ANNUAL DISCLOSURE REPORT

of the

LONG ISLAND POWER AUTHORITY

(FISCAL YEAR 2021)

This Annual Disclosure Report does not constitute an offer to sell or solicitation of an offer to buy any securities. The information set forth herein has been furnished by the Authority and LIPA and includes information obtained from other sources, all of which are believed to be reliable. The information and expressions of opinion contained herein are subject to change without notice and nothing herein shall, under any circumstances, create any implication that there has been no change in the affairs of the Authority, LIPA, PSEG, PSEG Long Island, National Grid or Exelon since the date hereof. Such information and expressions of opinion are made for the purpose of providing information to prospective investors and are not to be used for any other purpose or relied on by any other party.

This Annual Disclosure Report contains statements which, to the extent they are not recitations of historical fact, constitute "forward-looking statements." In this respect, the words "estimate," "project," "anticipate," "expect," "intend," "believe" and similar expressions are intended to identify forward-looking statements. A number of important factors affecting the Authority's and LIPA's business and financial results could cause actual results to differ materially from those stated in the forward-looking statements.

References to website addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such websites and the information or links contained therein are not incorporated into, and are not part of, this Annual Disclosure Report.

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INTRODUCTION TO THE AUTHORITY AND LIPA

This Annual Disclosure Report for the year ended December 31, 2021 (together with the Appendices attached hereto, the "ADR") is furnished by the Long Island Power Authority (the "Authority") as required by the various Continuing Disclosure Certificates (the "Continuing Disclosure Certificates") executed and delivered by the Authority relating to certain of its bonds. The ADR provides information relating to the Authority and its wholly-owned subsidiary, the Long Island Lighting Company ("LILCO" or "LIPA," as described below), which does business under the names LIPA and Power Supply Long Island. The Authority, acting through LIPA, provides electric service in its Service Area (the "Service Area") which includes Nassau County ("Nassau County") and Suffolk County ("Suffolk County") on Long Island (except for the Nassau County villages of Freeport and Rockville Centre and the Suffolk County village of Greenport, each of which has its own municipal electric system that supplies and distributes electricity to ultimate consumers within those municipalities) and a portion of the Borough of Queens of The City of New York known as the Rockaways.

Certain of the information contained in this ADR is in addition to that required by the Continuing Disclosure Certificates. Pursuant to the terms of the Continuing Disclosure Certificates, the Authority is under no obligation to update such additional information or include it in any future annual report.

Capitalized terms used but not defined herein have the meanings given to those terms in "Appendix B – Glossary of Defined Terms" attached hereto.

The Authority is a corporate municipal instrumentality and a political subdivision of the State of New York (the "State") exercising essential governmental and public powers. The Authority was created by the State Legislature pursuant to the Long Island Power Authority Act, being Title 1-A of Article 5 (§ 1020 et seq.) of the Public Authorities Law of the State, as amended, including as amended by certain provisions of the LIPA Reform Act (defined below), (the "Act").

The Authority became the provider of electric service in the Service Area on May 28, 1998 by acquiring LILCO as a wholly-owned subsidiary of the Authority through a merger. For the period prior to its acquisition by the Authority, LILCO was an investor-owned utility and is referred to herein as "LILCO." For the subsequent period after its acquisition by the Authority, it is referred to herein as "LIPA." LIPA is a stock corporation formed and existing under the Businees Corporation Law of the State.

Following its acquisition by the Authority, LIPA retained LILCO's electric transmission and distribution systems (the "T&D System"), certain agreements and contracts for power supply and transmission, an 18% ownership interest in Unit 2 of the Nine Mile Point nuclear electric generating station located in Oswego, New York ("NMP2") and certain other assets and liabilities. (For a discussion of these other assets and liabilities, see "CERTAIN OTHER MATTERS – LIPA Assets and Liabilities" in this ADR). The term "System" means the assets of the Authority and LIPA used in furnishing electric service.

The remainder of LILCO's assets (including all of its then-existing fossil-fueled generating units), its employees, and its entire gas supply system were transferred to certain wholly-owned subsidiaries of KeySpan Corporation ("KeySpan"). In August 2007, KeySpan was acquired by National Grid plc, a company organized under the laws of England and Wales ("National Grid plc"). Each subsidiary of KeySpan that acquired assets or employees of LILCO now does business under the name "National Grid" (each such subsidiary is referred to herein as a "National Grid Sub" and collectively the "National Grid Subs").

Relationship of the Authority and LIPA

LIPA is a State corporation and a wholly-owned subsidiary of the Authority. Pursuant to LIPA's organizational documents, the Authority conducts and manages LIPA's business and affairs. Accordingly, LIPA is controlled by the Authority. The Authority is governed by a Board of Trustees (the "Board") as described herein.

The Authority and LIPA are parties to a Financing Agreement (the "Financing Agreement") providing for their respective duties and obligations relating to the financing and operation of the retail electric business in the Service Area, which is included herein by specific cross-reference.

Pursuant to the terms of the Financing Agreement, the Authority is to issue all debt for the Authority and LIPA. This debt includes all Bonds and Subordinated Indebtedness issued and to be issued. The proceeds of all such debt are to be treated as loaned from the Authority to LIPA, which will repay such loans from the revenues it receives from its electric business. To secure the loans, LIPA has pledged all of its revenues to the Authority, which has, in turn, pledged such revenues as security for such debt.

Pursuant to the terms of the Financing Agreement, LIPA conducts the electric business in the Service Area and provides service to customers in the Service Area. The Authority and LIPA are also parties to an Administrative Services Agreement described below under which the Authority provides personnel, personnel-related services and other services necessary for LIPA to provide electric service in the Service Area. See "LONG ISLAND POWER AUTHORITY - Management and Operation of the System."

Proposed Changes to the Authority-LIPA Relationship and Resolution

Prior to its acquisition by the Authority, LILCO was an investor-owned utility. To effectuate the acquisition, the Authority adopted the Resolution (defined below) and purchased all of the outstanding common stock of LILCO with the proceeds of the initial issuance of bonds under the Resolution. That acquisition was the subject of an Internal Revenue Service letter ruling which confirmed that the acquisition would not result in a federal tax liability to the Authority. The Authority's staff recently proposed to simplify the Authority's operations by consolidating the Authority and its subsidiary, and has successfully sought a letter ruling from the Internal Revenue Service to confirm that there would be no federal tax liability to the Authority or LIPA as a result of the merger of LIPA into the Authority. The timing of the merger is not certain but is expected to be this year or next. In addition, in light of the proposed consolidation, the staff proposed amending and restating the Resolution (as so amended and restated, the "Amended and Restated Bond Resolution"), which Amended and Restated Bond Resolution was approved and adopted by the Authority's Board on July 22, 2020. There are conditions to the effectiveness of such amendments as described below.

The Consolidation Amendments

In connection with effectuating the potential consolidation, the Amended and Restated Bond Resolution contains amendments that: (i) reflect the consolidation of LIPA with the Authority and the termination of agreements between the Authority and LIPA in connection with such consolidation; (ii) delete references to agreements between the Authority and LIPA; (iii) delete references to debt of LIPA which is no longer outstanding; (iv) provide for adjustments in flow of funds provisions related to the foregoing; and (v) modify other provisions which would no longer be necessary upon the consolidation of LIPA into the Authority and the assumption of all liabilities of LIPA by the Authority (collectively, the "Consolidation Amendments").

The Additional Amendments

In addition to the Consolidation Amendments, the Authority's staff proposed other amendments unrelated to the proposed consolidation that are generally intended to update the Resolution by (i) amending the definition of Operating Expenses and related flow of funds provisions to permit Payments in Lieu of Taxes to be paid as Operating Expense on the same basis as taxes, (ii) including an enhanced debt service coverage ratio in the Authority's rate covenant (from 100% to 110% of Debt Service, and amounts under all Parity Contract Obligations, payable by the Authority in the applicable fiscal year), (iii) including a debt service coverage ratio as a condition to issuance of Bonds, and (iv) amending various other provisions of the existing Resolution, without regard to whether the proposed merger of LIPA occurs (collectively, the "Additional Amendments" and together with the Consolidation Amendments, the "Proposed Amendments").

Effectiveness

The Proposed Amendments are subject to the consent or deemed consent of the holders of a majority in principal amount of all Outstanding Bonds. As of the date hereof, the holders of approximately 28% of the Outstanding Bonds have consented to the Proposed Amendments set forth in the Amended and Restated Resolution. However, such Proposed Amendments may become effective at a later date as a result of consents or deemed consents of holders of additional Bonds, consents solicited from other Bondholders, or the retirement or defeasance of Bonds which may reduce the principal amount of Bonds Outstanding for purposes of computing the percentage of Bondholders consenting to the proposed amendment.

The Amended and Restated Resolution will be effective upon the filing with the Trustee of consents (which have not been revoked), executed by Holders (or, to the extent provided by the Supplemental Resolution authorizing any series of Bonds, bond insurers or others deemed to be Holders or the underwriters of any series of Bonds), or upon the deemed consent of the Holders, of not less than a majority in principal amount of the Bonds then-Outstanding. The Amended and Restated Resolution provides that following its effectiveness, the Authority will mail notice of such amendment to the Holders of the Bonds as provided in the Resolution. The Resolution provides that, upon the filing of certain proofs with the Trustee as to such consent and the giving of required notice to the Holders of Bonds, the Amended and Restated Resolution and the Amendments set forth therein shall be deemed conclusively binding upon the Authority, the Trustee and the Holders of all Bonds.

Partial Effectiveness

The Authority's Board also authorized staff to file an amended and restated Resolution reflecting only the Proposed Amendments as are consented to, in the event that all Proposed Amendments do not receive the consent of a majority of the holders of Bonds outstanding, or an amended and restated Resolution reflecting only the Additional Amendments, in the event that the consolidation is not accomplished. Certain of the Proposed Amendments may not require the consent of the Holders of Bonds. Notwithstanding inclusion in the Amended and Restated Bond Resolution, the Authority reserves the right to implement any such Proposed Amendments which do not require the consent of the Holders of Bonds in accordance with the terms of the existing Resolution.

System Operation by the Authority

To assist the Authority (acting through LIPA) in providing electric service in the Service Area, the Authority and LIPA have entered into operating agreements, the purpose of which is to provide the Authority and LIPA with the operating personnel and a significant portion of the power supply resources necessary for LIPA to provide electric service in the Service Area. Below is a summary of certain of LIPA's basic operating agreements.

T&D System management including, among other functions, the management of day-to-day operation and maintenance, customer service, billing and collection and meter reading

Commencing January 1, 2014, a wholly-owned subsidiary of Public Service Enterprise Group Incorporated ("PSEG") dedicated to the operations of the T&D System ("PSEG Long Island") became the service provider pursuant to the Amended and Restated Operations Services Agreement (the "2014 OSA"). The PSEG Long Island management company consists of approximately 19 employees at the director level and higher. The PSEG Long Island service company consists of approximately 2,500 employees. PSEG Long Island is also the retail brand for electric service on Long Island. Further information about PSEG and PSEG Long Island can be found at http://www.psegliny.com. No information on that website is included herein by specific cross-reference.

On December 15, 2021, the 2014 OSA was further amended and restated, effective April 1, 2022 (the "OSA" or "reformed OSA"). The OSA has a base term of 12 years, expiring December 31, 2025. See "RECENT DEVELOPMENTS" and "THE OSA" below.

Each year, the Authority and PSEG Long Island, with involvement of the Department of Public Service (the "DPS," which is the staff arm of the New York Public Service Commission (the "PSC")), develop operating and capital budgets and related Performance Metrics for the services provided by PSEG Long Island. The Authority retains the ultimate authority and control over the T&D System assets and certain responsibilities, including: to determine all T&D System rates and charges; to review and approve the Authority's consolidated budget; to represent the Authority's interests in industry and regulatory institutions and organizations; to approve PSEG Long Island's appointment or replacement of its senior executive team, including the president/chief operating officer; and to review and approve power and fuel supply agreements. Additionally, the Authority has the right to undertake such actions, receive additional information, consult with the representatives of PSEG Long Island and make recommendations to PSEG Long Island in order to perform the Authority's oversight responsibilities and obligations. See "THE OSA" below.

Power supply (including capacity and related energy) from the oil and gas fired generating plants on Long Island owned by a National Grid Sub ("National Grid Generation LLC" or "GENCO") ("GENCO Generating Facilities")

LIPA and GENCO executed a Power Supply Agreement (the "PSA") for a term of 15 years that commenced in May 2013, which provides for the purchase of capacity and related energy from approximately 3,600 MW of on-Island generating facilities. The PSA provides this capacity for the term of the agreement and provides LIPA with the option to ramp down (i.e., cease purchasing capacity from) a portion of the PSA units. The PSA also provides for certain penalties related to guaranteed performance levels by GENCO, including unforced capacity ("UCAP") (i.e., capacity adjusted for forced outages) and efficiency levels (heat rate) of the generating facilities. See "THE SYSTEM – Power Supply" below. *This summary of the PSA is not complete and reference is made to the PSA for full and complete statements of such agreement and all provisions. The PSA has been filed with the MSRB's EMMA and is included by specific cross-reference herein. For convenience, a copy of the PSA can also be found on the Authority's website (https://www.lipower.org/about-us/contracts-reports/) under the caption "Major Contracts and Procurement Reports."*

LIPA can also purchase energy on a least-cost basis from all available on-Island and off-Island sources, consistent with existing transmission interconnection and T&D System limitations. In addition to the PSA with GENCO, LIPA purchases approximately 1,620 MW of capacity from generating facilities on Long Island and elsewhere under various other power purchase agreements.

Power Supply and Fuel Management

Effective January 1, 2015, a PSEG Long Island affiliate, PSEG Energy Resources & Trade LLC ("PSEG ER&T"), provides the power supply and fuel management services to LIPA.

LIPA, PSEG Long Island and DPS

The LIPA Reform Act of 2013 (the "LIPA Reform Act") amended certain provisions of the Long Island Power Authority Act and established an office within the DPS to review and make recommendations to the Board, the Authority, and PSEG Long Island related to rates and charges, core utility functions including capital expenditures, the methods employed by PSEG Long Island for providing safe and adequate service, and PSEG Long Island's emergency response plan. The LIPA Reform Act also gives the DPS the responsibility to investigate and mediate customer complaints. Additionally, the DPS was given the power to undertake comprehensive and regular management and operations audits of LIPA and PSEG Long Island, as it does for investor-owned utilities in the State, every five years. The Authority bears the costs and expenses relating to the DPS's oversight role. Under this provision, the DPS conducted and concluded its management and operations audit in June 2018. LIPA and PSEG Long Island have been in the process of implementing the audit recommendations pursuant to an audit implementation plan approved by the DPS and the Board. The next DPS management and operations audit is expected to commence in the fourth quarter of 2022. *The 2018 DPS Management and Operations Audit and the related Implementation Plan can be found on the Authority's website (https://www.lipower.org/about-us/contracts-reports/) under the caption "Management and Operations Audits."* Such information on the website is not included herein by specific cross-reference.

2021 FINANCIAL INFORMATION

The Authority's consolidated financial statements and required supplementary information are attached hereto as Appendix A.

RECENT DEVELOPMENTS

Tropical Storm Isaias, Options Analysis and OSA Reforms

The Task Force Reports

On Tuesday, August 4, 2020, Tropical Storm Isaias landed on Long Island and the Rockaways with rain and wind gusts up to 70 miles per hour. The resulting damage to the electrical system caused approximately 646,000 customer outages, making it the third-most damaging storm to affect the T&D System. The Authority currently estimates approximately $300 million in response and restoration costs associated with Tropical Storm Isaias. It took PSEG Long Island five days to restore power to 75% of customers and eight days to restore power to 99% of customers. Significantly, on the afternoon of the storm, both PSEG Long Island's Outage Management System ("OMS") and telephone system failed. The OMS and its feeder systems are complex, mission-critical information technologies used to report power outages, assess damage, estimate customer restoration times, dispatch trucks, and communicate with customers.

On August 5, the Authority's Chief Executive Officer initiated an independent review (the "Task Force") of the circumstances and root causes that led to the lapses in PSEG Long Island's storm response. The Task Force was charged with providing actionable recommendations and overseeing PSEG Long Island's remediation activities. The Authority committed to reporting the Task Force's findings and recommendations to the Board of Trustees and the public in a 30-Day Report, 90-Day Report, and Final Report. The Task Force presented the 30-Day Report to the Board of Trustees at the September 23, 2020 Board meeting and the 90-Day Report to the Board of Trustees at the November 18, 2020 meeting. The 30-Day and 90-Day Reports included 85 recommendations to improve PSEG Long Island management, emergency preparation and response, and information technology systems, including a recommendation to either terminate or renegotiate the 2014 OSA.

In addition to the 85 Task Force recommendations, the Board of Trustees adopted an additional 87 recommendations (the "Management Recommendations") between December 15, 2020 and March 30, 2022 to improve 15 non-storm operational areas managed by PSEG Long Island, including enterprise risk management, asset management, inventory management, work management, data and information access, budgeting, affiliate services, and information technology system modernization.

At the May 19, 2021 meeting, the Board adopted a resolution replacing the Task Force Final Report with a Quarterly Reporting requirement. The Quarterly Reports address the status of each of the 85 Task Force and 87 Management recommendations based on PSEG Long Island's monthly status reporting to the Authority and describe the status of the Authority's independent verification and validation of each recommendation. The Board adopted the first Quarterly Report on June 23, 2021, the second Quarterly Report on September 22, 2021, the third Quarterly Report on December 15, 2021, and the fourth Quarterly Report on March 30, 2022 (collectively, the "Quarterly Reports").
The 30-Day Report, 90-Day Report and all Quarterly Reports are available on the Authority's website at https://www.lipower.org/reformedcontract/. Those reports are not included herein by specific cross-reference.

The DPS Investigation

In addition to the Authority's Task Force, on August 5, 2020, the Governor directed the DPS to conduct an investigation into utility performance across the State, including the performance of PSEG Long Island. On August 18, 2020, the DPS issued a Notice of Apparent Violations and Direction of Prompt Remedial Action letter to PSEG Long Island for its apparent failures to properly anticipate and/or respond to the weather emergency in accordance with its approved ERP.

On November 13, 2020, the DPS provided a recommendation (the "DPS Recommendation") to the Board as a result of its ongoing investigation of PSEG Long Island's storm response. The DPS Staff identified more than 70 potential violations of PSEG Long Island's ERP. The DPS recommended, among other things, that the Authority:

- evaluate options to terminate PSEG Long Island as the Authority's service provider;
- declare PSEG Long Island's poor performance during Isaias as a *first* failure of the Major Storm Performance Metric as defined in the 2014 OSA (which provides the Authority with the right to terminate the OSA without penalty if PSEG Long Island has a *second* failure of the Major Storm Performance Metric in 2021 or 2022); and
- seek to either terminate or renegotiate the 2014 OSA to enable greater oversight by the Authority and the DPS.

The Recommendations and November Resolution; Lawsuit Against PSEG Long Island

The 90-Day Report and the DPS Recommendation both recommended either termination or renegotiation of the 2014 OSA. Therefore, the Board instructed the Chief Executive Officer to: (i) conduct contingency planning for the termination of the 2014 OSA and report to the Board on the results; and (ii) report on action taken in response to 90-Day Report and DPS Recommendation. In addition, the Board determined that PSEG Long Island's performance was wholly unsatisfactory and directed that all potential contractual, legal, and equitable claims be investigated and pursued.

In furtherance thereof, on December 9, 2020, the Authority filed a complaint in Supreme Court, Nassau County to: (i) recover damages in the amount of not less than $70,000,000 for PSEG Long Island's willful breaches of material obligations under the 2014 OSA between the Authority and PSEG Long Island, and breach of the covenant of good faith and fair dealing implied under the 2014 OSA, based on PSEG Long Island's failure to prepare for and manage restoration efforts during and following Tropical Storm Isaias; and (ii) compel PSEG Long Island to comply with its obligations under the 2014 OSA. This litigation was discontinued by LIPA upon effectiveness of the OSA on April 1, 2022. See "THE OSA" below.

Options Analysis

Pursuant to the Board's direction at the November 2020 meeting, the Authority's Chief Executive Officer and staff developed the Phase I Options Analysis. The Phase I Options Analysis was the first of two reports detailing options to improve the management of the Authority's assets. The Authority has conducted similar analyses on at least four prior occasions – in 1998, 2005, 2011, and 2013.

At the December 2020 Special Meeting, the Board approved a Resolution (i) adopting the Phase I Analysis, (ii) finding that privatization was too costly for customers to merit investing additional staff time and funds to further develop the alternative, and (iii) directing the Authority's Chief Executive Officer to further develop the other alternatives, in a Phase II Options Analysis.

At the April 2021 Meeting, the Board was presented with the Phase II Options Analysis, which provided further refinement of the alternatives outlined in the Phase I Analysis including: 1. Privatization; 2. Resetting the relationship with PSEG Long Island by re-negotiating the 2014 OSA; 3. Seeking a new service provider to improve operations; and 4. Bringing T&D System operations under the Authority's management.

OSA Reforms

On June 27, 2021, the Authority reached a tentative settlement agreement with PSEG Long Island, the terms of which provided improvements to the 2014 OSA in the areas outlined by the Phase II Options Analysis and prescribed by the Authority's Board of Trustees. As of December 15, 2021, PSEG Long Island and LIPA entered into the OSA, which became effective on April 1, 2022 upon approval by the New York State Attorney General and Office of the State Comptroller. The following is a brief summary of certain of the provisions of the OSA. For additional detail, see "THE OSA" below.

In order to provide stronger protections for Service Area customers, the OSA:

- increases the amount of PSEG Long Island's annual compensation at risk from $10 million to $40 million;
- subjects PSEG Long Island to up to 110 detailed Performance Metrics set annually by the Board with a recommendation by the DPS to ensure PSEG Long Island meets the Board's strategic direction for service to customers and industry best practices;
- includes both new and strengthened termination rights and automatic compensation reductions (i.e. default and gating Performance Metrics) for failures to meet minimum emergency response, customer satisfaction, cybersecurity, and reliability standards;
- provides a new DPS investigative process to reduce compensation for failures to provide safe, adequate, and reliable service to customers;
- requires PSEG Long Island to implement plans to fix known operational issues identified by Authority staff or the DPS, with oversight by the Board;
- strengthens PSEG Long Island's dedicated management team with new positions for Chief Information Officer, Chief Information Security Officer, Vice President for Business Services, Director of Human Resources and Director of Emergency Response;
- ensures that all Long Island employees report to managers dedicated to Long Island operations and links the compensation for all PSEG Long Island employees to Service Area performance;
- includes a Duty of Candor with a termination right for failure to timely and accurately disclose significant operational issues that impair PSEG Long Island's ability to provide reliable service, emergency response, cybersecurity, financial impairment, noncompliance with laws, or circumstances that may endanger public health, safety, and welfare;
- has new standards requiring greater long-term planning, transparency, and accountability for delivering projects and services on time and within budget;
- requires PSEG Long Island to demonstrate cost savings or improved service for hiring or retaining PSEG affiliates to perform services for LIPA;
- requires the separation of all LIPA information technology systems from those of PSEG affiliates pursuant to a plan to be filed by July 29, 2022;
- provides the Authority with new rights to independently test and validate the performance of mission-critical information technology systems, such as those that failed during Tropical Storm Isaias; and
- Lastly, the OSA eliminates PSEG Long Island's eight-year term extension option; instead, the OSA will expire on December 31, 2025, subject to extension upon mutual agreement.

In addition, PSEG Long Island agreed to forfeit approximately $30 million for its Tropical Storm Isaias failures including: $19.5 million in payments and credits to the Authority towards the cost of upgrading the information technology and communication systems that failed during the storm; $6.6 million to reimburse customers without power for more than 72 hours for food and medicine spoilage; and $3.9 million in contributions to Long Island-based charities.

For convenience, copies of the Task Force Reports, the various Board Resolutions, and the Options Analysis Reports can be found on the Authority's website at https://www.lipower.org/reformedcontract/. No statement on the Authority's website is included by specific cross-reference herein.

Management Options Upon OSA Termination in 2025

In approving the reformed OSA in December 2021, the LIPA Board of Trustees by resolution directed the Chief Executive Officer to complete a study by year-end 2023 to evaluate the best course of action in advance of the expiration of the OSA on December 31, 2025 and to release such study for public comment. The study shall consider, among other matters, PSEG Long Island's performance in 2022 and 2023, as well as a review of the benefits and considerations of exercising the five-year extension option in the OSA; competitively procuring a management contractor; and bringing T&D System operations under the Authority's management.

In approving the OSA on April 1, 2022, the Office of the State Comptroller required that exercise of the 5-year extension of the PSEG Long Island contract be subject to the approval of the Office of State Comptroller and New York State Attorney General and advised in writing that its approval would only be pursuant to a competitive procurement by LIPA.

Legislative Commission on the Future of LIPA

The State's 2022 budget enacted a Legislative Commission on the Future of LIPA (the "Commission") to investigate and report to the State Legislature on the establishment of the public power model for management of the operations of LIPA, whereby Authority management would directly operate the utility. The Commission will report to the State Legislature on the specific actions, legislation, and timeline necessary to restructure LIPA to bring T&D System operations under Authority management no later than December 31, 2025.

The Commission consists of eight members of the State Legislature appointed by legislative leaders in both houses and of both parties. The Commission will be assisted by an advisory committee consisting of no more than fifteen members, including representatives of business, labor, local government, Indian nations and tribes, economic development, environment, energy, social justice, consumer, civic, and school districts or higher education.

The Commission is tasked with considering in its report (a) the method of governance of the public authority, (b) improved transparency, accountability, and public involvement, (c) improved reliability of the system, (d) the impact on electric rates, (e) improved storm response, (f) the powers required by the Authority to more effectively operate the utility, (g) the oversight role of the DPS and the PSC over the Authority's operation, (h) the impact on existing bonded indebtedness, (i) improved long-term energy planning, (j) compliance with the goals of the CLCPA, (k) increased reliance on renewable energy sources to produce electricity, (l) taxation and PILOTs, (m) the special needs of communities that are or have been impacted by the siting of power generating facilities; and (n) any other matter relevant to the feasibility of establishing a public power model of management for the operation of the Authority.

The Commission is to hold public hearings on the public power model of management by September 30, 2022 and issue a draft report to members of the State Legislature no later than December 31, 2022. The State Comptroller will have the discretion to review the draft report and issue any recommendations no later than February 1, 2023. The Commission will hold additional public hearings no later than February 15, 2023 and issue a final report no later than April 1, 2023, including any legislation required to implement the public power model of management of operations.

The Phase II Options Analysis presented to the Authority's Board on April 28, 2021, described above, found that the public power model of management of operations was feasible and financially attractive, with estimated annual savings of $75 to $80 million per year. The Phase II Analysis concluded that LIPA would need to hire up to 12 new employees, transition 2,500 ServCo employees to LIPA management, segregate certain information technology systems on shared platforms with PSEG Long Island's New Jersey-based affiliates, and transition certain services provided by PSEG affiliate companies (the majority of which are for information technology systems and services) to the Long Island service company or other vendors. As described above, the reformed OSA requires the separation of all LIPA information technology systems from those of PSEG affiliates pursuant to a plan to be filed by July 29, 2022.

For convenience, copies of the Phase II Options Analysis can be found on the Authority's website at https://www.lipower.org/reformedcontract/. No statement on the Authority's website is included by specific cross-reference herein.

Board Policy on Debt and Access to the Credit Markets

The Board asked to periodically review its policy on Debt and Access to the Credits Markets (the "Board Financial Policy") first adopted in December 2015. At the November 2020 meeting, the Authority's Financial Advisor, PFM, presented a Financial Policy Report reviewing the accomplishments of the Board's Financial Policy over the past five years and recommending certain actions for the future. At the December 2020 meeting, the Board adopted the recommendations of the Financial Policy Report, including (i) increasing the fixed obligation coverage ratio target to 1.40x in 2022; and (ii) transitioning funding of the Authority's OPEB Account with funding categorized as an operating expense in LIPA's consolidated budget in a phased-in approach beginning in 2023. These actions are intended to continue to reduce the Authority's debt-to-assets ratio from approximately 95% to a level below 70% by 2030. See " – Impacts from the Coronavirus and COVID-19 Pandemic - *Potential Changes in Customer Demand, Stress Testing and Potential Impact on the Authority"* below.

Impacts from the Coronavirus and COVID-19 Pandemic

Authority Response

The Authority has been taking steps as set forth below to address the ongoing pandemic of the Coronavirus and COVID-19, first, to ensure the health and safety of its employees and second, to sustain the T&D System for Service Area customers. There can be no assurances that the spread of the Coronavirus and COVID-19 or other highly contagious or epidemic diseases will not have a materially adverse impact on the Authority, its financial condition, or operations.

Customer Initiatives

On March 27, 2020, the Board approved staff proposals for temporary emergency modifications to the Authority's tariff for electric service to allow PSEG Long Island, as needed to address COVID-19's impact on customers, (1) to suspend the application of customer late payment charges, (2) to suspend the application of customer reconnection charges (including back-billed demand and service charges), and (3) to extend the grace period for customers to re-enroll in the low-income customer discount program. On May 28, 2020, the State Legislature passed a bill that amended Article 2 of the State's Public Service Law ("Article 2") to prevent residential disconnections during and including a 180-day period following the end of the COVID-19 state of emergency. Although not generally subject to the Public Service Law, the Authority is required by the State's Public Authorities Law to provide its customers the rights and protections provided in Article 2. In May 2021, an extension of the disconnection moratorium was signed into law. That extension expired on December 21, 2021. Commercial disconnections resumed in November 2021 and residential disconnects are scheduled to resume in July 2022.

In April 2022, New York's Governor Hochul announced $567 million would be available statewide for the low-income bill-credit program, including $250 million in the state's fiscal 2023 budget to eliminate pandemic-related utility arrears for low-income households and reduce all other household arrears that accumulated during the pandemic. The Authority is participating in a state-wide energy assistance working group to define how to utilize the $250 million. Program design components are still in process but are expected to provide an estimated $9 to $10 million to Authority customers through the State budget. Program funds are expected to be distributed by August 1, 2022.

The Authority is considering a proposal to forgive all low-income customer arrears incurred prior to May 1, 2022, with customers who are eligible but not yet enrolled in the low-income program provided the opportunity to enroll by December 31, 2022 and receive the forgiveness benefit. Details of the plan design are not yet completed. Arrears of LIPA customers currently enrolled in the low-income program are approximately $28 million. It is anticipated that the additional funds for arrears forgiveness beyond that provided by the State budget would come from existing uncollectible reserves and the uncollectible expense budget variance component of the Delivery Service Adjustment. In addition, according to state filings, a state working group is developing programs that could reduce arrears of those not eligible for the low-income program. See " – Impacts from the Coronavirus and COVID-19 Pandemic - *Potential Changes in Customer Demand, Stress Testing and Potential Impact on the Authority"* below.

Potential Changes in Customer Demand, Stress Testing and Potential Impact on the Authority

As a result of the COVID-19 crisis and the associated reduction in economic activity coupled with a shift to work-from-home for many residential customers, the Authority has experienced changes in electric consumption by service class. Based on data available from smart meters, starting with the implementation of New York State on PAUSE in response to the COVID-19 pandemic in March 2020 through the end of 2021, the Authority saw a reduction in commercial customer consumption of 9% (weather-adjusted). However, this was offset by the impacts of the stay-at-home directive and work-from-home patterns, which resulted in an increase in residential customer consumption of approximately 7% during the same period. As a result, the combined sales from March 2020 through the end of 2021 were relatively unchanged compared to pre-COVID-19 levels.

The Authority developed a 2022 budget plan that anticipated many of the COVID-19 trends would continue. In the first quarter of 2022, commercial customer sales remain approximately 6% below pre-COVID-19 levels and residential customer sales are 7% above pre-COVID-19 levels. On a year-over-year basis, first quarter 2022 sales for commercial customers were 2% above 2021 and residential customer sales were 2% below 2021, resulting in overall 2022 sales remaining at essentially the same level as 2021.

Sales variances stemming from the change in customer's usage patterns in the wake of COVID-19 are captured in the Authority's Revenue Decoupling Mechanism ("RDM"), which allows for the recovery or refund of differences in actual revenues for delivery service compared to the approved budget. Due to a shift to work-from-home for many residential customers and the warmer than normal summer, the Authority's revenues from residential customers exceeded budget by $50 million in 2021. As a result, the Authority is refunding approximately $50 million to its residential customer class in 2022. However, due to the decline in commercial customer usage in 2021, the Authority will collect approximately $37 million from its commercial customer class. To aid its commercial customers from a high bill impact, the Authority's Board elected to limit the RDM rate to a maximum of 5% of delivery service revenues for any customer class with amounts not collected carried forward to subsequent periods. As a result, the Authority will collect approximately $27 million in 2022 and the balance in subsequent years. See "RATES AND CHARGES – Authority to Set Electric Rates" for additional information about the RDM.

As of March 31, 2022, customer arrears totaled approximately $232 million, which is an increase of approximately $49 million and $119 million when compared to March 31, 2021 and March 31, 2020, respectively. To address the significant volatility in the customer receivable arrears balances, the 2022 budget continued to reflect an increase in uncollectible expense, as compared to pre-COVID-19 levels. Additionally, beginning January 2021, any variance of accrued uncollectible expense from the amount in an approved LIPA budget will be captured as a component of the Authority's Delivery Service Adjustment (or "DSA", which allows the Authority to reconcile certain projected costs to actual costs in each year). The Board approved modification of the DSA to capture budget variances related to uncollectible expense during periods affected by a government-ordered or Board-authorized moratorium on service disconnections and for up to two years following the end of such moratorium. Accrued uncollectible expense in 2021 remained approximately $12 million higher than pre-COVID-19 levels; which was consistent with amounts budgeted in 2021. Increased levels of uncollectible expense are expected to continue through 2022. In addition, lower revenues from the suspension of late payment charges continued into 2021; however, late payment charges resumed in January 2022.

The Authority's Board also modified its Board policy on Debt and Access to the Credit Markets allowing for funding capital expenditures from new debt to exceed 64% for 2021 and 2022. As a result, the Authority is currently projecting to fund 68% of its capital expenditures with debt over the three-year period 2022-2024.

The Authority, working with PSEG Long Island, continues to monitor the impacts of the COVID-19 pandemic and will update its financial projections as needed. The Authority uses these financial projections for the planning and implementation of any corrective actions.

During 2021, the Authority experienced $7 million in increased operating and maintenance costs as a result of COVID-19 related activities and safety measures to maintain a safe work environment that were not recoverable through a recovery mechanism. A portion of these higher costs may be eligible for reimbursement from FEMA; however, the amounts of any expected FEMA grant reimbursements cannot be predicted.

In aggregate, non-recoverable costs and lower revenues resulted in an approximate $30 million impact on the Authority's 2021 financial results. However, the higher costs to maintain a safe work environment and lower miscellaneous revenues resulting from the COVID-19 pandemic were offset by lower PSEG Long Island operating and maintenance costs, lower LIPA operating costs, as well as lower short-term debt interest costs and higher investment income earned on the OPEB dedicated account. The overall impact resulted in a fixed obligation coverage ratio of 1.40x which exceeded the 1.35x target in the budget.

Liquidity

The Board Policy on Debt and Access to the Credit Markets requires the Authority to manage its liquidity position to maintain cash on hand of at least $100 million in its operating account and $150 million in its Rate Stabilization Fund at each month-end, as well as having cash on hand and available credit of at least 120 days of operating expenses. At March 31, 2022, the Authority had in excess of 260 days of cash on hand and available credit.

The Authority's short-term borrowing program provides resources to meet interim working capital needs, cash flow requirements due to the seasonality of sales, and cash flow requirements from unforeseen circumstances such as severe weather events. The Authority was authorized to issue short-term borrowings (including its revolving credit facility) up to $1.2 billion.

Additional Information

Additional information about the outbreak of the Coronavirus and COVID-19 and responses thereto can be found on State and local government websites, including but not limited to the Governor's office (https://coronavirus.health.ny.gov/home). Information on that website is not included herein by specific cross-reference.

Integrated Resource Planning and Repowering Studies

The Authority and PSEG Long Island are currently in the process of developing the Authority's 2022 Integrated Resource Plan (the "IRP"), with a report expected to be released to the public by December 2022. The IRP examines potential strategies within the Authority's control to respond to evolving developments in both electricity supply and demand. Given recent changes in law and policy initiatives (e.g., the Climate Leadership and Community Protection Act (the "CLCPA")), as well as the need to plan for the expiration of major contracts, the IRP will provide options that may ultimately result in substantially altering the profile of the Authority's current resource portfolio.

The CLCPA calls for 70% electric generation from renewable energy sources statewide by 2030, and a 100% zero-emissions electric system by 2040. Transitioning to a zero-emissions electric system means both adding new clean sources of energy and retiring older, fossil-fueled power plants. The CLCPA mandates target amounts of clean energy additions for specific technologies. In addition, the Governor has announced more aggressive targets, which have not been formally adopted to date. It is expected that the Authority's shares of these target amounts would be 1,125 of offshore wind (through bundled products or renewable attributes) by 2035, 1,310 MW of distributed solar by 2030, and 750 MW of energy storage by 2030. The IRP will build on these minimum targets and suggest additional flexible resources to complement the intermittency of the wind and solar additions.

A primary objective of the IRP is to provide guidance as to the order, amount, and timing of fossil power plant retirements. In August 2021, National Grid submitted amended compliance plans to New York State Department of Environmental Conservation ("DEC") stating its plans to postpone the retirement of five LILCO-era combustion turbines, totaling 195 MW, until May 1, 2025 so the units will continue to remain available to support near-term system reliability, as contemplated by the DEC regulations. (See "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Environmental – New York State Regulation of NOx Emissions from Power Plants.")

The 2022 IRP is expected to identify additional generating units that could be retired in the next five to seven years, with particular focus on the legacy steam turbines that are still in operation at National Grid's Barrett, Port Jefferson and Northport Generating Stations. Each of the steam turbines have been evaluated in recent years for potential repowering, most recently a study of the Northport steam turbines completed in March 2020, which concluded that: (i) repowering the Northport facility would result in increased cost to the Authority's customers; and (ii) retirement of at least one unit would achieve cost savings for the Authority customers with no expected impact on T&D System reliability.

Suffolk County Payments in Lieu of Taxes

The Authority is exempt from payment of real property taxes. However, by statute, LIPA makes payments in lieu of taxes ("PILOTs") for each parcel of real property it acquired from LILCO. Beginning in calendar year 2015, the LIPA Reform Act capped LIPA's PILOT payments to no more than 2% higher than the prior calendar year. In 2017, the Authority received notices from Suffolk County claiming to enforce liens against certain of its properties allegedly for unpaid real estate taxes. The Authority has paid the full amount of PILOTs it is authorized by law to pay. Furthermore, Suffolk County lacks legal authority to enforce a tax lien on the Authority's property. The Authority has filed a legal action to negate any attempt by Suffolk County to enforce the alleged tax liens. LIPA has also filed suit against the towns in Suffolk County to ensure that they comply with the annual 2% limit on growth in such PILOT. After all initial pleadings were served, all sides filed motions for summary judgment.

On April 1, 2021, the Supreme Court, Suffolk County issued a Decision and Order that found: (1) LIPA's T&D properties are not exempt from real-property taxation for tax years 2014/15 through 2019/20 by reason of LIPA's failure to timely challenge its unlawful assessment as non-exempt, taxable properties by the Town Assessors during those tax years; and (2) compelling LIPA to pay to Suffolk County alleged unpaid real property taxes levied against the T&D properties for tax years 2014/15 through 2019/20 (by stipulation, the judgment includes the 2020/21 tax year). A judgment was entered on October 8, 2021. LIPA filed a notice of appeal from the judgment on October 14, 2021, and the appeal was filed on December 17, 2021. Enforcement of the judgment is stayed pending the determination of LIPA's appeal. LIPA estimates the potential exposure with penalties and interest to be approximately $90 million, growing at a potential addition of $22 million per year in the event of an adverse result on appeal. LIPA obtained regulatory approval from the Board to defer the recovery of these costs from its customers until the conclusion of the appeal process. The Authority does not believe this litigation will have a material adverse impact on its business or the affairs of the Authority or LIPA.

Power Plant Property Tax Litigation

The Authority has filed tax certiorari challenges against the County of Nassau, the Town of Huntington, the Town of Brookhaven and the Village of Port Jefferson related to certain of the power plants subject to the PSA. Some of those municipalities and certain school districts challenged LIPA's right to file tax certiorari cases but the court confirmed LIPA's right to do so in two of those challenges. LIPA currently reimburses National Grid for the property taxes assessed against the plants by the taxing jurisdictions. The property tax challenges in Nassau County are on the E.F. Barrett generating station in Island Park and Oceanside, and the Glenwood Generating Station in Glenwood Landing, and in Suffolk County on the Northport Power Station and the Port Jefferson Power Station.

In December 2018, the Authority entered into settlements with the Town of Brookhaven and the Village of Port Jefferson for the Port Jefferson Power Station that will reduce the Authority's annual property tax payments to approximately 50% of 2019 levels by 2027.

In November 2020, the court approved a settlement with the Town of Huntington and the Northport-East Northport School District of the Authority's property tax challenges on the Northport Power Station. The settlement will reduce the Authority's annual property tax payments to 47% of 2020 levels by 2027. In addition, the Authority will also make a total of $14.5 million and $3 million in payments over the next seven years to the School District and Town, respectively, to help offset the impact of Authority's lower tax payments. As part of the settlement, the Town and School District discontinued their appeals of the court's ruling that LIPA is entitled to challenge the tax assessments on the Northport Power Station. In addition, in April 2021, the Authority amended the above-described settlement with the Village of Port Jefferson to be equivalent to the settlement on the Northport Power Station.

In April 2022, the Nassau County Legislature approved a settlement with LIPA for the Authority's property tax challenges on the E.F. Barrett and Glenwood Landing generating stations that will reduce the Authority's annual property payments for these plants to 47% of current levels by 2027. The settlement agreement was approved by the court in May 2022.

Recent Legislation

On December 24, 2020, the Governor signed into law a bill that amends the Act to provide the PSC with the ability to impose recommendations contained in a DPS comprehensive and regular management and operations audit in circumstances where the audit report indicates a finding of fraud, abuse or mismanagement by the Authority or a service provider. Prior to these amendments; (i) the DPS already possessed the power to undertake comprehensive and regular management and operations audits of LIPA and PSEG Long Island, as it does for all investor-owned utilities in the State, every five years, and (ii) the Authority was already obligated to implement DPS audit recommendations unless the Authority's Board makes a final determination, after notice and public hearing, that a recommendation is inconsistent with the Authority's sound fiscal operating practices, any existing contractual or operating obligations, or the provision of safe and adequate service. To date, the Board has not rejected any of the more than 130 audit recommendations resulting from the 2013 and 2018 audits, and the Authority and PSEG Long Island are currently in the process of implementing the most recent audit recommendations pursuant to an audit implementation plan approved by the DPS and the Board. The next DPS management and operations audit is expected to commence in the fourth quarter of 2022.

