 and the effect on the balance sheet is $14,932 recorded in Other Current Assets, with a corresponding liability in Other Current Liabilities. Topic 606 was previously adopted.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

(2) Accounts Receivable

NYISO's accounts receivable at December 31, 2022 and 2021 consisted of the following:

		2022	2021
Billed:			
Miscellaneous billed receivables	$	681,867	528,487
Past-due settlement invoices		—	10,300
		681,867	538,787
Unbilled:			
Rate Schedule 1 revenue for December		4,338,013	3,608,392
Miscellaneous unbilled receivables		3,563,362	916,919
		7,901,375	4,525,311
Total	$	8,583,243	5,064,098

Miscellaneous billed and unbilled receivables are for planning study services provided by the NYISO in accordance with the NYISO OATT. These revenues offset the corresponding planning study expenses, which are incurred in performing such studies.

NYISO recovers its Rate Schedule 1 revenue in the invoice following the period of service. Therefore, a portion of unbilled Rate Schedule 1 revenues for December are billed and recovered in January of the subsequent year.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

(3) Regulatory Assets and Liabilities

At December 31, 2022 and 2021, regulatory assets and liabilities consisted of the following:

		2022	2021
Regulatory assets:			
Funding for pension benefits	$	9,416,351	10,617,703
Funding for postretirement deferred charges		11,009,617	10,517,686
Derivative contracts		—	3,195,137
Total regulatory assets		20,425,968	24,330,526
Less current portion		—	—
Noncurrent regulatory assets	$	20,425,968	24,330,526
Regulatory liabilities			
Net Financing and Capital rate timing	$	12,745,198	20,223,861
Rate Schedule 1 transactional volume overcollections		7,387,926	7,944,350
Funding for pension deferred charges		7,364,971	4,767,331
Funding for postretirement benefits		6,507,657	3,607,850
Voltage support service (reactive power) market		1,033,300	2,341,828
Derivative Contracts		3,483,794	—
Rate Schedule 1 underspending		5,613,872	2,802,973
Total regulatory liabilities		44,136,718	41,688,193
Less current portion		(14,035,098)	(13,089,151)
Noncurrent regulatory liabilities	$	30,101,620	28,599,042

(a) Funding for Pension and Postretirement Benefits

The pension and postretirement funding regulatory assets and liabilities reflect the unrecognized pension and postretirement benefit costs that under GAAP for rate-regulated entities are recorded as deferred noncurrent regulatory assets or liabilities. These amounts are expected to be included in future rates.

(b) Funding for Deferred Charges

The NYISO recovers its annual employer cash contributions for both the pension and postretirement benefit plans via Rate Schedule 1. The amounts in funding for deferred charges represents the pension and postretirement benefit costs net of cash contributions.

(c) Rate Schedule 1 Underspending

To the extent that NYISO's spending does not exceed the annual Rate Schedule 1 revenue requirement, a regulatory liability is established for the underspending amount.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

(d) Rate Schedule 1 Transactional Volume Collections

NYISO recovers its costs through a surcharge assessed to market participants via Rate Schedule 1 of the OATT and Services Tariff. To the extent that transactional volumes billed under Rate Schedule 1 fall short of the amount expected when the Rate Schedule 1 surcharge is established, NYISO reflects a regulatory asset for the undercollection amounts. To the extent that transactional volumes billed under Rate Schedule 1 exceed the amount expected when the Rate Schedule 1 surcharge is established, NYISO reflects a regulatory liability for the overcollection amounts.

(e) Voltage Support Service

In order to maintain acceptable transmission voltages on the New York State transmission system, certain market participants within the New York Control Area produce or absorb voltage support service (reactive power). Payments to market participants supplying voltage support service and recoveries from other market participants are assessed via Rate Schedule 2 of the OATT and Services Tariff. Differences between the timing of recoveries and payments for voltage support service that result in undercollections or overcollections are reflected as regulatory assets or liabilities.

(f) Derivative Contracts

NYISO's Rate Schedule 1 tariff does not include the fair value of derivative contracts. Any changes in fair value of these derivative instruments are ultimately deferred for recognition due to regulatory recovery of interest costs. Future payments on these derivative instruments are recorded and classified as interest expense.

(g) Net Financing and Capital Rate Timing

NYISO's Rate Schedule 1 includes a timing mechanism for net financing obligations and capital costs incurred during the reporting period based on the revenue requirement formula in the tariffs. In connection with this rate-making mechanism these amounts are expected to be included in future rates.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

(4) Property and Equipment

As of December 31, 2022 and 2021, property and equipment consisted of the following:

		2022	2021
Software developed for internal use	$	232,154,606	226,808,066
Building, building improvements, and leasehold improvements		107,292,278	106,946,904
Computer hardware and software		61,992,564	56,870,741
Machinery and equipment		8,436,876	8,431,452
Land and land improvements		3,361,818	3,361,818
Furniture and fixtures		2,440,022	2,440,022
		415,678,164	404,859,003
Accumulated depreciation		(347,244,335)	(321,663,392)
Property and equipment, net		68,433,829	83,195,611
Work in progress		26,886,998	15,911,398
Total Property and equipment, net	$	95,320,827	99,107,009

Property and equipment includes interest of $150,534 and $106,338, capitalized during 2022 and 2021, respectively. Total capitalized labor for the years ended December 31, 2022 and 2021 was $6,886,850 and $4,995,015, respectively.

Depreciation expense for the years ended December 31, 2022 and 2021 was $25,580,943 and $25,249,731, respectively.

Costs represented in Work in progress primarily include the Distributed Energy Resources Participation Model, the Block Storage refresh upgrade, and Building Management System replacement projects.

(5) Revolving Credit Facility

On December 14, 2018 NYISO entered into a $30.0 million Revolving Credit Facility with an effective date of January 1, 2019 through December 31, 2023. The proceeds from this Revolving Credit Facility are to be used for working capital purposes. Interest on borrowings under this Revolving Credit Facility is based on NYISO's option of varying rates of interest tied to either the prime rate or the London Interbank Offered Rate (LIBOR). On May 15, 2020, NYISO exercised the Accordion Feature of the Revolving Credit Facility and increased the amount to $50.0 million. On October 18, 2022, the Revolving Credit Facility was amended, removing the use of LIBOR and replacing it with the Secured Overnight Funds Rate (SOFR) as the reference point for interest rates.

At December 31, 2022 and 2021, there were no amounts outstanding on the Revolving Credit Facility. During 2022 $10.0 million in borrowings were made under the Revolving Credit Facility, at an average interest rate of 2.495%. During 2021 $10.0 million in borrowings were made under the Revolving Credit Facility, at an average interest rate of 0.814%.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

(6) Long-Term Debt

At December 31, 2022, the following amounts were outstanding on NYISO's long-term debt:

	2019-2023 Budget facility loan (i)	Mortgage (ii)	Renovations (ii)	2012 Infrastructure loan (iii)	Total
Total outstanding:					
Maturities	$ 53,966,667	2,896,355	3,113,201	22,599,405	82,575,628
Less unamortized debt issuance costs	(57,393)	(2,928)	(3,290)	(100,658)	(164,269)
Total debt, net	$ 53,909,274	2,893,427	3,109,911	22,498,747	82,411,359
Current portion:					
Maturities	$ 23,166,667	1,033,525	693,710	2,646,316	27,540,218
Less unamortized debt issuance costs	(17,455)	(1,133)	(823)	(11,842)	(31,253)
Total current portion	$ 23,149,212	1,032,392	692,887	2,634,474	27,508,965
Long term portion:					
Maturities	$ 30,800,000	1,862,830	2,419,491	19,953,089	55,035,410
Less unamortized debt issuance costs	(39,938)	(1,795)	(2,467)	(88,816)	(133,016)
Total long term portion	$ 30,760,062	1,861,035	2,417,024	19,864,273	54,902,394

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

At December 31, 2021, the following amounts were outstanding on NYISO's long-term debt:

	2019-2023 Budget facility loan (i)	Mortgage (ii)	Renovations (ii)	2012 Infrastructure loan (iii)	Total
Total outstanding:					
Maturities	$ 46,000,000	3,871,094	3,766,333	25,245,721	78,883,148
Less unamortized debt issuance costs	(74,849)	(4,061)	(4,113)	(112,500)	(195,523)
Total debt, net	$ 45,925,151	3,867,033	3,762,220	25,133,221	78,687,625
Current portion:					
Maturities	$ 18,333,333	974,739	653,132	2,646,316	22,607,520
Less unamortized debt issuance costs	(17,456)	(1,133)	(823)	(11,842)	(31,254)
Total current portion	$ 18,315,877	973,606	652,309	2,634,474	22,576,266
Long term portion:					
Maturities	$ 27,666,667	2,896,355	3,113,201	22,599,405	56,275,628
Less unamortized debt issuance costs	(57,393)	(2,928)	(3,290)	(100,658)	(164,269)
Total long term portion	$ 27,609,274	2,893,427	3,109,911	22,498,747	56,111,359

(i) On December 14, 2018, NYISO entered into a $90.0 million Revolving Term Loan Credit Facility (2019–2023 Budget Facility) with an effective date of January 1, 2019 through December 31, 2023. The proceeds from this Term Loan Credit Facility are to be used for capital purchases and significant projects during 2019–2023. Interest on borrowings under this Term Loan Credit Facility is based on NYISO's option of varying rates of interest tied to either the prime rate or LIBOR plus 67.5 basis points.

On October 18, 2022, the Revolving Credit Facility was amended, replacing the use of LIBOR with SOFR as the reference point for interest rates.