In August 2021, legislation was enacted to permit the issuance of additional restructuring bonds by UDSA in an amount not to exceed $8 billion (inclusive of the approximately $4.5 billion of restructuring bonds already issued). Additional restructuring bonds may be issued to refund outstanding indebtedness of the Authority and UDSA for debt service savings, and to fund investment in T&D System resiliency. The Authority and UDSA expect to additional UDSA later this year.

THE OSA

The following is a summary of certain provisions of the OSA. This summary is not complete and reference is made to the OSA for full and complete statements of such agreement and all provisions. The OSA has been filed with the Municipal Securities Rulemaking Board's ("MSRB") EMMA and is included by specific cross-reference herein. For convenience, a copy of the OSA can also be found on the Authority's website (https://www.lipower.org/about-us/contracts-reports/) under the caption "Major Contracts and Procurement Reports." In addition, see "RECENT DEVELOPMENTS – Tropical Storm Isaias and Options Analysis" above.

Compensation Paid to PSEG Long Island and its Affiliates. Through 2021, the 2014 OSA provided for an annual fixed management services fee (approximately $68.0 million in 2021) and an annual incentive compensation pool (approximately $10.2 million in 2021), both indexed for inflation. The incentive compensation pool was earned based on favorable performance relative to approximately 26 Performance Metrics. Any revisions to the Performance Metrics included in the 2014 OSA were subject to mutual consent of LIPA and PSEG Long Island. PSEG Long Island's incentive compensation for 2020 was $9.1 million, which PSEG Long Island waived in consideration of the resolution of disputes with the Authority following Tropical Storm Isaias. The 2021 incentive compensation was approximately $9.4 million.

The reformed OSA effective April 1, 2022, provides for an annual fixed management services fee (approximately $39.9 million in 2022), a variable compensation pool (approximately $21.0 million in 2022) and a compensation pool subject to DPS reduction (approximately $16.6 million in 2022), all indexed for inflation. The variable compensation pool is earned based on performance relative to up to 110 Scope Function-specific Performance Metrics set annually by the Authority (with a recommendation to the Authority's Board by DPS) and certain Gating Performance Metrics (as such terms are defined in the OSA). The compensation pool subject to DPS reduction is paid to PSEG Long Island unless the Board accepts a DPS recommendation to reduce the pool after a DPS determination that PSEG Long Island failed to follow its Emergency Response Plan or failed to provide safe, adequate and reliable service to LIPA customers.

Generally, costs and expenses (with no mark-up or profit) incurred by PSEG Long Island while providing operations services are treated as Pass-Through Expenditures and are paid by the Authority under the OSA rather than from management services fees.

In addition to management services fees, the Authority pays PSEG Long Island for services provided by PSEG affiliate companies as Pass-Through Expenditures. The majority of services provided by PSEG affiliates (approximately $21 million annually) are for certain information technology systems and services, with other costs related to human resources, procurement, payroll, accounts payable, enterprise risk management, legal, treasury, and other miscellaneous services. The reformed OSA adds senior manager positions dedicated to the Authority's operations, including a Chief Information Officer, Chief Information Security Officer, Vice President of Business Services, Director of Human Resources, and Director of Emergency Services. These new senior manager positions are primarily dedicated to services previously managed by PSEG affiliates. Under the OSA, LIPA and PSEG Long Island have further agreed to establish and maintain information technology systems that are separate and distinct from the systems, data, reports, and information of PSEG Long Island's affiliates based in New Jersey and to form a cross-functional team to develop a plan by July 29, 2022 to separate all information technology systems. Additionally, the reformed OSA requires PSEG Long Island to demonstrate cost savings or improved service for hiring or retaining PSEG affiliates to perform services for the Authority. The Authority expects these actions to significantly reduce the services provided by PSEG affiliate companies over time.

Additionally, a PSEG Long Island affiliate, PSEG ER&T, provides power supply and fuel management services to LIPA under a separate contract from the OSA at a cost of approximately $19 million per year, indexed for inflation.

Performance and Gating Performance Metrics. The variable compensation pool paid to PSEG Long Island each year is determined by performance relative to Performance Metrics and Gating Performance Metrics. The goal of the Performance Metrics is to achieve the strategic direction defined by the Authority's Board of Trustees for service to customers and industry best practices. Prior to 2022, any revisions to the Performance Metrics included in the 2014 OSA were subject to mutual consent of the Authority and PSEG Long Island. Starting in 2022, Performance Metrics are proposed annually by the Authority for final recommendation to the Board by DPS after consideration of PSEG Long Island's comments. Additionally, Gating Performance Metrics are intended to discourage singularly poor performance. Failure to achieve Gating Performance Metrics, which relate to cost management, emergency preparation and response, customer satisfaction and reliability, can reduce the variable compensation pool by 15% to 100%, depending on the metric.

PSEG Long Island and ServCo Employees. Under the OSA, PSEG Long Island provides 19 of the 33 senior managers at the director level or higher and executes management services generally as an independent contractor for the T&D System on behalf of LIPA in accordance with the standards set forth in the OSA.

ServCo, a subsidiary service company of PSEG Long Island, provides 14 of the senior managers at the director level or higher (and currently five of the 19 PSEG Long Island senior manager positions) and substantially all the operations services under the OSA. ServCo consists of approximately 2,500 employees, including the legacy LILCO and National Grid employees that transitioned employment to ServCo upon the effectiveness of the 2014 OSA. The salary and benefit costs of ServCo employees are a Pass-Through Expenditures paid by the Authority. Upon the termination of the OSA, PSEG Long Island will transfer all Membership Interests in ServCo to LIPA or, at LIPA's direction, its designee, at no cost.

Management Services. Under the OSA, except for certain rights and responsibilities reserved to LIPA, PSEG Long Island assumes and undertakes the rights and responsibilities for management of the T&D System and the establishment of programs and procedures with respect thereto, including: all electric transmission, distribution and load servicing activities for the safe and reliable operation and maintenance of the T&D System; day-to-day operation of the T&D System; power supply and planning and implementation of clean energy programs; engineering activities; preparation of recommended capital plan; preparation of long- and short-range planning analyses and forecasts; customer services; maintaining information technology and cyber-security of the T&D System; finance, accounting, budgeting, longer-term financial forecasting and treasury operations related to the T&D System; and other general activities such as information technology, human resources, procurement, communications, environmental health and safety compliance, enterprise risk management, and implementation of emergency response and reporting.

LIPA has policy-making and oversight responsibilities and obligations for the operation and maintenance of the T&D System consistent with the LIPA Reform Act and OSA. The OSA now also requires PSEG Long Island to adhere to Board recommendations related to operations services that are also recommended by DPS. LIPA's specific rights and responsibilities with respect to the T&D System include: the right to determine all T&D System rates and charges and establish policies that govern those rates and charges; the right to review and approve the consolidated budget; the right to review and make recommendations with respect to all planning studies and load forecasts; the right to approve all power supply procurements and wholesale contracts; the right and responsibility to establish the vision and strategic directions pursuant to which PSEG Long Island will develop strategic plans; the right to guide the strategic planning and policy with respect to wholesale markets, integrated resource plan, and clean energy programs; the right to approve changes to LIPA's small generator interconnection process; the responsibility for financing the business and operations of the Authority and LIPA; the right to conduct governmental relations, external affairs, and communications related to the interests, operations, and responsibilities of LIPA; access to and ownership of T&D System information systems; responsibility for compliance with any financing documents and administration of debt service for all debt of the Authority and LIPA; overall responsibility for the Authority's and LIPA's legal matters, including reporting and related legal compliance; and the right to approve (which approval shall not be unreasonably withheld or delayed) PSEG Long Island's decisions regarding the appointment or replacement of PSEG Long Island's President and Chief Operating Officer, the four most senior executive managers responsible for operations, customer care, power supply/wholesale marketing, and administration, the Chief Information Officer, the Chief Information Security Officer, the Director of Emergency Management, the Vice President of Business Services, the Vice President of Legal, the Director of Human Resources and any other Senior Manager who is a Vice President level, Managing Director level, or above.

Termination of OSA. The OSA contains customary events of default, including bankruptcy, payment failures and failure to perform material obligations under the agreement, as well as cure rights. The OSA may be terminated upon an event of default that has not been timely cured. If a bankruptcy-related event of default occurs under the OSA, the OSA terminates immediately without further action by the non-defaulting party. For payment defaults or, in the case of PSEG Long Island and certain of its affiliates only, credit support-related defaults, the non-defaulting party may terminate upon not less than 15 Business Days' written notice to the other party. For other events of default, generally, LIPA may terminate no later than 18 months after written notice and PSEG Long Island may terminate no earlier than 18 months after written notice. Immediately upon the expiration or any earlier termination of the OSA, PSEG Long Island will transfer the membership interests in ServCo and all corporate books and records to LIPA or, at LIPA's direction, its designee at no cost to LIPA or its designee. LIPA and PSEG Long Island will mutually agree upon such instruments, agreements and other documents as may be reasonably necessary to effect such transfer.

Additional LIPA Termination Rights. LIPA may also terminate the OSA at any time upon not less than six months' notice in the event (i) the T&D System is sold, transferred or assigned, in whole or in part, to a federal, state or municipal governmental entity or to a private entity (a "LIPA Privatization") or (ii) LIPA has determined to operate and maintain the T&D System with its own employees (a "LIPA Municipalization"). In addition, if a Change of Control (as defined in the OSA) of PSEG Long Island or certain affiliated entities occurs, LIPA may terminate the OSA upon not less than thirty days' notice. The OSA contains Default Metrics related to PSEG Long Island's performance on emergency preparedness and response, customer satisfaction, and cyber security. PSEG Long Island's failing any of the Default Metrics (as defined in the OSA) gives LIPA the right to terminate the OSA. Furthermore, the OSA also contains a Duty of Candor (as defined in the OSA), which gives LIPA the right to terminate the OSA if PSEG Long Island fails to fully and accurately respond to LIPA or DPS requests or to voluntary disclose known matters that may materially impair its performance.

Additional Service Provider Termination Rights. Under the OSA, PSEG Long Island may terminate the agreement in the event of either a (i) LIPA Privatization, (ii) LIPA Municipalization or (iii) Change in Regulatory Law (as defined in the OSA). In the event of a termination of the OSA by PSEG Long Island as a result of a LIPA Privatization, the termination date would be the closing date of the sale, transfer or assignment of the T&D System. In the event of a termination of the OSA by PSEG Long Island by reason of a LIPA Municipalization, the termination date would be the effective date of LIPA's employment of the T&D System operating and maintenance personnel or LIPA's acquisition of PSEG Long Island service company, whichever first occurs. PSEG Long Island is required to provide LIPA with no less than six months' prior written notice of termination by reason of a LIPA Privatization or LIPA Municipalization unless PSEG Long Island receives less than six months' notice from LIPA of such event. If PSEG Long Island exercises its right to terminate the OSA by reason of a Change in Regulatory Law, the termination notice period would generally extend for 12 or 14 months. In the case of a Change in Regulatory Law that subjects PSEG Long Island (or any of its affiliates that provides Operation Services under the OSA) to rate or other substantive regulation by the DPS or any other state utility commission, the OSA will automatically terminate without notice or further action of the Parties one day prior to the effective date of such Change in Regulatory Law, unless PSEG Long Island agrees in writing to waive its termination right relating thereto. Under the OSA, LIPA has the option to extend the effective date of any termination by reason of Change in Regulatory Law on a month-to-month basis for up to a maximum of six months upon payment of an extension fee calculated in accordance with the OSA. In addition, in the case of a termination of the OSA by PSEG Long Island by assertion of Federal Energy Regulatory Commission ("FERC") jurisdiction over the OSA or PSEG Long Island, the OSA permits LIPA to submit to arbitration the question of whether a delay in the termination of the OSA would be in the public interest and fair and equitable to the LIPA and PSEG Long Island, and should, therefore, be permitted.

Service Provider as LIPA's Agent. The OSA designates PSEG Long Island as LIPA's agent to enter into (a) purchase, rental and other contracts on behalf of and for the account of LIPA to properly operate and maintain the T&D System, to maintain the records of LIPA, to make such additions and extensions to the T&D System and, as may be needed from time to time by LIPA, to enter into contracts for support and back office services related to LIPA, the T&D System, and/or LIPA's assets provided that entering into such contracts is consistent with applicable law under the OSA, and (b) to enter into contracts under LIPA's tariff with retail customers and wholesale customers/generators under LIPA's tariff. The designation as agent enhances the financial benefits and relationship between the parties under the agreement, including the ability to achieve certain sales and use tax savings.

DPS Rate Proceeding and Budgeting. The OSA establishes a process for proceedings for rate proposals that seek to increase rates above 2.5% of aggregate revenues annually, for review by the DPS and recommendation to the Board. The Authority did not submit a rate proposal that would have increased rates in excess of 2.5% of aggregate revenues in 2019, 2020, 2021 or 2022 and currently does not expect to file such a rate proposal in 2023. The OSA specifically acknowledges the Board's sole right to set final and interim rates.

The OSA provides that in any DPS rate proceeding, LIPA will provide evidentiary and other support and submit its views regarding the LIPA portion of the rate plan, and PSEG Long Island will be responsible for the rest of the rate plan, and both parties may submit their own views on the filing. If the DPS proposes a draft recommendation to either party, the parties must work together to determine if the proposed recommendation is consistent with the OSA and LIPA's statutory obligations. If the parties cannot agree on such a conclusion, but the recommendation is presented to the Trustees for approval, PSEG Long Island may present its views about the recommendation to the Trustees at any Board meeting prior to a vote. Upon receipt of a final recommendation from the DPS, the parties have 21 days to negotiate and finalize an updated budget, during which time the Board would not take final action on the DPS recommendation unless necessary to comply with bond covenants or applicable law. If agreement on the budget is not reached within 21 days, then the parties would submit the matter for resolution through expedited binding arbitration. See "RATES AND CHARGES – Authority to Set Electric Rates."

Customer Rate Changes. The OSA allows either party to propose to the other, a rate change deemed necessary, upon the same basis as stated above. Following negotiations, PSEG Long Island will prepare a proposal within 30 days for LIPA's review and within 30 days thereafter, the parties will engage in good faith discussions to agree on the rate change proposal. Following this process, the Authority can implement a change in rates or charges provided it is consistent with the OSA and the LIPA Reform Act.

Voluntary DPS Rate Filing. For any rate filing permitted, but not required under the LIPA Reform Act, the OSA sets forth that the process described above will be followed for a DPS proceeding.

Overall Cap on Certain Service Provider Liabilities. The OSA limits to $40 million the total amount of damages and reductions in variable compensation and in the compensation pool subject to DPS reduction that can be sustained by PSEG Long Island in a year or from a single event or circumstance. Damages for willful misconduct and bad faith breach are not subject to the overall cap.

DERIVATIVES AND HEDGE ACTIVITIES

The Authority uses financial derivative instruments and physical hedges to manage the impact on its electric rates from changes in electric prices, fuel costs and interest rates.

Commodity Hedging

The Authority is exposed to volatile energy commodity prices in the normal conduct of its operations. The costs to either purchase and deliver fuel to produce electricity in power plants under contract to the Authority or to purchase power from other suppliers are recovered from the Authority's customers at cost through a power supply charge (the "Power Supply Charge"). An effective commodity hedging program provides the Authority's customers with greater stability in power supply costs.

The Authority manages the volatility of the Power Supply Charge using financial derivative and physical hedges according to a risk management program and hedging plan overseen by a Power Supply Risk Management Committee ("PRMC"). The Authority's Chief Executive Officer appoints the members of the PRMC consisting of at least three Authority staff, two of which must be drawn from Authority senior management. The PRMC has established, maintains, and monitors processes and controls in the conduct of Authority's Power Supply Hedging Program. The power supply commodity hedging program identifies price and volume targets for power supply commodities with the goals of stable and reasonable fuel and purchased power costs. The Authority has authorized PSEG ER&T to implement this risk management plan as the Authority's agent. As of March 31, 2022, the Authority was holding $243.1 million cash collateral (includes initial and variable margin) from the Authority's clearing brokers for its power supply commodity hedge positions. The mark-to-market value as of March 31, 2022 for the Authority's power supply commodity hedge positions was positive $302.0 million.

Interest Rate Hedging

The Authority manages a portion of its interest rate risk with derivative instruments. As of March 31, 2022, the Authority had five interest rate exchange agreements with a total notional amount of $1.204 billion relating to its outstanding and anticipated future indebtedness and an aggregate mark-to-market value of approximately negative $120 million.

The Authority monitors its interest rate derivative exposure regularly. The Authority is subject to collateral posting requirements on certain of its interest rate derivatives depending on the credit ratings of the Authority and, in certain cases, of the swap insurer Assured Guaranty Municipal Corp. (formerly "FSA") ("Assured"). The Authority has not had to post collateral for its interest rate derivatives. In the event that the Authority were required to post collateral, the Authority may post the collateral or provide alternative credit support in lieu of posting collateral and/or executing collateral documentation.

A downgrade of the Authority's senior lien debt below Baa2, BBB or BBB by Moody's, S&P, or Fitch, respectively, requires the Authority to fully collateralize one of its swaps if the swap's mark-to-market is negative (mark-to-market at March 31, 2022 of positive $3.20 million) and may also require the Authority to execute collateral documentation related to one swap (with a mark-to-market at March 31, 2022 of positive $7.14 million). Regarding a swap insured by Assured (with a mark-to-market at March 31, 2022 of negative $132.31 million), the Authority may have to execute collateral documentation if both the insurer's rating falls below A2 by Moody's and A by S&P, *and* the Authority's senior lien debt rating falls below A3 by Moody's or A- by S&P.

The swap counterparties can terminate the swaps following certain events related to the Authority, including payment defaults or other uncured events of default or termination events, bankruptcy, insolvency, bond-related events, or credit rating downgrades of the Authority and/or the swap insurer (if applicable). Under the majority of the Authority's swap agreements, the counterparties do not have the right to terminate until one of the Authority's senior lien credit ratings is downgraded below investment grade. Some counterparties may also terminate if, following a downgrade of the Authority and/or Assured below certain levels, the Authority does not provide credit support, post collateral or execute collateral documentation.

In March and early April of 2021, the Authority terminated three basis swaps, with an aggregate remaining notional of $792,425,000, which swaps are not included in the discussion above. The Authority, in conjunction with its advisors, determined that given the LIBOR cessation in 2023 and the uncertainty around the trading performance of the Secured Overnight Financing Rate ("SOFR") fallback, terminating the basis swaps under attractive market conditions would reduce the uncertain basis exposure and other associated swap risks (i.e., potential collateral posting, termination). After these terminations, the Authority has no outstanding basis swap exposure. These terminated basis swap transactions have generated net payments to the Authority of $26,938,998 since the execution of the transactions. In September 2021, the Authority's Total Return swap with a notional of $175,000,000 matured.

Under Governmental Accounting Standard Board ("GASB") Statement No. 53, *Accounting and Reporting for Derivative Instruments,* and GASB Statement No. 72, *Fair Value Measurement and Application,* the Authority records its derivatives at fair value. For a further discussion of these matters, and for a summary of certain interest rate exchange agreements, see Note 8 of Notes to Basic Financial Statements. On July 27, 2017, the Financial Conduct Authority announced that it will no longer persuade or compel banks to submit rates for the calculation of the London Interbank Offered Rate Rates ("LIBOR") after 2021 (the "FCA Announcement").

On October 23, 2020, the International Swaps and Derivatives Association ("ISDA") published the Fallback Protocol, which could be used by parties to a derivative transaction to amend existing transactions to make use of the fallback language. That supplement (effective since January 25, 2021) provides fallback language by amending the ISDA LIBOR definitions (including USD LIBOR) to include a fallback rate (USD Compound SOFR) in case of LIBOR discontinuation. The Fallback Protocol provides a mechanism to incorporate the fallback rate for legacy swaps that were executed prior to January 25, 2021, which can be implemented via adherence to the Protocol or bilateral agreements. On March 5, 2021, ICE Benchmark Administration Limited ("IBA") and the Financial Conduct Authority ("FCA") announced that the LIBOR cessation date for most USD LIBOR tenors, including 1-Month LIBOR, will be June 30, 2023. That announcement also triggered the fixing of the USD LIBOR-SOFR fallback spread adjustment. All transactions will remain in LIBOR until the LIBOR cessation date in 2023. The Authority will be adhering to the Fallback Protocol once OSC approval is granted.

RATES AND CHARGES

The Act and the Rate Covenant

The Act requires that any bond resolution of the Authority contain a covenant that it will at all times maintain rates, fees or charges sufficient to pay the costs of operation and maintenance of facilities owned or operated by the Authority; payments in lieu of taxes; renewals, replacements and capital additions; the principal of and interest on any obligations issued pursuant to such resolution as the same become due and payable; and to establish or maintain any reserves or other funds or accounts required or established by or pursuant to the terms of such resolution.

Rate Tariffs and Adjustments

LIPA's base retail electric rates generally reflect traditional rate designs and include fixed customer charges for all customer classes, seasonal energy rates for all customer classes except street lighting, and seasonally differentiated demand charges for non-residential customer classes (greater than 7 kW). Economic development and load retention incentives are provided to a small number of commercial customers. Miscellaneous service charges, pole attachment charges, and wireless rental charges are also assessed monthly. Besides the base delivery service charges, the Authority's electric rates include a Power Supply Charge, a PILOT payments recovery rider (as described below), a rider providing for the recovery of the Suffolk Property Tax Settlement, a Distributed Energy Resources ("DER") Charge to recover the costs of LIPA's customer-side efficiency programs, the DSA, the RDM, and the State Assessment charge to recover the cost of the Department of Public Service Assessment (authorized by Public Service Law Section 18-a and the LIPA Reform Act).

The DSA provides cost recovery for certain items that can vary significantly due to external factors, which items include, among others: debt service (variances in interest rates, capital expenditures), storm expenditures (variances from the annual budget for storm expenses in base rates), accrued bad debt expense (for up to two years following a government or Board-imposed moratorium on customer shut-offs for nonpayment), Service Provider pensions and OPEBs, and incremental expenses incurred during emergencies other than storms and approved by the

Board. The DSA is calculated through the end of September each year, which allows for the bill impact to be known before annual budget approval and the adjustment to be implemented on the following January 1 of each year.

The RDM functions by comparing actual revenues with authorized revenues and crediting (or collecting) any differences due to (or from) customers. The RDM covers all sources of variances in delivery service revenues including any net lost revenues attributable to implementing energy efficiency or net metering programs, any revenue variances (positive or negative) caused by weather patterns, and revenue variances (positive or negative) that result from changes in economic conditions.

Modifications to the Tariff

Information on approved modifications to the Authority's Tariff is available in the "Approved Rulemaking" section of the website: https://www.lipower.org/about-us/tariff/approved-rulemaking/. Information on proposed but not yet approved modifications to the Authority's Tariff is available in the "Proposed Rulemaking" section of the website: https://www.lipower.org/about-us/tariff/proposed-rulemaking/. Such information on the website is not included herein by specific cross-reference.

Power Supply Charge

The Power Supply Charge recovers LIPA's fuel and purchased power costs. It also recovers the costs associated with LIPA's compliance with the State's CES, including costs incurred in complying with REC and ZEC requirements, and may recover costs associated with LIPA's compliance with the CLCPA described below. Effective January 1, 2022, the Power Supply Charge consists of the Market Supply Charge, which recovers LIPA's bypassable costs (i.e., costs which are avoided by LIPA if customers switch to another commodity supplier) from its bundled customers, and the Local Supply Charge, which recovers LIPA's non-bypassable costs (i.e., costs to maintain reliability for all customers) from its bundled and retail choice customers. The Market and Local Supply rates are updated monthly, which is consistent with the process used by other major State electric utilities.

PILOTs

The Act requires the Authority to make payments in lieu of taxes, i.e., PILOTs, related to revenues and to property taxes. The Authority makes payments in lieu of taxes to municipalities and school districts on Authority-owned property it acquired from LILCO equal to the property taxes that would have been received by each such jurisdiction from LILCO if the acquisition by the Authority had not occurred. Part A of the LIPA Reform Act limits increases in PILOTs assessed by municipalities on those facilities to no more than 2% per calendar year, beginning in 2015, which is significantly less than the 6.6% rate of growth of property-based PILOTs over the ten years prior to the LIPA Reform Act. Such PILOTs are recovered in the Authority's base rates, which are adjusted annually for the actual amount of anticipated PILOT payments on Authority-owned property. As discussed above under "RECENT DEVELOPMENTS - Suffolk County Payments in Lieu of Taxes," on April 1, 2021, a court in Suffolk County issued a ruling that the Authority's properties are subject to property taxation and that the Authority is obligated to pay the amounts billed for the years 2014/15 through 2019/20 (by stipulation, the judgment includes the 2020/21 tax year). A judgment was entered on October 8, 2021. LIPA filed a notice of appeal from the judgment and its appeal is pending. Additionally, property tax expense reimbursed to National Grid related to the GENCO units, and property taxes in all other power purchase agreements, are recovered in the Power Supply Charge.

The Authority also makes PILOTs for certain State taxes (including gross receipts taxes) and local taxes (including transit station maintenance surcharges charged by the Metropolitan Transportation Authority of New York) which would otherwise have been imposed on LILCO. The PILOT payments recovery rider allows the Authority to recover PILOTs representing these gross receipts taxes and surcharges.

The Securitization Authority and Restructuring Charges

Part B of the LIPA Reform Act, also referred to herein as the Securitization Law (the "Securitization Law"), created the Utility Debt Securitization Authority ("UDSA") and authorized the issuance of UDSA bonds to retire a portion of the Authority's existing debt. The Securitization Law authorizes the Authority to adopt financing orders that create restructuring property and authorize the issuance of restructuring bonds. The financing orders are irrevocable as the time for any appeal to such financing orders has lapsed. The Securitization Law requires that the proceeds of the restructuring bonds be used by UDSA to purchase restructuring property created by a financing order from the Authority and to pay or fund upfront financing costs. It also requires that the Authority use the proceeds of the restructuring bonds it receives from its sale of the restructuring property to UDSA only to pay approved restructuring costs, which include the costs of repurchasing, redeeming, repaying or defeasing certain of the Authority's outstanding indebtedness and upfront financing costs, and, if funds remain after the approved restructuring costs are paid, to refund or credit to consumers any such surplus, to the extent practical. As required by the LIPA Reform Act and each financing order, each restructuring charge will be adjusted at least annually and if determined to be necessary, semiannually or more frequently, to ensure that the expected collection of the restructuring charge is adequate to timely pay all scheduled payments of principal and interest on the related restructuring bonds and all ongoing financing costs when due.

The LIPA Reform Act mandates that the restructuring charges are irrevocable, non-bypassable consumption-based charges. "Non-bypassable" means that the restructuring charges will be collected from customers, as long as such customer is connected to the T&D System and is taking electric delivery service in the Service Area, even if such customer also produces some of its own electricity or purchases electric generation services from a provider of electric generation services who is not the owner of the T&D System Assets and even if the T&D System Assets are no longer owned by LIPA. Certain customers that self-generate eligible renewable power will only pay restructuring charges based upon their "net-billed" consumption. The obligation of customers to pay the restructuring charges is not subject to any right of set-off in connection with the bankruptcy of LIPA or any other entity.

A restructuring charge is a Transition Charge (defined below) for purposes of the Authority's Electric System General Revenue Bond Resolution (the "Resolution") and amounts collected in respect thereof are not Revenues subject to the lien of the Resolution or the Authority's Electric System General Subordinated Revenue Bond Resolution (the "Subordinated Resolution"). A restructuring charge can only pay debt service on the related restructuring bonds and related costs. All payments from or on behalf of customers, including all Revenues and Transition Charges, are initially deposited into an allocation account maintained by the Authority and allocated daily by the Authority among Revenues transferred to the Revenue Fund and the restructuring charges transferred to one of the collection accounts established under indentures relating to the UDSA restructuring bonds. UDSA issued approximately $4.5 billion of restructuring bonds in several series effectively exhausting UDSA's ability to issue restructuring bonds under the Securitization Law. However, as described above, in August 2021, legislation was enacted that made changes to the Securitization Law to permit the issuance of additional restructuring bonds in an amount not to exceed $8 billion (inclusive of the approximately $4.5 billion of restructuring bonds already issued) to refund outstanding indebtedness for debt service savings and fund investment in System resiliency. Restructuring bonds are not secured by the Trust Estate described herein. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Payment of Revenues Pursuant to Financing Agreement." Restructuring bonds are not obligations of the Authority, LIPA, PSEG Long Island or any of their affiliates and bonds and other obligations issued or incurred by the Authority and LIPA are not obligations of UDSA.

The Authority's bills also recover the restructuring charges owed by the Authority's customers to UDSA. Restructuring charges are collected by LIPA, as the initial Servicer, under servicing agreements between LIPA and UDSA. As Servicer, LIPA is responsible for monitoring the collateral securing the UDSA bonds, taking all necessary action in connection with adjustments to the restructuring charges and certain reporting requirements. However, in its role as T&D System manager under the OSA, PSEG Long Island performs several functions otherwise provided by LIPA including billing and collecting the restructuring charges from customers, meter reading and forecasting. For each issuance of restructuring bonds, UDSA and LIPA also signed an Administration Agreement under which LIPA, acting as Administrator, performs certain administrative and other duties on behalf of UDSA.

Authority to Set Electric Rates

The Board is empowered to set rates for electric service in the Service Area subject only to review and recommendation by the DPS under certain conditions. The LIPA Reform Act mandated that the Authority and PSEG Long Island submit to the DPS any rate proposal that seeks to increase rates above 2.5% of aggregate revenues annually, for review by the DPS and recommendation to the Board. The Board retains final rate-setting power to accept or reject any particular DPS recommendation associated with a rate proposal if the Board determines in its discretion the DPS recommendation is inconsistent with the Authority's sound fiscal operating practices, any existing contractual or operating obligations, or the provision of safe and adequate service. The Authority did not submit a rate proposal that would have increased rates in excess of 2.5% of aggregate revenues in 2019, 2020, 2021 or 2022 and currently does not expect to file such a rate proposal in 2023.

The Authority uses the "Public Power Model" of rate-setting, which makes use of the debt service coverage method in determining revenue requirements. For the Authority this entails an annual fixed obligation coverage ratio on Authority-issued debt and leases of 1.35x for Authority debt and leases and 1.15x for Authority and UDSA debt and leases. The Authority exceeded its target in 2021 by achieving a fixed obligation ratio of 1.40x. With UDSA's restructuring bonds included, the coverage ratio achieved was approximately 1.26x. Depreciation expense, amortization of the acquisition adjustment and of other regulatory assets, and the difference between the accrual expense and actual required cash contributions to PSEG Long Island OPEBs, are non-cash expenses excluded from the Authority's methodology for coverage calculation.

The Authority's coverage ratio targets were codified in a policy on Debt and Access to the Credit Markets, which can be found on its website at https://www.lipower.org/purpose/ under the caption "Board Policies." Such information on the website is not included herein by specific cross-reference. Achieving these financial targets involves risks and uncertainties, and therefore the Authority's actual results may differ from the targets. See "RECENT DEVELOPMENTS "– Board Policy on Debt and Access to the Credit Markets" and **"**Impacts from the Coronavirus and COVID-19 Pandemic."

Comparative Rates

The table below sets forth LIPA's 2021 average residential and commercial rates as compared with certain New York City metropolitan area electric utilities.

Comparative Rates *

Utility Name	2021 Average Residential Price (cents/kWh)	2021 Average Commercial Price (cents/kWh)
Consolidated Edison Co-NY	27.33	23.50
United Illuminating Company	24.90	17.92
Eversource (ES-CL&P)	21.30	16.48
Long Island Power Authority	21.07	20.16
Orange & Rockland Utilities	19.85	11.99
Public Service Elec & Gas Co	17.40	12.64

Source: Form EIA-861M (formerly EIA-826) detailed data: https://www.eia.gov/electricity/data/eia861m/
* Subject to change as 2021 data has not been finalized.

BILLING AND COLLECTIONS

The following table sets forth information relating to the annual net charge-offs for LIPA, including net charge-offs of customers as part of LIPA's annual charge-off reconciliation process, prepared in accordance with the metrics provided for in the 2014 OSA for all years. The write-off rate was substantially reduced by temporary actions taken to provide customers relief due to the impact of the COVID-19 pandemic. See "RECENT DEVELOPMENTS – Impacts from the Coronavirus and COVID-19 Pandemic."

Net Charge-Offs as a Percentage of Total Billed Retail Electricity Service Revenues

	2016	2017	2018	2019	2020	2021
Electric Revenues Billed ($000)	3,427,943	3,457,210	3,659,782	3,614,157	3,812,469	4,046,947
Net Charge-Offs ($000)	19,646	25,217	19,479	17,974	13,928	11,271
Percentage of Revenue Billed	0.57%	0.73%	0.53%	0.50%	0.37%	0.28%

SECURITY AND SOURCES OF PAYMENT FOR THE BONDS

Under the OSA, PSEG Long Island must bill and collect such fees, rates, rents and charges for the use and services of the T&D System as established by the Authority under the Resolution and the Act.

Since LIPA owns the System, the Financing Agreement contains covenants as to the operation and maintenance of the System, and the Resolution contains covenants of the Authority to enforce the Financing Agreement and assigns to the Trustee certain of the Authority's rights and interests under the Financing Agreement, including the right to bring actions and proceedings to enforce the Financing Agreement.

Pledge of Trust Estate

The Resolution pledges the Trust Estate for the payment of the Bonds and all Parity Obligations, subject to the provisions of the Resolution, the Act and the Financing Agreement permitting certain applications of the Trust Estate and subject to the prior payment of Operating Expenses.

The Resolution authorizes the application of Revenues to certain purposes free and clear of the lien of the pledge. These applications include payment of Operating Expenses from the Operating Expense Fund prior to the deposit of Revenues in the Debt Service Fund. In addition, amounts on deposit in the Rate Stabilization Fund may be used for any lawful purpose of the Authority or LIPA, and amounts retained in the Revenue Fund may be used for any lawful purpose of the Authority or LIPA, as determined by the Authority.

The principal items in the Trust Estate pledged by the Resolution include:

(i) all payments received by the Authority from LIPA under the Financing Agreement, and all rights to receive the same;

(ii) all Revenues and all right, title and interest of the Authority in and to Revenues, and all rights of the Authority to receive the same;

(iii) the proceeds of sale of Bonds until expended for the purposes authorized by the Supplemental Resolution authorizing such Bonds; and

(iv) all funds, accounts and subaccounts established by the Resolution, including securities credited thereto and investment earnings thereon.

The Authority covenants in the Resolution that it will not, and will not permit LIPA to, issue any bonds, notes or other evidences or indebtedness or otherwise incur any indebtedness, other than Bonds or Parity Obligations, secured by a pledge of or other lien or charge on the Trust Estate which is prior to or of equal rank or priority with the pledge made by the Resolution, and that it will not create or cause to be created any lien or charge on the Trust Estate which is prior to or of equal rank or priority with the pledge made by the Resolution.

Payment of Revenues Pursuant to Financing Agreement

Under the Financing Agreement, LIPA transfers to the Authority all its right, title and interest in and to the Revenues, including all right to collect and receive the same, subject to the provisions of the Financing Agreement and the Resolution providing for the application of Revenues, and consents to the assignment by the Authority to the Trustee of its interest therein.

Revenues are defined in the Resolution to mean all revenues, rates, fees, charges, surcharges, rents, proceeds from the sale of LIPA assets, proceeds of insurance, and other income and receipts, as derived in cash, directly or indirectly from any of LIPA's operations, by or for the account of the Authority or LIPA including but not limited to all payments received by the Authority or LIPA with respect to any guaranty of performance under any System Agreement and all dividends received by the Authority as a result of ownership of any stock or other evidence of an equity interest in LIPA; provided, however, that Revenues shall not include (i) any Transition Charge, (ii) any such income or receipts attributable directly or indirectly to the ownership or operation of any Separately Financed Project, or (iii) any federal or State grant moneys the receipt of which is conditioned upon their expenditure for a particular purpose unless the Authority determines that such moneys constitute Revenues. Revenues also do not include any amounts, or amounts from any sources, as may be specified from time to time by Supplemental Resolution; provided, however, that at such time the applicable additional Bonds tests of the Resolution will be satisfied (whether or not the tests are then required to be met for other purposes) without regard to such amounts.

Transition Charge means any rates, fees, charges or surcharges relating to the T&D System or the customers thereof established by irrevocable rate order or other action or instrument, and applicable to or by the Authority or LIPA, in conjunction with the issuance of debt or other securities under a separate resolution, indenture or similar instrument (other than the Resolution) to the extent such rates, fees, charges or surcharges are pledged or otherwise encumbered or conveyed as security for such debt or other securities (a "Transition Charge"). Each financing order contains a finding that the applicable restructuring charge is a Transition Charge for purposes of the Resolution. See "RATES AND CHARGES – The Securitization Authority and Restructuring Charges."

Funds

The Resolution establishes the following Funds: the Construction Fund; the Revenue Fund; the Operating Expense Fund; the Debt Service Fund; the Parity Contract Obligations Fund; the Subordinated Indebtedness Fund; the LIPA Unsecured Debt Fund; the PILOTs Fund; and the Rate Stabilization Fund, all to be held by or on behalf of the Authority except for the Debt Service Fund, which is to be held by the Trustee.

Flow of Funds

The Authority is required by the Resolution, as promptly as practicable after receipt thereof by LIPA, to deposit all Revenues in the Revenue Fund. Amounts on deposit from time to time in the Revenue Fund shall be withdrawn and deposited in this order of priority:

FIRST: to the Operating Expense Fund, the amount determined by the Authority from time to time to be deposited to pay, or to be set aside therein as a reserve for the payment of, Operating Expenses;

SECOND: (A) to the Debt Service Fund, the amounts required to pay or provide for the payment of the Principal Installments and Redemption Price of and interest on Bonds and Parity Reimbursement Obligations; and

(B) to the Parity Contract Obligations Fund, the amount determined by the Authority to be required to be deposited therein to pay or provide for the payment of Parity Contract Obligations;

THIRD: if such amounts are not expected by the Authority to be required thereafter for purposes of paragraphs FIRST and SECOND, to the Subordinated Indebtedness Fund, the amount determined by the Authority to be required to be deposited therein to pay or provide for the payment of Subordinated Indebtedness;

FOURTH: if such amounts are not expected by the Authority to be required thereafter for purposes of paragraphs FIRST, SECOND or THIRD above, to the LIPA Unsecured Debt Fund, the amount determined by the Authority to be required to be deposited therein to pay or provide for the payment of Outstanding LIPA Unsecured Debt;

FIFTH: if such amounts are not expected by the Authority to be required thereafter for purposes of paragraphs FIRST, SECOND, THIRD or FOURTH, to the PILOTs Fund, the amount determined by the Authority to be required to be deposited in such Fund to pay or provide for the payment of PILOTs; and

SIXTH: if such amounts are not expected by the Authority to be required thereafter for purposes of paragraphs FIRST, SECOND, THIRD, FOURTH or FIFTH, to the Rate Stabilization Fund, the amount determined by the Authority to be deposited therein to provide for any payments or deposits from Revenues thereafter.

Any moneys remaining in the Revenue Fund may be used for any lawful purpose of the Authority or LIPA, as determined by the Authority, including, but not limited to, the purchase or redemption of any bonds, notes or other obligations of the Authority or LIPA.

Rate Covenant

The Authority covenants in the Resolution to establish and maintain System fees, rates, rents, charges and surcharges sufficient in each Fiscal Year so that Revenues reasonably expected to be produced in such Fiscal Year will be at least equal to the sum of:

(i) 100% of Debt Service, and amounts under all Parity Contract Obligations, payable by the Authority in such Fiscal Year;

(ii) 100% of the Operating Expenses payable in such Fiscal Year;

(iii) 100% of the amount necessary to pay all PILOTs payable in such Fiscal Year; and

(iv) 100% of the amount necessary to pay other Required Deposits, all other payments required pursuant to the Resolution and the Financing Agreement, and all other payments required for the System, for such Fiscal Year.

If at any time such fees, rates, rents, charges and surcharges are or will be insufficient to meet the Rate Covenant, it will not constitute an Event of Default if and to the extent the Authority promptly takes action reasonably expected by the Authority to cure or avoid any such deficiency or to cause the same to be cured or avoided. In addition, the failure in any Fiscal Year to comply with the covenant in clauses (iii) and (iv) above (the "non-debt service and operating expense rate covenant"), will not constitute an Event of Default if the Authority retains a Rate Consultant and a Consulting Engineer to review System fees, rates, rents, charges and surcharges and review the System Budget and complies with the following sentence. If the Rate Consultant (relying upon a Certificate of the Consulting Engineer) is of the opinion that a schedule of fees, rates, rents, charges and surcharges for the T&D System which would provide funds to meet the requirements specified in the non-debt service and operating expense rate covenant is impracticable at that time and the Authority therefore cannot comply with the non-debt service and operating expense rate covenant, then the Authority will fix and establish such schedule of System fees, rates, rents, charges and surcharges as is recommended in such Certificate by the Rate Consultant to comply as nearly as practicable with the non-debt service and operating expense rate covenant, and in such event the failure of the Authority to comply with the non-debt service and operating expense rate will not constitute an Event of Default.

For the Rate Covenant, at any time, (i) Revenues include any amounts withdrawn or expected to be withdrawn thereafter in any Fiscal Year from the Rate Stabilization Fund which were either (a) on deposit therein prior to such Fiscal Year or (b) proceeds of Bonds or Subordinated Indebtedness issued to fund the Shoreham Credits, (ii) Revenues do not include any proceeds from the sale of LIPA assets or proceeds of insurance, and (iii) Debt Service, Parity Contract Obligations, PILOTs and other Required Deposits will not include any amounts expected by the Authority to be paid from any funds, other than Revenues, reasonably expected by the Authority to be available therefore (including without limitation the anticipated receipt of proceeds of sale of Bonds or Subordinated Indebtedness, or moneys not a part of the Trust Estate, expected by the Authority to be used to pay the principal of Bonds, Parity Contract Obligations, Outstanding LIPA Unsecured Debt or Subordinated Indebtedness, other than proceeds of Bonds or Subordinated Indebtedness issued to fund the Shoreham Credits), which expectations, if included in a resolution of the Authority or Certificate of an Authorized Representative, will be conclusive.

In addition, the Authority covenants in the Resolution to review, or cause LIPA to review, the adequacy of System fees, rates, rents, charges and surcharges at least annually. Except to the extent required by law, the Authority covenants not to permit LIPA to furnish or supply or cause to be furnished or supplied any product, use or service of the System free of charge (or at a nominal charge) to any person, firm or corporation, public or private, unless the Authority determines that other adequate consideration has been, or is expected to be, received in connection therewith, and to cause LIPA to enforce or cause to be enforced the payment of any and all amounts owing to LIPA for use of the System in accordance with the Financing Agreement.