The 2019-2023 Budget Facility allows for a maximum of $140.0 million to be drawn over the five-year period, with no more than $90.0 million outstanding at any time. Under the revolving structure, loan amortization in proceeding years restores funds availability sufficient to cover draws totaling $140.0 million through 2023. NYISO must convert each year's annual borrowings to term loans, with the principal and interest payments payable over three years.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

As of December 31, 2022 and 2021, the loan details on the 2019-2023 Budget Facility consisted of the following:

Draw year		2019		2020		2021		2022
Draw amount	$	26,000,000	$	26,600,000	$	28,400,000	$	32,000,000
Converted to term loan		January 2020		January 2021		January 2022		January 2023
Term period		36 months		36 months		36 months		36 months
Maturity date		12/1/2022		12/1/2023		12/1/2024		12/1/2025
As of 12/31/22								
Outstanding balance at fixed interest rate	$	—	$	2,585,547	$	16,138,357	$	27,276,096
Fixed interest rate		N/A		2.900%		2.900%		2.900%
Outstanding balance at variable interest rate	$	—		447,787	$	2,794,976	$	4,723,904
Variable interest rate		N/A		4.913%		4.913%		4.913%
As of 12/31/21								
Outstanding balance at fixed interest rate	$	—	$	17,600,000	$	28,400,000	$	—
Fixed interest rate		N/A		2.900%		2.900%		N/A
Outstanding balance at variable interest rate	$	—		—		—	$	—
Variable interest rate		N/A		0.774%		0.774%		N/A

(ii) On July 8, 2005, NYISO entered into two financing agreements to purchase and renovate a 140,000-square foot office building in Rensselaer, NY. The first agreement is a $14.7 million mortgage to finance the building purchase (Mortgage), and the second agreement represents a $10.0 million line of credit for renovations during an 18-month period, beginning in July 2005 (Renovations Loan). Both agreements were secured by liens on the building and subsequent capitalized renovations. Interest on borrowings under both facilities is due monthly and was based on varying rates of interest tied to LIBOR plus 100 basis points.

Effective November 1, 2021, NYISO refinanced these two financing agreements. The first refinanced agreement is a $4.0 million mortgage for the building purchase (Mortgage), and the second agreement represents a $3.9 million loan for renovations (Renovations Loan). The liens related to the original agreements were released upon refinancing. Interest on borrowings under both facilities is due monthly and is based on varying rates of interest tied to LIBOR plus 67.5 basis points.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

As of December 31, 2022 and 2021, the loan details on the Mortgage and Renovation Loans consisted of the following:

Loan		Mortgage	Renovation
Draw amount	$	4,027,498	3,871,294
Converted to term loan		November 2021	November 2021
Term period		3 Years 9 Months	5 Years 2 Months
Maturity date		8/1/2025	1/1/2027
As of 12/31/22			
Outstanding balance at fixed interest rate	$	2,896,355	3,113,201
Fixed interest rate		5.465%	5.635%
As of 12/31/21			
Outstanding balance at fixed interest rate	$	3,871,094	3,766,333
Fixed interest rate		5.465%	5.635%

(iii) On July 18, 2012, NYISO entered into the 2012 Infrastructure Loan to renovate its facilities in Guilderland, NY and to perform construction at its facility in Rensselaer, NY. The agreement permitted borrowings of up to $45.0 million through July 18, 2014, at which point the full $45.0 million was converted to a term loan. The NYISO is required to make interest only payments for up to 24 months, followed by 17 years of principal and interest payments. Interest on borrowings under the 2012 Infrastructure Loan is due monthly and is based on varying rates of interest tied to LIBOR plus 225 basis points.

On January 31, 2022 the 2012 Infrastructure Loan was refinanced to modify the interest rate spread from 225 basis points to 175 basis points.

As of December 31, 2022 and 2021, the loan details on the 2012 Infrastructure Loan consisted of the following:

		December 31	
		2022	2021
Outstanding balance at fixed interest rate	$	20,196,079	22,549,020
Fixed interest rate		3.649%	4.149%
Outstanding balance at variable interest rate		2,403,326	2,696,701
Variable interest rate		5.870%	2.349%

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

At December 31, 2022, scheduled maturities of NYISO's long-term debt was as follows:

	2019–2023 Budget facility loan	Mortgage	Renovations	2012 Infrastructure loan	Total
2023	$ 23,166,667	1,033,525	693,710	2,646,316	27,540,218
2024	20,133,334	1,095,575	736,412	2,646,316	24,611,637
2025	10,666,666	767,255	782,563	2,646,316	14,862,800
2026	—	—	831,183	2,646,316	3,477,499
2027	—	—	69,333	2,646,316	2,715,649
Thereafter	—	—	—	9,367,825	9,367,825
	$ 53,966,667	2,896,355	3,113,201	22,599,405	82,575,628

On March 5, 2021, the Financial Conduct Authority ("FCA"), the regulatory supervisor of USD LIBOR's administrator ("IBA"), announced the future cessation or loss of representativeness of overnight/Spot Next, 1-month, 3-month, 6-month and 12-month USD LIBOR tenor settings. This is set to occur on the earliest of (i) July 1, 2023, (ii) the date that all Available Tenors of USD LIBOR have either permanently or indefinitely ceased to be provided by IBA or have been announced by the FCA pursuant to public statement or publication of information to be no longer representative and (iii) the Early Opt-in Effective Date.

(7) Derivatives and Hedging Activities

NYISO's derivative instruments are economic hedges used to manage its exposure related to changes in interest rates related to long-term debt. By using derivative instruments to hedge exposure to changes in interest rates, NYISO is exposed to credit and market risk. Credit risk is the failure of the counterparty to perform under the terms of the derivative contract. When the fair value of a derivative contract is positive, the counterparty owes the NYISO, which creates credit risk. When the fair value is negative, the NYISO owes the counterparty and, therefore, the NYISO is not exposed to the counterparty's credit risk in those circumstances. NYISO minimizes counterparty credit risk in derivative instruments by entering into transactions with high-quality counterparties. Market risk is the adverse effect on the value of a derivative instrument that results from a change in interest rates.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

A summary of the derivative instruments notional amount, fair value, and gain (loss) are represented in the following table:

Loan		Swap Notional amount at inception	Swap Notional amount at December 31, 2022	Swap Fair Value at December 31, 2021	Swap Fair Value at December 31, 2022		2022 Gain (loss) on fair value
2019-2023 Budget Facility (iii)	$	115,000,000	46,000,000	(1,746,719)	1,999,728		3,746,447
2012 Infrastructure Loan (ii)		40,000,000	20,196,079	(715,381)	1,548,009		2,263,390
Mortgage (i)		4,027,498	2,896,355	(313,042)	(13,053)		299,989
Renovations (i)		3,871,294	3,113,201	(419,995)	(50,890)		369,105
Total						$	6,678,931

(i) In February 2005, NYISO entered into two interest rate swap agreements with a commercial bank to fix interest rate payments on the financing of a new office building purchase. The notional amount of debt on the swap agreement for the Mortgage was $14,708,750. NYISO paid a fixed interest rate of 5.79% on the outstanding principal amount of this financing on payments from August 2005 through October 2021. The notional amount of debt on the swap agreement for the Renovations Loan was $10,000,000, and NYISO paid a fixed interest rate of 5.96% on payments from January 2007 through October 2021.

In 2021, the NYISO refinanced the Mortgage and Renovation loans. The notional amount of debt on the swap agreement for the Mortgage was $4,027,498. NYISO pays a fixed interest rate of 5.465% on the outstanding principal amount of this financing on payments from November 2021 through August 2025. The notional amount of debt on the swap agreement for the Renovations Loan was $3,871,294, and NYISO pays a fixed interest rate of 5.635% on payments from November 2021 through January 2027. For the years ended December 31, 2022 and 2021, the fair value of these interest rate swap agreements was $(13,053) and (313,042) for the Mortgage and $(50,890) and (419,995) for the Renovations Loan, respectively, recorded in Other Noncurrent Liabilities. For the years ended December 31, 2022 and 2021 NYISO recorded a fair value gain of $669,094 and $460,064, respectively, related to these swap agreements.

(ii) In July 2012, NYISO entered into an interest rate swap agreement with a commercial bank to fix interest rate payments on the 2012 Infrastructure Loan. The notional amount of debt on the swap agreements was $40,000,000. NYISO paid a fixed interest rate of 4.149% through January 2022. In January 2022 the agreement was amended and the NYISO pays a fixed interest rate of 3.649% from February 2022 through July 2031.

As of December 31, 2022 and 2021, the fair value of this interest rate swap agreement was $1,548,009 and $(715,381), respectively, recorded in Other Noncurrent Assets and Other Noncurrent Liabilities. For the years ended December 31, 2022 and 2021, NYISO recorded a fair value gain of $2,263,390 and $1,059,292, respectively, related to this swap agreement.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

(iii) In April 2019, NYISO entered into an interest rate swap agreement with a commercial bank to fix interest rate payments on the 2019 -2023 Budget Facility loan. The notional amount of the debt on the swap agreement was $115.0 million. NYISO pays a fixed interest rate of 2.9% through December 2026. As of December 31, 2022 and 2021, the fair value of this interest rate swap agreement was $1,999,728 and $(1,746,718), respectively, recorded in Other Noncurrent Assets and Other Noncurrent Liabilities. For the years ended December 31, 2022 and 2021 NYISO recorded a fair value gain of $ 3,746,447 and $1,828,078, respectively, related to this swap agreement.