Additional Bonds Test

There is no limit or test for issuing additional Bonds under the Resolution.

Subordinated Indebtedness; Acceleration of Subordinated Indebtedness

There is no limit or test for issuing Subordinated Indebtedness under the Resolution.

Subordinated Indebtedness is subject to acceleration prior to maturity upon the occurrence of certain events. An acceleration of Subordinated Indebtedness would not cause an acceleration of the Bonds or affect the priority of the application of Revenues to the payment of the Bonds. In such an event any amounts then available under the Resolution after the payment of Operating Expenses and Debt Service on any Bonds and Parity Contract Obligations could be required to be applied to the payment of the Subordinated Indebtedness.

Other Agreements

The Authority sometimes executes agreements in connection with the incurrence of Bonds issued under the Resolution. In addition, the Authority may execute agreements to directly reflect the incurrence of senior, subordinated or unsecured debt under the Resolution, which may be done as a direct placement with the lender(s). Those agreements typically contain covenants, events of default, remedies, priority rights, and other similar terms**.**

The Authority's current agreements generally include the following covenants, among others: (i) a requirement that the Authority maintain an amount not less than $150,000,000 in the Rate Stabilization Fund; (ii) a rate covenant substantially the same as that described above under " – Rate Covenant," but such that Revenues are reasonably expected to be at least equal to 110% of such amounts; and (iii) the Authority or LIPA will not issue additional debt (other than certain refunding debt) unless the Authority can provide (a) a certificate of the Authority establishing that the Revenues for any twelve consecutive months within the eighteen (18) months preceding the issuance satisfied certain requirements set forth therein or (b) a certificate of a Rate Consultant establishing that the Revenues for the Fiscal Year of issuance and the next five (5) full Fiscal Years are projected to satisfy certain requirements set forth therein. The terms of all such agreements including, without limitation, those described herein are subject to amendment, waiver or termination in accordance with the agreements and there is no guarantee that any such terms will be in effect or enforced by a counterparty at any time.

See "INTRODUCTION TO THE AUTHORITY AND LIPA - Relationship of the Authority and LIPA - *Proposed Changes to the Authority-LIPA Relationship and Resolution"* above.

For convenience, copies of such agreements can be found on the Authority's website (https://www.lipower.org/investors/) under the caption "Official Statements & Bond Resolution." Such information on the website is not included herein by specific cross-reference.

LONG ISLAND POWER AUTHORITY

The Authority is a corporate municipal instrumentality and a political subdivision of the State created by the Act. LIPA is a wholly-owned subsidiary of the Authority, which was formed and exists under the Business Corporation Law of the State.

The Act

Pursuant to the Act, the Authority has all of the powers necessary or convenient to carry out the purposes and provisions of the Act including, without limitation, to (i) acquire real or personal property; (ii) enter into agreements or contracts consistent with the exercise of its powers; (iii) borrow money, issue notes, bonds or other obligations and secure its obligations by mortgage or pledge of its property; (iv) create or acquire one or more wholly-owned subsidiaries; (v) set its rates and charges; and (vi) make inquiries, investigations and studies necessary to carry out its objectives.

The Authority may enter into agreements to purchase power from the Power Authority of the State of New York ("NYPA"), the State, any State agency, any municipality, any private entity or any other available source (excluding Canada unless negotiated through NYPA) at such price as may be negotiated. The Authority is specifically authorized to provide and maintain generating and transmission facilities and enter into management agreements for the operation of all or any of the property or facilities owned by it. Finally, the Authority may transfer any of its assets to one or more private utilities or municipal gas or electric agencies for such consideration and upon such terms as the Authority may determine to be in the best interest of the gas and electric ratepayers in the Service Area. The Act permits the Authority to file a petition under Chapter 9 of Title 11 of the United States Bankruptcy Code or take other similar action for the adjustment of its debts. LIPA as a business corporation may file a petition under Chapter 7 or Chapter 11 of Title 11 of the United States Bankruptcy Code.

The Act requires that any resolution authorizing the issuance of bonds contain a covenant by the Authority that it will at all times maintain rates, fees or charges sufficient to pay, and that any contracts entered into by the Authority for the sale, transmission or distribution of electricity shall contain rates, fees or charges sufficient to pay, the costs of operation and maintenance of the facilities owned or operated by the Authority, PILOTs, renewals, replacements and capital additions, the principal of and interest on any obligations issued pursuant to such resolution as they become due and payable, and to establish or maintain any reserves or other funds or accounts required or established by or pursuant to the terms of such resolution.

Trustees

The Authority is governed by the Board. The Board supervises, regulates and makes policy for the Authority. The Board appoints a Chief Executive Officer, who is responsible for the Authority's overall management and operation. The hiring of all employees other than the Chief Executive Officer, Chief Financial Officer, General Counsel and Chief Audit Executive is under the jurisdiction of the Chief Executive Officer.

The Board consists of nine Trustees, five of whom are appointed by the Governor, two by the Temporary President of the State Senate and two by the Speaker of the State Assembly. The Trustees serve for staggered four-year terms. As of the date hereof, there are no vacancies on the Board; however, seven of the nine Trustees terms have expired but the Trustees continue to serve until a replacement is appointed. The Board Chair is appointed by the Governor. As of the date hereof, the Governor has not appointed a Board Chair and the Vice Chair serves as the Acting Chair. The LIPA Reform Act requires that all Trustees reside in the Service Area and have relevant utility, corporate board or financial experience. Trustees are not compensated for their service but are reimbursed for reasonable expenses.

Pursuant to the Public Authorities Law and as set forth in the Authority's By-laws, five (5) Trustees of the Authority constitute a quorum for the transaction of any business or exercising any power of the Authority and the Authority only has the power to act by a vote of five (5) Trustees.

Pursuant to the Act, the Trustees and the officers of the Authority are not subject to any personal or civil liability resulting from the exercise, carrying out or advocacy of the Authority's purposes or powers. The By-laws and other instruments of the Authority and LIPA provide for the indemnification of the Trustees, officers and employees of the Authority and the directors, officers and employees of LIPA.

Strategic Direction by the Board

The Board has defined the purpose and vision of the Authority, as well as its expectations for the strategic outcomes that management will deliver in all the important aspects of providing service to customers, including reliability, resiliency, customer experience, clean energy, affordability, information technology, cyber security, and financial performance. For each policy, the Board has specified objectives and related reporting requirements by management that allow the Board to monitor the Authority's performance relative to its strategic direction. Some of the elements of the Board's policies include:

T&D System Reliability and Resiliency

- Provide top decile reliability, as measured by system average outage duration;

- Improve circuit conditions that cause a customer to experience four or more outages of greater than 5 minutes or six or more outages of less than 5 minutes in any 12-month period;
- Mitigate the effects of climate change through multi-year programs that reduce the number and duration of outages after significant system disruptions;

Customer Experience

- Deliver top quartile performance in J.D. Power's utility residential and business customer satisfaction studies and on industry-standard customer service metrics;
- Ensure simple, accurate, and proactive customer communications related to customer billing, energy usage, emergency response, and estimated times of restoration;

Clean Energy and Beneficial Electrification

- Achieve a zero-emissions electric grid by 2040, while meeting or exceeding LIPA's share of the clean energy goals of the CLCPA;
- Demonstrate innovation and be recognized among the leading utilities in reducing economy-wide greenhouse gas emissions through energy efficiency and beneficial electrification;
- Improve equity for disadvantaged communities, by meeting or exceeding LIPA's share of New York's environmental justice goals;

Customer Value and Affordability

- Maintain competitive electric rates compared to the system average rates of regional electric utilities;
- Offer programs to low-income and disadvantaged customers to maintain electric bills that are a reasonable percentage of household income;

Information Technology and Cyber Security

- Deploy modern grid management technology and data analytics, as measured by a Smart Grid Maturity Model level consistent with the top 25% of utilities;
- Maintain a level of 3 or higher on the NIST Cybersecurity Framework, as evaluated annually through an independent assessment;

Debt and Access to the Credit Markets

- Achieve fixed charge coverage of no less than 1.40x on the combination of Authority-issued debt and lease payments and 1.20x on Authority and UDSA-issued debt and leases.

The Board's strategic direction serves as the basis for the annual work plans presented by Authority management, as well as the Performance Metrics adopted by the Board to determine PSEG Long Island's variable compensation pool. The Authority generally reviews its Board Policies annually. More information about the Board's Policies and management's work plans can be found on the Authority's website at http://www.lipower.org/purpose/. The Authority's Performance Metrics for PSEG Long Island for 2022 can be found at http://www.lipower.org/about-us/contracts-reports/. Such information on the website is not included herein by specific cross-reference. Achieving the results specified in the Board's Policies involves risks and uncertainties, and therefore the Authority's actual results may differ.

Management and Operation of the System

Administrative Services Agreement. The Authority and LIPA are parties to an Administrative Services Agreement, which sets forth the terms and conditions under which the Authority will provide personnel, personnel-related services, and other services (including management, supervisory, payroll and other services) necessary for LIPA to provide electric service in the Service Area. Except for services of the type and nature provided to LIPA by outside independent agents, attorneys, and consultants and for any other services provided under agreements approved by the Authority, LIPA will meet its personnel and personnel-related needs exclusively through the Administrative Services Agreement. The Administrative Services Agreement may be amended to reflect the changing needs of the Authority and LIPA.

Under the Administrative Services Agreement, the services provided by the Authority include, but are not limited to: (i) performance of LIPA's duties and obligations and enforcing its rights under any existing and future contracts between LIPA and any other person; (ii) coordination of services for which LIPA contracts; (iii) coordination of negotiations and studies authorized by LIPA for any project for the supply of Power and Energy or the provision of transmission capacity to LIPA; (iv) reviewing invoices; (v) disbursement of all funds of LIPA; (vi) preparation of construction and operating budgets on behalf of LIPA; (vii) provision or coordination of all other accounting matters and preparation of billings to, and collection from, LIPA's customers; (viii) coordination of all other matters arising under any agreements relating to any project that LIPA might undertake; (ix) securing information from any persons required to fulfill LIPA's obligations under any agreements arising from the Administrative Services Agreement, the agreements referred to in clauses (i) and (viii), and any project LIPA might undertake; (x) provision or coordination of rate matters; and (xi) provision or coordination of such other services as LIPA determines are required to carry out its business in an economical and efficient manner.

Board Leadership and Senior Management. The Board leadership and senior management of the Authority, along with information covering their background and experience, are listed below. The Authority's staff encompasses approximately 70 positions.

Mark Fischl is the Vice Chair of the Board. At the May 19, 2021 Board meeting, former Chair Ralph Suozzi announced that he was not seeking reappointment to the Board. Vice Chair Fischl will continue to preside over the Authority's Board meetings until a new Chair is designated by Governor Hochul. Mr. Fischl is the President of Pinnacle Real Properties LLC, a real estate consulting and development advisory firm that focuses on redeveloping downtown areas and industrial properties. Prior to joining Pinnacle, Mr. Fischl spent 13 years with RGE, a real estate firm located on Long Island. At RGE, Mr. Fischl managed commercial properties as well as certain environmental issues. While at RGE, Mr. Fischl assisted the acquisition of almost one million square feet of space. Mr. Fischl spent six years as President of the American Platform Tennis Association.

Thomas Falcone is the Chief Executive Officer and Interim Chief Financial Officer of the Authority, the third largest publicly-owned electric utility in the United States as measured by customers. Mr. Falcone joined the Authority in January 2014 as Chief Financial Officer and became Chief Executive Officer in September 2015. With the resignation of Tamela Monroe as Chief Financial Officer effective May 31, 2022, Mr. Falcone is also serving as Interim Chief Financial Officer while the Authority executes its search for a new Chief Financial Officer, which is expected to conclude by year-end. Since 2014, the Authority has reduced power outages by 28 percent, signed agreements for over 1,000 MW of clean and distributed energy, reformed and strengthened its management services contract with PSEG Long Island, obtained four credit-rating upgrades, invested over $4.9 billion in the T&D System, while keeping electric rate adjustments below the rate of inflation. Mr. Falcone serves on the Climate Action Council, the 22-member board that adopts the State plans to achieve New York's ambitious greenhouse gas reduction targets, including a zero emissions electric system by 2040 and an 85% reduction in state-wide emissions by 2050. Mr. Falcone serves as Vice Chair of the board of the Large Public Power Council and on the executive committee of the board of the Advanced Energy Research and Technology Center at Stony Brook University. Mr. Falcone also participates in the Energeia Partnership, a think-tank organization focused on challenges facing Long Island. Prior to joining the Authority, Mr. Falcone was an investment banker and advisor to publicly-owned utilities and state and local governments. In that role, Mr. Falcone raised more than $25 billion for public utilities and infrastructure investments across the country. Mr. Falcone received a Bachelor of Science in Economics from the Wharton School of the University of Pennsylvania.

Mujib Lodhi, Chief Information Officer and Senior Vice President of Customer Experience, is responsible for the management of the information security and technology at the Authority, including its business applications, computing infrastructure, networks and cyber security, as well as oversight of PSEG Long Island's information technology platforms. As Senior Vice President of Customer Experience, Mr. Lodhi is responsible for overseeing and implementing end-to-end strategies to enhance the customer experience for residential and commercial customers. Prior to the Authority, Mr. Lodhi spent over two decades as the Chief Information Officer for large utilities across the United States including Riverside Public Utilities, Washington Suburban Sanitary Commission, and District of Columbia Water and Sewer Authority. Mr. Lodhi has earned over a dozen CIO awards for levering technology and improving business performance and has authored papers on advanced data analytics with IBM research scientists. Mr. Lodhi holds a B.S. from the University of Indianapolis in Management Information Systems. He has also completed graduate coursework in Leadership from Nyack College, the Management Development Program from Harvard's Graduate School of Education and Leadership, and the Strategic Management Program from Cornell University.

Bobbi O'Connor, General Counsel and Secretary to the Board of Trustees, joined the Authority in November 2013 and previously served as Assistant General Counsel for commercial transactions, Deputy General Counsel, Vice President of Policy, Strategy, and Administration, and most recently Chief Administrative Officer. Prior to joining the Authority, Ms. O'Connor was a partner in the business and finance department of an international law firm where her practice involved advising clients on securities law matters, with a particular focus on representing utility clients. Ms. O'Connor received a Bachelor of Arts degree in Psychology from Loyola College of Maryland and a Juris Doctor from Hofstra University School of Law.

Billy Raley, Senior Vice President of Transmission and Distribution, is responsible for overseeing PSEG Long Island transmission and distribution operations, including the design, planning, operation, maintenance, and construction of the T&D System, regulatory compliance, emergency planning and response, and interconnection of generation resources. Mr. Raley joined the Authority in March 2021 and has over 35 years of experience in the utility industry, including utility operations, project management, construction, maintenance, storm restoration, and nuclear generation. Previously, Mr. Raley was the Lead Director at PricewaterhouseCoopers' Global Capital Projects and Infrastructure Practice. Mr. Raley has also held numerous leadership positions at Progress Energy, Georgia Power, and the Southern Company. Mr. Raley received a Bachelor of Science in Electrical Engineering from the Georgia Institute of Technology. Mr. Raley is a member of the Institute of Electrical and Electronics Engineers and has served on the Association of Edison Illuminating Companies committee and numerous other national committees.

Rick Shansky, Senior Vice President of Power Supply and Wholesale Markets, leads the Authority's power supply planning, procurement and generation portfolio management, which activities are carried out by PSEG Long Island. Mr. Shansky also manages the Authority's participation in wholesale power markets and oversees the day-to-day procurement of power and fuel to serve the energy needs of LIPA's customers. Mr. Shansky has 40 years of electric utility experience and has held several management positions at the Authority since joining in 2008. Previously, Mr. Shansky held positions at Con Edison and LILCO in the areas of energy management, resource planning, fuel and purchased power, and generation planning. Mr. Shansky has a Bachelor of Science in Electrical Engineering from Rensselaer Polytechnic Institute and a Master of Science in Energy Management from the New York Institute of Technology. Mr. Shansky is also a licensed Professional Engineer in the State.

THE SYSTEM

Service Area

The Service Area consists of Nassau and Suffolk Counties in Long Island (except for the Nassau County villages of Freeport and Rockville Centre and the Suffolk County village of Greenport, each of which has an individually owned municipal electric system that supplies and distributes electricity to ultimate consumers within those municipalities) and a portion of Queens County in the City of New York known as the Rockaways. According to Bureau of Census data, the population of the Service Area was approximately 3.0 million as of July 1, 2021, which represents a slight increase since July 1, 2016. As of December 31, 2021, the Authority had approximately 1.2 million customers in the Service Area, which was a small increase from December 31, 2016.

Long Island is a significant regional economy that benefits from its proximity to Manhattan, but also generates its own income, employment, and regional output. Long Island has a highly skilled labor force, close proximity to New York City, over 20 colleges, universities and core research institutions, such as Brookhaven National Laboratory, Cold Spring Harbor Laboratory, and the technology and science developmental centers at Stony Brook and Farmingdale Universities that specialize in the areas of biotechnology, computer sciences, wireless and internet technologies, and energy. Long Island also has a highly desirable suburban lifestyle that attracts many individuals to live, work and vacation within the area.

The Long Island economy benefits from high average personal income and a service-based economy. According to 5-year estimate data published by the United States Bureau of the Census, Nassau and Suffolk Counties had median household incomes of $120,036 and $105,362 (in 2020 dollars), respectively, compared to a national median of $64,994.

The table below shows Long Island's unemployment rate as compared with the national and State unemployment rates for the periods shown (as described above under "RECENT DEVELOPMENTS – Impacts from the Coronavirus and COVID-19 Pandemic," United States, State and Service Area unemployment rates were severely impacted by COVID-19):

Service Area Unemployment – Average Annual

Year	US [1]	NY [1]	Nassau-Suffolk [1]
2017	4.4%	4.7%	4.3%
2018	3.9%	4.1%	3.7%
2019	3.7%	3.8%	3.6%
2020	8.1%	10.0%	8.2%
2021	5.4%	6.9%	4.5%

Sources:
[1] Bureau of Labor Statistics: http://www.bls.gov/data/ (not seasonally adjusted data)

In the year ending December 31, 2021, approximately 54.2% of LIPA's annual retail revenues were received from residential customers, 44.2% from commercial customers and 1.5% from street lighting, public authorities and certain others. The largest customer in the Service Area (the Long Island Rail Road) accounted for less than 1.5% of total sales and less than 1% of revenue. In addition, the ten largest customers in the Service Area accounted for approximately 7.3% of total sales and 6.1% of revenue.

The Transmission and Distribution System

The T&D System is an integrated electric system consisting of overhead and underground facilities, equipment, land parcels, easements, contractual arrangements, and other assets used to provide the transmission and distribution of electric capacity and energy to and within the Service Area. The T&D System includes seven transmission interconnections owned in part or under contract that link the T&D System to neighboring utilities.

Transmission Facilities

LIPA's transmission facilities provide for the delivery of capacity and energy from transmission interconnections and on-Island generating stations to LIPA's electric distribution system. As of December 31, 2021, the transmission system consists of approximately 1,400 miles of overhead and underground lines with voltage levels ranging from 23 kilovolts ("kV") to 345 kV.

The on-Island transmission system has been constructed following standards similar to those employed by other major electric utilities in the Northeast and includes wood poles, steel poles, and lattice steel towers. Many of the existing transmission structures support distribution circuits and/or connections for telephone, cable television, or fiber optics.

In accordance with the latest North American Electric Reliability Corporation ("NERC") standards, 41 LIPA-owned transmission substations are part of the Bulk Electric System ("BES"). The combined capability of LIPA's BES and non-BES transmission substations is approximately 9,100 million volt-amperes ("MVA"). The transmission system also includes LIPA-owned transformation equipment at 12 generating sites under contract with LIPA that is used to step up the generation voltage to transmission voltage levels, and seven substations that interconnect to independent power producers ("IPPs") or other generation.

Distribution Facilities

The distribution system comprises 13 kV and 4 kV facilities and a combination of overhead and underground equipment. There are 156 distribution substations throughout the Service Area that step the voltage down from transmission to distribution levels. The combined capability of LIPA's distribution substations have a combined transformation capability of approximately 8,700 MVA. As of December 31, 2021, the distribution system also includes approximately 14,017 circuit miles of overhead and underground line (9,011 overhead and 5,006 underground), and approximately 192,548 line transformers with a total capacity of approximately 13,650 MVA. A portion of the poles on which LIPA's distribution facilities have been installed are owned by Verizon Communications and used by LIPA under a joint-use agreement pursuant to which the parties aim to maintain parity.

Reliability

LIPA and PSEG Long Island undertake programs intended to maintain and/or improve the reliability and quality of electric service within the Service Area. For the distribution system, these programs are focused on several major areas: (i) circuit reconfiguration and reinforcement; (ii) pole replacement; (iii) system automation; (iv) tree trimming; (v) targeted system enhancements; and (vi) circuit conversion and reinforcement projects to serve new customer loads. For the transmission system, the improvement program is focused on: (i) transmission system reliability; (ii) substation reliability improvements; (iii) transmission breaker replacements; and (iv) a structure inspection program. These program elements are a key part of efforts to limit both the frequency and duration of customer outages.

Over the five-year period from 2016 through 2020, LIPA's customers experienced an average of 13.6 months between interruptions and average interruption times of 74.0 minutes. Based on data provided by the PSC for all State utilities (other than Consolidated Edison Company of New York, Inc. ("Con Edison"), which is primarily an underground utility), the average time between interruptions during the five-year period from 2016 through 2020 was 11.7 months and the average duration of an interruption was 111.0 minutes. These statistics indicate that LIPA's system-wide frequency and duration of outages were among the most favorable for overhead utilities in New York. These statistics exclude outages due to major storms, consistent with PSC standards. PSC is expected to release 2021 data for the other State utilities later this year.

The average period between interruptions for a customer served by LIPA during 2021 was approximately 17.7 months. For those LIPA customers affected by an interruption during 2021, the average length of interruption was approximately 80.5 minutes. The average outage duration for each customer served was 54.7 minutes for 2021. These statistics compare to an average time between interruption of 15.1 months, an average interruption of approximately 82.9 minutes, and an average outage duration for each customer served of 66.0 minutes for a LIPA customer during 2020.

Beginning in 2016, the Authority and PSEG Long Island began several initiatives to improve the reliability and resiliency of the T&D System, including adopting new tree-trimming standards and a new multi-year storm hardening initiative. Since that time, the average outage duration for each customer served has declined from 75.5 minutes in 2016 to 54.7 minutes in 2021 (approximately 28%). The number of customers experiencing multiple sustained outages (4 or more outages per year) has declined from 70,248 in 2016 to 23,722 in 2021 (approximately 67%), while the average number of momentary interruptions experienced by customers has declined from 3.92 in 2016 to 1.78 in 2021 (approximately 55%).

Long Island experiences seasonal conditions typical of the northeast United States. Summers are usually hot with high temperatures over 90°F. Winters include snow and icing conditions that can be damaging to overhead power lines. In addition, the Service Area experiences severe storms, including hurricanes, which can be damaging due to Long Island's coastal location.

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Customer Satisfaction

The Authority and PSEG Long Island placed a significant focus on improving customer satisfaction beginning in 2014. The Board has selected the J.D. Power Electric Utility Residential Customer Satisfaction Study and the J.D. Power Electric Utility Business Customer Satisfaction Study as the primary metrics to measure accomplishment in this area, supported by other indicators of customer service and satisfaction. The Board has established an objective to be among the top quartile of Large East region peer utilities. PSEG Long Island's inadequate restoration efforts following Tropical Storm Isaias led to a substantial decline in customer satisfaction. As a result, the Authority has established Performance Metrics for PSEG Long Island to consistently drive to top quartile performance. See "RECENT DEVELOPMENTS – Tropical Storm Isaias and Options Analysis" herein.

Transmission Interconnection Facilities

The geographic location of the Service Area restricts the number of transmission interconnections between LIPA's T&D System and other systems in the region. Seven major transmission lines connect the T&D System with the Con Edison system to the west and with Eversource (Connecticut Light & Power) ("ES-CL&P") and United Illuminating Company to the north and Jersey Central Power & Light ("JCP&L") to the southwest. These interconnections are summarized in the table that follows.

Service Area Transmission Interconnections

Name	**Off System Terminal Locations**	**Summer Capacity (MW)**	**Interconnecting Utility**	**Voltage [2]**
Dunwoodie to Shore Road (Y-50)	Westchester County, NY	656	Con Edison [1]	345 kV
East Garden City to Sprain Brook (Y-49)	Westchester County, NY	637	Con Edison [8]	345 kV
Northport to Norwalk Cable (NNC)	Norwalk, CT	436	ES-CL&P [1,3]	138 kV
Jamaica to Lake Success	Queens, NY	240	Con Edison [1]	138 kV
Jamaica to Valley Stream	Queens, NY	268	Con Edison [1]	138 kV
Shoreham to New Haven (CSC)	New Haven, CT	330	United Illuminating [7]	138 kV [4]
Sayreville to Levittown (Neptune)	Sayreville, NJ	660	JCP&L [5]	345 kV [6]

[1] These utilities own the portion of the interconnections not owned by LIPA.
[2] Kilovolt or "kV."
[3] ES-CL&P = Eversource (CL&P).
[4] This cable carries high voltage direct current, which is converted and delivered to the LIPA system at 138 kV.
[5] JCP&L = Jersey Central Power & Light. JCP&L is a wholly-owned operating subsidiary of First Energy.
[6] This cable carries high voltage direct current, which is converted and delivered to the LIPA system at 138 kV.
[7] United Illuminating Company is a subsidiary of Eversource
[8] Owned by NYPA.

The Con Edison cable extending approximately 18 miles from Dunwoodie to Shore Road (the "Y-50 Cable") was placed in operation in August 1978 and is jointly owned by LIPA and Con Edison. Con Edison's share of the power flowing across the Y-50 Cable is delivered to Con Edison via the two 138 kV cables to Jamaica from Valley Stream and Lake Success, respectively.

The East Garden City to Sprain Brook interconnection (the "Y-49 Cable"), installed in 1991, is another major transmission interconnection. The Y-49 Cable comprises submarine and land-based portions totaling approximately 23 miles. This line is owned entirely by NYPA; however, most of the capacity of the Y-49 Cable is used by LIPA under the terms of a contract with NYPA. The Y-49 Cable contract was set to expire in 2020 but was extended to November 2022, pending completion of NYPA's studies of the reliability of the cable and possible options to extend its operating life or replace it. NYPA has now determined that some portions of the onshore cable on Long Island will need to be replaced in the near term. The line outage for replacement work is expected to begin in October 2022 with completion expected by the end of May 2023. LIPA and NYPA are contemplating a second contract extension while the replacement project is being completed.

The cable from Northport to Norwalk Harbor (the "NNC"), which was installed in 2008 to replace the original cable installed in 1969, extends approximately twelve miles under the Long Island Sound from the Northport generating station in Suffolk County, New York to Norwalk Harbor, Connecticut. LIPA owns that portion of the line from Northport to the New York-Connecticut state boundary.

The high voltage direct current ("HVDC") cable from Shoreham to New Haven (the "Cross Sound Cable" or "CSC") was constructed under a firm transmission capacity purchase agreement (the "CSC Agreement") signed between LIPA and Cross Sound Cable Company, LLC ("CSC LLC") in 2000 under which LIPA agreed to purchase up to 330 MW of transmission capacity. The CSC is owned by CSC LLC. The CSC Agreement, as amended, expires in 2032. The CSC became operational in June 2004.

In September 2005, LIPA signed a 20-year firm transmission capacity purchase agreement with Neptune Regional Transmission System LLC ("Neptune") to permit LIPA to import power from New Jersey over an undersea HVDC transmission cable (the "Neptune Cable") capable of carrying 660 MW of electricity. The Neptune Cable is owned by Neptune, runs from Sayreville, New Jersey under the Atlantic Ocean and connects with LIPA at its Newbridge Road substation in Levittown. The cable became operational in July 2007.

Capital Improvements

The following table sets forth actual capital expenditures for 2020 and 2021, as well as budgeted 2022 capital expenditures by category (and in thousands of dollars).

	2020 Actual	**2021 Actual**	**2022 Budget**
Transmission and Distribution	$568,711	$492,627	$565,321
Information Technology	$31,353	$58,246	$81,701
FEMA-Storm Hardening	$44,842	$39,845	$2,690
Customer Operations & Other	$108,400	$81,976	$69,742
NMP2	$14,066	$4,992	$27,267
Support & Administration	$16,973	$15,687	$36,056
Total	**$784,344**	**$693,372**	**$782,777**

The Authority's Debt and Access to the Credit Markets policy targets funding no more than 64% of capital projects with new debt (over a three-year rolling average). The Authority's Board also modified its Board policy on Debt and Access to the Credit Markets allowing for funding capital expenditures from new debt to exceed 64% for 2021 and 2022. The Authority's budget projected funding approximately 71% of its capital expenditures with funds from issuance of new debt in 2021. Nevertheless, due to budget savings and investment gains, which offset the financial impacts of COVID-19, the Authority was able to achieve 64% of the capital budget funded from debt for 2021. The Authority is currently projecting to fund 68% of its capital expenditures with debt over the three-year period 2022-2024. See "RECENT DEVELOPMENTS – Impacts from the Coronavirus and COVID-19 Pandemic."

Loads

The Service Area is characterized by customer usage patterns and weather conditions that result in peak usage during the summer and relatively low annual load factors. The table below shows LIPA's peak demand as experienced and after adjustments for weather-normalization, customer outages, and emergency demand relief for the period 2017 through 2021.

Year	**Peak Demand (MW)**	**Weather Normalized (MW)**
2017	4,945	5,218
2018	5,206	5,147
2019	5,269	5,114
2020	5,203	5,018
2021	4,984	5,059

LIPA's service provider prepares load growth forecasts annually. PSEG Long Island's estimate of annual peak demand within the Service Area shows an average annual decline of 0.5% over the five-year period from 2022 to 2026 (prior to adjustment for various demand side programs such as energy efficiency and renewables). This would result in a slight decrease in LIPA's summer peak demand, prior to the effects of cogeneration, NYPA supplied load and demand side management, to approximately 5,330 MW in 2026 on a weather-normalized basis. After adjustment for various demand side programs such as energy efficiency and renewables, LIPA's summer peak demand is expected to sharply decline over the 2022 to 2026 period. See "POWER SUPPLY – Market Energy Purchases" below.

Power Supply

During 2021, LIPA's 18% interest in NMP2 and its rights to the capacity of the GENCO Generating Facilities provided approximately 3,836 MW of generating capacity. Purchases, including on-Island IPPs and off-Island purchases from other suppliers, provided approximately 1,620 MW of additional capacity. In aggregate, these resources provided approximately 5,455 MW in 2021.

Reliability rules applied by the NYISO require LIPA to supply at least 99.5% of its forecast peak load to satisfy its Locational Capacity Requirement ("LCR") from on-Island installed capacity ("ICAP") resources (the "On-Island Requirement"). LIPA's portfolio of capacity resources currently exceeds the LCR requirement. As part of the Integrated Resource Plan, LIPA is currently examining whether the projected capacity surplus will enable the shutdown of additional older fossil-fired units.

Outstanding Requests for Proposals

In December 2015, the Authority issued a Request for Proposals ("RFP") for Renewable Capacity and Energy (the "2015 Renewable RFP"). Responses to the 2015 Renewable RFP were received on June 22, 2016 and evaluation results were presented to the Board with the selection of two projects at the July 26, 2017 Board meeting. The Long Island Solar Calverton project, a 22.9 MW solar generation facility has an executed power purchase agreement. Commercial operation is expected shortly. The power purchase agreement for Riverhead Solar 2, a 36 MW solar project, remains under review by the developer and has not been executed.

Feed-in Tariffs for Commercial Solar Photovoltaic Renewable Resources for up to 20 MW ("FIT III") and a Fuel Cell Feed-in Tariff for up to 40 MW ("FIT IV") were approved by the Board at the September 21, 2016 Board meeting. As of April 15, 2022, FIT III has a total of 30 projects (total 18.07 MW) comprising of 25 projects completed (14.94 MW) and 5 active projects with a PPA totaling 4.03 MWs. The FIT III program closed for new applications on February 1, 2020 and is at its capacity. For FIT IV, three projects totaling 39.8 MW were initially selected to satisfy the 40 MW requirement. Two projects were subsequently canceled and a 7.4 MW FIT IV project began commercial operation on December 29, 2021.

In May 2020, the Board approved a new 20 MW Feed-In tariff program ("FIT V") called Solar Communities, which benefits low- and moderate-income residential customers. The initial enrollment period ended September 30, 2020 and resulted in 47 applications totaling 60.9 MW. The active awards now total 13.99 MW, with those projects now in the interconnection study process.

On April 30, 2021, PSEG Long Island issued the 2021 Request for Proposals for Bulk Energy Storage to solicit bids for development of nearly 175 MW Bulk Energy storage on Long Island ("Bulk Energy Storage RFP"). The schedule for the RFP anticipates project selection by August 2022.

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Existing Capacity and Energy Resources

The table below sets forth historical annual peak demands and energy requirements for the period 2017 through 2021.

Historical Loads and Resources

	2017	2018	2019	2020	2021
Annual Peak Demand (Summer) (MW) [1]	4,945	5,206	5,269	5,203	4,984
Capacity (MW) [2]					
Nuclear [3]	224	233	232	233	232
Purchased Capacity:					
GENCO					
GENCO Steam	2,351	2,344	2,357	2,351	2,337
GENCO Other	1,351	1,347	1,345	1,341	1,267
Other LIPA Contracts					
Purchased Capacity [4]	1,881	1,838	1,824	1,720	1,619
Total Purchased Capacity	5,583	5,529	5,525	5,412	5,223
Total Capacity	5,807	5,762	5,757	5,645	5,455
Annual Reserve Margin:					
MW [5]	862	556	488	442	471
Percent	17.4%	10.7%	9.3%	8.5%	9.5%
Energy (MWh)					
Retail Requirements	20,195,715	20,773,082	20,104,072	19,823,364	19,951,342
Total Energy Requirements [6]	20,195,715	20,773,082	20,104,072	19,823,364	19,951,342
Generating Resources:					
Nuclear [3]	1,947,060	1,822,388	2,021,035	1,842,557	2,022,272
Purchased Energy:					
National Grid PSA					
Steam	3,172,789	4,300,133	3,640,286	4,707,168	5,754,569
Other	115,487	229,886	140,050	205,446	235,093
Total National Grid PSA	3,288,276	4,530,019	3,780,336	4,912,614	5,989,662
Other Purchased Energy	12,696,131	11,996,408	12,608,919	11,806,690	10,764,781
Total Purchased Energy	17,931,467	18,348,815	18,410,290	18,561,861	18,776,714
Total Energy	20,195,715	20,773,082	20,104,072	19,823,364	19,951,342

[1] Includes LIPA retail sales and Long Island Choice. BNL Hydro, Recharge NY & Load Modifiers excluded.
[2] Summer Rating ("ICAP").
[3] The actual generation attributable to LIPA's 18% ownership interest in NMP2.
[4] Includes on- and off-Island resources under contract at time of peak. Including but not limited to the resources of the contract.
[5] Equal to Capacity less Demand.
[6] Amounts shown for 2017 through 2021 include sales for resale, Long Island Choice, Grumman Campus, Recharge NY and BNL Hydro and excludes Load Modifiers.

Power Supply Agreement

Pursuant to the PSA, GENCO supplies LIPA with the capacity of the GENCO Generating Facilities. These steam, combustion turbine, and internal combustion generating units operate using oil, natural gas, or both. The purchased energy section of the table above provides historical generation levels for the GENCO Generating Facilities for 2017 through 2021. The decline in generation from the GENCO Generating Facilities during the period 2018 to 2019 reflects displacement by more economical sources of generation, including off-Island purchases over submarine transmission cables. Generation from the GENCO Generating Facilities increased in 2020 and 2021 reflecting various cable outages. The PSA provides for approximately 3,600 MW on-Island capacity for the term of the agreement and provides LIPA with the option to ramp-down all or a portion of the PSA units.

Under the PSA, LIPA pays GENCO certain fixed and variable rates for the generating capacity supplied by GENCO. LIPA and GENCO have agreed to a formula for the adjustment of these charges through the term of the PSA. These rates are subject to the jurisdiction of FERC. The current rates were accepted for filing by FERC in May 2013. GENCO may request a rate reset under certain conditions.

GENCO's annual capital expenditures must be approved by LIPA. LIPA pays for approved GENCO capital expenditures through the depreciation accruals and return on investments in the rates for capacity charged under the PSA. The PSA also provides for certain penalties related to guaranteed performance levels by GENCO, including unforced capacity (i.e., capacity adjusted for forced outages) and efficiency levels (heat rate) of the generating facilities.

Nine Mile Point Nuclear Unit 2

LIPA owns an 18% interest in NMP2, which is located on the Lake Ontario shoreline approximately six miles east of Oswego, New York. Until 2021, the other 82% was owned by Constellation Energy Nuclear Group, LLC ("CENG"), a joint venture of Exelon Corporation and EDF, a French company. However, in 2021 Exelon acquired EDF's share of the joint venture. Then, on February 1, 2022, Exelon separated into two publicly traded corporations. One of these corporations retains the name, Exelon Corporation, and holds all of the former corporation's regulated electric and gas utilities. The other, named Constellation Energy Corporation ("Constellation"), owns Nine Mile Point Unit 2 and all the other nuclear units and market-based ventures of the former corporation.

NMP2 is one of two General Electric boiling-water-reactor units at the Nine Mile Point site. The other, Nine Mile Point Nuclear Unit 1, is entirely owned by Constellation. NMP2 began commercial operation in August 1988 at a rated capacity of about 1,140 MW, and was upgraded to its current capacity of approximately 1,300 MW in 2014. Its operating license from the Nuclear Regulatory Commission ("NRC") extends through October 31, 2046.

NMP2 is operated by Constellation Energy Generation, LLC, a subsidiary of Constellation. LIPA is responsible for 18% of the unit's operation and maintenance, capital, and fuel costs, and is entitled to 18% of the electric energy produced and capacity provided by the unit. An operating agreement between Constellation and LIPA specifies the mutual obligations of the two parties. NMP2's annual business plan and its operating and capital budgets are developed by Constellation, and submitted to LIPA for its review.

Inasmuch as the unit employs a closed-loop circulating-water system with a natural-draft cooling tower, it complies with federal Clean Water Act § 316(b).

See "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Nuclear Plant Matters" herein for additional information pertinent to NMP2.

Other Power Supply Agreements

In addition to the generation subject to the PSA with GENCO described above, LIPA purchases approximately 1,620 MW of capacity from generation facilities on Long Island and elsewhere under various power supply agreements. Effective November 2021, LIPA signed a five-year agreement with NYPA for capacity from their Flynn plant located in Holtsville, NY.

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The table below contains a summary of existing power supply agreements.

Summary of Power Supply Agreements [1]

Unit Name	Summer Capacity (MW)	Contract Expiration	Unit Type [2]	Primary Fuel Type
GENCO				
Steam Turbine	2,328	2028	ST	Natural Gas [3, 4]
Internal Combustion/Simple Cycle	1,235	2028	IC/SC	Natural Gas/Oil [4]
Huntington Resource Recovery	24.3	2022	ST	Refuse
Babylon Resource Recovery	14.7	2022	ST	Refuse
Hempstead Resource Recovery	74.2	2022	ST	Refuse
Islip Resource Recovery	7.9	2022	ST	Refuse
J-Power Shoreham	84.9	2023	SC	Oil [4]
National Grid Glenwood Landing	82.5	2027	SC	Natural Gas [3,4]
National Grid Port Jefferson	80.7	2027	SC	Natural Gas [3,4]
J-Power Edgewood	84.5	2023	SC	Natural Gas [4]
Marcus Hook [6]	685.0 [1b]	2030	CC	Natural Gas
Calpine Bethpage 3	74.8	2025	CC	Natural Gas [4]
Hawkeye Greenport	52.5	2023	SC	Oil [4]
J-Power Pinelawn	72.2	2025	CC	Natural Gas [3,4]
Caithness	266.2 [1b]	2029	CC	Natural Gas [3,4]
Village of Freeport	10.0 [1b]	2034	SC	Natural Gas
NYPA Hydro Sale for Resale (BNL)	15.0 [1b]	2025	HY	Water
NYPA Flynn	150.0	2026	CC	Natural Gas [3]
Long Island Solar Farm (LISF)	31.5 [1a]	2031	SL	Solar
Eastern Long Island Solar Project (ELISP)	11.2 [1a]	2032	SL	Solar
Fitzpatrick	N/A [5]	2023	ST	Nuclear
South Fork Wind Farm	130.0 [7]	2042	OSW	Wind
Long Island Energy Storage-East Hampton	5.0	2038	BAT	N/A
Long Island Energy Storage-Montauk	5.0	2039	BAT	N/A
Shoreham Solar Commons	24.9	2038	SL	Solar
Kings Park Solar 1	2.0	2039	SL	Solar
Kings Park Solar 2	2.0	2039	SL	Solar
Riverhead Solar Farm	20.0	2039	SL	Solar
Long Island Solar Calverton [7]	22.9 [7]	2052 [8]	SL	Solar

[1] Summer capacity based upon summer 2021 Dependable Maximum Net Capacity ("DMNC") test results. Test results may not reflect final Capacity Resource Interconnection Service Adjusted ICAP totals used for NYISO capacity supply purposes.
(a) LISF and ELISP are based on nameplate ratings.
(b) Represents portion of plant capacity sold to LIPA.

[2] CC = Combined Cycle; ST = Steam; Cogen = Cogeneration; IC = Internal Combustion; SC = Simple Cycle; PS = Pumped Storage; HY = Hydro; SL = Solar; OSW = Offshore Wind; BAT = Battery.

[3] Also capable of burning oil.

[4] LIPA is responsible for fuel procurement.

[5] Energy only contract.

[6] LIPA has a long term transmission contract with Neptune Regional Transmission System (660 MW, expires 2027), which is used to deliver capacity associated with the Marcus Hook facility identified above, as well as deliver energy purchases from PJM (a regional transmission organization operating a transmission grid running from Illinois to New Jersey and south to Virginia, respectively).

[7] Facility has not achieved Commercial Operation. Capacities shown are projected Project Capacities from respective Power Purchase Agreements.

[8] Expiration date based on 30 years from planned commercial operation date for Long Island Solar Calverton and 20 years for Riverhead Solar 2, LLC...

[9] PPA authorized for execution by the Board.

Short-Term Capacity Purchases

In addition to the resources described above, LIPA relies on short-term, firm capacity purchases from the NYISO "Rest of State" market to meet a portion of its total statewide capacity requirements. LIPA is also allocated additional Long Island and "Rest of State" capacity resources from the NYISO on a monthly basis as part of its market excess purchase obligation as a load serving entity in New York. LIPA anticipates the need to continue to make additional capacity purchases. Such purchases are accomplished through solicitations, auctions and/or bilateral arrangements. PSEG ER&T, a PSEG Long Island affiliate, estimates the requirement and timing of these capacity purchases on LIPA's behalf.

Market Energy Purchases

In addition to energy purchased under the terms of the agreements described above, LIPA routinely purchases energy in the day-ahead and real-time markets operated by the NYISO, ISO-NE and PJM (described below). These purchases are generally made when the price of energy from these sources is below the incremental cost of generation from LIPA's contracted resources.

The tables below summarize estimated demand and energy requirements for the period shown. During this period, annual peak demands and energy requirements, after adjustment for various demand side programs, are estimated to decrease at annual compound rates of approximately 1.6% and 2.2%, respectively. The estimated demand and energy requirements in the tables below incorporate the effects of LIPA's Long Island Choice program and reflect the results of resource planning assessments conducted by PSEG Long Island. Such information is not intended to represent resource-specific power supply expansion plans adopted by the Authority. The information in the table below is presented on an unforced capacity basis to conform to the requirements of NYISO. ICAP is a measurement of a generating unit's maximum output under certain defined test conditions without considering the impact of forced outages. UCAP is a related measure that takes a generating unit's ICAP and reduces it based on the proportion of a generating unit's historic output that was not available due to forced outages. Historical data throughout this ADR has been presented on an ICAP basis to be consistent with prior years. It is anticipated that the Authority will migrate to the UCAP basis as such information becomes available.

Estimated Capacity Requirements and Resources (UCAP)
(MW)

	2022	2023	2024	2025	2026
System Demand					
Net LIPA Load [1]	5,056	4,951	4,870	4,782	4,746
plus: Transmission Loss Adjustment [2]	50	50	50	50	50
net: LIPA Load with Losses	5,106	5,001	4,920	4,832	4,796
Required Reserve Margin [3]	403	395	389	382	379
Total Capacity Requirement	5,509	5,396	5,309	5,214	5,175
Resources (UCAP)					
Nine Mile Point 2	231	231	231	231	231
GENCO [4]	3,402	3,371	3,371	3,371	3,371
Additional Contract Generation [5]	849	798	691	561	561
UCAP Net Purchases/(Sales) [6]	1,027	996	1,016	1,051	1,012
Total Capability	5,509	5,396	5,309	5,214	5,175
Reserve Margin	107.90%	107.90%	107.90%	107.90%	107.90%

[1] Based on 2022 Gold Book. Zone K Net Peak Load reflects reductions for Energy Efficiency, Renewables & Load Modifiers.
[2] NYISO Off-Island Transmission Loss Adjustment factor for LIPA.
[3] NYISO Required Reserves estimated 107.90% UCAP (119.60% ICAP equivalent) (as of April 2022).
[4] National Grid covered under the PSA.
[5] Includes Combined Cycle units - Pinelawn Power, Calpine Bethpage 3 & Caithness, Fast Track GT's - Glenwood Landing, Port Jefferson, Shoreham, Edgewood, Greenport, Freeport, NYPA Flynn, IPP's – Hempstead Resource Recovery, Huntington Resource Recovery, Babylon Resource Recovery, Islip Resource Recovery, LI Solar Farm, Deepwater Off-Shore Wind.
[6] UCAP purchases, including Marcus Hook, net of short-term UCAP sales.

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Estimated Energy Requirements and Resources [1]
(GWH)

	2022	2023	2024	2025	2026
Energy Requirements					
Total Energy Requirements [2]	19,330	18,798	18,414	17,933	17,718
Resources [3]					
NMP2	1,893	2,033	1,876	2,033	1,871
GENCO [4]	3,352	2,725	2,026	1,904	1,919
Contracted Power Purchase Agreements [5]	3,405	3,076	2,775	2,443	2,265
Non-Dispatchable IPP Resources	895	895	897	895	895
BNL HYDRO and Recharge NY	497	499	499	499	499
Existing Load Modifiers [6]	415	431	443	442	442
Future Resource Additions [7]	47	266	650	648	830
Net Economy [8]	8,826	8,873	9,248	9,069	8,997
Total Resources	19,330	18,798	18,414	17,933	17,718

[1] Based on final 2022 LIPA Budget.
[2] LIPA's estimated Total Energy Requirements including Long Island Choice customers. Source: LIPA Forecast of Electric Requirements, Sales and Peak Loads as of September 8, 2021.
[3] Includes the estimated GWh output of both the existing and future resources expected to be under contract to LIPA during each year of the projected period and spot market energy purchases. Values based upon final 2022-2026 LIPA Operating Budget.
[4] Generating units covered under the PSA.
[5] Power purchase agreements under contract (including emergency generators in Montauk and East Hampton). When contracts expire, it is assumed the energy is available in the Net Economy market.
[6] Reflects existing load modifiers. Includes solar Feed In Tariffs (FIT1, FIT2, FIT3, FIT5) and Fuel Cells. Also includes BP Solar, Invenergy Shoreham Solar, BQ Indian Head, sPower Riverhead (20MW), Montauk and East Hampton Battery.
[7] Reflects the estimated energy output from the Resource Additions and Load Modifiers expected to be placed into service during the projected period: new solar projects (Nextera Calverton, sPower Riverhead 36 MW), Deep Water Off-Shore Wind, and Future Behind-The-Meter Battery Storage.
[8] Short term purchases net of short term sales.

Cybersecurity

The Board has adopted an Information Technology and Cyber Security policy to maintain a robust information security program for its systems and assets, including those managed by PSEG Long Island. This multi-faceted program delineates the strategic objectives, management structures, business processes, and technology capabilities to implement safeguards to minimize and manage risk to acceptable levels.

This policy provides the Board's expectations and direction for the Authority and PSEG Long Island in protecting the Authority's digital infrastructure and data. Key provisions of this policy include:

- Conducting quarterly internal vulnerability assessments and annual third-party vulnerability assessments and penetration testing of all information and operational technology systems and promptly mitigating the vulnerabilities; and
- Maintaining a level of 3 or higher on the National Institute of Standards and Technology Cyber Security Framework (NIST CSF), as evaluated annually through an independent assessment.

In addition, cybersecurity was a particular area of focus for the Authority in the recent contract negotiations relating to the OSA. As a result, the Authority has established a cybersecurity default metric in the OSA for PSEG Long Island to achieve and maintain NIST CSF Tier 3. The default metric provides LIPA with the right to terminate the contract should PSEG Long Island fail to maintain compliance. In addition, pursuant to the terms of the OSA, PSEG Long Island is obligated to comply with any safety and security policies and procedures of the Authority and all requirements of applicable law regarding data security, cybersecurity, and information security. PSEG Long Island has reported maintaining robust cybersecurity practices for LIPA's systems and assets.

Consistent with these policies, the Authority works with PSEG Long Island, CENG, GENCO, and other power suppliers, the State, and other interested parties to ensure that information management and security practices are in place to safeguard and protect data, information, and assets from inappropriate use, improper disclosure, and unauthorized release.

To date, the Authority is not aware of any significant cyber incidents that impacted the PSEG Long Island operations; however, PSEG Long Island has made the Authority aware that PSEG received a threat of attacks that could have impacted some shared services between PSEG and PSEG Long Island if ransomware was not paid. PSEG Long Island completed the internal review and concluded that this incident did not impact PSEG Long Island Information technology systems and/or PSEG information technology systems shared with PSEG Long Island and used to provide operations services to LIPA.

PSEG Long Island reported to the Authority that their Security Operations Center ("SOC") vendor detected suspicious activity on a PSEG system by an unknown threat actor. PSEG remediated the vulnerabilities identified and took mitigating actions. On further investigation, PSEG concluded that there was no evidence of an unauthorized program running on impacted PSEG systems. Also, no lateral movement or privilege escalation was found on any impacted PSEG systems. In a separate incident, PSEG Long Island notified the Authority of the presence of information related to a customer on a site used by software developers and has taken action to remove this information. In another incident, an older version of source code associated with PSEG Long Island was found and subsequently removed. There was no compromise of personally identifiable information related to this incident.

PSEG Long Island reported that their payroll services provider experienced a cybersecurity incident. PSEG immediately disconnected service with the provider to assess the situation and determine if any PSEG employee data was compromised. The payroll services provider later attested that none of the PSEG data was compromised or at risk from the cyber issue they experienced. Additionally, a PSEG equipment service provider became the target of a cyber-attack. Their service provider reported it did not find any indication that the incident affected PSEG Long Island or LIPA data. Another PSEG Long Island energy efficiency services provider became aware of suspicious activities within its network and suspected it had become a victim of a ransomware attack. PSEG Long Island nor any of its vendors assisting with the incident response efforts identified evidence that any client or end-user customer data was subject to unauthorized access or exfiltration in connection with the attack.

Fuel Supply

LIPA procures the fuel used at the GENCO Generating Facilities and certain non-GENCO facilities under the terms of its generation agreement(s). PSEG ER&T provides fuel management services for both the GENCO generating facilities and certain non-GENCO units.

The fuel used for generation will depend on generation plant fuel capability, fuel supply, fuel price, transportation cost and availability, and environmental constraints. All the GENCO steam units are dual fuel (can burn either natural gas or low sulfur residual oil). Dual fuel units can switch fuels based on overall most favorable economics.

The natural gas distribution system on Long Island shares natural gas delivery interconnections with neighboring gas utilities and interstate gas pipelines. Con Edison and two National Grid Subs have signed an agreement that provides for use of their joint systems to allow the parties to receive gas from interstate pipelines connected to their systems.

Oil is stored on site or at locations accessible by each generation facility with the capacity to burn oil. Existing oil storage capacity plus an active oil management program is employed by the applicable service providers for continuous fuel oil supply to the GENCO Generating Facilities and certain other non-GENCO generating units.

Constellation is responsible for procurement of all fuel for NMP2, and LIPA reimburses Constellation for 18% of these fuel costs.

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Overview of Regulatory Framework as it Applies to LIPA

LIPA's Provision of Transmission Service to Third Parties

As a corporate municipal instrumentality and political subdivision of the State, the Authority, and, indirectly, LIPA, are not considered "public utilities" under the Federal Power Act ("FPA") and therefore are largely exempt from FERC regulation under Part II of the FPA. Notwithstanding this exemption, the Authority and LIPA are subject to the authority of FERC to order interconnection of its facilities under Section 210 of the FPA, and the authority of FERC to order "transmitting utilities" to provide transmission services under sections 211 and 212 of the FPA as amended by the 2005 Energy Policy Act (as defined below). Further, FERC applies its "open access" principles from Order No. 888 and its progeny to non-jurisdictional utilities, through a reciprocity requirement (described below).

On April 24, 1996, FERC issued Order No. 888. As that order was modified on rehearing, it (i) requires all public utilities to have a tariff on file with FERC that provides open access transmission services to other entities under comparable terms and conditions of transmission service that the public utility provides to itself and its affiliates and (ii) contains a reciprocity provision that requires non-jurisdictional utilities (including municipal and consumer-owned utilities such as LIPA and the Authority) that purchase transmission services under FERC filed open access tariffs and that own or control transmission facilities to provide open access service to the transmitting utility on rates, terms and conditions that are comparable to the service that the non-jurisdictional utility provides itself. In 1998, FERC reviewed LIPA's Open Access Transmission Tariff ("OATT"), including its rates for transmission service, and found that the OATT represents an acceptable reciprocity tariff subject to the condition that LIPA adopt a code of conduct and maintain an Open Access Same-time Information System ("OASIS"). While LIPA has retained a reciprocity OATT, transmission service over LIPA's system occurs primarily through its participation in the NYISO, including offering of transmission service under terms set forth in the NYISO OATT and engagement in the NYISO regional transmission planning process.

The rates that LIPA charges for wholesale transmission service, including the calculation of any stranded cost charge, are not subject to direct regulation by FERC under Sections 205 or 206 of the FPA. LIPA's rates for wholesale transmission service are set by the Authority and incorporated for informational purposes into the NYISO OATT.

On July 21, 2011, FERC issued Order No. 1000 to expand upon certain regional planning principles of Order No. 890. Order No. 1000 establishes a framework for developing large regional transmission planning groups, requires sharing information between such regional transmission planning groups to enable the development of needed "interregional" transmission facilities, and requires the regional transmission planning groups to develop methodologies for allocating the costs of new transmission facilities identified through such regional and interregional transmission planning efforts. Public utilities and the NYISO developed changes to their planning processes to integrate the Order 1000 reforms (as described below).

As part of the Energy Policy Act of 2005 (the "2005 Energy Policy Act"), Congress amended the FPA to include a new Section 211A, which grants FERC limited discretionary authority (but does not mandate the exercise of such authority) to order "unregulated transmitting utilities" to provide "open access" transmission service. The term "unregulated transmitting utility" is defined as an entity that owns or operates facilities used for wholesale transmission service in interstate commerce and is an otherwise exempt entity under Section 201(f) of the FPA. LIPA meets this definition and will be an unregulated transmitting utility should FERC ever apply Section 211A to LIPA. FERC has never asserted its FPA Section 211A authority over LIPA.

While FERC may apply the terms of Section 211A to LIPA and other unregulated transmitting utilities case-by-case, it is unclear whether such application would fundamentally change LIPA's provision of wholesale transmission service. LIPA already provides open access transmission service to third parties on a comparability basis through its participation in the NYISO as described below. Further, LIPA maintains its own reciprocity OATT, voluntarily complies with FERC's Standards of Conduct and OASIS requirements and operationally and administratively ensures comparability in interconnection service to generators.

New York Independent System Operator

General

The investor-owned utilities in the State, with NYPA and LIPA (collectively, the "Transmission Owners"), are members of an independent transmission system operator called NYISO. NYISO is a not-for-profit corporation formed to provide for non-discriminatory open-access transmission over electric transmission systems belonging to the Transmission Owners, to maintain the reliability of the combined systems and to administer electric power markets within the State. Customers of NYISO pay non-transmission-related charges to NYISO and pay the Transmission Service Charge ("TSC") to the Transmission Owners under the NYISO OATT. LIPA participates in the NYISO under provisions designed to protect the Authority's tax-exempt status and which recognize that the Authority, not FERC, is the entity with jurisdiction to set LIPA's rates. LIPA remains the entity responsible for billing and collecting its TSC for its transmission facilities under rates set by the Authority under State law. Further, LIPA retains ownership and operational control over its transmission facilities while coordinating the scheduling, maintenance and use of LIPA's transmission system with the NYISO.

In addition to its transmission-related responsibilities, the NYISO provides power pooling and power coordination functions. Operational features of the NYISO include: (i) the establishment of a day-ahead and real-time bid-based spot energy market; (ii) the implementation of congestion pricing for transmission services; (iii) the creation and administration of transmission congestion contracts; (iv) the administration of a capacity market; (v) markets for certain ancillary services; and (vi) long-term planning for reliability, economic and public policy matters. A significant feature of the NYISO's tariffs is its administration of an electric power market that uses a locational based marginal pricing structure.

LIPA receives payments for use of its transmission system by third parties through the billing and collection of its TSC and contractual payments under certain grandfathered transmission agreements between LIPA and third parties. For non-grandfathered contracts, LIPA directly bills the TSC, a per kilowatt-hour charge, to transmission customers withdrawing energy from the LIPA System, and collects the TSC revenue directly from the customers. LIPA's TSC is developed based upon a formula rate, which was approved by LIPA's Board in September 2003.

As a condition of LIPA's participation in the NYISO and to recognize LIPA's non-jurisdictional status, the NYISO OATT includes provisions that allow the NYISO to file, on LIPA's behalf, LIPA's TSC for inclusion in the NYISO OATT on an informational basis only. FERC limits its review of LIPA's TSC to a comparability review by which it only reviews whether the TSC rates that LIPA is charging are applied to all transmission customers, including LIPA itself, on a comparable basis.

NYISO Compliance with Orders 890 and 1000

Order 890, as modified on rehearing, required the NYISO to adopt a transparent, regional transmission planning process that includes all stakeholders in the State and neighboring, interconnected regions. LIPA voluntarily participated in developing the NYISO's compliance filings covering implementation of most elements of Order 890. During 2007 and 2009, FERC approved NYISO proposals covering the development, cost-recovery and cost-allocation of reliability and economic transmission upgrade projects. These proposals included provisions recognizing the Authority's role in transmission planning for the Service Area and its jurisdiction over LIPA's rates. Most of the other changes to the OATT included in Order No. 890 do not substantially affect the provision of transmission service by the NYISO because of its "financial transmission rights" rather than "physical transmission rights" structure.

As part of the Order 890 process, FERC also approved changes to the New York Independent System Operator/Transmission Owner Reliability Agreement (the "NYISO/TO Reliability Agreement"), which permits the NYISO to require transmission owners to make transmission reliability upgrades subject to certain transmission owner rights and conditions. The NYISO/TO Reliability Agreement provides cost-allocation and cost-recovery assurance to the transmission owners regarding the construction of reliability projects identified as part of the NYISO's planning process.

As part of developing this NYISO/TO Reliability Agreement, LIPA sought and gained inclusion of several key terms intended to protect LIPA's status as a non-jurisdictional utility and its ability to maintain and issue tax-exempt debt. These conditions include: (i) a provision that LIPA does not have to build a project if the construction or use of such project would violate the tax-exempt status of its bonds; (ii) clarification that LIPA's execution of the NYISO/TO Reliability Agreement is not considered a waiver of LIPA's non-jurisdictional status under the FPA; and (iii) procedures by which LIPA may withdraw from the NYISO/TO Reliability Agreement upon 90-days' notice subject to any specific obligation it may have already incurred prior to the date of withdrawal. On January 25, 2010, the Board approved a resolution authorizing the execution and implementation of the terms of the NYISO/TO Reliability Agreement by LIPA.

Order 1000 (as described above) required modifications to the NYISO regional transmission planning process, including the adoption of new cost allocation procedures for projects addressing transmission needs caused by public policy requirements and measures for allocation of costs for inter-regional (i.e., inter-ISO) projects. Under Order 1000, NYISO has adopted changes to its OATT that incorporate the assessment of transmission needs driven by public policy requirements into the NYISO transmission planning process. As part of these changes, the NYISO proposed, and FERC has approved, language detailing the process by which the Authority exercises its statutory responsibility for transmission planning within the Service Area to identify transmission needs on the LIPA transmission system that may be driven by public policy requirements and integrating such transmission needs into the NYISO's public policy requirements planning process.

Since 2015, FERC has approved multiple projects outside of Long Island under the public policy planning process and related processes for cost allocation and recovery among all regions of the state including Long Island. These include the "AC Transmission" projects designed to reduce congestion over the Central East interface, of which Long Island was allocated 3.6% of revenue requirements, and "Western Transmission" projects designed to unbottle NYPA hydroelectric energy and improve imports from Ontario, of which Long Island was allocated 6.93%. Long Island was allocated 8.55% of the "TOTS" projects through a settlement agreement that predated FERC's acceptance of the public planning process. Long Island may also be allocated a load ratio share (approximately 12.5%) of certain projects required pursuant to New York State's Accelerating Renewable Energy Growth and Community Benefit Act ("AREG&CBA") to unbottle renewable energy. The PSC continues to review these projects and their recovery mechanisms.

In March 2021, the PSC approved a Public Policy Transmission Need for one or more ties from Long Island to New York City or Westchester County to address the public policy requirements of offshore wind integration pursuant to the CLCPA. NYISO has solicited and is in the process of reviewing developer proposals to meet this need. In 2021, LIPA challenged the cost allocation associated with these projects. In May 2022, the PSC issued an order agreeing with the substantive arguments in LIPA's filing and ruling that the cost allocation formula associated with the transmission need identified in the March 2021 Order is to be based entirely on a statewide volumetric load ration share (i.e., approximately 12.5% to be incurred by LIPA).

Order 1000 also includes requirements for interregional planning between regions. FERC has approved a joint NYISO, PJM and ISO-NE interregional planning coordination program. As approved, any interregional planned project must be jointly identified by both ISOs and there must be an agreed-upon allocation of costs between both ISOs.

Fukushima Daiichi

Following the March 11, 2011 earthquake and tsunami that led to the catastrophic failure of the Fukushima Daiichi Plants in Japan, the NRC issued new requirements on March 12, 2012 that required upgrades to NMP2. NMP2 has been brought into full compliance with these requirements.

Generator Interconnection Rule

FERC has established rules requiring all public utilities that own, operate or control transmission facilities to file standard procedures and standard agreements governing interconnection services for "large" generators producing over 20 MW (Order No. 2003 & Order No. 2003-A - Large Generator Interconnections) and for "small" generators producing less than 20 MW (Order No. 2006, Order No. 2006-A & Order No. 2006-B - Small Generator

Interconnections). The NYISO OATT includes Large Generation Interconnection Procedures and a Large Generation Interconnection Agreement consistent with Order Nos. 2003 and 2003-A and Small Generation Interconnection Procedures and a Small Generation Interconnection Agreement consistent with Order Nos. 2006, 2006-A and 2006-B. As LIPA is not a "public utility" under the FPA, it has no direct obligation to comply with the Commission's interconnections procedures. However, as part of its participation in the NYISO, LIPA voluntarily complies with the NYISO's generator interconnection procedures for interconnections at the transmission system level. LIPA continues to administer the interconnection process for all generators connecting to its distribution facilities under its own tariff and procedures. LIPA also has adopted revisions to its own generator interconnection procedures to be complementary to the NYISO process.

In Order No. 845, "Reform of Generator Interconnection Procedures and Agreements," and the related rehearing order, Order No. 845-A, FERC adopted changes primarily focused on facilitating the integration of renewable resources and otherwise streamlining the interconnection review and authorization process. Most notably, as a part of this proceeding, FERC has adopted a rule permitting interconnection customers to exercise an option to build any required interconnection facilities and stand-alone network upgrades to the transmission provider's system. NYISO submitted two compliance filings to FERC to revise its governing interconnection rules in accordance with these orders, which FERC partially accepted on February 20, 2020 and in full on June 4, 2020. LIPA has been monitoring the NYISO's development of rules in compliance with these FERC orders and participates in the proceedings.

PJM Independent System Operator and Allocation of PJM Regional Transmission Expansion Project Costs

LIPA has contracted with Neptune to purchase 660 MW of transmission capacity over an undersea extra-high voltage cable installed between Sayreville, New Jersey and Levittown, New York. Beginning in June 2010, LIPA also has a contract with Marcus Hook LLP to purchase 91% of the capacity of the Marcus Hook generating facility in Pennsylvania.

PJM, a regional transmission organization operating a transmission grid running from Illinois to New Jersey and south to Virginia, allocates the costs of "Regional Transmission Expansion Plan" projects ("RTEP") based on cost allocation protocols. These costs are allocated to merchant transmission facilities, such as Neptune, which have obtained firm transmission withdrawal rights under the PJM Tariff. Neptune passes through to LIPA any RTEP charges assessed to the firm transmission withdrawal rights for capacity over the Neptune Line.

In late 2019, FERC rejected a PJM compliance filing that had allocated certain upgrades to the local transmission owner leaving some facilities within the Service Area that impact Neptune service open to reallocation and allocating a large share of costs to Neptune by default, and through contract with Neptune to LIPA. LIPA has been disputing the cost allocation of these facilities at FERC, most recently through a FPA Section 206 complaint currently before FERC.

In January 1, 2020, PJM had also implemented a separate Border Transaction Rate for Firm Point to Point transmission service, significantly increasing the price of firm point to point transactions to the Neptune Line. FERC had accepted these rates subject to refund while considering the justness and reasonableness of the proposed rates. LIPA and other impacted merchant transmission providers disputed these rates in proceedings before FERC. A settlement agreement was reached in October 2021 with a schedule that phases in moderate increases in firm point to point transactions to the Neptune Line.

New York State Reliability Council

The New York State Reliability Council, LLC ("NYSRC") determines the reliability rules that the NYISO and all market participants must operate under and monitors the NYISO's compliance with the reliability rules. The NYSRC provides reliability guidance consistent with the reliability regulation adopted by Congress in 2005 in Section 215 of the FPA, discussed above under "THE SYSTEM—Overview of Regulatory Framework as it Applies to LIPA - *LIPA's Provision of Transmission Service to Third Parties*."

CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY

General

The electric utility industry has been, and will be, affected by several factors which will affect the business, operations and financial condition of both public and private electric utilities, including the Authority and LIPA. Such factors include, (i) effects of compliance with rapidly changing environmental, safety, licensing, regulatory and legislative requirements, (ii) changes resulting from "self-generation," energy efficiency, conservation and demand-side management programs to the timing and use of electric energy, (iii) changes in state and national energy policy, (iv) new requirements to obtain increasing portions of overall electric energy supply from renewable generating resources, (v) imposition of requirements to reduce emissions of greenhouse gases, (vi) issues relating to the ability to issue tax-exempt obligations, (vii) service restrictions on the ability to sell to non-governmental entities electricity from generation projects financed with outstanding tax-exempt obligations, (viii) changes in current and projected future load requirements, (ix) changes in installed capacity requirements, and (x) increases in costs. These factors (and other factors) could affect the financial condition of any electric utility and likely will affect individual utilities in different ways. In addition, the ongoing COVID-19 pandemic will have negative effects on all sectors of the United States economy, including the utility sector. See "RECENT DEVELOPMENTS – Impacts of the Coronavirus and COVID-19 Pandemic."

The Authority cannot predict what effects these factors will have on the business, operations and financial condition of the Authority or LIPA, but the effects could be significant. The sections of this caption briefly discuss certain of these factors. However, these discussions are not comprehensive or definitive, and these matters are subject to change after the date of this ADR. Extensive information on the electric utility industry is, and is expected to be, available from legislative and regulatory bodies and other sources in the public domain.

Competition

In New York and many other states, there have been legislative and regulatory actions to promote competition in the supply of power by requiring the separation of power supply services and costs from electric transmission and distribution services and costs.

The Authority has taken several actions to promote an orderly transition to greater competition in power supply and retail customer choice in the power supply markets in the Service Area. The Authority fosters wholesale competition by offering Open Access Transmission Service to generators that wish to provide power to the NYISO or to other wholesale customers. This service is offered on a comparable basis to the regulated transmission utilities in the State that are also members of the NYISO. Retail choice (sometimes called customer choice, retail wheeling, or retail open access) refers to a process by which retail customers choose among competitive suppliers for electric capacity, energy, and ancillary services. The delivery of capacity and energy is provided by the owner and operator of the local transmission and distribution system.

Under current law, customers may purchase energy from third party providers. In 1998, the Authority adopted a retail choice program (called "Long Island Choice"), which offers electric customers the opportunity to choose an electric energy supplier other than LIPA. The program is available to all customers in the Service Area. The enabling legislation for the New York State budget passed April 1, 2019, included the repeal of the sales tax exemption under New York Tax Law §1105-C on the sale of transportation, transmission, or distribution of gas and electricity where it is sold separately from the commodity. As a result, effective June 1, 2019, non-residential customers purchasing from energy service companies must now pay sales tax on the unbundled delivery portion of their bill. This change resulted in declining customer participation in retail choice programs statewide, including the Authority's Long Island Choice program. As of May 2022, other suppliers were selling electricity to 20 customers in the Service Area representing a total coincident peak load of 2.6 MW. The Authority cannot make a prediction as to the effect, if any, new or revised State or federal laws addressing retail and commercial competition will have on ongoing implementation of retail competition.

On May 20, 2020, the Board approved a proposal to allow Community Choice Aggregation ("CCA"), a program that enables a municipal government to enroll customers within its jurisdiction in Long Island Choice and engage an energy service company to supply their energy. A customer whose municipal government chooses CCA will be enrolled by default, unless the customer chooses to "opt-out" of the CCA and remain a full-service Authority customer. Several municipal governments in the Service Area have taken steps to form CCAs. The Authority cannot predict how many customers will enroll. A customer's choice of an energy service company to supply their energy under Long Island Choice does not have an adverse financial impact on the Authority.

The DPS conducted a stakeholder collaborative proceeding to examine the potential benefits and challenges of retail competition on Long Island.[1] In that proceeding, the Authority proposed changes to the Long Island Choice rate structure for purposes of simplification and transparency, which received a positive recommendation from the DPS, were adopted by the Board, and became effective on January 1, 2022. The modified rate structure will continue to ensure that the Authority recovers all its unavoidable power supply costs on an equitable basis from both bundled service customers and retail choice customers. As modified, the Authority's Power Supply Charge consists of the Market Supply Charge, which recovers LIPA's bypassable costs from its bundled customers, and the Local Supply Charge, which recovers LIPA's non-bypassable costs from its bundled and retail choice customers.

New York State Electric Utility Industry Regulation

General. Legislation is regularly introduced in the State Legislature, which could affect the operations of the Authority. The Authority cannot predict which of such legislation might be enacted into law, what form any of such legislation, if enacted, might take or what impact any of such legislation if enacted might have on the Authority's operations.

NYISO. For a description of the NYISO and its present activities, see "THE SYSTEM – New York Independent System Operator" herein.

Reforming the Energy Vision and the Clean Energy Standard. In April 2014, the PSC commenced its REV initiative to transform the State's energy industry and regulatory practices. Reports and additional REV information are available from the DPS, which is the staff arm of the PSC, at http://www.dps.ny.gov/. Information on that website is not included herein by specific cross-reference. See "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY - Climate Change - *Climate Leadership and Community Protection Act and the State Energy Plan*" for additional information relating to REV and certain other State energy initiatives.

In addition, in January 2016, the PSC approved the 10-year $5.3 billion Clean Energy Fund (the "CEF") to be managed by NYSERDA under the direction of the PSC. The CEF has four portfolios: market development (to reduce costs and accelerate customer demand for energy efficiency and other behind-the-meter clean energy solutions, and increase private investment); innovation and research (to invest in cutting-edge technologies that will meet increasing demand for clean energy); NY Green Bank (to partner with private financial institutions to accelerate and expand the availability of capital for clean energy projects) and NY-Sun (to provide long-term certainty to the State's growing solar market and to lower the costs for homeowners and businesses investing in solar power).

While the Authority is not a regulated utility subject to the PSC's jurisdiction, it has been monitoring, and expects to continue to monitor, the REV proceeding closely and review and evaluate orders put forth by the PSC and implemented by the investor-owned utilities to develop and recommend a plan of action by the Authority consistent with REV goals and objectives. The Authority cannot predict the outcome of the REV proceeding or related proceedings or their impact on the business, operations or financial condition of the Authority.

Public Authorities Reform. The Public Authorities Accountability Act of 2005 (the "PAAA") was signed into law in January 2006. The PAAA addressed a wide range of matters pertaining to many public authorities in the State, including the Authority. In December 2009, the Governor signed into law additional legislation (the Public Authorities Reform Act – "PARA") intended to further reform the way public authorities conduct business in the State. PARA creates an independent authorities budget office with certain oversight powers and expands on the filing and publication requirements of the PAAA.

[1] DPS Matter No. 15-02754, *In the matter of examining the potential benefits of retail competition on Long Island*.

Environmental

Electric utilities are subject to rapidly changing environmental regulations. Federal, state and applicable local standards and procedures, which regulate the environmental impact of electric utilities, are subject to change in interpretation and enforcement. These changes may arise from continuing legislative, regulatory and judicial actions regarding such standards and procedures. There is no assurance that the facilities owned or under contract to LIPA will remain subject to the regulations currently in effect, will always be able to comply with future regulations or can always obtain all required operating permits. An inability to comply with environmental standards could cause additional capital expenditures to comply, reduced operating levels, or the complete shutdown of individual electric generating units ("EGUs"), including NMP2 and units under contract to LIPA under the PSA, if not in compliance.

The EPA, the states and local jurisdictions may enact new laws and regulations governing emissions from many types of power plants and significantly affect demand for electricity. State regulation of electric utility emissions may change significantly. The changes could affect the cost of purchased power from combustion turbines and other types of plants. If enacted, new laws and regulations may change existing cost assumptions for electric utilities. While it is too early to determine if any new requirements will be imposed, in what form, or what their effect will be, the changes may have a material impact on the cost of power generated at affected EGUs. See also "ENVIRONMENTAL MATTERS" herein.

Cross-State Air Pollution Rule

The United States Environmental Protection Agency ("EPA") adopted the Transport Rule (also referred to as the Cross-State Air Pollution Rule ("CSAPR")) on February 26, 2016. The rule established a new cap-and-trade program requiring greater reductions in SO_2 and NO_x air emissions than those required by the 2005 Clean Air Intrastate Rule ("CAIR") that it replaced. In December 2015, DEC adopted its final rules repealing its NO_x ozone season and annual trading programs and SO_2 trading programs under CAIR to replace them with new rules to allocate allowances as created by CSAPR for EGUs. In 2018, under CSAPR, DEC (i) allocated allowances based on the average of the last three years for which data are available to existing 25 MW or larger EGUs, (ii) set aside 5% of the budget for new EGUs, and (iii) provided the remaining 10% of allowances to NYSERDA to promote energy efficiency and renewable energy technologies. EPA recently proposed modifications to CSAPR, which are being reviewed by the Authority and PSEG Long Island.

New York State Regulation of NOx Emissions from Power Plants

In December 2019, DEC adopted regulation 6 NYCRR Subpart 227-3, titled "Ozone Season Oxides of Nitrogen (NOx) Emission Limits for Simple Cycle and Regenerative Combustion Turbines." The regulation significantly lowers allowable NO_x emissions from simple cycle and regenerative combustion turbines starting in 2023. The regulation provides several compliance options, including the ability to average a facility's emissions with nearby electric storage or renewable generation facilities. The regulation governs legacy combustion turbines totaling 1,345 MW in capacity that the Authority has under contract with National Grid under the PSA. The Authority and National Grid have evaluated the available compliance options and submitted an initial compliance plan to DEC in March 2020 and updated it in the Summer of 2021. The current plans are to retire approximately195 MW of units that are subject to the new NOx limits and retrofit approximately 315 MW of units with emissions control technology.

Regulation of CO_2 emissions from Power Plants

The federal and state governments have increased focus on regulating CO_2 and other GHG emissions from power plants. EPA's authority to regulate GHG emissions stems from a 2007 United States Supreme Court decision which determined that GHG emissions are "air pollutants" under the federal Clean Air Act ("CAA"). EPA has begun regulating the energy sector by: (i) mandating GHG reporting as of 2011; (ii) establishing a nationwide New Source Performance Standard ("NSPS") for CO_2 emissions from new fossil-fired EGUs pursuant to CAA § 111(b); and (iii) addressing GHGs from existing EGUs pursuant to CAA § 111(d) as discussed below.

On August 3, 2015, the EPA issued the Clean Power Plan final rule ("CPP"). The CPP intended to regulate CO_2 emissions from existing fossil fuel-fired EGUs, specifically coal-, oil-, and gas-fired steam generating units and natural gas combined cycle units. On July 8, 2019, the EPA repealed the CPP, stating that the CPP exceeded EPA's authorities under the CAA. EPA proposed to change its legal interpretation underlying the CPP to conclude that the CAA's use of the term "best system of emission reduction" must involve technological or operational measures that apply to an individual point source as opposed to the approach taken in the CPP that would have involved a shifting of the balance of coal, gas, and renewable-generated power at the grid-wide level, which EPA stated constitutes energy policy as opposed to environmental policy. At the same time, the repealed CPP was replaced by the Affordable Clean Energy ("ACE"). The ACE rule was focused on potential upgrades to coal plants and would have been unlikely to materially affect energy and capacity prices in the NYISO wholesale market and the Eastern Interconnection. On January 19, 2021, the D.C. Circuit court vacated the ACE rule and remanded it to the EPA for further proceedings consistent with its opinions. The United States Supreme Court just reviewed the extent of EPA's regulatory authority to potentially reshape the country's electricity grids and unilaterally decarbonize any sector of the economy in the case *West Virginia v. EPA*, and released its determination on June 30, 2022, which determination the Authority and PSEG Long Island will evaluate for its impact. Given these developments, the timing and substance of federal regulation of CO_2 applicable in the State is not certain.

DEC's GHG standards for new power plants, adopted in June 2012, are more stringent than the NSPS finalized by EPA on August 3, 2015. Specifically, new power plants must achieve a standard of 925 pounds of CO_2 equivalent per MW gross electrical output or 120 pounds CO_2 equivalent per million BTU of input. The standards are set at a level that permits the construction of natural gas plants with back-up fuel oil, but the standards are too low to permit construction of new coal-fired power plants in the State. On May 9, 2019, DEC adopted final regulations setting a CO_2 emission limit for existing power plants in the State of 1,800 pounds of CO_2 equivalent per MW gross electrical output or 180 pounds CO_2 equivalent per million BTU of input. All of the power plants owned by or under contract to the Authority are expected to be within this limit.

In addition, effective December 31, 2020, DEC revised its regulations implementing the Regional Greenhouse Gas Initiative ("RGGI") program, a CO_2 cap-and-trade program that applies to EGUs within the eleven RGGI states in the Northeast and Mid-Atlantic region. The new regulations implement the decision of the RGGI states to further reduce the cap by 2.275% each year until 2030 to achieve an overall reduction of 30% from 2020 to 2030. It is expected that power companies will comply with these caps by purchasing new allowances at auction at slightly higher prices and using allowances banked in previous compliance periods. Beginning in 2021, RGGI states implemented the Emissions Containment Reserve (the "ECR") that will withhold allowances from circulation to secure additional emissions reductions if prices fall below an established trigger price. The ECR triggers only if emission reduction costs are lower than projected.

The State's CLCPA described below addresses GHG emissions by requiring that 100% of the State's electricity to be zero emissions by 2040. The impact of compliance with the Federal and State climate change policies on LIPA cannot be ascertained at this time.

See below under " - Climate Change - *Climate Leadership and Community Protection Act*" herein for a description of certain State initiatives intended to transform the State's energy industry and regulatory practices.

Climate Change

In recent years, state, national and international scientific reports about the contribution of human activities, largely the release of polluting gasses from burning fossil fuels (coal, oil and gas) to the changing of the Earth's climate have raised concerns among policymakers and the general public about the risks of climate change, which include greater vulnerability of the energy system to increased severity and frequency of weather events and other climate change impacts. Some, including New York City, have declared a climate emergency. Policies proposing to reduce and prevent climate change risks generally include measures to reduce emissions of CO_2 and other GHG into the atmosphere with the goal of eliminating or neutralizing such emissions entirely within decades.

Climate Vulnerability Study and Impact of Climate Change on the T&D System

In the first half of 2022, the Authority engaged a consultant to develop a climate change vulnerability study report which is exploring, among other things, weather trends and the potential impact of higher temperatures on load forecasts, T&D System impacts, and future sea level rise. The study is expected to be completed by August 2022. The main objectives for the climate change vulnerability study include: assessing how future projections of climate risks and climate variability for the Authority's service area will impact key assets and facilities, system operations and planning; identifying and prioritizing key vulnerabilities; recommending adaptation measures to mitigate the risks; and identifying next steps to advance system resiliency to climate change. The recommendations from this study will be considered in the long-term design of T&D system. The Integrated Resource Plan will also look to incorporate the projected impacts of climate change on the T&D system, such as the impact on the load forecast.

Climate Leadership and Community Protection Act

The Governor in his 2019 State of the State Address introduced the Green New Deal plan. That plan was largely incorporated into the CLCPA, which came into effect on January 1, 2020, and became one of the most comprehensive and transformational efforts to address the climate crisis in the nation. On April 8, 2020, the Energy Planning Board amended its State Energy Plan (the "SEP"), which was released in 2015 and coordinates state agencies that impact energy policy, in light of the enactment of the CLCPA. As amended, the SEP sets the following clean energy and climate targets for the State to meet: (i) a 40% reduction in greenhouse gas ("GHG") emissions from 1990 levels by 2030; (ii) 70% of electric generation from renewable energy sources by 2030 ("70x30 goal"); (iii) 185 trillion BTU increase in on-site energy savings from 2015 baseline by 2025; (iv) zero emissions electric system by 2040; (v) minimum 85% reduction in GHG emissions from 1990 levels by 2050, with a goal of 100% reduction; (vi) 9,000 MW of offshore wind by 2035; (vii) 6,000 MW of distributed solar by 2025; (viii) 3,000 MW of energy storage by 2030; and (ix) 40% goal, and a minimum target of 35%, of overall benefits from investments in clean energy and energy efficiency to be realized by disadvantaged communities. Furthermore, the amended SEP adds a new initiative to establish a sustainable electric generation facility cessation mitigation program, calling on state entities to advance strategies to mitigate the impact of power plant closures on hosting communities. The Governor has subsequently announced expansions to some of those targets, although the SEP has not been formally amended to reflect this expansion. In December 2021, the Governor announced a goal of 10,000 MW of distributed solar by 2030. In the April 2022 State of the State address, the Governor announced a doubling of the State's energy storage goal to 6,000 MW by 2030.

While some regulatory actions pursuant to CLCPA have taken place, the full impact of the CLCPA on the State's economy will be detailed in regulations over the coming years. In December 2020, DEC issued the statewide emissions limits established by the CLCPA, these being 245.87 and 61.47 mln metric tons of CO_2e in 2030 and 2050, respectively. As required by CLCPA, the emissions accounting is based on GHG global warming potentials (GWP) over 20-year time horizon, which increases the global warming contribution of shorter-lived GHGs such as methane when compared to GWP integrated over 100-year, another typically used time horizon. In December 2021, the Climate Action Council, formed pursuant to the CLCPA, issued a draft Scoping Plan to accomplish the economic transition called for in CLCPA, and will consult with DEC on implementation of GHG reduction measures and future regulatory and policy action to achieve CLCPA goals. The Authority's Chief Executive Officer is a statutory member of the 22-member Climate Action Council. In May 2022, in accordance with CLCPA requirements, the PSC issued an order directing New York State Utilities to work with DPS staff in developing a proposal for reporting GHG emissions that is consistent with CLCPA and DEC accounting. The Authority intends to coordinate with DPS and DEC staff in establishing a reporting framework for GHG inventory of its emissions that is compatible with CLCPA accounting. As part of the 2022 Integrated Resource Plan, projected carbon emissions reductions will be calculated for various scenarios. This calculation will be based on the carbon reductions in the electric, transportation, and heating sectors.