The following table presents the carrying amounts and estimated fair values of NYISO's interest rate swaps at December 31, 2022 and 2021:

		2022		2021	
		Carrying amount	Fair value	Carrying amount	Fair value
Financial assets:					
Interest rate swaps	$	3,547,737	3,547,737	—	—
Financial liabilities:					
Interest rate swaps		63,943	63,943	3,195,137	3,195,137

(8) Employee Benefit Plans

(a) Defined Benefit Pension and Postretirement Plans

NYISO has a defined benefit pension plan covering certain employees upon their retirement. Effective December 1, 2009, NYISO adopted changes to its pension plan to end the accrual of future benefits for most employees and replaced this benefit with equivalent contributions to employee 401(k) plan accounts after December 1, 2009. There were $2.6M and $0 in NYISO cash contributions made during 2022 and 2021, respectively, to the defined benefit pension plan.

NYISO sponsors a defined benefit postretirement plan to provide medical benefits for eligible retirees and their dependents. NYISO employees who retire on or after age 55 become eligible for these benefits provided they have been credited with at least ten years of NYISO service (5 years of NYISO service for those employees hired before January 1, 2005). The benefits are contributory based upon years of service, with NYISO paying up to 50% of costs for retired employees and up to 25% for their dependents (subject to specified dollar limits). Medical coverage becomes secondary upon Medicare eligibility.

Pursuant to resolutions adopted by NYISO's Board of Directors, NYISO's Retirement Board is responsible for administration of NYISO's pension and postretirement plans, including recommending investment policy to the Board of Directors, and monitoring investment performance. The Retirement Board reports to NYISO's Board of Directors and currently consists of NYISO's Chief Financial Officer, Director of Human Resources, General Counsel, Controller and Assistant Treasurer and one Nonexecutive employee. The Retirement Board provides reports to the Commerce and Compensation Committee of the Board of Directors on at least an annual basis.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

NYISO records the overfunded or underfunded position of a defined benefit pension and postretirement plan as an asset or liability, with any unrecognized prior service costs, transition obligations, or gains/losses reported as recoverable under FASB ASC Topic 980 and recorded as a regulatory asset or liability.

For payment of benefits under the postretirement plan, as noted above, the NYISO established a Voluntary Employee Benefit Association (VEBA) trust in January 2010. The assets held in the VEBA trust reduce the accumulated postretirement benefit obligation as reported on the NYISO's Statements of Financial Position. The VEBA trust held assets of $5,683,676 and $6,947,551 as of December 31, 2022 and 2021, respectively. As noted in the following table, current obligations are assumed to be paid out of the trust assets, with the remaining unfunded obligation to be reflected as a noncurrent liability.

The schedules that follow show the benefit obligations, the plan assets, and the funded status as of December 31, 2022 and 2021, and the change in benefit obligations for NYISO's pension and postretirement plans for the years ended December 31, 2022 and 2021.

		Pension Plan		Postretirement Plan	
		2022	2021	2022	2021
Change in benefit obligation:					
Benefit obligation – beginning of year	$	30,795,089	33,241,538	13,857,387	14,235,127
Service cost		—	—	755,999	847,431
Interest cost		759,807	662,838	385,299	332,311
Actuarial (gain)/loss		(4,672,016)	(1,293,505)	(4,637,020)	(1,468,671)
Participant contributions		—	—	205,077	250,484
Settlements		—	(872,867)	—	—
Benefits paid		(1,388,725)	(942,915)	(381,106)	(339,295)
Benefit obligation – end of year		25,494,155	30,795,089	10,185,636	13,857,387
Change in plan assets:					
Fair value of plan assets – beginning of year		25,107,387	26,041,730	6,947,551	6,163,838
Actual return on plan assets		(2,578,315)	1,058,723	(1,072,623)	886,812
Employer contributions		2,600,000	—	—	—
Participant contributions		—	—	205,077	250,484
Settlements		—	(872,867)	—	—
Benefits paid		(1,388,725)	(942,915)	(381,106)	(339,295)
Expenses paid		(134,902)	(177,284)	(15,223)	(14,288)
Fair value of plan – assets – end of year		23,605,445	25,107,387	5,683,676	6,947,551
Funded Status	$	(1,888,710)	(5,687,702)	(4,501,960)	(6,909,836)

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

The NYISO has determined that the pension and post retirement net actuarial (gain) loss is probable of recovery through the Tariff and has recorded a regulatory asset related to the pension plan and a regulatory liability related to the postretirement plan as of December 31, 2022 and 2021 in the accompanying Statements of Financial Position.

Amounts recognized in the 2022 and 2021 Statements of Financial Position consist of the following:

	Pension Plan		Postretirement Plan	
	2022	2021	2022	2021
Net actuarial (gain)/loss recognized in regulatory assets (liabilities)	$ 9,416,351	10,617,703	(6,507,657)	(3,607,850)
Projected benefit obligation	(25,494,155)	(30,795,089)	(10,185,636)	(13,857,387)
Accumulated benefit obligation	(25,494,155)	(30,795,089)	—	—
Fair value of assets	23,605,445	25,107,387	5,683,676	6,947,551
Unfunded projected benefit obligation	$ (1,888,710)	(5,687,702)	(4,501,960)	(6,909,836)

Net periodic pension expense and postretirement benefit costs include the following components:

	Pension Plan		Postretirement Plan	
	2022	2021	2022	2021
Service cost	$ —	—	755,999	847,431
Interest cost	759,807	662,838	385,299	332,311
Expected return on plan assets	(1,056,253)	(1,054,246)	(433,435)	(385,332)
Amortization of unrecognized (gain)/loss	298,806	306,268	(215,932)	(95,963)
Amortization of unrecognized prior service cost	—	—	—	—
Realized (gain)/loss due to settlements	—	295,918	—	—
Total	$ 2,360	210,778	491,931	698,447

NYISO uses a December 31 measurement date for its pension and postretirement benefit plans.