The CLCPA, through Sections 7(2) and (3) as described below, requires all State agencies, including the Authority, to consider the impacts of their final agency actions on GHG emissions and disadvantaged communities. Pursuant to Section 7(2) of the CLCPA, all State agencies must consider whether their administrative approvals and decisions "are inconsistent with or will interfere with the attainment of the statewide greenhouse gas emissions limits" established by the NYS Department of Environmental Conservation (DEC) pursuant to the CLCPA. CLCPA Section 7(3) requires all State agencies to ensure that their decisions will not "disproportionately burden disadvantaged communities" and to "prioritize reductions of greenhouse gas emissions and co-pollutants in disadvantaged communities”. The CLCPA also requires various State agencies, including the Authority, to “promulgate regulations to contribute to achieving the statewide greenhouse gas emissions limits established” by the DEC, although such regulations will not limit DEC's authority to regulate and control GHG emissions pursuant to CLCPA. To this end, the Board has updated the Authority’s policy on Resource Planning and Clean Energy and its policy on Diversity, Equity, and Inclusion to incorporate the achievement of LIPA’s share of CLCPA clean energy, energy efficiency, electrification and environmental justice goals into the Authority’s policies while upholding commitments to reliability and affordability. Accordingly, the Authority is incorporating appropriate standards into its planning activities, the evaluation of requests for resource proposals and other decisions of the Authority. Through its procurement of the State’s first offshore wind farm and several utility-scale solar facilities, as well as the Bulk Energy Storage RFP initiated in April 2021 described above, the Authority is positioning itself to achieve its share the State’s climate goals.

The implementation of CLCPA will fundamentally change the existing generation supply portfolio for the State and Long Island over the next two decades. NYISO’s 2021 Comprehensive Reliability Plan noted while the State will be in position to achieve the 70x30 goal and meet reliability requirements, achieving zero-emissions in the electric system by 2040 may require additional transmission capacity, a review of current reliability frameworks, and changes to wholesale electricity market design, to address tightening resource adequacy margins across the New York grid and the risk of extreme weather events driven by climate change. The Authority cannot predict with specificity at this time the various effects these developments will have on the business, operations and financial condition of the Authority or LIPA.

Reforming the Energy Vision, Clean Energy Standard, the Zero-Emissions Credit Requirement

The PSC commenced its Reforming the Energy Vision (or “REV”) initiative to transform the State’s energy industry and regulatory practices in April 2014. Reports and additional REV information are available on the DPS website at http://www.dps.ny.gov/. Information on that website is not included herein by specific cross-reference.

In January 2016, the PSC expanded the scope of its REV proceeding to include consideration of a clean energy standard (“CES”). In August 2016, the PSC issued an Order Adopting a Clean Energy Standard and has subsequently modified the CES in October 2020 (as modified, the “CES Order”). The PSC has also issued subsequent CES implementation orders. The CES is divided into a Renewable Energy Standard (“RES”) and a Zero-Emissions Credit (“ZEC”) requirement. In the CES Order, the PSC requires each load-serving entity (“LSE”) within its jurisdiction to serve its retail customers (the CES Order assumes Authority participation as well) by procuring new renewable resources, evidenced by the procurement of qualifying Renewable Energy Credits (“RECs”) at incrementally larger percentages for the years 2017 through 2030, with sufficient lead time for the load-serving entities to incorporate the changes into their planning processes.

The LSEs can meet their incremental obligations by purchasing “Tier 1” RECs from the New York State Energy Research and Development Authority (“NYSERDA”), by purchasing qualified RECs from other sources, or by making alternative compliance payments to a dedicated fund as discussed below. Resources eligible to produce Tier 1 RECs will be resources that came into operation after January 1, 2015, and that meet the eligibility criteria set forth in the CES Order. To the extent that NYSERDA has insufficient RECs available to meet LSE demand, LSEs make an “Alternative Compliance Payment” as prescribed in the CES Order. To the extent that LIPA has insufficient self-supplied RECs available to meet LIPA demand, LIPA has established a dedicated account (the “Clean Energy Compliance Fund”) to fund renewable energy projects or future REC purchases through LIPA procurements or NYSERDA. LIPA’s 2022 Budget included a $17,070,630 deposit in the Clean Energy Compliance Fund for future purchases of RECs from LIPA procurements or NYSERDA, if available.

The PSC’s October 15, 2020 Order (CES Modification Order) established a new Tier 4 program within the Clean Energy Standard (CES) in response to NYSERDA’s CES White Paper. The new Tier 4 will increase the penetration of renewable energy into New York City (NYISO Zone J), which is particularly dependent on polluting fossil fuel-fired generation.

In response to the CES Modification Order, NYSERDA issued a Tier 4 solicitation in January 2021. The solicitation generated robust competition, including seven different projects with 35 total alternative bid variants. After the vetting and scoring process, Governor Kathy Hochul announced two recommended contract awards in September

2021 – the Clean Path NY project (CPNY) and the Champlain Hudson Power Express project (CHPE). These projects will deliver wind, solar, and hydropower to New York City.

The contracts were submitted to the PSC for approval and public comment on November 30, 2021. The contracts for CHPE and CPNY and the accompanying petition are available on the DPS website under Case Number 15-E-0302. Information on that website is not included herein by specific cross-reference. The PSC approved the contracts by Order of April 14, 2022, subject to limited contract clarification and similar requirements as laid out in the Order. NYSERDA has projected total program payments for the purchase of Tier 4 RECS from the projects to be between $5.9 and $11.6 billion over the 25-year Tier 4 contract period. Based on the Authority's 12.5% share of the State's load, the Authority's cost obligation could range between $739 million and $1.45 billion over the 25 years. However, Tier 4 program costs could be reduced as a result of federal tax credits or through the voluntary purchase of Tier 4 RECs.

On October 15, 2020, the PSC issued an Order establishing a new "Tier 2" REC program aiming to maximize the contributions and potential of New York's existing renewable resources to ensure their continued operations and delivery of renewable energy into the state. Eligible generators include existing non-State-owned run-of-river hydropower and existing wind resources located within the state that entered commercial operation prior to January 1, 2015. Funding for the competitive Tier 2 program, which is capped at a total of $200 million across the three proposed annual solicitations, would be recovered through a new Tier 2 REC obligation imposed on all jurisdictional LSEs. At their March 29, 2021 meeting, the Authority's Board of Trustees authorized staff to execute an agreement with NYSERDA for the purchase of Tier 2 REC's. Based on LIPA's 12.5% share of the State's load, LIPA's maximum cost obligation was estimated to be $25 million. On April 30, 2021, NYSERDA released the rate for the 2021 compliance year. The rate was $0.02/MWh, which is much lower than was first anticipated. On November 1, 2021, NYSERDA and the DPS further revised downward the tier 2 rate to be $0.004/MWH. For 2022, the estimated annual cost is now forecast to be $78,000.

The PSC also proposed that each LSE, including the Authority, preserve the environmental values or attributes of qualified zero-emissions nuclear-powered electric generating facilities by purchasing an amount of ZECs in proportion to the electric load energy served by the LSE in relation to the total electric load energy served by all LSEs in the State. The Authority purchases its load-proportional share of ZECs from NYSERDA and receives its share of ZEC revenues through its ownership interest in NMP2. The net cost of ZECs to the Authority was $56 million for the full calendar year 2021. Costs will increase with the projected social cost of carbon as determined by the State and the federal government or decrease with forecasted wholesale market prices, as outlined in the CES Order.

The Authority and PSEG Long Island are also participating in the State's Offshore Wind Master Plan, which involves efforts to license and procure sufficient offshore wind resources to meet the State's goal of 9,000 MW of offshore wind by 2035. LIPA expects to meet a portion of its share of the State's goal by purchasing 130 MW from the proposed South Fork Offshore Wind Farm, and the remaining portion by purchasing Offshore Wind RECs ("ORECs") from NYSERDA, which serves as the OREC procurement agent on behalf of participating LSEs. With the two recent NYSERDA offshore wind awards interconnecting into the T&D System (880 MW and 1260 MW interconnecting to Holbrook and Barrett, respectively) and with additional NYSERDA offshore wind awards expected to also interconnect to LIPA's T&D System, studies are underway to examine the need for transmission reinforcements and flexible resources (e.g., peaking plants and energy storage) to enable the reliable and cost-effective integration of offshore wind into the local and regional power grid. In March 2021, the PSC issued an order designating a public policy transmission need associated with integrating offshore wind into the LIPA and Con Edison systems. The NYISO has received and is in the process of evaluating proposals from prospective developers to fulfill that need (see discussion of FERC Order 1000 above).

The Authority's tariff provides for net metering of certain residential and nonresidential customer-generators of renewable power, such as solar, wind, farm waste, micro-combined heat and power, fuel cells, micro-hydroelectric and hybrids. The net meters measure only the net electricity provided to or by the customer-generator using the T&D System. On March 9, 2017, the PSC adopted the first phase of its net metering successor plan (*see* Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, And Related Matters, New York Public Service Commission Case 15-E-0751 (the "Phase One Order")), which provides a new mechanism for utility compensation of certain distributed energy resources interconnected after March 9, 2017. Under the Phase One Order, large commercial customers will be compensated with a value stack comprising values for energy, capacity, environmental, and demand reduction costs. Notwithstanding the fact that the Authority is not subject to PSC jurisdiction, the Authority implemented the PSC's net metering successor plan within the Service Area, including value stack compensation for large commercial customers, on January 1, 2018. Under Phase Two, the PSC has ordered the investor-owned utilities to establish a Customer Benefits Contribution ("CBC") charge, payable by new net metered systems connecting after January 1, 2022, to recover the costs of certain programs that benefit customers and support state policy goals, such as the cost of low-income customer discounts and energy efficiency incentives. The LIPA Board adopted a similar CBC in December 2021. LIPA's CBC includes a two-year phase-in, which began on January 1, 2022 and will be complete on January 1, 2024.

While the Authority is not a regulated utility subject to the PSC's jurisdiction, it has been and expects to continue to monitor the REV and CLCPA proceedings closely and review and evaluate orders put forth by the PSC and implemented by the investor-owned utilities to develop and recommend a plan of action by the Authority consistent with the State's goals and objectives. The Authority cannot predict the activities of the Climate Action Council or the impact of related DEC regulations that will be promulgated or new related PSC proceedings on the business, operations, or financial condition of the Authority.

Nuclear Plant Matters

Wholesale Electricity Prices

Since about 2010, relatively low natural-gas prices in the Northeast have resulted in correspondingly low wholesale electricity prices in upstate New York. With Constellation's majority share of NMP2 being a merchant endeavor, these prices were insufficient to provide a positive return on cash flow for Constellation. To minimize the possibility that NMP2 and the other three nuclear units in Oswego and Wayne Counties, New York might cease operation before the expiration of their NRC Operating Licenses, the PSC established a system of Zero Emission Credits (ZECs) under its CES. This system, which became effective on April 1, 2017, provides an additional payment to Constellation for each MWH of energy produced at the Nine Mile Point Nuclear Site, up to a maximum of 9,206,000 MWH per year. The ZEC revenue attributable to NMP2 is split between Constellation and LIPA in proportion to their respective ownership shares. This additional revenue has thus far been sufficient to provide a positive return on cash flow for Constellation, and to substantially mitigate the possibility of a shutdown of NMP2 before the expiration of its operating license. The ZEC program is currently set to run through March 31, 2029.

Spent Fuel

Under the Nuclear Waste Policy Act of 1982, the Department of Energy ("DOE") was to develop, construct, and operate a system for the disposal of spent nuclear fuel and high-level radioactive waste. The system was to include interim storage capability and a permanent geological repository. A deadline of January 1, 1998 was set for DOE to begin moving spent fuel from nuclear power plants, and a fee of $1.00/MWH was collected from nuclear-plant operators to cover the department's costs for spent-fuel disposal. LIPA reimbursed Constellation's predecessor for its share of these payments. However, with the cancellation of DOE's plans for a permanent geologic repository at Yucca Mountain in Nevada, DOE is unlikely to accept any spent nuclear fuel from commercial nuclear power plants in the near term, and collection of the disposal fee was suspended in May 2014.

Until a permanent repository is built, spent nuclear fuel from NMP2 in excess of the capacity of its spent-fuel pool is being stored in dry casks at an on-site Independent Spent Fuel Storage Installation ("ISFSI"). Constellation is being reimbursed for the ongoing ISFSI costs of NMP2 by DOE from funds previously paid for NMP2's fuel disposal. Constellation in turn is forwarding or otherwise crediting 18% of these reimbursements to LIPA.

Decommissioning

Federal regulations require reactor operators to certify that sufficient funds will be available for decommissioning the radioactively contaminated portions of nuclear-plant sites. The option that LIPA adopted for assuring the availability of sufficient funds for its share of decommissioning costs is maintenance of external sinking funds that are segregated from its assets and outside its administrative control. These "trust funds" currently have a combined balance sufficient under NRC regulations to meet the present value of its decommissioning-cost obligation.

Liability for Nuclear Accidents

The Federal Price-Anderson Act currently requires licensees of commercial nuclear power plants to maintain $450 million in private insurance for each reactor site (not each reactor) for indemnification for offsite damage in the event of a nuclear accident at the site. Constellation maintains this coverage for the Nine Mile Point site, and LIPA reimburses Constellation for its proportionate share of the cost. The Act further stipulates that in the event offsite damage from an incident at any U.S. commercial nuclear power plant site exceeds the amount of that site's private insurance coverage, each reactor licensee is retroactively liable for a prorated share of the excess. This liability is limited to $138 million per reactor per incident, payable at no more than approximately $20 million per reactor per incident per year. LIPA's maximum liability under this provision is approximately $25 million, payable at no more than approximately $4 million per incident per year.

ENVIRONMENTAL LIABILITY

As discussed in "CERTAIN OTHER MATTERS —Guarantees and Indemnities," National Grid and LIPA have signed Liabilities Undertaking and Indemnification Agreements which, taken together, provide, generally, that environmental liabilities are to be divided between National Grid and LIPA based on whether they relate to Transferred Business (defined below) or Retained Business (defined below). In addition, to clarify and supplement these agreements, National Grid and LIPA have also contracted to allocate between them certain liabilities, including environmental liabilities, arising from events occurring prior to the 1998 acquisition of LILCO and relating to the business and operations to be conducted by LIPA Parties after the 1998 acquisition (the "Retained Business") and to the business and operations to be conducted by National Grid after the 1998 acquisition (the "Transferred Business"). For a complete description of specific actual and potential environmental liabilities of LIPA and National Grid, see "Legal Proceedings" in Note 16 of Notes to the Authority's Basic Financial Statements for the years ended December 31, 2021 and 2020, which are included herein by specific cross-reference.

The Authority and LIPA are subject to several federal, State and local environmental laws and regulations governing the installation, operation and maintenance of electric transmission and distribution systems.

REGULATION

The operations of the Authority and LIPA are subject to regulation by various State and federal agencies, discussions of which appear in other parts of this ADR. The principal agencies having a regulatory impact on the Authority and LIPA and the conduct of their activities are:

New York State

DPS. See "INTRODUCTION TO THE AUTHORITY AND LIPA - LIPA, PSEG Long Island and DPS" above for a description of the DPS's role and relationship with LIPA and PSEG Long Island.

Public Authorities Control Board ("PACB"). The Authority is required by the Act to obtain certain approvals of the PACB. The PACB consists of five members appointed by the Governor of the State. One member is appointed upon the recommendation of the Majority Leader of the State Senate, one upon the recommendation of the Speaker of the State Assembly, one upon the recommendation of the Minority Leader of the State Senate and one upon the recommendation of the Minority Leader of the State Assembly. The two members of the PACB appointed by the Governor upon the recommendations of the Minority Leaders of the Senate and the Assembly do not vote. The unanimous vote of the voting members of the PACB is required to authorize action by the PACB.

Pursuant to the Act, the Authority may not undertake any "project" without PACB approval. A "project" of the Authority is defined by the Act to mean an action undertaken by the Authority that: (i) causes the Authority to issue bonds, notes or other obligations, or shares in any subsidiary corporation; (ii) significantly modifies the use of an asset valued at more than one million dollars owned by the Authority or involves the sale, lease or other disposition of such an asset; or (iii) commits the Authority to a contract or agreement with a total consideration of greater than one million dollars and does not involve the day-to-day operations of the Authority. The Act provides that the PACB shall only approve a proposed project of the Authority upon the PACB's determination that: (i) the project is financially feasible; (ii) the project does not materially adversely affect overall real property taxes in the Service Area; (iii) the project is anticipated to result generally in lower utility rates; and (iv) the project will not materially adversely affect overall real property taxes or utility rates in other areas of the State.

New York State Comptroller. Pursuant to the Act, the Authority must obtain the written approval of the Comptroller of any private sale of bonds or notes of the Authority and the terms of such sale. By letter dated July 22, 1999, the Comptroller set forth his determination that pursuant to Section 1020-cc of the Act (which subjects all Authority contracts to "the provisions of the State Finance Law relating to contracts made by the State") Authority contracts for goods and services that exceed $50,000 in amount must be approved by the Comptroller before such contracts become effective. The LIPA Reform Act amended Section 1020-cc of the Act to exempt from this requirement, among other things, contracts between the Authority's service provider and third parties. In addition, the Comptroller's office periodically conducts audits of the Authority to examine the Authority's policies, procedures, controls and other financial and management practices.

Utility Intervention Unit. Under the LIPA Reform Act, the Utility Intervention Unit, within the Department of State, is empowered to participate in rate proceedings and hold regular forums in the Service Area.

Department of Environmental Conservation. DEC is the principal agency of the State government regulating air, water and land quality. Before any federal license or permit can be issued for any activity involving a discharge into navigable waters, DEC must certify that the discharge will comply with the State water quality standards (or waive certification). Certain aspects of DEC's regulatory authority over pollutant discharge permits, air quality permits and hazardous waste regulation arise from delegation of such authority to the State by federal legislation. Furthermore, DEC is charged with promulgating by January 1, 2024 and then enforcing the rules and regulations to achieve statewide GHG emissions reductions and other goals and targets established by the CLCPA reflecting the scoping plan to be prepared by the Climate Action Council by January 1, 2023. Subsequently, DEC in consultation with the Climate Action Council, will report on the implementation of the GHG reduction measures and make recommendations for future regulatory and policy actions to achieve the CLCPA goals.

Federal

Nuclear Regulatory Commission. The NRC regulates the construction and operation of nuclear power plants. An operating license is required for operating any nuclear power plant. In addition, the NRC prescribes various operating standards and other rules.

Federal Energy Regulatory Commission. FERC regulates the rates, terms and conditions of: (i) the sale for resale of electric power by "public utilities"; and (ii) the provision of transmission service in interstate commerce by public utilities. Neither the Authority nor LIPA is a "public utility" under the FPA and therefore, FERC does not exercise direct jurisdiction over rates for service over LIPA's facilities under either FPA Sections 205 or 206. Although the rates, terms and conditions under which the Authority provides transmission service are not currently subject to general FERC jurisdiction, FERC may order the Authority to provide wheeling transmission service to individual customers meeting the requirements of Sections 211 and 212 of the FPA on rates, terms and conditions comparable to those of the Authority for the Authority's own use of its system. Further, FERC may apply the provisions of FPA Section 211A (under which FERC may order unregulated transmitting utilities to provide "open access" transmission service) to LIPA, in which case LIPA would become subject to FERC jurisdiction with respect to the provision of wholesale transmission service at rates comparable to the rates it charges itself, on terms and conditions that are comparable and not unduly discriminatory or preferential.

FERC has never applied FPA Section 211A to LIPA. Since the enactment of this provision, FERC has taken a conservative approach to its implementation and has only asserted jurisdiction in very limited instances, none of which have involved an unregulated transmitting utility participating in an organized market, such as LIPA's existing participation in the NYISO.

While the Authority and LIPA are non-jurisdictional entities with respect to the establishment of rates, terms and conditions of service for the sale of energy and provision of transmission service, FERC has jurisdiction over municipal utilities such as LIPA with respect to compliance with reliability standards and prohibitions against market manipulation. Under FPA Section 215, all users, owners and operators of the bulk power system, including LIPA, must comply with reliability standards issued by NERC, which FERC has approved as the Electric Reliability Organization responsible for overall adoption and enforcement of the reliability standards. In the Northeast, implementation of the NERC reliability standards is largely delegated to, and undertaken by, the Northeast Power Coordinating Council ("NPCC"). There are now over 100 federal reliability standards covering transmission and generation operations conducted by, or on behalf of LIPA. In addition to NERC standards and NPCC standards and criteria, the NYISO and State market participants must comply with NYSRC Reliability Rules for planning and operating the State Power System. NYSRC Reliability Rules are consistent with and more stringent and specific than associated ERO standards and NPCC standards and criteria. This is permitted by federal legislation in FPA Section 215. The NYSRC Reliability Rules include local rules that apply to New York City and Long Island that are more stringent than other NYSRC Rules. These Local Rules are more stringent because of the need to protect the reliable delivery of electricity for specific electric system characteristics and demographics relative to these zones. These conditions include unique circumstances and complexities related to the maintenance of reliable transmission service, and the dire consequences that would result from failure to provide uninterrupted service.

Separately, FPA Section 222 prohibits "any entity" (including otherwise non-jurisdictional entities such as LIPA) from engaging in the use of any manipulative or deceptive device or contrivance as part of its purchase or sale of electric energy or transmission service. FERC has implemented FPA Section 222 by issuing an anti-market manipulation rule set forth in 18 C.F.R. §1.c.2 and applied such rule to non-jurisdictional entities participating in wholesale energy markets. Violations of these requirements are subject to enforcement and potential sanctions by FERC, for which the Commission may apply its Penalty Guidelines. The Penalty Guidelines have the potential to result in imposition of significant penalties where a violation causes a significant pecuniary gain for the violator or loss caused by the violation. Court decisions have held that FERC's penalty authority under FPA Section 316 and 316A does not extend to a municipality. However, this precedent has not yet been raised in a penalty assessment for violation of FPA Section 222 and LIPA expects that future cases before FERC and courts of appeal may clarify the authority of FERC to apply monetary civil penalties to municipalities, if any, for violations of FPA Section 222.

Environmental Protection Agency. The EPA is the principal agency of the federal government regulating air, water and land quality. The Authority and LIPA are subject to EPA rules requiring permits for discharge of identified pollutants in waters of the United States that may occur during utility operations. However, EPA does not regulate radiological emissions or effluents from nuclear facilities, rather the NRC reviews such environmental impacts as part of its permit and licensing proceedings. See also above "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Environmental - *Regulation of CO2 emissions from Power Plants.*"

Department of Energy. DOE may issue Presidential permits for international transmission interconnections and grant authorizations for the export of energy into Canada.

United States Army Corps of Engineers. The United States Army Corps of Engineers, subject to the State's DEC review and certification outlined above, must approve construction undertaken in connection with a power plant or transmission line, which affects navigation, involves dredging or filling in waters of the United States, or involves crossing of navigable streams.

Other Jurisdictions

The regulatory procedures of neighboring states such as Connecticut and New Jersey impact the ability of LIPA to obtain additional power supplies through constructing new cables which extend into such jurisdictions.

LITIGATION

LIPA is involved in numerous actions arising from the ordinary conduct of its business both prior to and after the 1998 acquisition of LILCO that include claims related to: Superstorm Sandy, LIPA's relationship with PSEG Long Island, LIPA's challenges to tax assessments in Nassau and Suffolk counties and environmental claims brought by governments and individual plaintiffs that allege LIPA is responsible for all or a portion of the clean-up costs, personal injuries and/or damages resulting from its alleged use, release or deposit of hazardous substances which include asbestos. While LIPA cannot predict the costs of such pending claims, or additional similar claims which may arise, LIPA believes that such litigation, in the aggregate, will not have a material adverse impact on the business or the affairs of the Authority or LIPA. See "Legal Proceedings" in Note 16 of Notes to the Authority's Consolidated Financial Statements and Required Supplementary Information for the years ended December 31, 2021 and 2020.

CERTAIN OTHER MATTERS

LIPA Assets and Liabilities

At the time of the 1998 Acquisition of LILCO, in addition to the electric assets described under "Introduction to the Authority and LIPA" herein, LIPA also retained certain other of LILCO's former assets (these electric and other retained assets are referred to collectively as the "LIPA Assets") and liabilities (the "LIPA Liabilities" and, together with the LIPA Assets, the "LIPA Assets and Liabilities"). The LIPA Assets included, among other assets (i) certain regulatory assets of LILCO, including the Shoreham Regulatory Asset, (ii) the judgments, actions and claims of LILCO for refunds of property taxes, including the judgment resulting from the litigation contesting the assessment of certain Shoreham Nuclear Power Station property and (iii) other intangible assets of LILCO's former retail electric business, including the right to provide electric service in the Service Area. The LIPA Liabilities included, among other liabilities, certain environmental liabilities of LILCO not otherwise transferred to or indemnified by a National Grid Sub.

Upon consummating the 1998 Acquisition, LIPA recorded various purchase accounting adjustments to recognize the fact that LIPA is not subject to the regulatory jurisdiction of the PSC and is exempt from federal income tax. The primary result of these adjustments was the elimination of the regulatory assets and liabilities of LILCO, including the Shoreham Regulatory Asset, and eliminating LILCO's net deferred federal income tax liability. The unamortized balance of the excess of the acquisition costs over the original net book value of the transmission and distribution and nuclear assets and the fair value of the other net assets retained appears on the financial statements included by specific cross-reference herein as the "Acquisition Adjustment." This Acquisition Adjustment was originally being amortized over 35 years (commencing in 1998) and the remaining amortization period on the Acquisition Adjustment was shortened by approximately seven years based on the results of a depreciation study. In May 1998, when the Authority acquired LILCO, the original Acquisition Adjustment was approximately $4.2 billion. As of December 31, 2021, the balance of the Acquisition Adjustment, net of accumulated amortization was approximately $544 million.

Guarantees and Indemnities

National Grid USA (a subsidiary of National Grid) has absolutely and unconditionally guaranteed to the Authority (i) the full and prompt payment when due of all amounts required to be credited or paid by National Grid Sub under the PSA and (ii) the full and prompt performance of the covenants and agreements of the National Grid Sub under the PSA. Upon certain reductions in the credit ratings of National Grid USA, LIPA has the right to have National Grid USA obtain letters of credit securing these undertakings and agreements. On April 13, 2018, National Grid USA replaced KeySpan as the guarantor of National Grid Sub's obligations under the PSA, as provided in the amendment to the PSA that became effective on March 29, 2018.

PSEG Power LLC, an affiliate of PSEG Long Island, has absolutely and unconditionally guaranteed to the Authority (i) the full and prompt payment when due of all amounts required to be credited or paid by PSEG Long Island under the OSA up to $60,000,000 and (ii) the full and prompt performance of the covenants and agreements of PSEG Long Island under the OSA. Upon certain reductions in the credit ratings of PSEG, LIPA has the right to have PSEG Long Island obtain a letter of credit in lieu of the corporate guaranty.

ADDITIONAL INFORMATION

Certain of the corporations mentioned in this ADR, including National Grid plc., PSEG, Exelon Corporation, the current parent of Constellation Energy Nuclear Group, LLC, the operator of NMP2, file reports and other information with the Securities and Exchange Commission, which reports and information are publicly available. None of the above-mentioned additional information is included herein by specific cross-reference, and the Authority takes no responsibility for the accuracy or completeness thereof.

APPENDIX A

AUDITED BASIC FINANCIAL STATEMENTS

LIPA
Long Island Power Authority

(A Component Unit of the State of New York)

Consolidated Financial Statements and Required Supplementary Information

December 31, 2021 and 2020

(With Independent Auditors' Reports Thereon)

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Montauk, Long Island, New York

KPMG LLP
Suite 200
1305 Walt Whitman Road
Melville, NY 11747-4302

Independent Auditors' Report

Board of Trustees
Long Island Power Authority

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of the business-type activities of the Long Island Power Authority (LIPA), a component unit of the State of New York, as of and for the years ended December 31, 2021 and 2020, and the related notes to the consolidated financial statements, which collectively comprise LIPA'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 of LIPA, as of December 31, 2021 and 2020, and the respective changes in financial position and, where applicable, cash flows thereof for the years 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 Consolidated Financial Statements section of our report. We are required to be independent of LIPA 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 Consolidated 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 LIPA'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 Consolidated 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 LIPA'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 LIPA'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 information in the Management's Discussion and Analysis on pages 3 through 23 and the Schedule of Proportionate Share of the Net Pension Liability and Schedule of Contributions on page 89 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.

Report on Other Legal and Regulatory Requirements

In accordance with *Government Auditing Standards*, we have also issued our report dated March 30, 2022 on our consideration of LIPA'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 LIPA'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 LIPA's internal control over financial reporting and compliance.

KPMG LLP

Melville, New York
March 30, 2022

Introduction

The Long Island Power Authority (LIPA) is a component unit of the State of New York (State). LIPA became the retail supplier of electric service in the Counties of Nassau and Suffolk (with certain limited exceptions) and a portion of Queens County known as the Rockaways (Service Area), on May 28, 1998 by acquiring the transmission and distribution (T&D) system of the Long Island Lighting Company (LILCO) as a wholly owned subsidiary of LIPA. As part of the acquisition, LIPA also acquired an undivided 18% interest in the Nine Mile Point Unit 2 (NMP2) generating facility, located in upstate New York. LIPA provides electric delivery service in the Service Area, which includes approximately 1.1 million customers. The population of the Service Area is approximately 2.9 million.

LIPA was established as a corporate municipal instrumentality of the State, constituting a political subdivision of the State, created by Chapter 517 of the Laws of 1986 (the LIPA Act). As such, it is a component unit of the State and is included in the State's annual financial statements.

LIPA is governed by a local Board of Trustees (Board) consisting of nine Trustees, five of whom are appointed by the Governor, two by the Temporary President of the State Senate, and two by the Speaker of the State Assembly. The Board supervises, regulates, and sets policy and rates for LIPA. However, in accordance with the LIPA Reform Act, codified as Chapter 173, Laws of New York (Reform Act) in 2013, LIPA is required to submit any proposed rate increase to the NYS Department of Public Service (DPS) for review if it would increase the rates and charges by an amount that would increase LIPA's annual revenues by more than 2.5%; however, LIPA's Board retains final rate-setting power.

The Reform Act also created the Securitization Law, which established LIPA's component unit, the Utility Debt Securitization Authority (UDSA). The Securitization Law's purpose was to provide the legislative foundation for the issuance of restructuring bonds that allowed LIPA to retire approximately $4.5 billion of its outstanding indebtedness, generating net present value debt service savings of $492 million for LIPA's customers. In 2021, LIPA successfully obtained an amendment to the UDSA legislation that permits the issuance of additional securitized bonds for refinancing and allows for borrowing to fund LIPA's T&D system resiliency investments. With these legislative changes the UDSA may issue up to $8.0 billion of securitized bonds (inclusive of the bonds already issued).

LIPA contracts to provide the majority of services necessary to deliver electric service in the Service Area. The primary contract is the Amended and Restated Operations Services Agreement (A&R OSA) with PSEG Long Island LLC (PSEG Long Island).

PSEG Long Island commenced managing LIPA's electric T&D system on January 1, 2014 under the PSEG Long Island brand name. PSEG Long Island manages day-to-day T&D system operating functions as well as certain administrative support functions. PSEG Long Island acts as agent in performing many of its obligations and in return receives (a) reimbursement for pass-through operating expenditures, (b) a fixed management fee, and (c) an incentive fee contingent on meeting certain performance metrics. See Operational Highlights for a discussion on the pending approval of a reformed second Amended and Restated Operations Services Agreement (Second A&R OSA) with PSEG Long Island.

LIPA also has a contract with PSEG Energy Resources and Trade LLC (PSEG ER&T) to provide services related to fuel and power supply management and certain commodity activities. Separately from its contract with PSEG ER&T, LIPA maintains power purchase agreements with various third-party power generators.

(Amounts in thousands, unless otherwise stated)

Overview of the Consolidated Financial Statements

LIPA's financial statements are prepared on an accrual basis in accordance with generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB).

The annual financial report for LIPA includes management's discussion and analysis and the Consolidated Financial Statements. The Consolidated Financial Statements consist of the Statements of Net Position, the Statements of Revenue, Expenses, and Changes in Net Position, the Statements of Cash Flows, and the Notes to Consolidated Financial Statements (Notes). Following the Consolidated Financial Statements is LIPA's Required Supplemental Information relating to its participation in the New York State and Local Employee's Retirement System.

Management's discussion and analysis provides an overview of LIPA's financial information for the years ended December 31, 2021 and 2020, with comparative information as of and for the year ended December 31, 2019. Management's discussion and analysis should be read in conjunction with the Consolidated Financial Statements and the accompanying Notes. The Notes are an integral part of LIPA's Consolidated Financial Statements and provide additional information on certain components of these statements.

During 2020, LIPA adopted GASB Statement No. 87, *Leases* (GASB Statement No. 87). GASB Statement No. 87 establishes a single model for lease accounting based on the principle that leases are financings of the right to use an underlying asset. Under this Statement, LIPA was required to recognize a lease liability and an intangible right-to-use lease asset for certain of its leases that were previously reported as operating leases under the previous accounting standards. As a result of the adoption of GASB Statement No. 87, amounts for the year ended 2019 reflect a retroactive increase of $1.4 billion for the recognition of the right-to-use asset included in Utility plant, property, and equipment with a corresponding increase in Lease obligations.

The Consolidated Statements of Net Position provide information about the nature and amount of resources and obligations at a specific point in time.

The Consolidated Statements of Revenues, Expenses, and Changes in Net Position report all of LIPA's revenues and expenses for the periods shown.

The Consolidated Statements of Cash Flows report the cash provided and used by operating activities, as well as other cash sources, such as investment income and debt financing, and other cash uses such as payments for debt service and capital additions.

The Notes to Consolidated Financial Statements provide additional detailed information to support the Consolidated Financial Statements.

The Required Supplemental Information includes unaudited information required by GASB to accompany the Consolidated Financial Statements and relates to LIPA's participation in the New York State and Local Employees' Retirement System.

Operational Highlights

Reformed Operations Services Agreement

On Tuesday, August 4, 2020, Tropical Storm Isaias caused approximately $300 million of damages to LIPA's T&D system and interrupted service to more than half of LIPA's customers, making it the third-most damaging storm to impact the system.

LIPA established an Isaias Task Force to undertake a thorough analysis of the root causes underlying the failures of PSEG Long Island's customer communications and outage management system during the storm. As a result of the investigation, LIPA sought organizational and contractual changes as recommended by the Task Force. During 2021, LIPA and PSEG Long Island reached agreement on a reformed contract. Pursuant to the proposed Settlement Agreement, the second A&R OSA would, among other things, increase the amount of PSEG Long Island's annual compensation at risk from $10 million to $40 million; include automatic compensation reductions for failures to meet minimum emergency response, customer satisfaction, and reliability standards, strengthen the dedicated Long Island management team, enhance oversight in long-term planning, project prioritization and budget development, partition Long Island information technology systems, facilitate independent verification and validation and provide a new DPS investigative process to reduce compensation for failures to provide safe, adequate, and reliable service to customers. In addition, PSEG Long Island would be subject to expanded performance requirements set annually by the Board and DPS. The proposed second A&R OSA would eliminate PSEG Long Island's eight-year term extension option; instead, the second A&R OSA will expire on December 31, 2025.

The second A&R OSA was approved by LIPA's Board on December 15, 2021, was approved by the New York State Attorney General on January 6, 2022, and is pending review and approval by the State Comptroller.

New York State Climate Leadership and Community Protection Act (CLCPA)

The CLCPA, signed in 2019, requires the State to reduce economy- wide greenhouse emissions 40% by 2030 and 85% by 2050. In order to develop a path forward for compliance with the CLCPA, in June 2021, LIPA launched its 2022 Integrated Resource Plan (IRP). The IRP, which is scheduled for completion in December 2022, will support LIPA by developing plans to ensure there is access to adequate electric power resources to enable LIPA to continue to serve its customers reliably and affordably.

The IRP will result in a plan that will identify the key activities and investments that LIPA will need to undertake to meet State and local goals. Objectives include supporting and meeting CLCPA goals; retiring fossil-fueled generation; integrating substantial amounts of renewable energy resources; identifying the impacts of beneficial electrification; and increasing the availability of clean energy technologies in disadvantaged communities.

To support transition to the CLCPA, LIPA's 2022 operating budget includes $106 million for utility-scale renewable projects, $93 million for energy efficiency and distributed energy programs, $52 million for residential and commercial solar and distributed energy systems, $5 million for Utility 2.0 programs and $3 million for new utility-owned LED lighting. LIPA's Utility 2.0 plan focuses on programs that improve energy efficiency, utilize new technology, such as smart meters, to address emerging resource and system needs, and encourage beneficial electrification through the adoption of electric vehicles and heat pumps.

Furthermore, to continue LIPA's commitment to the investments necessary to provide reliable electric service to customers, LIPA's 2022 capital budget of $783 million includes $178 million for load growth projects, $252 million for projects that target improved system reliability, $70 million for the second phase on LIPA's storm hardening initiative called "Power-on," $3 million associated with the final phase of the FEMA funded storm hardening, and $82 million in information technology related investments.

Generation Plants Under Contract

Under the Amended and Restated Power Supply Agreement (A&R PSA) with National Grid, LIPA contracts for approximately 3,700 megawatts of capacity (and related energy) from National Grid's legacy fossil generating plants located on Long Island. Under this agreement, which expires in 2028, LIPA is responsible for the property taxes on these generating plants. LIPA has sought reductions to such assessments and associated property tax bills over the past decade.

As a result, LIPA negotiated a settlement with the Town of Brookhaven and the Village of Port Jefferson on the Port Jefferson power plant for the taxes to decrease to approximately half of current levels by 2027. In September 2020, LIPA also reached an agreement with the Huntington Town Board and the Northport-East Northport School District for similar reductions on assessments of the Northport power plant. On March 25 2022, LIPA reached a tentative agreement for similar terms with Nassau County for the E.F. Barrett and the Glenwood Landing power plants. The Nassau County Legislature is expected to vote on the settlement on April 25, 2022. Should the agreement not be approved by the legislature, LIPA expects to move forward to trial, which is scheduled for May 28, 2022.

Also impacting LIPA's contracted generating plants are new Department of Environmental Conservation (DEC) regulations for nitrogen oxide (NOx) air emissions from peaking plants to take effect May 1, 2023, which directed all affected generation owners to submit compliance plans by March 2, 2020. National Grid, as owner of the plants, in consultation with LIPA, identified which units would require retrofits. As a result, LIPA and National Grid plan to retire five peaking units where retrofits are not cost-effective: two units at Glenwood Landing (15 and 55 megawatts); one unit at West Babylon (52 megawatts); and two units at Shoreham (53 and 19 megawatts). The retirements are expected to take effect in May 2025. In the meantime, the units will operate in compliance with the regulations that are applicable between 2023 and 2025. LIPA is reviewing other generating units for retirement prior to the expiration of the A&R PSA in 2028, potentially facilitated by the addition of new offshore wind and storage resources. All remaining National Grid peaking units are, or will be, in compliance with the DEC NOx regulations by the May 2023 deadline.

In November 2021 LIPA entered into a five-year capacity agreement with the New York Power Authority (NYPA) intended to enable NYPA to maintain its Flynn Power Plant, until sufficient new resources become available to allow its retirement.

In April 2021, PSEG Long Island issued a Request for Proposals to solicit bids for development of up to 175 MW of bulk energy storage projects to be located on Long Island under contract to LIPA. The procurement will help LIPA meet its share of the State's energy storage deployment goal established in the CLCPA, which amounts to approximately 187 MW out of the 2025 statewide goal of 1,500 MW. LIPA is currently evaluating the proposals.

Certain Litigation Related to Payments in Lieu of Taxes

By statute, LIPA makes payments in lieu of taxes (PILOTs) for real property it acquired from LILCO. Beginning in calendar year 2015, the LIPA Reform Act capped LIPA's PILOT payments to no more than 2% higher than the prior calendar year.

In 2017, LIPA received notices from Suffolk County claiming to enforce liens against certain of LIPA properties for alleged unpaid real estate taxes. LIPA has paid the PILOT amounts it is authorized to pay by law. Furthermore, Suffolk County lacks legal authority to enforce a tax lien on LIPA's property. LIPA filed a legal action to negate any attempt by Suffolk County to enforce the alleged tax liens. LIPA also filed suit against the ten Suffolk County towns to ensure that they comply with the annual 2% limit on growth in such taxes.

On April 1, 2021, the Supreme Court, Suffolk County issued a Decision and Order that found: (1) LIPA's T&D properties are not exempt from real-property taxation for tax years 2014/15 through 2019/20 by reason of LIPA's failure to timely challenge its unlawful assessment as non-exempt, taxable properties by the Town Assessors during those tax years; and (2) compelling LIPA to pay to Suffolk County alleged unpaid real property taxes levied against the T&D properties for tax years 2014/15 through 2019/20 (by stipulation, the judgment includes the 2020/21 tax year). A judgment was entered on October 8, 2021. LIPA filed a notice of appeal from the judgment on October 14, 2021, and the appeal was filed on December 17, 2021. Enforcement of the judgment is stayed pending the determination of LIPA's appeal. LIPA estimates the potential exposure with penalties and interest to be approximately $90 million. As a regulated entity, LIPA obtained regulatory approval from its Board to defer the recovery of these costs from its customers until the conclusion of the appeal process. LIPA does not believe this litigation will have a material adverse impact on the business or the affairs of LIPA or its subsidiary, LILCO.

COVID-19

LIPA has been able to maintain effective communications and carry out its activities without any disruption during the COVID-19 pandemic. PSEG Long Island also has instituted measures to have its workforce work remotely and instituted work practices for field personnel to maintain a safe work environment.

The decline in business activity in LIPA's Service Area resulted in lower commercial customer sales revenues in 2021 and 2020. LIPA's revenue decoupling mechanism (RDM) recoups revenues for this lower consumption as it compares actual revenues with authorized revenues and credits (or collects) any differences to (or from) customers. However, to aid its commercial customers from a high bill impact, the Board elected to limit the RDM rate to a maximum of 5% of delivery service revenues for any customer class with amounts not collected carried forward to subsequent periods. In addition, the economic impact of the pandemic has also resulted in increased arrears balances. LIPA increased its allowance for expected write-offs and LIPA's Board approved a modification to the Delivery Service Adjustment (DSA) to recover write-offs above amounts budgeted in 2021.

In addition, on March 20, 2020, the Federal Emergency Management Agency (FEMA) announced that federal emergency funds will be made available for certain incremental costs during the recovery efforts related to the COVID-19 pandemic. LIPA has been approved for public assistance; however, as no grant application has been finalized or approved as of December 31, 2021, LIPA's 2021 Consolidated Financial Statements do not include amounts for expected FEMA reimbursement.

LIPA will continue to monitor developments relating to the COVID-19 pandemic; however, LIPA cannot predict the extent to which COVID-19 may have an effect on its liquidity, financial condition, and results of operations.

Financial Condition Overview

LIPA's Consolidated Statements of Net Position as of December 31, 2021, 2020, and 2019 are summarized below.