During 2022, the lump-sum pension benefits paid during the year did not exceed the sum of service and interest cost components. In 2021, the sum of all lump-sum pension benefits paid during the year exceeded the sum of the service and interest cost components of the Pension Plan net periodic benefit cost for the year, resulting in the recognition of a net settlement loss of $295,918 in 2021.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

The following table as of December 31, 2022 and 2021 shows the assumptions used to calculate the pension and postretirement benefit obligations and net periodic cost or credit:

	Pension Plan		Postretirement Plan	
	2022	2021	2022	2021
Benefit obligations:				
Discount rate	5.15%	2.50%	5.25%	2.90%
Net periodic cost or credit:				
Discount rate	2.50%	2.00%	2.90%	2.50%
Expected return on plan assets	4.62%	4.55%	6.38%	6.38%

NYISO measured benefit obligations using the Pri-2012 mortality tables and MP-2021 mortality improvement scale in selecting mortality assumptions as of December 31, 2021 and December 31, 2022.

In 2021, the NYISO adopted the provisions of the American Rescue Plan Act of 2021 by electing to (i) implement the 15-year amortization provisions of the Act in plan year 2019, and (ii) adopt the new stabilized segment rates in the Act effective with the 2020 plan year. The result of the election is the plan's funding balance was increased from $1,198,839 to $1,601,054.

In 2022, the assumed postretirement plan healthcare cost trend rates for participants pre-65 are 6.25% for 2023 to 2024 decreasing to 4.75% in 2029, and the participants post-65 are 6.75% going from 2023 to 2024 decreasing to 4.75% in 2031. In 2021, the assumed postretirement plan healthcare cost trend rates for participants pre-65 are 7.25% for 2022 to 2023 decreasing to 4.5% in 2033, and the participants post-65 are 5.5% going from 2022 to 2023 decreasing to 4.5% in 2026

The following is a gain/loss transaction reflected in the measurement of the benefit obligation for the pension plan, as of December 31, 2022:

- The discount rate changed from 2.5% to 5.15%. This change had the impact of decreasing the projected benefit obligation by approximately $5.7 million.

The following is a gain/loss transaction reflected in the measurement of the benefit obligation for the postretirement plan, as of December 31, 2022:

- The discount rate changed from 2.9% to 5.25%. This change had the impact of decreasing benefit obligation by approximately $4.2 million.

NEW YORK INDEPENDENT
SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

The following benefit payments, which reflect expected future service, are expected to be paid:

		Pension plan	Postretirement plan
2023	$	2,821,044	354,463
2024		2,892,393	423,779
2025		2,484,574	502,808
2026		3,019,952	595,316
2027-2031		10,752,051	4,921,105

NYISO's expected rate of return on plan assets reflects anticipated returns on the pension and postretirement plans' current and future assets. To determine this rate, NYISO considers historical returns for equity and debt securities, as well as current capital market conditions and projected future conditions. The long-term investment objective for NYISO's pension plan is to maximize the total return on plan assets while limiting risk, reflected in volatility of returns, to prudent levels. To that end, NYISO's Retirement Board has appointed and regularly meets with an investment advisor to review asset performance, compliance with target asset allocation guidelines, and appropriate levels of asset diversification. NYISO's investment advisor operates under written guidelines provided by NYISO, which cover such areas as investment objectives, performance measurement, permissible investments, investment restrictions, and communication and reporting requirements.

NYISO's pension and postretirement plan investments are composed of mutual funds and commingled trust funds that are redeemable at net asset value (NAV) on a daily basis. Redemption of such investments generally requires 1 to 2 days' notice prior to redemption. The investments which utilize NAV are listed as Level 2 investments.