($ in thousands)

Assets and deferred outflows of resources:		2021	2020	2019
Capital assets	$	10,414,617	10,313,576	10,159,251
Current assets		2,773,753	2,448,950	2,347,045
Regulatory assets		1,436,195	1,623,091	1,343,731
Noncurrent assets		994,447	864,124	944,805
Deferred outflows of resources		173,975	226,254	222,548
Total assets and deferred outflows of resources		**15,792,987**	**15,475,995**	**15,017,380**
Liabilities and deferred inflows of resources:				
Long-term debt, net of current maturities		9,140,815	8,756,417	8,494,325
Current liabilities		1,657,813	1,678,869	1,427,345
Regulatory liabilities		203,635	98,731	34,240
Noncurrent liabilities		3,394,906	3,823,714	4,001,963
Deferred inflows of resources		793,439	580,576	540,639
Total liabilities and deferred inflows of resources		**15,190,608**	**14,938,307**	**14,498,512**
Total net position		**602,379**	**537,688**	**518,868**
Total liabilities, deferred inflows of resources, and net position	$	**15,792,987**	**15,475,995**	**15,017,380**

Assets and Deferred Outflows of Resources

2021 Compared to 2020

Assets and deferred outflows of resources increased by $317 million compared to 2020 due to increases of $101 million in capital assets, $325 million in current assets and $130 million in other noncurrent assets. These increases were partially offset by decreases of $187 million in regulatory assets, and $52 million decrease in deferred outflows of resources.

Capital assets increased $101 million compared to 2020 primarily due to higher investment in reliability capital projects, as well as certain storm hardening projects. These capital additions were partially offset by asset retirements and annual depreciation expense.

Current assets increased $325 million compared to 2020 primarily due to increased investment balances from the unspent proceeds received from the issuance of the Electric System General Revenue Bonds, Series 2021A and Series 2021B, an increase in mark-to-market valuation on commodity derivative instruments maturing within one year, and increased accounts receivable arrears balances resulting from the impacts of the COVID-19 pandemic.

Regulatory assets decreased $187 million primarily due to a decrease of $198 million in the OSA-Employee Retirement Benefits resulting from an updated actuarial study, a decrease of $48 million in unrealized mark-to-market changes on derivative instruments, a decrease of $26 million on the revenue decoupling mechanism, along with scheduled annual recovery or amortizations of regulatory assets totaling $45 million. These decreases were partially offset by an increase of $90 million resulting from recognition of the deferred recovery of costs associated with the estimated potential impact of the Suffolk County property tax litigation, and an increase of $40 million in the DSA resulting primarily from deferred storm restoration costs. For a full discussion of the regulatory assets and liabilities, see Note 5 to LIPA's Consolidated Financial Statements.

Other noncurrent assets increased $130 million due to the recognition of the $172 million FEMA receivable related to mitigation reimbursement due under the Superstorm Sandy Letter of Understanding, $63 million increase in commodity derivative instrument valuations, and an increase of $20 million in the NMP2 decommissioning trust. These increases were partially offset by $111 million of scheduled amortization of the Acquisition Adjustment.

Deferred outflow of resources decreased $52 million primarily due to the accumulated decrease in fair value of the effective financial and commodity derivative instruments.

2020 Compared to 2019

Assets and deferred outflows of resources increased by $459 million compared to 2019 due to increases of $154 million in capital assets, $102 million in current assets, $279 million in regulatory assets, and $4 million increase in deferred outflows of resources. These increases were partially offset by a decrease of $81 million in other noncurrent assets.

Capital assets increased $154 million compared to 2019 primarily due to higher investment in reliability capital projects, as well as certain storm hardening projects. These capital additions were partially offset by asset retirements and annual depreciation expense.

Current assets increased $102 million compared to 2019 primarily due to increased investment balances from the unspent proceeds received from the issuance of the Electric System General Revenue Bonds, Series 2020A and Series 2020B, and increased accounts receivable arrears balances resulting from the impacts of the COVID-19 pandemic.

Regulatory assets increased $279 million primarily due to an increase of $296 million in the DSA resulting from deferred recovery of restoration costs incurred as a result of Tropical Storm Isaias, and an increase of $39 million in the OSA-Employee Retirement Benefits resulting from an updated actuarial study. These increases were partially offset by the scheduled annual recovery or amortizations of regulatory assets totaling $57 million. For a full discussion of the regulatory assets and liabilities, see Note 5 to LIPA's Consolidated Financial Statements.

Other noncurrent assets decreased $81 million primarily due to the $111 million of scheduled amortization of the Acquisition Adjustment, partially offset by an increase of $20 million in the NMP2 decommissioning trust.

Deferred outflow of resources increased $4 million primarily due to the scheduled amortization of previously deferred costs associated with refunding of higher cost debt.

Liabilities and Deferred Inflows of Resources

2021 Compared to 2020

Liabilities and deferred inflows of resources increased $252 million due to increases of $384 million in long-term debt, a $105 million increase in regulatory liabilities and a $213 million increase in deferred inflows of resources. These increases were partially offset by a decrease of $429 million in noncurrent liabilities and $21 million in current liabilities.

Long-term debt, net of current portion, increased $384 million as LIPA issued Electric System General Revenue Bonds Series 2021A, 2021B and 2021C totaling $725 million, plus $97 million premium, to fund capital projects, refinance variable rate debt, and refund higher cost debt. The refunding produced net present value savings to LIPA's customers of $46 million. The remaining increase is attributable to the accretion of LIPA's capital appreciation bonds. These increases were partially offset by the $247 million of current debt maturities classified as current liabilities and the scheduled amortization of premium totaling $82 million.

Current liabilities decreased $21 million primarily due to a decrease of $102 million in accounts payable processed related to Tropical Storm Isaias, the change in the market value of commodity derivative instruments eliminating $34 million liability at December 31, 2021. These decreases were partially offset by an increase of $109 million on counterparty collateral due to changes in the market value of LIPA's commodity derivative instruments and an increase of $4 million in current maturities of long-term debt and lease obligations.

Regulatory liabilities increased $105 million primarily due to a $136 million increase on unrealized mark-to-market gains on commodity derivative instruments, an increase of $3 million in deferrals resulting from the DSA and a $2 million increase for distributed energy resources. These increases were partially offset by a $27 million decrease in the power supply charge refundable, a $8 million decrease in the RDM, and a $2 million decrease in the deferrals related to the Utility 2.0 program. For a full discussion of the regulatory assets and liabilities, see Note 5 to LIPA's Consolidated Financial Statements.

Other noncurrent liabilities decreased $429 million primarily due to a $336 million amortization of lease obligations, a $112 million decrease in the PSEG Long Island's workforce retirement benefit obligations resulting from updated assumptions and increased discount rates assumed in the actuarial valuation, a $42 million decrease in the mark-to-market value of financial and commodity derivative instruments, a $22 million decrease due to the termination of three interest rate basis swap instruments which had remaining upfront premium balances, and $5 million of amortization related to swap instrument premiums. These decreases were partially offset by the recognition of the estimated potential impact of the Suffolk County property tax litigation totaling $90 million.

Deferred inflows of resources increased $213 million primarily due to an increase of $172 million of regulatory credits due to the recognition of the remaining estimated balance of the FEMA Superstorm Sandy mitigation grant, a $52 million increase in mark-to-market valuations on certain investment accounts, and an increase of $5 million on LIPA employee pension and OPEB deferred expenses. These increases were partially offset by the amortization of the regulatory grant credits totaling $16 million.

2020 Compared to 2019

Liabilities and deferred inflows of resources increased $440 million due to increases of $262 million in long-term debt, $251 million in current liabilities, $64 million in regulatory liabilities, and $40 million in deferred inflows of resources. These increases were partially offset by a decrease of $178 million in noncurrent liabilities.

Long-term debt, net of current portion, increased $262 million as LIPA issued $488 million Electric System General Revenue Bonds Series 2020A and 2020B, which together with the $75 million of premium received on the bonds, funded capital projects. In addition, LIPA issued $114 million Electric System General Revenue Bonds Series 2020C to refund approximately $104 million of various bonds for net present value savings of $28 million. The remaining increase is attributable to the accretion of LIPA's capital appreciation bonds. These increases were partially offset by the $258 million of current debt maturities classified as current liabilities and the scheduled amortization of premium totaling $73 million.

Current liabilities increased $251 million primarily due to an increase in outstanding accounts payable amounts of $130 million due to timing of property tax bills and Tropical Storm Isaias billings, an increase of $125 million in short-term debt, and an increase of $18 million in current maturities of long-term debt and lease obligations, offset by a $22 million decrease in the mark-to-market value of the commodity derivative instruments.

Regulatory liabilities increased $64 million primarily due to a $35 million increase in the power supply charge refundable and an increase of $21 million in the RDM, the deferral mechanism designed to reconcile all sources of delivery service revenues variances. In 2020, residential customer sales variances were impacted by a hotter than usual summer and stay-at-home orders resulting from the COVID-19 pandemic, resulting in a RDM refundable to customers. Also impacting the increase was the increase in the deferrals related to the Utility 2.0 program. The Board authorized deferral to a regulatory liability of $13 million of unspent funds related to the Utility 2.0 program. This regulatory credit is to fund future expenditures filed under the Utility 2.0 program. These increases were partially offset by a decrease of $5 million in deferrals resulting from the DSA. For a full discussion of the regulatory assets and liabilities, see Note 5 to LIPA's Consolidated Financial Statements.

Other noncurrent liabilities decreased $178 million primarily due to the annual amortization of lease obligations totaling $334 million, which was partially offset by an increase in the PSEG Long Island's workforce retirement benefit obligations resulting from an updated actuarial valuation totaling $129 million. The remaining increase is due to the timing of various employee benefit accruals.

Deferred inflows of resources increased $40 million primarily due to the $46 million increase in mark-to-market valuations on certain investment accounts and the recognition of $10 million for deferred lease revenue. These increases were partially offset by the amortization of the regulatory grant credits totaling $12 million.

Results of Operations

LIPA's Consolidated Statements of Revenues, Expenses, and Changes in Net position for the years ended December 31, 2021, 2020, and 2019 are summarized as follows:

($ in thousands)

		2021	2020	2019
Electric revenue (net of uncollectible expense)	$	3,930,788	3,900,721	3,516,355
Operating expenses		(3,630,026)	(3,641,086)	(3,237,837)
Interest charges, net		(357,243)	(358,995)	(363,673)
Total expenses		(3,987,269)	(4,000,081)	(3,601,510)
Revenue less operating expenses and interest charges, net		(56,481)	(99,360)	(85,155)
Grant income		39,986	44,871	35,916
Other income		81,186	73,309	73,257
Total other income, net		121,172	118,180	109,173
Change in net position		64,691	18,820	24,018
Net position, beginning of year		537,688	518,868	494,850
Net position, end of year	$	602,379	537,688	518,868

2021 Compared to 2020

Electric operating revenues, net of uncollectible expense, for 2021 totaled $3.93 billion, an increase of $30 million compared to 2020 due to increases in (i) power supply charge (PSC) revenue totaling $210 million; (ii) base delivery revenues of approximately $63 million; and (iii) amortization of $15 million of Utility 2.0 revenue collected in prior periods. These increases were partially offset by a decrease of $248 million in the DSA primarily due to lower storm restoration costs as $306 million of Tropical Storm Isaias cost was deferred in 2020 and the decrease of $8 million of the Distributed Energy Resources (DER) revenue.

2020 Compared to 2019

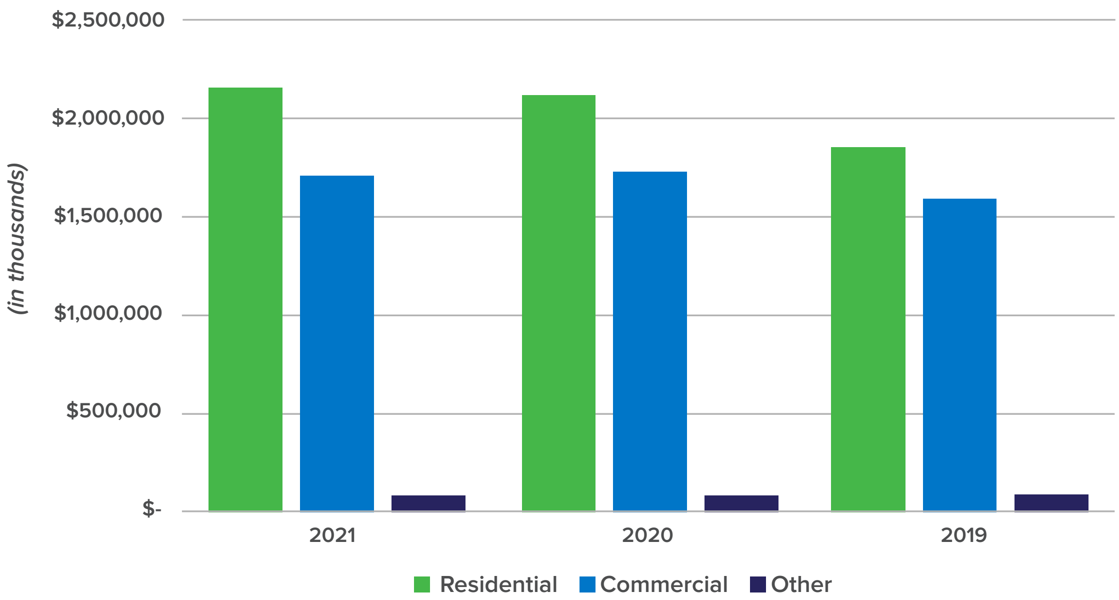
Electric operating revenues, net of uncollectible expense, for 2020 totaled $3.90 billion, an increase of $384 million compared to 2019 due to increases in (i) the DSA of $306 million due primarily to the Tropical Storm Isaias cost recovery deferral; (ii) the base delivery revenues of $75 million; (iii) the PSC of $13 million; (iv) DER revenues of $6 million; and (v) the Utility 2.0 program revenues of $2 million. These increases were partially offset by a decrease in miscellaneous revenue of $7 million driven by the suspension of various fees to assist customers impacted by COVID-19 and the increase of $12 million in the reserve for uncollectible expense.

(Amounts in thousands, unless otherwise stated)

The following table and chart represent revenue for the years ended December 31, 2021, 2020, and 2019 by customer class (residential, commercial, and other):

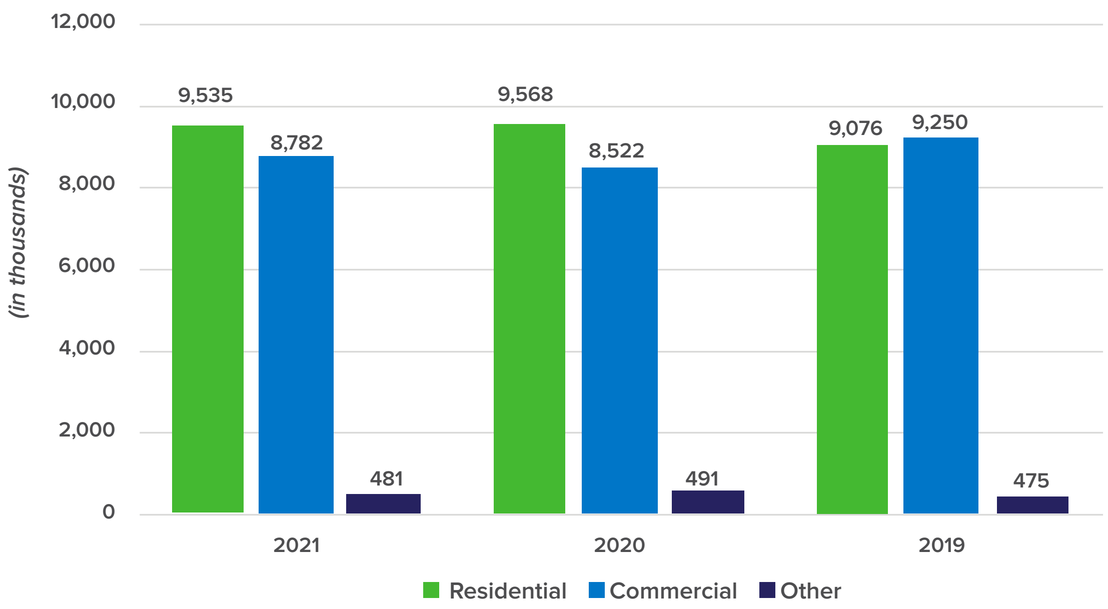
Revenues from sales of electricity:		**2021**	**2020**	**2019**
Residential	$	2,153,778	2,107,710	1,850,891
Commercial		1,700,386	1,715,532	1,582,981
Other		76,624	77,479	82,483
	$	3,930,788	3,900,721	3,516,355

Revenues from Sales of Electricity by Customer Class



The following chart shows megawatt hour (MWh) sales for the years ended December 31, 2021, 2020, and 2019 by customer class (residential, commercial, and other). The largest customer in the Service Area (the Long Island Rail Road) accounted for less than 2% of total sales and less than 2% of revenue, which is included in "Other" sales. In addition, the ten largest customers in the Service Area accounted for approximately 7% of total sales and 6% of revenue.

Megawatt Hour Sales



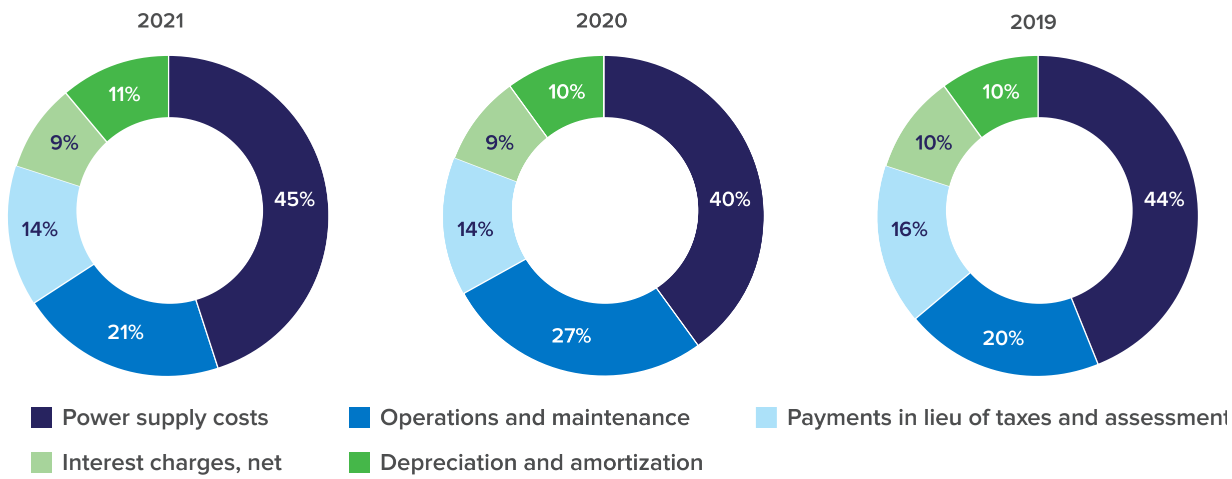
(Amounts in thousands, unless otherwise stated)

Operating and Interest Charges

For the years ended December 31, 2021, 2020, and 2019, LIPA's expenses were comprised of (i) power supply costs; (ii) operations and maintenance expenses; (iii) payments in lieu of taxes, other taxes, and assessments (including property taxes on generating assets under contract); (iv) interest charges, net; and (v) depreciation and amortization, as shown below:

Operating and interest charges:		2021	2020	2019
Power supply costs	$	1,800,933	1,587,356	1,572,325
Operations and maintenance		833,750	1,064,052	739,086
Payments in lieu of taxes, other taxes, and assessments*		569,445	568,701	564,082
Interest charges, net		357,243	358,995	363,673
Depreciation and amortization		425,898	420,977	362,344
Total	$	3,987,269	4,000,081	3,601,510

*Amount excludes approximately $130 million for sales tax revenue collected by LIPA on behalf of local government jurisdictions and remitted to such jurisdictions.



2021 Compared to 2020

For the year ended December 31, 2021, operating and interest charges totaled $3.99 billion, a decrease of $13 million compared to 2020. The decrease is primarily due to lower (i) operating and maintenance costs of $230 million from lower storm restoration costs; and (ii) interest charges of $2 million. These decreases were partially offset by higher (i) power supply costs of $213 million; (ii) depreciation and amortization of $5 million; and (iii) payments in lieu of taxes, other taxes, and assessments of $1 million.

(Amounts in thousands, unless otherwise stated)

2020 Compared to 2019

For the year ended December 31, 2020, operating and interest charges totaled $4.00 billion, an increase of $399 million compared to 2019. The increase is primarily due to higher (i) operating and maintenance costs of $325 million due primarily to restoration costs related to damage to the T&D system from Tropical Storm Isaias which are estimated to total approximately $306 million; (ii) depreciation and amortization of $59 million due to updated depreciation rates; (iii) power supply costs of $15 million; and (iv) payments in lieu of taxes, other taxes, and assessments of $5 million, offset by a decrease in interest charges of $5 million.

Capital Asset and Financing Activities

LIPA's financial policy seeks to generate sufficient cash flow from revenues to maintain the issuance of new debt as a percentage of capital spending at 64% or less as measured on a three-year rolling average. However, to allow LIPA to respond to the impacts of COVID-19 pandemic and Tropical Storm Isaias, LIPA's Board modified its financial policy in 2020 to allow the issuance of new debt as a percentage of capital spending to exceed 64% target on a forward-looking three-year rolling average in 2021 and 2022. As such, LIPA's approved 2022 capital budget anticipates funding 71% of capital expenditures with long-term tax-exempt bonds.

LIPA and UDSA paid scheduled debt maturities totaling $258 million and $228 million in 2021 and 2020, respectively. In 2021, LIPA also called for early redemption $21 million of its taxable Electric System General Revenue Bonds, Series 2014B with cash from operations.

A summary of the financing activity for LIPA and the UDSA for the years ended December 31, 2021 and 2020 is shown below:

		Bonds to fund capital projects	Refinancing/ refunding notes or bonds	Interim funding related to Tropical Storm Isaias
2021				
2021 General Revenue Notes	$	—	—	250,000
2021A General Revenue Bonds		180,755	175,000	—
2021B General Revenue Bonds		175,000	—	—
2021C General Revenue Bonds		—	194,390	—
Total	$	355,755	369,390	250,000
2020				
2020A General Revenue Bonds	$	237,975	—	—
2020B General Revenue Bonds		250,000	—	—
2020C General Revenue Bonds		—	113,975	—
Total	$	487,975	113,975	-

For a full discussion on LIPA's debt activities, see Note 12 to the Consolidated Financial Statements.

(Amounts in thousands, unless otherwise stated)

Fixed Obligation Coverage Ratios

LIPA utilizes fixed obligation coverage ratios to determine revenue requirements. LIPA's methodology for calculating its fixed obligation coverage ratios excludes certain specified non-cash items from expenses.

Effective in 2020, LIPA modified its financial policy related to fixed obligation coverage as a result of the impact of GASB Statement No. 87. As this new standard no longer differentiates between capital and operating leases and considers all leases with a term greater than one year to be a financing arrangement, LIPA recognized a financing arrangement asset and a corresponding liability in its Consolidated Statements of Net Position for certain of its existing operating leases.

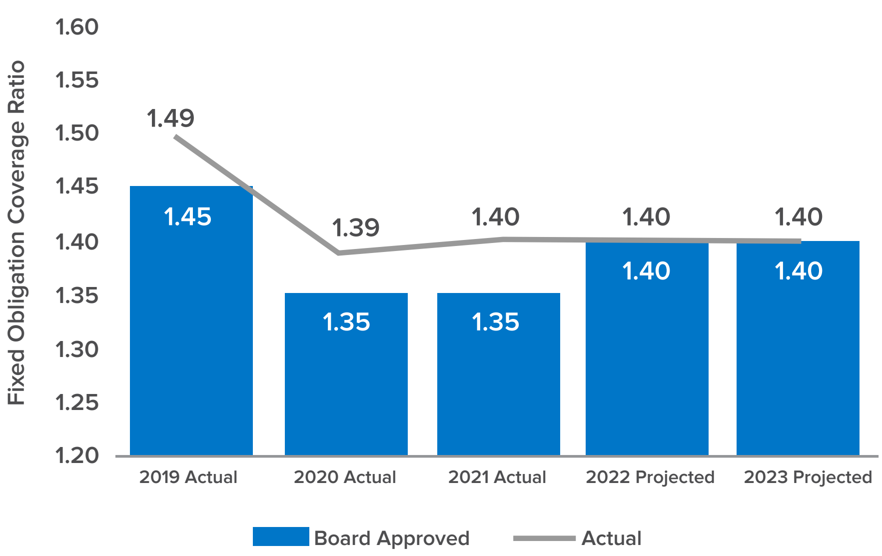
To supply electricity to its customers, LIPA enters into long-term power supply agreements for power plants and regional transmission cables. Although these power plants and cables are not owned by LIPA, under these new accounting rules, LIPA recognized approximately $1.4 billion of right-to-use assets and corresponding lease obligations in its Consolidated Statements of Net Position as of December 31, 2019. The new accounting guidance does not change payments under these contracts, but increases assets and liabilities, which impacts LIPA's stated fixed obligation coverage ratio.

Prior to the 2020 modification, LIPA's financial policy targeted a 1.45x fixed obligation coverage ratio for 2019 and beyond to provide adequate cash flow to limit borrowing to no more than 64% of capital spending. To maintain the same level of cash flow after adopting this new standard in 2020, LIPA's financial policy was updated to modify its financial target from 1.45x coverage of debt and capital lease payments to 1.35x coverage of debt and lease payments, using the new definition of leases as described above. This new target will generate the same cash flow to cover fixed obligations as the prior lease accounting rules and the prior coverage target.

As shown, LIPA budgeted to achieve fixed obligation coverage targets on LIPA-issued debt of a minimum of 1.35x for 2021 and 2020, under the new leasing standards. For 2021, 2020, and 2019, LIPA exceeded its targets by achieving fixed obligation ratios of 1.40x for 2021 and 1.39x for 2020. Following the old leasing standard in 2019, LIPA achieved a fixed obligation ratio of 1.49x.

For a full discussion of the fixed obligation coverage ratio calculation, see Note 12(g) to the Consolidated Financial Statements.

Fixed Obligation Coverage (excluding UDSA debt)

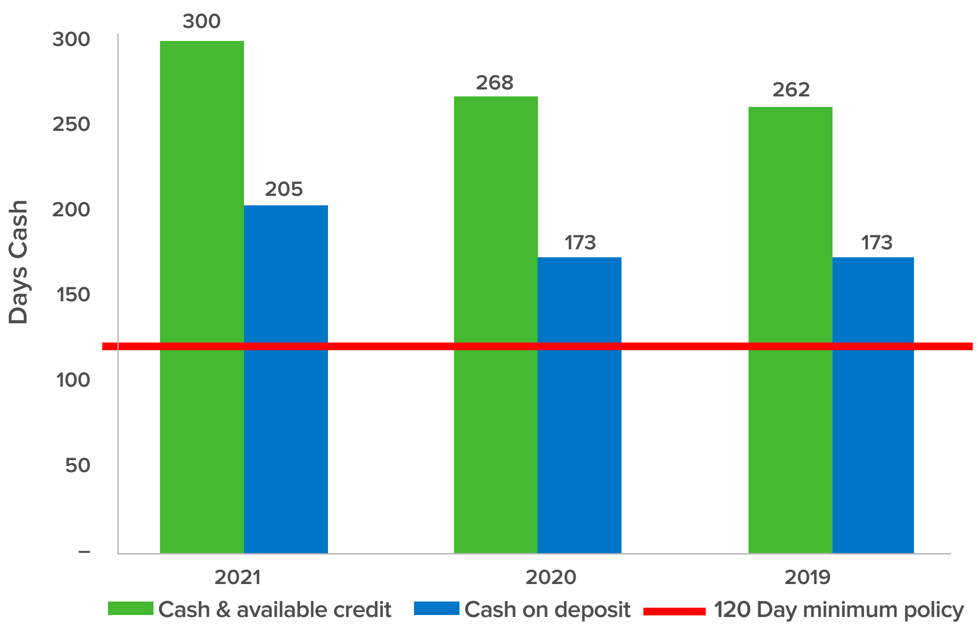


(Amounts in thousands, unless otherwise stated)

Liquidity and Capital Resources

LIPA's Board financial policy includes a requirement, among others, to maintain a minimum month-end balance of at least $100 million in the Operating Fund and $150 million in the Rate Stabilization Fund and overall cash on hand and available credit of at least 120 days of operating expenses. As of December 31, 2021, 2020, and 2019, LIPA's available sources of liquidity for operating purposes and capital program funding achieved the policy target with 300 days, 268 days, 262 days of cash and available credit, respectively. This represents cash, cash equivalents, investments, and available credit totaling approximately $2.40 billion and $2.20 billion as of December 31, 2021 and 2020, respectively.

Days of Cash and Available Credit



(Amounts in thousands, unless otherwise stated)

The table below summarizes LIPA's operating liquidity and available credit capacity:

		2021	2020	2019
Operating liquidity				
Unrestricted cash, cash equivalents, and investments	$	785,271	727,395	743,307
OPEB Account cash, cash equivalents, and investments		581,261	475,366	386,262
PSEG Long Island working capital requirements		276,391	202,700	248,499
Total operating liquidity		1,642,923	1,405,461	1,378,068
Available credit				
General Revenue Notes – Revolving Credit Facility		198,000	198,000	198,000
General Revenue Notes – Commercial Paper		580,000	585,000	510,000
Total available credit		778,000	783,000	708,000
Total cash, cash equivalents, investments, and available credit	$	2,420,923	2,188,461	2,086,068
Restricted cash and cash equivalents				
Clean Energy Compliance Fund	$	8,086	4,577	—
FEMA Grant Proceeds		1,740	1,738	1,732
UDSA		111,694	128,833	109,049
Total restricted cash and cash equivalents	$	121,520	135,148	110,781

Funds included in available cash, cash equivalents, and investments

LIPA's available liquidity balances include accounts dedicated to pre-funding PSEG Long Island's working capital needs totaling approximately $276 million, $203 million, and $248 million, as of December 31, 2021, 2020, and 2019, respectively. This represents approximately 34 days cash as of December 31, 2021. These accounts are owned by LIPA and are available only for LIPA's operating and capital costs. The funds are restricted due to the contractual obligation to pre-fund the accounts from which PSEG Long Island, who acts as agent for LIPA, pays expenses related to operating LIPA's electric system; however, LIPA considers these funds to be part of its working capital as these funds are available to meet its operating and capital needs.

LIPA's available liquidity balance also includes an unrestricted OPEB Account established to pre-fund certain future post-employment retirement obligations of the PSEG Long Island employees. The balance in the unrestricted OPEB Account is intended to fund the PSEG Long Island employee retiree contractual obligation. However, in the event that revenues are insufficient to pay reasonable and necessary operating expenses, or to make payments on bonds or parity obligations, these funds are available; as such, they are considered unrestricted cash, cash equivalents, and investments. As of December 31, 2021, 2020, and 2019, the unrestricted OPEB Account had approximately $581 million, $475 million, and $386 million on deposit, respectively. This represents approximately 72 days cash as of December 31, 2021.

Available credit

LIPA maintains a short-term borrowing program to provide resources to meet interim working capital needs, fund its capital program between long-term debt offerings, and meet any cash flow requirements from severe weather events. Among other factors, LIPA's operating and capital needs vary during the year given the summer peaking and seasonal nature of its sales. As of December 31, 2021, the maximum outstanding total short-term borrowings may not exceed $1.2 billion which was increased from $1.0 billion in 2020, as LIPA's Board authorized a $200 million increase to provide for interim funding associated with costs of storm hardening system improvements that are expected to be reimbursed by FEMA.

The outstanding balance of LIPA's short-term borrowings totaled $422 million and $417 million as of December 31, 2021 and 2020, respectively. The short-term borrowing programs are supported by bank agreements with various expiration dates from 2022 through 2025. Management renewed or replaced the bank agreements as needed prior to their expiration. LIPA believes it will have sufficient liquidity to meet its planned operating, maintenance, and capital programs.

Restricted cash, cash equivalents, and investments

LIPA's restricted cash, cash equivalents, and investments as of December 31, 2021, 2020, and 2019, was $121 million, $135 million, and $111 million, respectively, of which approximately $2 million, was advance funding provided by FEMA for storm restoration and storm hardening capital projects. Restricted cash and cash equivalents also includes amounts related to UDSA debt service payments and required debt service and operating reserves of $112 million, $129 million, and $109 million, as of December 31, 2021, 2020, and 2019, respectively. The remaining balance is related to the amounts collected for the Clean Energy Compliance Fund. Restricted funds are not included in the days cash calculation.

(Amounts in thousands, unless otherwise stated)

Risk Management

LIPA has a dedicated Enterprise Risk Management group to identify operating and other risks within each business unit and assist management in ongoing risk identification, monitoring and mitigation.

LIPA has a Power Supply Risk Management Committee (PRMC) to identify and manage commodity risk and has an Enterprise Risk Management Committee (ERMC) to identify and manage significant risks to the organization, during the conduct of its operations, including interest rate risk. As part of risk management, LIPA established a power supply risk management hedging program to mitigate a portion of the exposure to fluctuations in commodity prices on behalf of its customers. LIPA also hedges its interest rate exposure through certain interest rate derivative instruments that are approved by the ERMC based on the Board policy established for interest rate exchange agreements.

Bond Ratings

LIPA's financial policy sought to increase LIPA's credit ratings to A2 by Moody's Investors Service (Moody's), A by Standard and Poor's Global Ratings (S&P), and A by Fitch Ratings (Fitch). The Board's policy has resulted in four upgrades to LIPA's credit ratings since 2013 and a recent change to a "positive outlook" by Fitch.

Rating Agency	2021	2020	2019
Moody's	A2 (Stable)	A2 (Stable)	A2 (Stable)
S&P	A (Stable)	A (Stable)	A (Stable)
Fitch	A (Positive)	A (Stable)	A (Stable)

The UDSA bonds are rated Aaa (sf) by Moody's and AAA (sf) by S&P and Fitch for the years ended December 31, 2021, 2020, and 2019.

Certain bonds and notes of LIPA are supported by either a bank letter of credit or are insured against default.

Contacting the Long Island Power Authority

This financial report is designed to provide LIPA's bondholders, customers, and other interested parties with a general overview of LIPA's finances and to demonstrate its accountability for the funds it receives. If you have any questions about this report or need additional information, contact LIPA at 333 Earle Ovington Blvd., Suite 403, Uniondale, New York 11553, or visit LIPA's website at www.lipower.org.

LONG ISLAND POWER AUTHORITY

(A Component Unit of the State of New York)

Consolidated Statements of Net Position

December 31, 2021 and December 31, 2020

(Amounts in thousands)

Assets and Deferred Outflows of Resources		**2021**	**2020**
Current assets:			
Cash and cash equivalents	$	258,903	266,400
Restricted cash – working capital requirements		156,163	78,165
Restricted cash – UDSA		111,694	128,833
Investments		1,107,629	936,361
Restricted investments – working capital requirements		128,314	129,112
Counterparty collateral – posted by LIPA		—	71,634
Accounts receivable (less allowance for doubtful accounts of $62,184 and $43,891 at December 31, 2021 and December 31, 2020, respectively)		611,991	554,834
Other receivables		60,378	58,156
Fuel inventory		127,595	106,829
Material and supplies inventory		71,561	70,950
Commodity derivative instruments		73,309	—
Regulatory assets to be recovered within one year		214,831	190,045
Prepayments and other current assets		66,216	47,676
Total current assets		2,988,584	2,638,995
Noncurrent assets:			
Restricted cash and cash equivalents		1,740	1,738
Utility plant and property and equipment, net		10,414,617	10,313,576
Nuclear decommissioning trust fund		184,236	164,085
Other long-term receivables		197,190	38,105
Unrealized charges		4,026	3,680
Financial derivative instruments		354	1,254
Commodity derivative instruments		63,014	—
Regulatory assets for future recovery		1,221,364	1,433,046
Acquisition adjustment (net of accumulated amortization)		543,887	655,262
Total noncurrent assets		12,630,428	12,610,746
Deferred outflows of resources:			
Deferred defeasance costs on debt refunding		164,200	190,047
OPEB expense		81	161
Pension expense		3,045	2,597
Accumulated decrease in fair value of commodity derivatives		—	16,298
Accumulated decrease in fair value of financial derivatives		6,649	17,151
Total deferred outflows of resources		173,975	226,254
Total assets and deferred outflows of resources	$	15,792,987	15,475,995

See accompanying Notes to Consolidated Financial Statements.

LONG ISLAND POWER AUTHORITY

(A Component Unit of the State of New York)

Consolidated Statements of Net Position

December 31, 2021 and December 31, 2020

(Amounts in thousands)

Liabilities, Deferred Inflows of Resources and Net Position		**2021**	**2020**
Current liabilities:			
Short-term debt	$	422,000	417,000
Current maturities of long-term debt		69,735	78,610
Current maturities of UDSA debt		177,511	179,419
Current portion of lease obligations		348,638	334,031
Counterparty collateral - held by LIPA		109,035	—
Accounts payable and accrued expenses		431,939	533,633
Regulatory liabilities payable in one year		203,635	98,731
Commodity derivative instruments		—	34,461
Accrued payments in lieu of taxes		11,485	11,320
Accrued interest		57,079	56,068
Customer deposits		30,391	34,327
Total current liabilities		1,861,448	1,777,600
Noncurrent liabilities:			
Long-term debt, net		5,301,796	4,694,767
Long-term UDSA debt, net		3,839,019	4,061,650
Lease obligations		2,121,921	2,457,513
Borrowings		34,739	61,786
Operations Services Agreement – employee retirement benefits		813,362	925,098
Financial derivative instruments		137,554	172,893
Commodity derivative instruments		—	7,086
Asset retirement obligation		90,746	70,766
Long-term liabilities and unrealized credits		41,125	62,838
Claims and damages		155,459	65,734
Total noncurrent liabilities		12,535,721	12,580,131
Deferred inflows of resources:			
Regulatory credits – grants		626,460	470,312
Lease revenue		9,258	9,816
OPEB expense		5,369	2,788
Pension expense		2,900	63
Accumulated increase in fair value of NMP2 Trust and OPEB Account		149,452	97,597
Total deferred inflows of resources		793,439	580,576
Net position:			
Net investment in capital assets		349,036	213,073
Restricted		127,439	136,746
Unrestricted		125,904	187,869
Total net position		602,379	537,688
Total liabilities, deferred inflows of resources, and net position	$	15,792,987	15,475,995

See accompanying Notes to Consolidated Financial Statements.

LONG ISLAND POWER AUTHORITY

(A Component Unit of the State of New York)

Consolidated Statements Revenues, Expenses and Net Position

Years Ended December 31, 2021 and December 31, 2020

(Amounts in thousands)

		2021	2020
Operating revenues – electric sales (net of uncollectible expense)	$	3,930,788	3,900,721
Operating expenses:			
Operations – power supply charge		1,800,933	1,587,356
Operations – power supply charge – property taxes		222,549	225,754
Operations and maintenance		656,852	642,243
Storm restoration		138,731	389,330
General and administrative		38,167	32,479
Depreciation and amortization		425,898	420,977
Payments in lieu of taxes and assessments		346,896	342,947
Total operating expenses		3,630,026	3,641,086
Operating income		300,762	259,635
Nonoperating revenues and expenses:			
Other income, net:			
Investment income, net		35,767	48,555
Grant income		39,986	44,871
Carrying charges on regulatory assets		19,337	20,674
Other		26,082	4,080
Total other income, net		121,172	118,180
Interest charges and (credits):			
Interest on debt		366,534	369,797
Other interest		41,940	33,755
Other interest amortizations		(51,231)	(44,557)
Total interest charges and (credits), net		357,243	358,995
Change in net position		64,691	18,820
Net position, beginning of year		537,688	518,868
Net position, end of year	$	602,379	537,688

See accompanying Notes to Consolidated Financial Statements.

LONG ISLAND POWER AUTHORITY

(A Component Unit of the State of New York)

Consolidated Statements of Cash Flows

Years Ended December 31, 2021 and December 31, 2020

(Amounts in thousands)

		2021	2020
Cash flows from operating activities:			
Operating revenues received	$	4,124,284	3,814,475
Paid to suppliers and employees:			
Operations and maintenance		(721,220)	(721,642)
Operations – power supply charge		(1,626,641)	(1,350,174)
Operations – power supply charge – property tax related		(222,549)	(214,531)
Payments-in-lieu-of-taxes		(495,970)	(471,938)
Collateral on commodity derivative transactions, net		180,669	44,775
PSEG Long Island pension funding		(37,400)	(30,000)
Net cash provided by operating activities		1,201,173	1,070,965
Cash flows from investing activities:			
Earnings received on investments		23,763	37,823
Sale of investment securities		—	26,775
Sale of restricted investment securities		—	18
Sale of restricted investment securities – working capital investments		798	—
Purchase of investment securities		(171,268)	—
Purchase of restricted investment securities – working capital investments		—	(129,112)
Purchase of investment securities – OPEB Account		(63,532)	(54,395)
Sale of investment securities – OPEB Account		105,896	89,104
Net cash used in investing activities		(104,343)	(29,787)
Cash flows from noncapital financing related activities:			
Grant proceeds		30,330	27,448
Proceeds from credit facility draws and commercial paper program		1,275,000	1,463,000
Redemption of credit facility draws and commercial paper program		(1,270,000)	(1,338,000)
Proceeds from the issuance of long-term debt		254,187	—
Interest paid – LIPA		(1,250)	—
Net cash provided by noncapital related activities		288,267	152,448
Cash flows from capital and related financing activities:			
Capital expenditures		(729,979)	(780,490)
Lease payments		(388,414)	(419,293)
Proceeds from the issuance of long-term debt		822,216	676,579
Payment to bond escrow agent to refinance bonds		(193,656)	(115,940)
Debt issuance costs		(5,788)	(875)
Other interest costs		(42,142)	(29,995)
Interest paid – LIPA		(151,771)	(153,285)
Redemption of long-term debt – LIPA		(78,610)	(101,860)
Early defeasance of long-term debt – LIPA		(196,201)	—
Interest paid – UDSA		(187,969)	(192,972)
Redemption of long-term debt – UDSA		(179,419)	(126,057)
Net cash used in capital and related financing activities		(1,331,733)	(1,244,188)
Net increase (decrease) in cash and cash equivalents		53,364	(50,562)
Cash and cash equivalents at beginning of year		475,136	525,698
Cash and cash equivalents at end of year	$	528,500	475,136

See accompanying Notes to Consolidated Financial Statements.