The targeted allocation and actual investment mix of the pension plan's assets are as follows at December 31:

	2022		2021	
Asset category	**Target**	**Actual**	**Target**	**Actual**
Fixed income	70%	76%	70%	70%
International and emerging equities	15	11	15	14
Large cap equities	8	7	8	8
Mid cap equities	5	4	5	6
Small cap equities	2	2	2	2
	100%	100%	100%	100%

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

The actual rate of return for the pension plan's assets as of December 31, 2022 and 2021 is as follows:

Asset category	Annual returns December 31 2022	2021
Small cap equities	(9.3)%	29.9 %
Large cap equities	(18.6)	29.4
Mid cap equities	(18.0)	23.9
International and emerging equities	(22.7)	0.7
Fixed income	(6.5)	(0.7)
Total portfolio weighted average	(9.6)%	3.6 %

The fair values of the pension plan assets at December 31, 2022 and 2021 are presented below:

	2022 Fair value			
	Level 1	Level 2	Level 3	Total
Domestic investments:				
Equities:				
Small cap	$ 520,992	—	—	520,992
Mid cap	865,208	—	—	865,208
Large cap	1,567,824	—	—	1,567,824
Total	2,954,024	—	—	2,954,024
Fixed income	—	17,981,447	—	17,981,447
Total	—	17,981,447	—	17,981,447
International and emerging equities	2,712,860	—	—	2,712,860
Total	2,712,860	—	—	2,712,860
Cash and cash equivalents	(42,887)	—	—	(42,887)
	$ 5,623,998	17,981,447	—	23,605,445

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

	2021 Fair value			
	Level 1	Level 2	Level 3	Total
Domestic investments:				
Equities:				
Small cap	$ 618,945	—	—	618,945
Mid cap	1,146,301	—	—	1,146,301
Large cap	2,083,323	—	—	2,083,323
Total	3,848,569	—	—	3,848,569
Fixed income	—	17,691,303	—	17,691,303
Total	—	17,691,303	—	17,691,303
International and emerging equities	3,606,768	—	—	3,606,768
Total	3,606,768	—	—	3,606,768
Cash and cash equivalents	(39,253)	—	—	(39,253)
	$ 7,416,084	17,691,303	—	25,107,387

The targeted allocation and actual investment mix of the VEBA Trust (postretirement) plan's assets are as follows at December 31:

	2022		2021	
	Target	Actual	Target	Actual
Domestic equities	50%	52%	50%	51%
Fixed income	35	34	35	35
International and emerging equities	15	14	15	14
	100%	100%	100%	100%

The actual rate of return for the VEBA Trust (postretirement) plan's assets as of December 31, 2022 and 2021 is as follows:

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

Asset category	Annual returns December 31 2022	2021
Domestic equities	(14.7)%	27.1 %
International and emerging equities	(21.4)	5.5
Fixed income	(14.8)	(1.1)
Total portfolio weighted average	(15.5)%	10.9 %

The fair values of VEBA Trust (postretirement) plan's assets at December 31, 2022 and 2021 are presented below:

	2022 Fair value Level 1	Level 2	Level 3	Total
Domestic equities	$ 2,955,854	—	—	2,955,854
Fixed income	1,914,458	—	—	1,914,458
International and emerging equities	774,887	—	—	774,887
Total	5,645,199	—	—	5,645,199
Cash and cash equivalents	38,476	—	—	38,476
	$ 5,683,675	—	—	5,683,675

	2021 Fair value Level 1	Level 2	Level 3	Total
Domestic equities	$ 3,543,695	—	—	3,543,695
Fixed income	2,299,491	—	—	2,299,491
International and emerging equities	1,005,824	—	—	1,005,824
Total	6,849,010	—	—	6,849,010
Cash and cash equivalents	98,541	—	—	98,541
	$ 6,947,551	—	—	6,947,551

(b) 401(k) Plan

NYISO has a 401(k) Retirement and Savings Plan open to all non-temporary employees. This plan provides for employee contributions up to specified limits. NYISO matches 100% of the first 3% of employee contributions, and 50% of the next 2% of employee contributions. Beginning December 1, 2009, NYISO also contributes funds to employee 401(k) plan accounts equivalent to defined benefit accruals formerly earned in the pension plan.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

Employees are immediately vested in NYISO's matching contributions and become vested in other employer contributions after three years of credited service. The total NYISO contributions to the 401(k) plan were $7,541,564 and $6,899,082 for 2022 and 2021, respectively.

(c) Long-Term Incentive Plan

NYISO's Long Term Incentive Plan provides certain members of senior management with deferred compensation benefits. Benefits are based upon the achievement of three-year performance goals established by the Board of Directors, with participants becoming fully vested and distributions payable for these deferred amounts after the completion of the audited financial statements for the third year. Benefits are paid out in equal installments over three years following the end of the three-year cycle. Accrued Long Term Incentive Plan benefits included in Other Noncurrent Liabilities at December 31, 2022 and 2021 were $4,992,578 and $5,034,420, respectively. The short-term portion of such liability, included in Other Current Liabilities, at December 31, 2022 and 2021, was $2,517,210 and $3,136,302, respectively.

(d) 457(b) Plan – Eligible Deferred Compensation Plan

NYISO's 457(b) Plan provides for certain members of senior management to defer a portion of their current compensation and have it credited under a supplemental unfunded savings program. This Plan is intended to satisfy the requirements of an eligible deferred compensation plan maintained by NYISO as a nongovernment tax-exempt entity under Code section 457(1)(B). Plan participants have the ability to invest these funds in the same investments offered by the NYISO 401(k) plan at their discretion. The investment balance at December 31, 2022 and 2021 was $2,931,463 and $3,090,453, respectively, recorded as marketable securities, and the corresponding deferred compensation liability is recorded in Accounts Payable and Accrued Expenses in the accompanying Statements of Financial Position.