LONG ISLAND POWER AUTHORITY

(A Component Unit of the State of New York)

Consolidated Statements of Cash Flows

Years Ended December 31, 2021 and December 31, 2020

(Amounts in thousands)

		2021	2020
Reconciliation to net cash provided by operating activities:			
Operating income	$	300,762	259,635
Adjustments to reconcile operating income to net cash provided by operating activities:			
Depreciation and amortization		425,898	420,977
Other post – employment benefit non – cash expense		45,825	46,837
Nuclear fuel burned		9,518	8,657
Shoreham and VBA surcharges		52,081	49,647
Accretion of asset retirement obligation		3,925	3,473
Changes in operating assets and liabilities:			
Accounts receivable, net		(221,666)	(107,820)
Regulatory assets and liabilities		214,704	(317,637)
Fuel and material and supplies inventory		(21,377)	(487)
Accounts payable, accrued expenses, and other		391,503	707,683
Net cash provided by operating activities	$	1,201,173	1,070,965

See accompanying Notes to Consolidated Financial Statements.

(1) Nature of Operations

The Long Island Power Authority (LIPA) is the owner of the electric transmission and distribution (T&D) system located in the Counties of Nassau and Suffolk (with certain limited exceptions) and a portion of Queens County known as the Rockaways (Service Area), and is responsible for supplying electricity to customers within the Service Area. LIPA also owns an undivided 18% interest in the Nine Mile Point Unit 2 (NMP2) generating facility, located in upstate New York.

LIPA was established as a corporate municipal instrumentality of the State of New York (State), constituting a political subdivision of the State, created by Chapter 517 of the Laws of 1986 (the LIPA Act). As such, it is a component unit of the State and is included in the State's annual financial statements.

LIPA is subject to the LIPA Reform Act (Reform Act) which was passed and codified as Chapter 173, Laws of New York on June 21, 2013, by the New York State Assembly and Senate. The Reform Act is divided into two parts, Part A and Part B.

Part A of the Reform Act addressed the organization of LIPA and Part B, referred to as the Securitization Law, created the Utility Debt Securitization Authority (UDSA). The Securitization Law provided a legislative foundation for the UDSA to issue restructuring bonds to allow LIPA to retire a portion of its outstanding indebtedness, providing debt service savings to LIPA's customers on a net present value basis. In 2020, LIPA sought a change to permit the UDSA to issue additional securitized bonds for refinancing, storm hardening and resiliency purposes. The legislation authorizing the change was signed into law on August 2, 2021. With these legislative changes, the UDSA may issue up to $8.0 billion of securitized bonds, inclusive of the bonds already issued. There were no additional securitized bonds issued in 2021 as a result of the changes to the UDSA legislation.

The UDSA has a governing body separate from that of LIPA and has no commercial operations. For a further discussion on the UDSA, see Note 4.

LIPA has operating agreements with service providers to provide the majority of services necessary to serve LIPA's customers and has power purchase agreements to meet its power supply needs. Below is a summary of LIPA's primary operating agreements:

Amended and Restated Operations Services Agreement (OSA): Effective January 1, 2014, PSEG Long Island LLC (PSEG Long Island), a wholly owned subsidiary of Public Service Enterprise Group (PSEG), fully dedicated to LIPA's Long Island operations, provides operations, maintenance, and related services for the T&D system under the OSA. The OSA expires December 31, 2025 and includes a provision that if PSEG Long Island achieves certain levels of performance during the first 10 years of the 12-year term, the parties will negotiate an eight-year extension on substantially similar terms and conditions. Essentially all costs of operating and maintaining LIPA's T&D system incurred by PSEG Long Island are passed through to and paid for by LIPA. PSEG Long Island is paid a management fee and may earn incentive compensation related to specified performance metrics. During the years ended December 31, 2021 and 2020, PSEG Long Island was paid a management fee totaling approximately $68 million and $67 million, respectively. For 2020, PSEG Long Island was entitled to an incentive fee totaling approximately $10 million; however, PSEG Long Island elected to apply their compensation towards reimbursing certain customers for their food and medicine spoilage as a result of prolonged outages that occurred during Tropical Storm Isaias. For 2021, PSEG Long Island may earn an incentive fee up to approximately $10 million, which will be determined by June 2022.

On Tuesday, August 4, 2020, Tropical Storm Isaias caused approximately $300 million of damages to LIPA's T&D system and interrupted service to more than half of LIPA's customers, making it the third-most damaging storm to impact the system. LIPA established an Isaias Task Force to undertake a thorough analysis of the root causes underlying the failures of PSEG Long Island's customer communications and outage management system during the storm. As a result of the investigation, LIPA sought organizational and contractual changes as recommended by the Task Force. During 2021, LIPA and PSEG Long Island reached agreement on a reformed contract. Pursuant to the proposed Settlement Agreement, the second A&R OSA would, among other things, increase the amount of PSEG Long Island's annual compensation at risk from $10 million to $40 million; include automatic compensation reductions for failures to meet minimum emergency response, customer satisfaction, and reliability standards, strengthen the dedicated Long Island management team, enhance oversight in long-term planning, project prioritization and budget development, partition Long Island information technology systems, facilitate independent verification and validation; and provide a new New York State Department of Public Service (DPS) investigative process to reduce compensation for failures to provide safe, adequate, and reliable service to customers. In addition, PSEG Long Island would be subject to expanded performance requirements set annually by the Board and DPS. The proposed second A&R OSA would eliminate PSEG Long Island's eight-year term extension option; instead, the second A&R OSA will expire on December 31, 2025.

The second A&R OSA was approved by LIPA's Board on December 15, 2021, approved by the New York State Attorney General on January 6, 2022, and is pending review and approval by the State Comptroller.

Amended and Restated Power Supply Agreement (A&R PSA): The A&R PSA, which became effective on May 28, 2013, is the successor agreement to the original PSA between National Grid and LIPA. The A&R PSA provides for the sale to LIPA by National Grid of all the capacity, energy, and ancillary services from the oil and gas-fired generating plants on Long Island formerly owned by the Long Island Lighting Company (LILCO). Sales are at cost, based on wholesale rates regulated by the Federal Energy Regulatory Commission (FERC), which may be modified in accordance with the terms of the A&R PSA for: (i) agreed upon labor and expense indices applied to the base year; (ii) a return of and return on net capital additions, which require approval by LIPA; and (iii) certain reasonably incurred expenses that are outside of the control of National Grid. The annual capacity charge in 2021 and 2020 was approximately $441 million in both years. The variable charge under both the PSA and A&R PSA is constant at $0.90 per megawatt hour of electric energy generated by the plants.

The A&R PSA has provisions for penalties in the event that annual guarantees for heat rate and unforced capacity are not met. No penalties were assessed in either 2021 or 2020.

In addition, LIPA is party to several power purchase agreements with other third-party generators for approximately 1,800 megawatts of capacity and related products.

Fuel Management Agreement and Power Supply Management Agreement: PSEG Energy Resources and Trade LLC (PSEG ER&T) provides fuel management services for both the National Grid generating facilities under contract by LIPA and the other units in LIPA's energy supply portfolio. Certain other services related to power supply management and commodity activities are also provided by PSEG ER&T. During the years ended December 31, 2021 and 2020, PSEG ER&T was paid a management fee totaling approximately $19 million and $18 million, respectively. The agreements with PSEG ER&T expire December 31, 2025 and are subject to extension.

(2) Summary of Significant Accounting Policies

(a) Reporting Entity

LIPA complies with all applicable pronouncements of the Governmental Accounting Standards Board (GASB). LIPA's financial statements are prepared in accordance with GASB Codification Section RE10, Regulated Operations, which requires that the effects of the rate-making process be recorded in the financial statements.

LIPA's reporting entity is comprised of itself and (i) its operating subsidiary, LILCO, a wholly owned subsidiary of the Long Island Power Authority, doing business as LIPA; and (ii) the UDSA. All significant transactions between LIPA, LILCO, and UDSA have been eliminated.

In 2017, LIPA established a legally separate trust under Section 115 of the Internal Revenue Code known as the Long Island Power Authority OPEB Trust (OPEB Trust) to fund LIPA's Other Post-Employment Benefit Plan (OPEB) which provides health care benefits to LIPA's qualified retired employees. For further discussion, see Note 11 (f).

(b) Estimates

The accompanying financial statements were prepared in conformity with U.S. generally accepted accounting principles, which require management to make estimates and assumptions that affect the reported amounts of revenues and expenses during the reporting period as well as the reported amounts of assets and liabilities, including disclosure of contingent assets and liabilities, through the date of the financial statements. Actual results could differ from those estimates.

(c) Reclassifications

Certain reclassifications have been made to the prior year's financial statements to conform to the current year's presentation. Unrealized mark-to-market values relating to the ineffective balance of commodity and financial derivative instruments are deferred as unrealized charges or credits in accordance with regulatory accounting. During 2021, such amounts have been reclassed to the regulatory asset and liability section of the Consolidated Statements of Net Position.

(d) Cash, Cash Equivalents, and Investments (including Restricted)

Cash and cash equivalents, and restricted cash and cash equivalents, include all highly liquid financial instruments with a maturity of three months or less when purchased.

Funds held by LIPA are administered in accordance with LIPA's investment policies pursuant to Section 2925 of the New York State Public Authorities Law. These policies comply with the New York State Comptroller's investment guidelines for public authorities. Investments' carrying values are reported at fair market value.

Certain amounts have been restricted for specific purposes. For a further discussion, see Note 11(b).

(e) Counterparty Collateral

LIPA and certain of its counterparties require collateral posting for mark-to-market valuations that exceed established credit limits. As of December 31, 2021, LIPA held approximately $109 million of collateral posted by counterparties, which is recorded as a current liability. As of December 31, 2020, LIPA was required to post $72 million, of collateral to counterparties, which is recorded as a current asset.

(f) Material and Supplies Inventory

The material and supplies inventory supports the operations and maintenance of the T&D system. The inventory is accounted for on a weighted average cost basis of accounting.

LIPA also owns 18% of the material and supplies inventory needed to support the operation of the NMP2 nuclear power station. As of December 31, 2021 and 2020, the value of the NMP2 inventory totaled approximately $13 million.

(g) Other Receivables and Other Long-Term Receivables

The current portion of other receivables is comprised primarily of non-electric billings such as insurance damage claims.

The noncurrent portion of other long-term receivables are comprised primarily of (i) the balance of the Federal Emergency Management Agency (FEMA) public assistance mitigation grant; (ii) the net present value of the reimbursable costs to construct the interconnection facilities related to the Neptune cable, which is to be paid to LIPA over a 20-year period that commenced in 2007; and (iii) a receivable resulting from a telecommunication attachment lease expiring in 2024.

(h) Acquisition Adjustment

The Acquisition Adjustment, an intangible asset, represents the difference between the purchase price paid and the net assets acquired from LILCO. The Acquisition Adjustment is being amortized on a straight-line basis through 2026 totaling approximately $111 million annually.

(i) Lease Obligations

During 2020, LIPA adopted GASB Statement No. 87, *Leases* (GASB Statement No.87). GASB Statement No. 87 establishes a single model for lease accounting based on the principle that leases are financings of the right to use an underlying asset. LIPA was required to recognize a lease liability and an intangible right-to-use lease asset for certain of its leases that were previously reported as operating leases under the previous accounting standards. As a result of the adoption of GASB Statement No. 87, amounts for the year ended December 31, 2020, reflected an increase of approximately $1.0 billion for the recognition of the right-to-use asset, included in Utility plant, property and equipment, and an increase in Lease obligations on the Consolidated Statements of Net Position.

The lease obligations represent the net present value of various contracts including capacity and/or energy of certain generation and transmission facilities, fleet vehicles, and certain facilities. The capacity and energy contracts are recognized in power supply expense in an amount equal to the contract payment of the leases, as allowed through the rate-making process. The value of the asset and the obligation is reduced each month to properly reflect the remaining net present value of the asset and obligation. The fleet vehicle and facility leases are recognized in operating expense in an amount equal to the contract payment of the agreement consistent with LIPA's rate-making process.

(j) Fuel Inventory

LIPA owns the fuel oil used in the generation of electricity at the facilities under contract. Fuel inventory represents the value of low sulfur residual oil and other liquid fuels that LIPA had on hand at each year-end. Fuel inventory is valued using the weighted average cost method. At the time of consumption, an expense is recorded at the weighted average cost.

(k) Borrowings

Borrowings represent the unamortized balance of cash premiums received at the time of entering into certain financial derivative instruments. LIPA is amortizing such premiums over the life of the instrument in accordance with GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* (GASB Statement No. 53).

(l) Commodity and Financial Derivative Instruments

Commodity and financial derivative instruments represent the amount LIPA estimates it would receive or be required to pay in order to terminate its commodity and financial derivative instruments which approximates fair value.

(m) Long-Term Liabilities and Unrealized Credits

Long-term liabilities and unrealized credits consist primarily of the advance deposits related to construction and any changes resulting from updated asset retirement studies.

(n) Claims and Damages

Losses arising from claims including workers' compensation claims, property damage, property tax litigation and general liability claims are partially self-insured. Reserves for these claims and damages are established if it is probable that a loss has been incurred and the amount can be reasonably estimated.

(o) Revenues

Operating revenues are comprised of cycle billings for electric service rendered to customers based on meter reads and the accrual of revenues for electric service rendered to customers not billed at year-end. LIPA accrues unbilled revenues by estimating unbilled consumption at the customer meter. Unbilled revenues totaled $187 million and $174 million as of December 31, 2021 and 2020, respectively.

LIPA recognizes an estimate for uncollectible accounts for its receivables related to electric service based upon its historical experience with collections; however, during the year ended December 31, 2021 and 2020, the economic impact of the COVID-19 pandemic was also considered in forward-looking projections related to uncollectible rates and resulted in increases to the allowance for uncollectible accounts. LIPA records bad debts for its estimated uncollectible accounts related to electric service as a reduction to related operating revenues in the Consolidated Statements of Revenues, Expenses, and Changes in Net Position.

(p) Depreciation and Amortization

The provisions for depreciation for utility plant result from the application of straight-line rates determined by age life studies of assets in service. The rates are applied to groups of depreciable properties. The average composite depreciation rates were 3.14% and 3.34% for 2021 and 2020, respectively. Property and equipment are being depreciated over its estimated useful life using the straight-line method.

Separately, leasehold improvements are being amortized over the lesser of the life of the assets or the term of the lease, using the straight-line method. Right-to-use lease assets are being amortized over the term of the lease using the effective interest rate method to be consistent with the amortization of the related obligation.

(Amounts in thousands, unless otherwise stated)

The following estimated useful lives are used for utility property:

Category	Useful life
Generation – nuclear	46 – 54 years
Transmission and distribution	40 – 75 years
Common	5 – 55 years
Nuclear fuel in process and in reactor	6 years
Generation assets under capital lease	10 – 25 years

(q) Asset Retirement Obligations (ARO)

GASB issued Statement No. 83, *Certain Asset Retirement Obligations* (GASB Statement No. 83), which states that if a legal obligation for future asset retirement exists for tangible capital assets, a liability is required to be recognized. LIPA, as an 18% owner of NMP2, has a legal obligation imposed by the U.S. Nuclear Regulatory Commission to decommission the plant. LIPA funds its share of the decommissioning costs of the nuclear power plant based on an actuarial study. The obligation to perform the asset retirement activity is unconditional even though uncertainty exists about the timing and method of settlement.

GASB Statement No. 83 also provides an exception to the initial and subsequent measurement of the ARO if the governmental agency owns a minority share (less than 50%) in an undivided interest arrangement with joint ownership of a tangible capital asset when the majority owner reports under the Financial Accounting Standards Board (FASB). The exception allows governments to report their minority share of an ARO liability using the measurements provided by the FASB reporting entity without adjustment.

As NMP2's majority shareholder is a FASB reporting entity, LIPA estimated its ARO in accordance with FASB Accounting Standards Codification (ASC) 410, Asset Retirement and Environmental Obligations (FASB ASC 410). LIPA recorded its 18% share of accretion expense and change due to updates from Exelon's annual review and analysis of the NMP2 ARO. The 2021 analysis resulted in increasing LIPA's share of the NMP2 ARO liability by $16 million. The change due to updates was attributable to a forecasted increase in borrowing cost, labor rates, and a change in the Department of Energy (DOE) spent fuel acceptance date assumption from 2030 to 2035. This increase had no impact on LIPA's operating results as amounts were reclassed from deferred prior year downward adjustments. The NMP2 plant has a remaining license term to 2046. The ARO is continually reviewed for adequacy and any necessary changes are updated annually.

LIPA also has a legal obligation to remove certain of its contracted undersea cables in its transmission agreements. Removal of undersea cables pose many potential environmental issues and removal of such cables are rarely completed. Since the timing and extent of any potential asset retirement is unknown, the fair value of any obligations associated with such removal cannot be reasonably estimated.

(Amounts in thousands, unless otherwise stated)

A summary of LIPA's ARO activity for the years ended December 31, 2021 and 2020 is included below:

		2021	2020
Asset retirement obligation:			
Balance at January 1	$	70,766	67,293
Change due to updates		16,055	—
Accretion expense		3,925	3,473
Balance at December 31	$	90,746	70,766

(r) Long-Lived Assets

Long-lived assets and purchased intangibles subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that there is a significant unexpected decline in the service utility of a capital asset. There were no impairment charges recognized in 2021 or 2020.

(s) Payments-in-Lieu-of-Taxes

LIPA makes payments-in-lieu-of-taxes (PILOTs), including gross income, property, and Metropolitan Transportation Authority. In addition, LIPA has entered into various PILOT arrangements for property it owns, upon which generation plants have been built.

(t) Income Taxes

LIPA is a political subdivision of the State and, therefore, is exempt from Federal, state, and local income taxes.

(u) Fair Value Measurements

GASB Statement No. 72, *Fair Value Measurement and Application* (GASB Statement No. 72), establishes general principles for measuring fair value and standards of accounting and financial reporting for assets and liabilities measured at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is a market-based measurement, not an entity-specific measurement. For some assets and liabilities, observable market transactions or market information might be available; for others, this information might not be available.

The fair value hierarchy categorizes the inputs to valuation techniques used to measure fair value into three levels as described below:

Level 1 – measurements that use quoted or published prices (unadjusted) for identical assets or liabilities in active markets that LIPA has the ability to access at the measurement date.

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

Level 3 – measurements that use unobservable inputs for an asset or liability. In some valuations, the inputs used may fall into different levels of hierarchy. In these cases, the financial instrument's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

For a further discussion on the fair value hierarchy levels of LIPA's derivatives and investments, see Notes 8 and 11.

(v) Recent Accounting Pronouncements Not Yet Adopted

GASB Statement No. 91, *Conduit Debt Obligations*, 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. The requirements of this statement are effective for reporting periods beginning after December 15, 2021.

GASB Statement No. 92, *Omnibus 2020*, seeks to improve the consistency of authoritative literature by addressing practice issues identified during implementation of certain GASB Statement.

GASB Statement No. 93, *Replacement of Interbank Offered Rates*, addresses that the London Interbank Offered Rate (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. GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, as amended, requires a government to terminate hedge accounting when it renegotiates or amends a critical term. The objective of this Statement is to address those and other accounting and financial reporting implications that result from the replacement of LIBOR. The removal of LIBOR as an appropriate benchmark interest rate is effective for reporting periods ending after December 31, 2022. All other requirements of this Statement are effective for reporting periods beginning after June 15, 2021.

GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*, addresses issues related to public-private and public-public partnership arrangements (PPPs). A PPP is an arrangement in which a government contracts with an operator to provide public services by conveying control of the right to operate or use a nonfinancial asset, such as infrastructure or other capital asset for a period of time in an exchange or exchange-like transaction. The requirements of this Statement are effective for reporting periods beginning after June 15, 2022.

GASB Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance*, was issued in response to the ongoing COVID-19 pandemic. GASB Statement No.95 intends to provide relief to governments and other stakeholders in light of the COVID-19 pandemic by postponing the effective date of certain other GASB Statements.

GASB Statement No. 96, *Subscription-Based Information Technology Arrangements*, defines a subscription-based technology arrangement as a contract that conveys control of the right to use a vendor's software, alone or in combination with tangible capital assets requiring governments to recognize a right-to-use subscription asset and a corresponding subscription liability. The requirements of this Statement are effective for periods beginning after June 15, 2022.

LIPA is currently evaluating the impact of statements effective for future periods on the accompanying consolidated financial statements.

(3) Rate Matters

LIPA is empowered by the LIPA Act to set rates for electric service in its Service Area without being required to obtain the approval of the DPS or any other State regulatory body. The LIPA Act requires that any bond resolution of LIPA contain a covenant that it will at all times maintain rates, fees, or charges sufficient to pay the costs of: operation and maintenance of facilities owned or operated by LIPA; PILOTs; renewals, replacements, and capital additions; and the principal of, and interest on, any obligations issued pursuant to such resolution as the same become due and payable. In addition, LIPA must establish or maintain reserves or other funds or accounts required or established by or pursuant to the terms of such resolution.

In 2013, the LIPA Reform Act established a rate review process that required LIPA and PSEG Long Island submit for review to DPS a three-year rate proposal for rates and charges that took effect on January 1, 2016. Subsequent to the rate proposal period, LIPA and PSEG Long Island are required to submit a proposed rate increase for DPS review if it would increase the rates and charges by an amount that would increase LIPA's annual revenues by more than 2.5%. LIPA's Board retains final rate-setting power. LIPA's annual base rate increase has not exceeded the 2.5% threshold since the three-year rate plan expired at the end of 2018; therefore, no such rate proposal has been submitted to the DPS, although LIPA provides DPS with its budgets and rate adjustments.

LIPA has a cost reconciliation mechanism, referred to as the Delivery Service Adjustment (DSA), to reconcile certain specified budgeted costs to actual costs in each year. The DSA provides cost recovery or refunding for certain items that vary due to external factors, including: debt service (variances in interest rates and capital expenditures), storm restoration expenditures (variances from the budget for storm restoration expenses), non-storm emergency costs, bad debt expense, and service provider pension and OPEBs. For debt service, any differences between the actual payments and the amount included in the approved budget and approved delivery rates are charged or refunded to customers in the following year, including an allowance for fixed obligation coverage at the factor specified in the Board's financial policy. For storm restoration expenditures, if actual storm restoration costs to be recovered from customers are lower than the budgeted costs, such balances will be managed as a regulatory storm reserve to offset future storm expenditures. If actual storm restoration costs are higher than the budgeted costs, one-third of that balance will be recovered in the subsequent recovery period and the remaining two-thirds will be eligible for recovery during a future recovery period and remain as a regulatory asset.

Eligible non-storm emergency costs are incremental costs authorized by the Board (net of anticipated grant reimbursements) for emergencies other than storms. Eligible bad debt costs are variances of accrued uncollectible expense from the amount in a Board-approved budget during periods affected by a government ordered or Board authorized moratorium on service disconnections and for up to two years following the end of such moratorium. Eligible pension and OPEB expenses are variances from the amount in a Board-approved budget, related to the service provider's operations, excluding variances in pension and OPEB expenses allocated to capital, storms, or Utility 2.0 (as such variances are already eligible for recovery in other riders).

The DSA is calculated through the end of September each year, which allows for the bill impact to be known in advance of the annual budget approval. Any adjustments are reviewed by DPS and implemented on January 1st for recovery (or refund) over the following 12 months.

(Amounts in thousands, unless otherwise stated)

LIPA also has a Revenue Decoupling Mechanism (RDM). All six of the investor-owned New York State electric utilities also have RDMs within their tariffs for delivery service. Mechanically, RDMs function by comparing actual delivery service revenues with authorized delivery service revenues and crediting (or collecting) any differences to (or from) customers in future periods. RDMs are intended to cover all sources of variances in delivery service revenues including, among other things, variances attributable to the implementation of energy efficiency or net metering above or below forecasted levels, variances caused by warmer or cooler than normal weather, and variances that result from unforeseen changes in economic conditions.

In addition to the items discussed above, LIPA's tariff also includes: (i) a Power Supply Charge to allow for adjustments to customers' bills to reflect changes in the cost of fuel, purchased power, and related costs; (ii) a PILOTs recovery rider to allow rate adjustments to accommodate changes in revenue-based PILOTs; (iii) a rider providing for the recovery of costs associated with the Shoreham Property Tax Settlement; (iv) a rider to recover the costs of LIPA's distributed energy resources and energy efficiency programs; (v) a rider providing for the collection of the New York State assessment imposed by the New York State Legislature; and (vi) undergrounding surcharges for customers located in participating municipalities.

(4) Component Unit – Utility Debt Securitization Authority

The Reform Act created the Securitization Law, which established the UDSA to permit the issuance of restructuring bonds to allow LIPA to retire a portion of its outstanding indebtedness in order to provide debt service savings to LIPA's customers as measured on a net present value basis. The Securitization Law allowed for a total issuance of up to $4.5 billion of UDSA restructuring bonds. In 2017, all such authorization was exhausted. However, in 2020, LIPA sought a change to permit the UDSA to issue additional securitized bonds for refinancing, storm hardening and resiliency purposes. The legislation authorizing the change was signed into law on August 2, 2021, and allows UDSA to issue up to $8.0 billion of securitized bonds (inclusive of the bonds already issued). There were no additional securitized bonds issued in 2021 as a result of the changes to the UDSA legislation.

Each issuance of restructuring bonds is separately secured by distinct collateral pursuant to a new financing order. Each such financing order authorizes restructuring bonds to be repaid pursuant to that financing order by an irrevocable contract right to impose, bill, and collect a non-bypassable consumption-based Restructuring Charge from all existing and future retail customers taking electric transmission or distribution service within the Service Area from LIPA or any of its successors or assignees.

LIPA's Board adopted Financing Orders which allowed the UDSA to issue restructuring bonds. All such financing orders are substantively the same, and each financing order permits the UDSA to issue restructuring bonds in an aggregate amount not to exceed the amount authorized by the Securitization Law. The issuance of the 2017 Restructuring Bonds utilized the available capacity of restructuring bonds permitted to be issued by the Securitization Law. Below is a summary of each financing order and amounts issued:

Financing Order	Date Issued	Initial Amount Issued	Net Present Value Savings	Restructuring Charge Rate Effective Date
Financing Order No. 1	December 18, 2013	$ 2,022,324	131,609	March 1, 2014
Financing Order No. 2	October 27, 2015	1,002,115	127,978	January 1, 2016
Financing Order No. 3	April 7, 2016	636,770	115,238	April 7, 2016
Financing Order No. 4	September 8, 2016	469,320	71,647	September 8, 2016
Financing Order No. 5	November 21, 2017	369,465	45,387	January 1, 2018
		$ 4,499,994	491,859	

To pass through the benefits of securitization to customers, LIPA modified its rate structure to create restructuring offset charges, which are in an amount equal to and opposite the Restructuring Charges; the net result is that the customer bill is less than it would have been absent the sale of restructuring bonds. The restructuring offset charges are adjusted coincident with changes to the Restructuring Charges to maintain that equality.

As discussed in Note 2, UDSA is a component unit of LIPA and all of the activities and balances of the UDSA are blended into and reported as part of LIPA. See Note 17 for consolidating condensed financial information.

(Amounts in thousands, unless otherwise stated)

(5) Regulatory Accounting

LIPA's Board has approved various regulatory mechanisms that result in timing differences between the recognition of revenues and expenses for rate-making purposes and treatment under U.S. generally accepted accounting principles for non-regulated entities. These actions result in regulatory assets and liabilities, which are summarized in the table below:

		2021	2020
Regulatory assets to be recovered within one year:			
OSA – employee retirement benefits	$	54,006	54,006
Shoreham property tax settlement		49,237	48,197
Delivery service adjustment		76,838	37,431
Unrealized commodity derivative losses		—	25,249
Employee benefit plan settlement		15,634	15,634
Power supply charge recoverable		13,476	4,078
Debt issuance costs		3,209	3,209
Southampton visual benefit assessment		1,049	1,003
New York State assessment		1,382	976
Distributed energy resources		—	262
	$	214,831	190,045
Regulatory assets for future recovery:			
OSA – employee retirement benefits		242,697	440,590
Shoreham property tax settlement		291,835	324,554
Delivery service adjustment		358,208	357,816
Unrealized financial derivative losses		117,689	140,002
Property tax litigation		90,134	—
Employee benefit plan settlement		46,901	62,535
Power supply charge recoverable		36,708	40,872
Revenue decoupling mechanism		3,669	29,570
Debt issuance costs		19,930	23,329
Unfunded actuarially determined reserves		8,132	8,132
Southampton visual benefit assessment		5,461	5,646
	$	1,221,364	1,433,046
Regulatory liabilities payable within one year:			
Unrealized commodity derivative gains		136,323	—
Power supply charge refundable		8,085	35,101
Revenue decoupling mechanism		26,047	34,035
Utility 2.0		26,955	28,587
Distributed energy resources		2,441	—
Delivery service adjustment		3,784	1,008
	$	203,635	98,731
Regulatory credits:			
Grants		626,460	470,312
	$	626,460	470,312

(a) OSA – Employee Retirement Benefits

LIPA is responsible for reimbursing PSEG Long Island for retirement benefit costs associated with the PSEG Long Island workforce. The PSEG Long Island workforce includes both electric-serving employees hired under the expired Management Services Agreement (MSA) with National Grid (referred to as transitioned employees) and PSEG Long Island employees hired since the beginning of the OSA on January 1, 2014. The retirement benefit plans are owned, sponsored by, and the legal obligation of PSEG Long Island. However, in most cases, PSEG Long Island employee compensation costs are a contractual cost of LIPA under the OSA, including the cost for these retirement benefits (and any required pre-funding of such benefits).

Retirement benefit obligations are future cash outlays that will be incurred as the PSEG Long Island employees receive retirement benefits and therefore are estimates of such costs. Differences between amounts collected from customers and amounts owed to PSEG Long Island for these benefits may arise from changes in asset values, plan amendments, interest rates, and actuarial assumptions, among other factors, which will be reflected in the balance of the regulatory asset. The OSA – Employee Retirement Benefits regulatory asset represents costs and liabilities which have been incurred, but not yet collected in electric rates. This amount will be different from LIPA's liability to PSEG Long Island due to differences between funding and recovery levels.

LIPA contributes to a PSEG Long Island sponsored pension trust on an ongoing basis to pre-fund pension obligations. Additionally, LIPA sets aside funds in an OPEB Account based upon periodic actuarial studies to ensure that sufficient funds are available to meet future healthcare and other post-employment benefit obligations of the PSEG Long Island workforce.

(b) Shoreham Property Tax Settlement (Settlement)

In January 2000, LIPA reached an agreement with Suffolk County, the Town of Brookhaven, the Shoreham-Wading River Central School District, the Wading River Fire District and the Shoreham-Wading River Library District (which was succeeded by the North Shore Library District) (collectively, the Suffolk Taxing Jurisdictions) and Nassau County regarding the over assessment of the Shoreham Nuclear Power Station. Under the terms of the agreement, LIPA issued $457.5 million of rebates and credits to customers over a five-year period. In order to fund such rebates and credits, LIPA used proceeds from its Capital Appreciation Bonds: Series 1998A Electric System General Revenue Bonds totaling $146 million and Series 2000A Electric System General Revenue Bonds totaling $325 million.

As provided under the Settlement, beginning in June 2003, Suffolk County electric customers' bills include a surcharge (the Suffolk Surcharge) to be collected over the succeeding approximate 25-year period to repay the debt service and issuance costs on the bonds issued by LIPA to fund the Settlement as well as the cost of pre-funding certain rebates and credits.

As rates are established at a level sufficient to recover all such costs identified above, LIPA recorded a regulatory asset. The balance remaining represents rebates and credits issued to LIPA's customers, costs of administering the program, plus annual debt service costs on the bonds identified above, less surcharges collected since 2003.

(c) Employee Benefit Plan Settlement

The MSA between LIPA and National Grid provided, among other things, that upon termination of the MSA, when a third-party succeeded National Grid as the service provider, the successor would assume the rights and obligations of National Grid regarding certain employee benefit plan liabilities. The OSA with PSEG Long Island, however, did not require PSEG Long Island to assume the employee benefit plan assets and liabilities related to the MSA, which were co-mingled with those of other National Grid employees.

LIPA and National Grid and its affiliates signed an Employee Benefit Plan Settlement in 2013 resolving the parties' respective employee benefit plan funding obligations for National Grid's electric-serving employees. LIPA's Board approved recovery of such costs from customers over a 10-year period, the remaining term of the OSA, as virtually all former employees of National Grid covered by these plans have been transitioned to PSEG Long Island and continue to serve our customers.

As of December 31, 2021 and 2020, the employee benefit plan settlement balance totaled $62 million and $78 million, respectively.

(d) Delivery Service Adjustment

The DSA reconciles certain specified budgeted costs to actual costs in each year. The DSA provides cost recovery or refunding for certain items that vary due to external factors, including: debt service (variances in interest rates and capital expenditures), storm restoration expenditures (variances from the budget for storm restoration expenses), non-storm emergency costs, bad debt expense, and service provider pension and OPEBs. For debt service, any differences between the actual payments and the amount included in the approved budget and approved delivery rates are charged or refunded to customers in the following year, including an allowance for fixed obligation coverage at the factor specified in the Board's financial policy. For storm restoration expenditures, if actual storm restoration costs to be recovered from customers are lower than the budgeted costs, such balances will be managed as a regulatory storm reserve to offset future storm expenditures. If actual storm restoration costs are higher than the budgeted costs, one-third of that balance will be recovered in the subsequent recovery period and the remaining two-thirds will be eligible for recovery during a future recovery period and remain as a regulatory asset.

The remaining DSA recoverable balance is primarily the result of the storm recovery rider component. As discussed in Note 3, Rate Matters, storm restoration costs above the annual budgeted amount are amortized for recovery, one-third of which is factored in the subsequent year's DSA collection and the remaining balance is carried forward for recovery in future years. Also included in the December 31, 2021 DSA balance is the deferral of the remaining anticipated FEMA reimbursable portion of Tropical Storm Isaias costs. As of December 31, 2021 a significant portion of the FEMA grant application has not been finalized and approved, and as such, amounts due from customers cannot be reasonably determined. LIPA obtained from its Board a regulatory action to defer such costs for future recovery beyond the normal collection timeframe in the DSA.

The carryover as of December 31, 2021, and 2020 totaled approximately $358 million.

(e) Unrealized Derivative Instrument Gains and Losses

Unrealized mark-to-market values relating to the ineffective balance of commodity and financial derivative instruments are recorded as regulatory assets or liabilities.

(f) Property Tax Litigation

The LIPA Reform Act capped LIPA's property tax PILOT payments to no more than 2% higher than the prior calendar year beginning in calendar year 2015.

In 2017, LIPA received notices from Suffolk County claiming to enforce liens against certain of LIPA properties for alleged unpaid real estate taxes. LIPA has paid the PILOT amounts it is authorized to pay by law. Furthermore, LIPA believes Suffolk County lacks legal authority to enforce a tax lien on LIPA's property. LIPA filed a legal action to negate any attempt by Suffolk County to enforce the alleged tax liens. LIPA also filed suit against the ten Suffolk County towns to ensure that they comply with the annual 2% limit on growth in such property tax PILOTs.

On April 1, 2021, the Supreme Court, Suffolk County issued a Decision and Order that found: (1) LIPA's T&D properties are not exempt from real-property taxation for tax years 2014/15 through 2019/20 by reason of LIPA's failure to timely challenge its unlawful assessment as non-exempt, taxable properties by the Town Assessors during those tax years; and (2) compelling LIPA to pay to Suffolk County alleged unpaid real property taxes levied against the T&D properties for tax years 2014/15 through 2019/20 (by stipulation, the judgment includes the 2020/21 tax year). LIPA filed an appeal on December 17, 2021. Enforcement of the judgment is stayed pending the determination of LIPA's appeal. LIPA estimates the potential exposure with penalties and interest to be approximately $90 million as of December 31, 2021. As a regulated entity, LIPA obtained regulatory approval from its Board to defer the recovery of these costs, from its customers until the conclusion of the appeal process.

(g) Revenue Decoupling Mechanism

The RDM ensures that only LIPA's budgeted and Board-approved revenues for delivery service are collected from customers. The RDM compares actual revenues with authorized revenues and credits (or collects) any differences to (or from) customers. It is intended to cover all sources of variances in delivery service revenues including, among other things, variances attributable to the implementation of energy efficiency or net metering above or below forecasted levels, variances caused by warmer or cooler than normal weather, and variances that result from unforeseen changes in economic conditions.

The RDM is applied to delivery rates on a percentage basis and is reset at the beginning of each year to include the prior year surplus or shortfall between actual and authorized revenues for delivery service. In years when a multi-year rate plan is in effect, the RDM also utilizes such realized prior year surplus or shortfall to update delivery rates for the current year so as to minimize future variances between actual and authorized revenues. In no event may LIPA recover an amount that exceeds authorized delivery revenues.

In response to the COVID-19 pandemic, LIPA's Board approved several relief measures for customers, including changes to the RDM. Due to the COVID-19 pandemic, many small business customers had to suspend operations, resulting in LIPA experiencing lost revenues in its commercial class of customers. To mitigate these customers from having significant bill impacts, LIPA's Board modified the RDM rate to a maximum of 5% of delivery service revenues for any customer class, with the excess to be recovered from the same customer class in the subsequent period. Prior to this modification, the full amount of the 2020 revenue variance would have been recovered from these classes in 2021. As a result of this change, approximately $4 million and $30 million, respectively, will be collected from the customers in the commercial classes in 2022 and 2021, respectively.

Due to the continuing "stay-at-home" work initiatives and a warmer than normal summer, LIPA's revenues from residential customers exceeded the budget resulting in a refund of approximately $50 million to its residential customer class in 2022 with an additional carry forward related to periods after the rate reset totaling approximately $2 million.

(h) Debt Issuance Costs

LIPA established a regulatory asset for debt issuance costs incurred prior to 2018. The regulatory asset will be amortized as a component of LIPA's revenue requirement on a systematic basis over the life of the debt to which they relate.

(i) Power Supply Costs Recoverable or Refundable

LIPA's tariff includes a Power Supply Charge with a monthly reconciliation of power supply costs. For the year ended December 31, 2021, actual power supply costs were higher than amounts recovered in the Power Supply Charge, resulting in the recognition of a regulatory asset totaling $9 million, which will be collected from customers in 2022. For the year ended December 31, 2020, actual power supply costs were below amounts recovered in the Power Supply Charge, resulting in the recognition of a regulatory liability totaling $35 million, which were returned to customers in 2021.

Also recoverable through the Power Supply Charge are deferred transition costs associated with the transfer of the power supply management contract to PSEG ER&T. Collection of these costs totaling $19 million are being recovered over an eleven-year period, as approved by LIPA's Board, that began January 1, 2015, and expiring December 31, 2025. As of December 31, 2021 and 2020, the remaining balance of such costs totaled $7 million and $8 million, respectively.

Amounts incurred related to various energy projects, the amortization of which are charged to power supply costs over the period of benefit (i.e., the life of the power purchase agreement) are also recoverable as a component of the Power Supply Charge. As of December 31, 2021 and 2020, the balance was $21 million and $23 million, respectively.

Unfunded actuarially determined potential costs relating to generation are a deferred component of the Power Supply Charge and total approximately $13 million. Such amounts will not be reflected in the Power Supply Charge until settlement costs are paid.

(j) Southampton Visual Benefit Assessment

LIPA has recorded the incremental costs to bury a portion of a transmission cable routed through the Town of Southampton as a regulatory asset, which is being recovered from certain customers of the Town in a visual benefit district over a period of 20 years that began in 2009.

(k) Regulatory Credits – Grants

LIPA has received grants for storm restoration and storm hardening. LIPA's Board authorized the deferral of grant income as a regulatory credit. This regulatory credit will be amortized over the same time period as the depreciation expense on the associated capital assets for storm hardening.

(l) Distributed Energy Resources

The Distributed Energy Resources (DER) charge recovers costs of LIPA's energy efficiency and distributed energy resource programs. The costs of such programs are authorized by LIPA's Board annually in its approved budget and billed to customers through the DER charge based on energy usage.

(m) Unfunded Actuarially Determined Reserves

Unfunded actuarially determined reserves are amounts recorded for non-cash reserves that are deferred until settlement costs are paid, at which time they are recovered in rates. Such estimates were calculated by an actuary based on experience and are updated every three years. The next study is scheduled for 2023.

(n) Utility 2.0

LIPA's annual Utility 2.0 plan funds new technologies, pilot programs, smart meters, and distributed energy projects. Utility 2.0 actual project costs are reconciled to funding levels set in rates on an annual basis.

(6) Deferred Outflows and Deferred Inflows of Resources

Certain assets and liabilities are reported as deferred outflows of resources (expenses or expenditures) and deferred inflows of resources (revenues) as follows:

(a) Deferred Defeasance Costs on Debt Refunding

Deferred defeasance costs on refunded debt represent the difference between the reacquisition price and the carrying amount of the refunded debt. These deferred costs are amortized as a component of interest expense over the shorter of the life of the old or new debt.

(b) Changes in Fair Value of Derivative Instruments

The accumulated changes in the mark-to-market valuation of a hedging derivative instrument deemed effective are reported as deferred inflows or deferred outflows of resources on the Consolidated Statements of Net Position.

As LIPA follows GASB Section RE10, Regulated Operations, any changes in ineffective investment derivative instruments are reported as regulatory assets or liabilities, as LIPA's Board has authorized the deferral of these unrealized gains or losses until realized, which corresponds to the period when they are recovered in rates.

(c) Changes in Fair Market Value of NMP2 Decommissioning Trust and OPEB Account

LIPA maintains a Trust for the decommissioning of NMP2. Separately, LIPA maintains an OPEB Account to set aside funds to meet future PSEG Long Island retirement benefit costs. These funds are reported at their fair market value and any unrealized gains or losses are recognized as a component of deferred inflows or deferred outflows of resources in accordance with LIPA's ratemaking process.

(d) Pension and OPEB

In accordance with GASB Statement No. 68, *Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27*, LIPA reports as deferred inflows or deferred outflows of resources the differences between expected and actual experience, projected and actual investment earnings on pension plan investments, contributions and the proportionate share of contributions, and changes in LIPA's contributions to the pension system subsequent to the measurement date. In accordance with GASB Statement No. 75, A*ccounting and Financial Reporting for Post- employment Benefits Other Than Pensions*, LIPA reports the changes in LIPA's net OPEB liability that have not been included in OPEB expense as deferred inflows or deferred outflows of resources. Amounts included would result from changes of assumptions, the net difference between projected and actual earnings on the OPEB Trust, and LIPA's contributions subsequent to the measurement date.

(e) Lease Revenue

LIPA receives contractually determined revenue related to leasing agreements with certain telecommunication providers for various attachments to the T&D system. These agreements, held by LIPA's previous service provider, were assigned to LIPA in 2020 and expire in May 2024. The agreement provides a fixed monthly rental payment which escalates 3% on June 1 of each year. The agreement does not provide for any variable payments. Additionally, there were no additional payments received other than the rental payments. The total amount of lease revenue and interest revenue in 2021 and 2020 was $3 million and $0.5 million, respectively. As of December 31, 2021 and 2020, the lease asset receivable and the corresponding deferred inflow of resources was approximately $9 million and $10 million, respectively.