(9) Other Commitments and Contingencies

On July 8, 2005, NYISO purchased an office building to relocate NYISO's alternate control center and to consolidate employees located in leased facilities. In connection with the purchase, management entered into a Payment in Lieu of Taxes (PILOT) Agreement with the Rensselaer County Industrial Development Agency (RCIDA) to achieve certain benefits. Under the terms of this agreement, NYISO was required to make annual payments of approximately $195,000 for the first 10 years. Effective January 1, 2016, this PILOT Agreement was amended to add three additional parcels of land purchased in 2014 and 2015, and to extend the term of the PILOT an additional 10 years. Under the terms of the amendment, NYISO is required to make annual payments of approximately $309,000, over the next 3 years through 2025. The agreement is cancelable at the discretion of NYISO.

NYISO is routinely involved in regulatory actions. In the opinion of management, none of these matters will have a material adverse effect on the financial position, results of operations, or liquidity of NYISO.

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

(10) Deferred Revenue

Deferred revenue at December 31, 2022 and 2021 consisted of the following:

		2022	2021
Advance payments received on planning studies	$	45,521,591	41,533,816
Governance participation fees and other		481,505	488,983
Total	$	46,003,096	42,022,799

(11) Liquidity and Working Capital Reserve

At December 31, 2022 and 2021, financial assets and liquidity resources available within one year for general expenditures, including operating expenses, scheduled principal payments on borrowings, and capital expenditures not financed with debt, include the cash and cash equivalents, accounts receivable and a revolving line of credit.

At December 31, 2022 and 2021, the liquidity consisted of the following:

		2022	2021
Cash	$	49,956,914	52,428,301
Restricted cash		686,855,825	435,540,925
Accounts receivable - net		8,583,243	5,064,098
Total	$	745,395,982	493,033,324

NYISO's cash flows have variations during the year attributable to fluctuation in Rate Schedule 1 recoveries. To manage liquidity, NYISO operates with a balanced budget on a cash flow basis in accordance with policies approved by the Board of Directors. In addition to the liquidity resources stated above, NYISO also has a Working Capital Reserve available to offset temporary imbalances in cash flows and to ensure liquidity and stability of the markets administered by the NYISO.

At December 31, 2022 and 2021, the working capital reserve consisted of the following:

		2022	2021
Market participant contributions through Rate Schedule 1	$	33,000,000	33,000,000
Interest on market participant contributions		2,512,840	34,551
Total	$	35,512,840	33,034,551

(12) Functional Classification of Expenses

NYISO's primary mission is serve the public interest and provide benefits to consumers by maintaining and enhancing regional reliability; operating open, fair, and competitive wholesale electric markets; planning the

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

power system for the future; and providing factual information to policy makers, stakeholders, and investors in the power system. NYISO's departments are specifically designed to support these functions. Those departmental costs are deemed directly identifiable to program services as summarized in the tables below. Other departments that are solely for supporting NYISO, such as administrative and support, are categorized as management and general as summarized in the tables below. For any department that is providing both program services and management and general services, an analysis was performed to allocate the costs based on estimates of the time spent supporting program services or supporting management and general activities and are categorized accordingly.

Operating expenses presented by both natural and functional classifications are as follows for the years ended December 31, 2022 and 2021:

	Year ended December 31, 2022		
	Program Services	Management & General	Total
Compensation and related benefits	$ 58,382,001	41,325,954	99,707,955
Professional fees and consultants	30,693,155	1,044,263	31,737,418
Depreciation	25,580,943	—	25,580,943
Maintenance, software licenses and facility costs	23,792,734	2,549,734	26,342,468
Federal Energy Regulation Commission fees	15,120,369	—	15,120,369
Administrative and other expenses	882,282	7,475,573	8,357,855
Total	$ 154,451,484	52,395,524	206,847,008

	Year ended December 31, 2021		
	Program Services	Management & General	Total
Compensation and related benefits	$ 55,544,707	38,714,050	94,258,757
Professional fees and consultants	23,118,564	1,039,373	24,157,937
Depreciation	25,249,731	—	25,249,731
Maintenance, software licenses and facility costs	20,799,598	2,024,516	22,824,114
Federal Energy Regulation Commission fees	15,361,866	—	15,361,866
Administrative and other expenses	3,140,982	7,104,313	10,245,295
Total	$ 143,215,448	48,882,252	192,097,700

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Notes to Financial Statements

December 31, 2022 and 2021

(13) Subsequent Events

NYISO considers events and transactions that occur after the balance sheet date, but before the financial statements are issued, to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure.

These financial statements were available to be issued on March 15, 2023 and subsequent events have been evaluated through that date.