(7) Federal Emergency Management Agency (FEMA) Grants

LIPA is eligible to receive public assistance grants through FEMA following major disaster declarations, which provides reimbursement of costs associated with emergency protective measures, and the repair and restoration of damaged facilities. Disaster assistance is subject to eligibility rules applicable to the applicant, facility, work, and cost.

(a) Superstorm Sandy

In 2012, Superstorm Sandy caused significant damage to LIPA's Service Area resulting in the declaration of a federal major disaster area and making LIPA eligible for FEMA grants. LIPA and FEMA signed a Letter of Undertaking (LOU) that provides for a Public Assistance (PA) grant authorized under Section 428 of the Stafford Act (428 Grant Agreement) for a total eligible reimbursement of $1.29 billion (90% of $1.43 billion contained in the LOU). LIPA also signed a Community Development Block Grant (CDBG) to compensate for the non-federal match of certain other declared weather events.

To date, LIPA has received funding resulting from Superstorm Sandy costs totaling approximately $1.11 billion. A portion of the FEMA 428 Grant Agreement included funding for future storm hardening and mitigation efforts. LIPA maintains a restricted segregated account for any unused portion of the grant proceeds. As of December 31, 2021 and 2020, this segregated grant account totaled approximately $2 million. The remaining amounts owed to LIPA under the LOU are expected to be received after the projects are completed and are recorded as a long-term receivable.

(b) Tropical Storm Isaias

On August 4, 2020, LIPA's Service Area suffered significant damage as a result of Tropical Storm Isaias. The resulting damage to the electrical system caused significant customer outages, making it the third-most damaging storm to affect LIPA's T&D System. LIPA filed for recovery of response and storm restoration costs of approximately $300 million associated with Tropical Storm Isaias.

Tropical Storm Isaias was declared a federal major disaster on October 2, 2020 and LIPA is seeking reimbursement from FEMA for the eligible reimbursable costs. LIPA deferred Tropical Storm Isaias costs in its DSA recovery mechanism and in accordance with this mechanism, deferred amounts are recovered over a rolling three years. However, as LIPA cannot reasonably estimate amounts recoverable in the DSA, its Board approved a regulatory action to defer Tropical Storm Isaias restoration costs expected to be reimbursed from FEMA for recovery until the grant application process is complete. As of December 31, 2021, LIPA received approximately $0.45 million in grant proceeds. As a significant portion of the grant continues through the application process, the balance of expected FEMA reimbursement remains deferred as a component of the DSA.

(c) COVID-19

In response to the COVID-19 pandemic, on March 20, 2020, FEMA announced that federal emergency funds will be made available for recovery efforts related to the COVID-19 pandemic. The funding is for incremental costs related to safety protocols implemented to protect employees, customers, and the public. LIPA has been approved for public assistance; however, as no grant application has been finalized or approved prior to December 31, 2021, no grant income was recognized.

(8) Derivative Instruments

LIPA uses derivative instruments in its normal course of business to limit some of the volatility associated with interest rate changes and market price fluctuations in the purchase of fuel oil, natural gas, and electricity. LIPA does not use derivative instruments for trading or speculative purposes. These contracts are evaluated pursuant to GASB Statement No. 53 to determine whether they meet the definition of derivative instruments and whether they effectively hedge the expected cash flows associated with interest rate and commodity price risk exposures. The fair values of LIPA's derivatives are reported on the Consolidated Statements of Net Position as either Commodity Derivative Instruments or Financial Derivative Instruments.

LIPA applies hedge accounting for derivative instruments that are deemed effective under GASB Statement No. 53. Under hedge accounting, changes in the fair value of such hedging derivative instruments are a component of deferred inflows or deferred outflows of resources on the Consolidated Statements of Net Position until the contract is settled, or hedge accounting is terminated. Derivative instruments that do not meet the definition of a hedging derivative instrument are economic hedges, intended to mitigate exposure to fluctuations in interest rates or commodity prices, and are referred to as investment derivative instruments. Changes in the fair value of investment derivative instruments are deferred until settled or terminated in accordance with LIPA's ratemaking process and recorded as regulatory assets or liabilities.

All settlement payments or receipts for hedging and interest rate derivative instruments are recorded as either power supply expense for commodity derivative instruments or interest expense for interest rate derivative instruments on the Statements of Revenues, Expenses, and Changes in Net Position in the period settled.

LIPA's interest rate and commodity derivative contracts are valued in accordance with GASB Statement No. 72, which establishes a fair value hierarchy: Level 1, Level 2, and Level 3 (as discussed in Note 2 (u)). Interest rate derivative contracts are based on the present value of cash flows using the income approach and the interest rate derivative contracts are classified as Level 2, as their valuation relies primarily on observable inputs.

LIPA's commodity derivative contracts are transacted both over-the-counter and through clearing exchanges and the valuations are based upon price quotes from exchanges. The impacts of credit and non-performance risk by either LIPA or its counterparty were not material to the financial statements.

In accordance with GASB Statement No. 72, LIPA determines the level of fair value hierarchy based on the lowest level input that is significant to the fair value measurement in its entirety. The following table presents LIPA's derivative instruments measured and recorded at fair value on the Consolidated Statements of Net Position on a recurring basis and their level within the fair value hierarchy.

(Amounts in thousands, unless otherwise stated)

		2021			2020		
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Derivative assets:							
Financial derivatives	$	—	(6,649)	—	—	(17,151)	—
Commodity derivatives		—	—	—	—	—	—
Derivative liabilities:							
Financial derivatives		—	(165,290)	—	—	(216,274)	—
Commodity derivatives		136,323	—	—	(41,547)	—	—
	$	136,323	(171,939)	—	(41,547)	(233,425)	—

LIPA's derivative instruments are as follows:

Derivative instrument description		Fair value December 31, 2021	Net change in fair value	Fair value December 31, 2020	Type of hedge	Financial statement classification for changes in fair value
Hedging derivative instruments:						
Financial derivatives:						
Total return swap	$	354	21	333		
Total return swap		—	(921)	921		
Forward-starting swap		(5,043)	7,625	(12,668)		
Forward-starting swap		(1,960)	3,777	(5,737)		
Total	$	(6,649)	10,502	(17,151)	Cash flow	Deferred outflows
Commodity derivatives:						
Natural gas basis swaps		—	16,298	(16,298)		
Total	$	—	16,298	(16,298)	Cash flow	Deferred outflows
Investment derivative instruments:						
Financial derivatives:						
Synthetic fixed-A	$	(165,290)	44,452	(209,742)	N/A	
Basis swap-A		—	3,266	(3,266)	N/A	
Basis swap-B		—	1,633	(1,633)	N/A	
Basis swap-C		—	1,633	(1,633)	N/A	
Total	$	(165,290)	50,984	(216,274)		Regulatory assets
Commodity derivatives:						
Power – financial basis		(12,858)	(10,487)	(2,371)	N/A	
Purchased power swaps		84,900	99,011	(14,111)	N/A	
Natural gas swaps		73,381	82,148	(8,767)	N/A	
Natural gas basis swaps		(9,134)	(9,134)	—	N/A	
Natural gas/power options		34	34	—	N/A	
Total	$	136,323	161,572	(25,249)		Regulatory assets/liabilities

The terms of LIPA's commodity derivative instruments as of December 31, 2021 are summarized in the table below:

Derivative Instrument	Notional Amount (in thousands)	Units	Beginning Period	Ending Period	LIPA Pays [(1)] Per Unit	LIPA Receives
Natural Gas Swaps	85,678	Dthms	1/1/22	12/1/24	$ 2.35 to $ 2.74	Natural Gas at Henry Hub
Natural Gas Basis Swaps	70,808	Dthms	1/1/22	3/1/24	$ (0.61) to $ 4.20	Gas Basis between Henry Hub and Transco Z6, NY
Purchased Power Swaps [(2)]	6,353	Mwhs	1/1/22	12/1/24	$ 20.85 to $ 34.35	Power at PJM West
Purchased Power Basis	7,578	Mwhs	1/1/22	12/1/24	$ (8.65) to $ 1.95	Power Basis between PJM West to JCPL
Purchased Power Options [(3)]	131	Mwhs	1/1/22	2/1/22	$ 65.00 to $ 65.00	Power at PJM West

(1) In some cases LIPA receives instead of pays as noted below.

(2) The purchased power swaps include two short-swaps resulting from the exercise of purchased put options. The volume of these swaps is included in the notional amount. The trade price of these swaps (which equals the strike price of the exercised option) is $65/MWh. This trade price is not included in the price range as it is the price received and not paid by LIPA.

(3) The price range shown is the strike price range. The power options are all put purchases; therefore, the price range indicates the amount LIPA receives per unit if exercised.

The terms of LIPA's commodity derivative instruments as of December 31, 2020 are summarized in the table below:

Derivative Instrument	Notional Amount (in thousands)	Units	Beginning Period	Ending Period	LIPA Pays Per Unit	LIPA Receives
Natural Gas Swaps	121,675	Dthms	1/1/21	12/1/23	$ 2.35 to $ 2.88	Natural Gas at Henry Hub
Natural Gas Basis Swaps	60,725	Dthms	1/1/21	3/1/23	$ (0.42) to $ 3.60	Gas Basis between Henry Hub and Transco Z6, NY
Purchased Power Swaps	8,829	Mwhs	1/1/21	12/1/23	$ 19.30 to $ 39.75	Power at PJM West
Purchased Power Basis	4,183	Mwhs	1/1/21	12/1/22	$ (5.45) to $ 3.10	Power Basis between PJM West to JCPL

The terms of LIPA's interest rate derivative instruments as of December 31, 2021 are summarized in the table below:

Financial derivative	Effective date	Termination date	LIPA pays	LIPA receives	Original notional	Upfront cash payment
Synthetic fixed-A	6/1/03	12/1/29	5.120 %	69.47% of 1-month LIBOR	$ 587,225	$ 106,400
Total return swap	5/1/20	6/29/23	69.4% 1-month LIBOR+.36%	MMD +1.10% [a]	200,000	—
Forward-starting swap	9/1/22	9/1/42	1.8571%	70.00% of 1-month LIBOR	251,510	—
Forward-starting swap	9/1/22	9/1/29	1.3150%	70.00% of 1-month LIBOR	164,860	—
						$ 106,400

(Amounts in thousands, unless otherwise stated)

The terms of LIPA's interest rate derivative instruments as of December 31, 2020 are summarized in the table below:

Financial derivative	Effective date	Termination date	LIPA pays	LIPA receives		Original notional		Upfront cash payment
Synthetic fixed-A	6/1/2003	12/1/2029	5.120 %	69.47% of 1-month LIBOR	$	587,225	$	106,400
Basis swap-A	7/1/2004	8/15/2033	SIFMA	70.50% of 1-month LIBOR		502,090		17,500
Basis swap-B	7/1/2004	8/15/2033	SIFMA	70.50% of 1-month LIBOR		251,045		8,750
Basis swap-C	7/1/2004	8/15/2033	SIFMA	70.50% of 1-month LIBOR		251,045		8,750
Total return swap	6/29/2020	6/29/2023	69.4% 1-month LIBOR+.36%	MMD +1.10% [a]		200,000		—
Total return swap	9/15/2016	9/1/2021	69.4% 1-month LIBOR+.30%	MMD +1.05% [a]		175,000		—
Forward-starting swap	9/1/2022	9/1/2042	1.8571%	70.00% of 1-month LIBOR		251,510		—
Forward-starting swap	9/1/2022	9/1/2029	1.3150%	70.00% of 1-month LIBOR		164,860		—
							$	141,400

[a] Based on lowest long-term rating of LIPA

Immediately following direct placement of LIPA's Electric System General Revenue Bonds, Series 2015A Municipal Market Data (MMD) Floating Rate Notes (FRNs) totaling $200 million and Series 2016A MMD FRNs totaling $175 million, LIPA entered into five-year basis agreements (total return swap) whereby the counterparty agreed to pay LIPA an amount equal to the floating MMD FRN coupon plus 110 basis points, and LIPA agreed to pay the counterparty 69.4% of 1-month London Interbank Offered Rate (LIBOR) plus 36 basis points. In 2020, the basis agreement related to the 2015A FRNs was amended to extend the agreement to June 29, 2023. The additional spread LIPA pays was reduced, and the calculation of the amount payable upon termination was revised. At the five-year expiration or the early termination of the agreements, the counterparty pays LIPA an amount equal to 0% of the first $0.25 of gain (per $100 notional principal amount of the FRN) and 90% of any thereafter in the market value of the MMD FRN and LIPA pays the counterparty 100% of any decrease in the market value of the MMD FRN, provided however, that if LIPA exercises its right to call or remarket the MMD FRN, the value of either agreement will be zero and neither party will have a payment obligation.

The total return swap agreement related to the 2016A FRNs expired on September 30, 2021, and the Electric System General Revenue Bonds, Series 2016A MMD FRNS totaling $175 million were called on October 1, 2021 and refinanced with the Electric System General Revenue Bonds Series 2021A.

LIPA also has two forward-starting interest rate swap transactions. The swaps become effective on September 1, 2022, and were executed in anticipation of issuing bonds to refund LIPA's Electric System General Revenue Bonds, Series 2012A and 2012B, which are callable in 2022. LIPA agreed to pay each counterparty the fixed interest rates in the table above in exchange for receiving 70% of 1-month LIBOR. LIPA has the ability to terminate each swap at no cost beginning on September 1, 2027, and monthly thereafter.

In addition, during 2021, LIPA terminated all three of its previously outstanding basis swaps.

LIPA is exposed to the following risks related to derivative instruments as defined by GASB Statement No 53:

(a) Termination Risk

Termination risk is the risk that a derivative could be terminated by a counterparty prior to its scheduled maturity due to a contractual event with LIPA owing a termination payment. As long as LIPA fulfills its obligations under the contracts, the counterparties do not have the right to terminate these agreements. LIPA believes that termination risk is low because the counterparties may terminate the agreements only upon the occurrence of specific events such as payment defaults, other defaults which remain uncured for 30 days after notice, bankruptcy or insolvency of LIPA (or similar events), or a downgrade of LIPA's and its insurers', if any, credit rating below investment grade. If, at the time of termination, the mark-to-market valuation of the derivative was a liability of LIPA, LIPA could be required to pay that amount to the counterparty. Termination risk associated with all of LIPA's derivatives is limited to the fair market value.

(b) Basis Risk

LIPA is exposed to basis risk on certain of its interest rate swaps because the variable-rate payments received by LIPA, and those paid either pursuant to the terms of the swap or on the associated variable rate debt, may differ. The terms of the interest rate swap transactions are summarized in the table above.

LIPA is exposed to basis risk on a portion of its commodity swaps when the commodity swap payment received is based upon a reference price in a market (e.g., natural gas priced at Henry Hub) that differs from the market in which the hedged item is expected to be bought (natural gas priced at New York City gate). If the correlation between these market prices should change substantially, LIPA may incur costs as a result of the hedging derivative instrument's inability to offset the price of the related commodity.

(c) Collateral Posting

Under certain conditions, LIPA may be required to post collateral related to its interest rate derivative instruments. Under the terms of its interest rate derivative agreements, collateral may be required if LIPA's credit ratings, and in the case of insured swaps, the credit ratings of any related interest rate derivative insurer, fall below minimum levels as provided in each agreement, and LIPA fails to provide alternative credit enhancements. Collateral for its financial derivatives, if required, would approximate fair value. LIPA has never been required to post collateral for its interest rate derivative instruments.

LIPA has collateral requirements with commodity derivative counterparties in the Credit Support Annexes (CSA) of International Swap Deal Agreements (ISDA). Collateral is required to be posted with the counterparty when the negative fair value of the commodity derivative instrument exceeds the unsecured line of credit established with each counterparty as listed in the counterparty table below. In the event of collateral being posted, the value will equal the difference between the fair value and the amount of the unsecured line of credit. For exchange broker cleared derivative transactions, there is an initial margin requirement on day one of a trade that is calibrated to cover the expected cost of closing out the position in the event of a default. Collateral postings between the exchange clearing broker and LIPA each day thereafter are based on the fair value of the derivative instrument.

(Amounts in thousands, unless otherwise stated)

(d) Credit Risk

Credit risk is the risk that the counterparty (or its guarantor) will default on its obligations under the agreement. LIPA has sought to limit counterparty risk by contracting only with highly rated counterparties or requiring guarantees of the counterparty's obligations. LIPA also makes use of exchange cleared transactions for a portion of its commodity derivatives. The exchange uses a central clearing counterparty structure along with risk-based margin requirements that limits credit risk exposure.

Below is a table with the credit ratings issued by Moody's Investors Service (Moody's) and Standard and Poor's Global Ratings (S&P) and unsecured line of credit limits of LIPA's counterparties as of December 31, 2021.

Counterparty	As of December 31, 2021 Moody's	S&P	Counterparty's unsecured line of credit ($M)
Interest Rate Derivative Instruments:			
Citibank, N.A. New York	Aa3	A+	$ —
UBS AG, Stamford Branch	Aa3	A+	—
Wells Fargo Bank, N.A.	Aa2	A+	—
Commodity Derivative Instruments:			
BP Energy Company *	A3	A-	$ 15.0
Citigroup Energy, Inc.*	A3	BBB+	10.0
Consolidated Edison Energy, Inc. *	Baa2	BBB+	4.0
Exelon Generation Company, LLC	Baa2	BBB-	5.0
J. Aron & Company *	A2	BBB+	40.0
JPMorgan Chase Bank, N.A.	Aa2	A+	35.0
Macquarie Energy LLC *	A2	A+	10.0
Merrill Lynch Commodities, Inc. *	A2	A-	20.0
Mitsui Bussan Commodities Ltd. *	A3	A	12.5
Morgan Stanley Capital Group Inc. *	A1	BBB+	10.0
Next Era Power Marketing *	Baa1	BBB+	10.0
Pacific Summit Energy LLC *	Baa1	BBB+	10.0
Societe Generale	A1	A	25.0
The Bank of Nova Scotia	Aa2	A+	25.0

* *Rating reflects the rating of the parent company guarantor*

(Amounts in thousands, unless otherwise stated)

(9) Utility Plant and Property and Equipment

Additions to and replacements of utility plant are capitalized at original cost, which includes material, labor, and indirect costs associated with an addition or replacement. The cost of renewals and betterments relating to units of property is added to utility plant. The cost of property replaced, retired, or otherwise disposed of is deducted from utility plant and, generally, together with dismantling costs less any salvage, are charged to accumulated depreciation. The cost of repairs and minor renewals are charged to operations and maintenance expense. Group properties, such as poles, meters, and wire, are accounted for on an average unit cost basis by year of installation.

The following schedule summarizes LIPA's utility plant and property and equipment as of December 31, 2021:

		Beginning balances	Additions	Transfers/ Disposals	Ending balances
Utility plant	$	9,122,598	863,298	(103,376)	9,882,520
Office equipment, furniture, and leasehold improvements		6,323	1,898	—	8,221
Accumulated depreciation		(2,340,303)	(300,608)	168,363	(2,472,548)
Total utility plant – net		6,788,618	564,588	64,987	7,418,193
Right-to-use asset under lease:					
Utility plant		3,311,412	21,408	(15,611)	3,317,209
Other		128,416	—	(2,289)	126,127
Accumulated depreciation		(648,284)	(342,357)	17,864	(972,777)
Total right-to-use-asset – net		2,791,544	(320,949)	(36)	2,470,559
Construction work in progress		716,083	642,818	(863,060)	495,841
Retirement work in progress		17,331	76,099	(63,406)	30,024
		733,414	718,917	(926,466)	525,865
Totals	$	10,313,576	962,556	(861,515)	10,414,617

(Amounts in thousands, unless otherwise stated)

The following schedule summarizes LIPA's utility plant and property and equipment as of December 31, 2020:

		Beginning balances	Additions	Transfers/ Disposals	Ending balances
Utility plant	$	8,480,568	726,444	(84,414)	9,122,598
Office equipment, furniture, and leasehold improvements		3,572	2,751	—	6,323
Accumulated depreciation		(2,184,994)	(293,275)	137,966	(2,340,303)
Total utility plant – net		6,299,146	435,920	53,552	6,788,618
Right-to-use asset under lease:					
Utility plant		3,355,684	—	(44,272)	3,311,412
Other		128,538	—	(122)	128,416
Accumulated depreciation		(346,701)	(345,911)	44,328	(648,284)
Total right-to-use-asset – net		3,137,521	(345,911)	(66)	2,791,544
Construction work in progress		712,503	708,206	(704,626)	716,083
Retirement work in progress		10,081	60,803	(53,553)	17,331
		722,584	769,009	(758,179)	733,414
Totals	$	10,159,251	859,018	(704,693)	10,313,576

(10) Nine Mile Point Nuclear Power Station, Unit 2

LIPA owns an undivided 18% interest in NMP2 in Oswego County, New York. Constellation Energy Nuclear Group (CENG) owns the other 82%. NMP2 has a rated net capacity of approximately 1,300 megawatts. LIPA is entitled to 18% of the unit's capacity and energy and is obligated to pay 18% of its operating and maintenance costs, nuclear fuel costs, and costs of capital additions. LIPA's net capital investment in NMP2, excluding nuclear fuel, was approximately $511 million and $526 million as of December 31, 2021 and 2020, respectively.

CENG was a joint venture of Exelon Corporation and EDF, a large electric-power company headquartered in France through August 6, 2021. Exelon and EDF entered into a Settlement Agreement under which Exelon acquired EDF's interest in the joint venture. Exelon Generation operates NMP2.

On December 16, 2021, the New York Public Service Commission approved a plan by Exelon to separate its regulated-utilities and competitive-energy businesses into two separate, publicly traded companies. This was the last regulatory approval required by Exelon to execute the plan. Exelon completed the separation on February 1, 2022. The resulting competitive-energy company is known as Constellation Energy Generation; it owns 82% of NMP2 and LIPA continues to own its 18% share.

(a) Nuclear Plant Decommissioning

The operating license for NMP2 expires on October 31, 2046.

As of December 31, 2021, and 2020, LIPA's share of the estimated costs for decommissioning of the unit and restoration of the site is approximately $87 million and $67 million, respectively, and is included in the Consolidated Statements of Net Position as a component of the Asset Retirement Obligation. LIPA maintains a nuclear decommissioning trust fund (NDTF) for its share of the decommissioning costs. As of December 31, 2021, and 2020, the NDTF had approximately $184 million and $164 million, respectively. LIPA believes that deposits to the fund, which are based on actuarial estimates, and the assumed investment returns of these funds during the term of the operating license, will be sufficient to meet its obligations.

(b) Liability for Nuclear Accidents

The Federal Price-Anderson Act (Act) currently requires owners of nuclear power plants to obtain $450 million in private insurance coverage for off-site liability coverage for each reactor site (not each reactor). Exelon maintains this coverage for the Nine Mile Point site, and LIPA reimburses Exelon for its proportionate share of the cost. The Act further stipulates that in the event off-site damages exceed the amount of private insurance coverage, each reactor licensee is retroactively liable for a prorated share of the excess. This liability is limited to $138 million per reactor, payable at no more than approximately $20 million per reactor per incident per year. LIPA's maximum liability under this provision is approximately $25 million, payable at approximately $4 million per incident per year.

(11) Cash, Cash Equivalents, and Investments

The majority of LIPA's cash, cash equivalents, and investments are either managed by an external investment manager or invested in mutual funds. LIPA's investment of funds is administered in accordance with the applicable provisions of State law, the Bond Resolution, certain banking agreements and LIPA's investment policy.

(a) Unrestricted cash, cash equivalents, and investments

As of December 31, 2021, and 2020, LIPA had unrestricted cash, cash equivalents, and investments totaling approximately $1.37 billion and $1.20 billion, respectively. The unrestricted funds primarily consist of the: Operating Fund, Construction Fund, Rate Stabilization Fund, and OPEB Account.

In the event that LIPA determines there are insufficient revenues to pay reasonable and necessary operating expenses or to make payments on bonds or parity obligations, if any, after notifying the Finance and Audit Committee of LIPA's Board, LIPA may release funds from the OPEB Account for such purposes. As such, the OPEB Account is unrestricted.

Deposits made to LIPA's unrestricted OPEB Account are to fund LIPA's contractual obligations to employees of PSEG Long Island for certain post-employment benefits. LIPA has invested such funds, pursuant to LIPA's investment policy, in domestic and international stock mutual funds (65%), as well as inflation protected and bond market institutional mutual funds (35%). As of December 31, 2021, and 2020, the OPEB Account balance totaled approximately $581 million and $475 million, respectively. The following tables summarize LIPA's unrestricted cash, cash equivalents and investments as of December 31, 2021 and 2020. The credit ratings listed are from Moody's, S&P, and Fitch, and the rating shown is the lowest rated obligation within each investment type.

(Amounts in thousands, unless otherwise stated)

Deposit/investment type	Credit Rating (if applicable)	Percent of portfolio		2021 Fair value	Cash and cash equivalents	Investments
Operating Fund, Construction Fund, Rate Stabilization Fund, and Other operating accounts:						
Cash and collateralized deposits		10	% $	74,957	74,957	—
Discount notes and bonds:						
Commercial paper	P-1/A-1/F1	27		214,995	—	214,995
Corporate	Baa1/BBB+/A-	23		182,349	—	182,349
Federal agencies	Aaa/AA+	5		38,488	—	38,488
Foreign government bonds	Aaa/AAA/AAA	2		14,886	—	14,886
Municipal bonds	A1/A/A	1		7,699	—	7,699
Treasury notes	Aaa/AA+	9		67,951	—	67,951
Money-market mutual funds		23		183,946	183,946	—
Subtotal		100	%	785,271	258,903	526,368
OPEB Account:						
Mutual funds - equities		66	%	383,889	—	383,889
Mutual funds - fixed income		34		197,372	—	197,372
Subtotal		100	%	581,261	—	581,261
Total			$	1,366,532	258,903	1,107,629

Deposit/investment type	Credit Rating (if applicable)	Percent of portfolio		2020 Fair value	Cash and cash equivalents	Investments
Operating Fund, Construction Fund, Rate Stabilization Fund, and Other operating accounts:						
Cash and collateralized deposits		2	% $	11,222	11,222	—
Discount notes and bonds:						
Certificates of deposit	P-1/A-1/F1+	—		1,169	—	1,169
Commercial paper	P-1/A-1/F1	30		222,601	—	222,601
Corporate	Baa1/BBB+/A-	14		103,610	—	103,610
Federal agencies	Aaa/AA+	9		63,249	—	63,249
Foreign government bonds	Aaa/AAA/AAA	1		10,849	—	10,849
Municipal bonds	A1/A/A	2		13,109	2,002	11,107
Treasury notes	Aaa/AA+	7		48,410	—	48,410
Money-market mutual funds		35		253,176	253,176	—
Subtotal		100	%	727,395	266,400	460,995
OPEB Account:						
Mutual funds - equities		68	%	321,643	—	321,643
Mutual funds - fixed income		32		153,723	—	153,723
Subtotal		100	%	475,366	—	475,366
Total			$	1,202,761	266,400	936,361

(b) Restricted cash, cash equivalents and investments

LIPA's restricted cash, cash equivalents, and investments consist of: the Working Capital Requirements Account, the FEMA Grant Fund, the Clean Energy Compliance Fund, and the UDSA Collection and Reserve Accounts.

Restricted Cash for Working Capital Requirements

In accordance with the OSA, LIPA is required to advance fund an account with three months of anticipated T&D operating and capital costs for PSEG Long Island to utilize as LIPA's agent in the management of LIPA's T&D system. Also, pre-funded by LIPA are amounts held by PSEG Long Island to pay taxes, storm restoration costs, and amounts required to fund the Clean Energy Compliance Fund. The accounts totaled $284 million and $207 million as of December 31, 2021 and 2020, respectively, and were invested in accordance with LIPA's investment policy. Due to the contractual obligation of LIPA to pre-fund such accounts, the funds are classified as restricted. Such accounts, except for the Clean Energy Compliance Fund which totaled $8 million and $4 million, respectively, are considered by LIPA to be a component of its working capital, as funds are used strictly for LIPA operating needs.

Grant Proceeds

LIPA received in advance approximately $502 million from FEMA which was restricted for storm hardening work on certain LIPA assets. LIPA funds are expended by PSEG Long Island for approved projects, and LIPA reimbursed itself for these approved projects expenditures. LIPA segregated FEMA funds for specific use as required by the FEMA 428 grant agreement.

UDSA

Restructuring charge collections are held by the Bond Trustee (Trustee) in Collection Accounts to satisfy debt service on the Restructuring Bonds. The Collection Accounts consist of four subaccounts: General Subaccount, Excess Funds Subaccount, Reserve Subaccount, and Upfront Financing Costs Subaccount. The Collection Accounts (other than the Upfront Financing Costs Subaccount) secure the Restructuring Bonds.

Restricted cash held by the Trustee, as of December 31, 2021 and 2020 includes $55 million and $71 million, respectively, in the General Subaccounts, and $57 million and $58 million, respectively in the Reserve Subaccounts.

The UDSA has separate investment guidelines that are specifically designed to address its legal and contractual requirements. These guidelines mandate that such investments be matched to meet bond principal and interest payments.

The following tables summarize LIPA's restricted cash, cash equivalents and investments as of December 31, 2021 and 2020. The credit ratings listed are from Moody's, S&P, and Fitch and the ratings shown are the lowest rated obligation within each investment type.

(Amounts in thousands, unless otherwise stated)

Deposit/investment type	Credit rating (if applicable)	Percent of portfolio		2021 Fair value	Cash and cash equivalents	Investments
Restricted Accounts for Working Capital, Clean Energy Compliance Fund, and Grants:						
Cash and collateralized deposits		54	% $	154,854	154,854	—
Discount notes and bonds:						
Commercial paper	P-1/A/1/F1	8		22,275	—	22,275
Corporate	A3/BBB+/A-	22		63,201	—	63,201
Federal agencies	Aaa/AA+	1		4,033	—	4,033
Foreign government bonds	Aaa/AAA/AAA	4		11,820	—	11,820
Municipal bonds	A	1		2,236	—	2,236
Treasury bills and notes	Aaa/P-1/AA+/A-1+	9		24,749	—	24,749
Money-market mutual funds		1		3,049	3,049	—
Total		100	% $	286,217	157,903	128,314
UDSA:						
Money-market mutual funds		100	% $	111,694	111,694	—

Deposit/investment type	Credit rating (if applicable)	Percent of portfolio		2020 Fair value	Cash and cash equivalents	Investments
Restricted Accounts for Working Capital, Clean Energy Compliance Fund, and Grants:						
Cash and collateralized deposits		37	% $	77,707	77,707	—
Discount notes and bonds:						
Commercial paper	P-1/A/1/F1	20		42,478	—	42,478
Corporate	A3/BBB+/A-	14		28,205	—	28,205
Federal agencies	Aaa/AA+	3		7,187	—	7,187
Foreign government bonds	Aaa/AAA/AAA	6		11,526	—	11,526
Municipal bonds	A	—		256	—	256
Treasury bills and notes	Aaa/P-1/AA+/A-1+	19		39,460	—	39,460
Money-market mutual funds		1		2,196	2,196	—
Total		100	% $	209,015	79,903	129,112
UDSA:						
Money-market mutual funds		100	% $	128,833	128,833	—

(c) Risks

LIPA's investment policy places a limit on investments by sector and issuer and addresses various risks, as described below. LIPA's Board may also specifically authorize, as it deems appropriate, other investments that are consistent with LIPA's investment objective. LIPA regularly reviews and revises its investment policy.

Credit Risk: The risk that an issuer of a security will not fulfill its obligation to the investor. LIPA mitigates this risk by limiting investments to those carrying either the highest short-term rating or: (i) the two highest long-term ratings for supranationals and collateralized investment agreements; (ii) the three highest long-term ratings for corporates, municipals, and certificates of deposit; (iii) the highest long-term rating for asset backed securities. Money-market funds must have the highest fund rating by all nationally recognized statistical rating organizations that rate the fund. Counterparties of repurchase agreements must be rated in the highest short-term rating category, and floating-rate notes should reflect the appropriate sector rating requirements.

Concentration of Credit Risk: The risk of loss attributed to the magnitude of an entity's investment in a sector single issuer. LIPA's investment policy has established limits such that no more than 5%, across all sectors of the investment portfolio, may be invested in the securities of any one non-governmental issuer, and no more than 40% may be invested in the securities of any one Federal Agency. Additionally, issuer limitations exist across other sectors of the portfolio as follows: (i) 10% for supranationals; (ii) 20% for repurchase agreements; and (iii) 25% for money-market funds.

Custodial Credit Risk: For deposits and investments, the risk that in the event of failure of a financial institution or counterparty, LIPA will not be able to recover its deposits, investments, or collateral securities that are in possession of another party. LIPA minimizes this risk by: (i) collateralizing its demand deposits and time deposits; (ii) utilizing financial institutions that are low risk, highly rated by rating agencies; and (iii) having investments held by designated custodians in the name of LIPA.

As of December 31, 2021, and 2020, approximately $230 million and $88 million, respectively, in deposits were uninsured. LIPA has, through a pledge, assignment, and custodial agreement with its bank, collateralized 102% of the collective funds on deposit. LIPA has highly rated money-market funds of approximately $299 million and $384 million which were uninsured at December 31, 2021 and 2020, respectively.

Interest Rate Risk: The risk of a decline in the value of an investment resulting from interest rate fluctuations. Interest rate risk is commonly associated with investments in fixed-income products. LIPA's investment portfolio is structured to ensure sufficient liquidity is available, and as such, LIPA's investment policy has established maximum maturities by sector. The portfolio may not exceed a 5.5 year average life with certain exceptions as follows: (i) Federal Agency securities have a maximum maturity of 10 years; (ii) certificates of deposit may not exceed 3 years; (iii) banker's acceptances and commercial paper may not exceed 180 and 270 days, respectively; and (iv) repurchase agreements have a maximum maturity of 90 days. Additionally, there are no maturity limitations for investments in money-market or mutual funds.

In order to meet the OPEB Account objectives of funding future retirement benefit obligations while balancing long-term risk and return and providing reasonable diversification, the OPEB Account allocates its assets in domestic and international equity mutual funds and fixed-income mutual funds. The equity funds replicate broad-based, low-cost market index strategies. The fixed-income mutual funds replicate the Barclays U S Treasury Inflation Protected Securities Index or the Barclay's Capital U S Float Adjusted Aggregate Bond Market Index.

LIPA's OPEB Account investment policy has established fund targets as follows: (i) domestic equity mutual funds at 40%; (ii) international equity mutual funds at 25%; (iii) fixed-income investment mutual funds at 20%; and (iv) fixed-income investments—inflation protected securities mutual funds at 15%, with quarterly rebalancing when an asset class falls outside of a 5% range of its asset weighting.

(Amounts in thousands, unless otherwise stated)

(d) Nuclear Decommissioning Trust Fund (NDTF)

LIPA maintains a separate investment policy applicable to the long-term investments in the NDTF, which are held to meet LIPA's obligation with respect to the eventual decommissioning of LIPA's 18% interest in the NMP2 nuclear facility. LIPA's policy is to periodically conduct an actuarial study to determine the appropriate level of funding for the NDTF and to maintain an appropriate investment policy so that the value in the trust in 2046 (the year in which decommissioning activities are scheduled to begin), will be sufficient to meet decommissioning obligations.

To meet LIPA's objectives of funding future nuclear decommissioning obligations , while balancing long-term risk and return and providing reasonable diversification, the NDTF is invested in domestic and international equity mutual funds and fixed-income mutual funds. The equity funds replicate broad-based, low-cost market index strategies. The fixed-income mutual funds replicate the Barclays U S Treasury Inflation Protected Securities Index or the Barclay's Capital U S Float Adjusted Aggregate Bond Market Index.

LIPA's NDTF investment policy has established fund targets as follows: (i) domestic equity mutual funds at 35%; (ii) international equity mutual funds at 20%; (iii) fixed-income investments mutual funds at 25%; and (iv) fixed-income investments—inflation protected securities mutual funds at 20%, with quarterly rebalancing when an asset class falls outside of a 5% range of its asset weighting.

The NDTF had the following investments as of December 31:

Mutual Fund Investment type	Percent of portfolio		2021 Fair value
Domestic equity	37	% $	68,777
International equity	19		34,812
Fixed-income investments	24		44,013
Fixed-income investments-inflation protected securities	20		36,634
Total	100	% $	184,236

Mutual Fund Investment type	Percent of portfolio		2020 Fair value
Domestic equity	39	% $	63,951
International equity	21		33,709
Fixed-income investments	22		36,207
Fixed-income investments-inflation protected securities	18		30,218
Total	100	% $	164,085

(Amounts in thousands, unless otherwise stated)

(e) Fair Value of Investments

The following table presents LIPA's unrestricted and restricted investments and NDTF, measured and recorded at fair value on the Consolidated Statements of Net Position and their level within the fair value hierarchy (as previously defined in Note 2 (u)):

Investment type	2021 Fair Value	Level 1	Level 2	Level 3
Unrestricted and restricted investments:				
Discount notes:				
Commercial paper	$ 237,270	—	237,270	—
Corporate	245,550	—	245,550	—
Federal agencies	42,521	—	42,521	—
Foreign government bonds	26,706	—	26,706	—
Municipal bonds	9,935	—	9,935	—
Treasury bills and notes	92,699	92,699	—	—
Money-market mutual funds	581,262	581,262	—	—
Total	$ 1,235,943	673,961	561,982	—
NDTF Mutual Funds	184,236	184,236	—	—
Total	$ 184,236	184,236	—	—

Investment type	2020 Fair Value	Level 1	Level 2	Level 3
Unrestricted and restricted investments:				
Discount notes:				
Certificates of deposit	$ 1,169	—	1,169	—
Commercial paper	265,079	—	265,079	—
Corporate	131,815	—	131,815	—
Federal agencies	70,436	—	70,436	—
Foreign government bonds	22,375	—	22,375	—
Municipal bonds	11,363	—	11,363	—
Treasury bills and notes	87,870	87,870	—	—
Money-market mutual funds	475,366	475,366	—	—
Total	$ 1,065,473	563,236	502,237	—
NDTF Mutual Funds	164,085	164,085	—	—
Total	$ 164,085	164,085	—	—

(Amounts in thousands, unless otherwise stated)

(f) OPEB Trust

LIPA created a legally separate Section 115 Trust (OPEB Trust) to fund its eligible employee and retiree OPEB obligation. Based on the funding analysis of an actuarial study, LIPA, in 2017, transferred approximately $19 million from the OPEB Account to the OPEB Trust. Additionally, LIPA funded approximately $0.69 million and $0.62 million in 2021 and 2020, respectively, to the OPEB Trust. As of December 31, 2021 and 2020, the OPEB Trust totaled approximately $30 million and $26 million, respectively, which was approximately 130.1% for 2021 and 113.8% for 2020 of its net OPEB liability.

The OPEB Trust is restricted to funding LIPA's employee and retiree OPEB obligations.

(12) Long-Term and Short-Term Debt

(a) Electric System General Revenue Bonds and Subordinated Revenue Bonds

LIPA financed the cost of acquiring the T&D system from LILCO with Electric System General Revenue Bonds. Ongoing capital improvements are funded through the issuance of debt, except where grants or excess cash flow provide the ability to cash fund such expenditures. LIPA and LILCO, which is now a subsidiary of LIPA, entered into a Financing Agreement, whereby LILCO transferred to LIPA all of its right, title, and interest in and to the revenues generated from the operation of the T&D system, including the right to collect and receive the same.

All of LIPA's bonds are secured by a Trust Estate as pledged under LIPA's Bond Resolution (the Resolution). The Trust Estate consists principally of the revenues generated by the operation of the T&D system and has been pledged to LIPA. Below is a summary of LIPA's bond transactions completed during the years ended December 31:

	2021			
Revenue Obligations:	2021 General Revenue Notes	Par Amount:	$	250,000
Purpose:	Fund costs related to Tropical Storm Isaias and pay issuance costs	Date Closed:		January 28, 2021
Revenue Obligations:	2021A General Revenue Bonds	Par Amount:	$	355,755
Purpose:	Refinance debt, fund system improvements and pay issuance costs	Date Closed:		September 30, 2021
Revenue Obligations:	2021B General Revenue Bonds	Par Amount:	$	175,000
Purpose:	Fund system improvements and pay issuance costs	Date Closed:		September 30, 2021
Revenue Obligations:	2021C General Revenue Bonds	Par Amount:	$	194,390
Purpose:	Refund debt and pay	Date Closed:		September 30, 2021
	issuance costs	NPV savings	$	45,857

	2020			
Revenue Obligations:	2020A General Revenue Bonds	Par Amount:	$	237,975
Purpose:	Fund system improvements and pay issuance costs	Date Closed:		August 20, 2020
Revenue Obligations:	2020B General Revenue Bonds	Par Amount:	$	250,000
Purpose:	Fund system improvements and pay issuance costs	Date Closed:		August 20, 2020
Revenue Obligations:	2020C General Revenue Bonds	Par Amount:	$	113,975
Purpose:	Retire higher cost debt and pay	Date Closed:		August 20, 2020
	issuance costs	NPV savings	$	28,185

(Amounts in thousands, unless otherwise stated)

(b) Component Unit Bonds – UDSA

LIPA's Board adopted Financing Orders authorizing the issuance of Restructuring Bonds by the UDSA to allow LIPA to retire a portion of its outstanding indebtedness and to provide savings to LIPA's customers as measured on a net present value basis. The Restructuring Bonds are not obligations of LIPA. There were no additional UDSA bond transactions completed in 2021 and 2020.

LIPA's long-term debt as of December 31, 2021 consisted of the following:

	Beginning balance	Accretion/ additions	Maturities	Repaid/ Refundings	Ending balance	Years of Maturity	Interest Rate (%)	
General revenue bonds/notes:								
Series 1998A	$ 82,961	4,397	12,970	—	74,388	2022-2028	5.30	(a)
Series 2000A	265,117	14,699	35,900	—	243,916	2022-2029	5.90-5.95	(a)
Series 2003C	36,645	—	—	—	36,645	2028-2029	5.25	
Series 2010B	194,715	—	15,785	16,325	162,605	2024-2041	5.45-5.85	(c)
Series 2011A	685	—	685	—	—	—	—	(b)
Series 2012A	166,970	—	—	125,975	40,995	2036-2042	5.00	(b)
Series 2012B	179,035	—	3,285	—	175,750	2022-2029	5.00	(b)
Series 2014A	413,070	—	—	—	413,070	2034-2044	4.00-5.00	(b)
Series 2014B	94,010	—	6,085	20,770	67,155	2024-2026	3.88-4.13	(b)
Series 2014C FRN	150,000	—	—	—	150,000	2030-2033	0.82	(b)(d)
Series 2015B	110,370	—		2,515	107,855	2023-2045	3.00-5.00	
Series 2015C FRN	149,000	—	—	—	149,000	2030-2033	0.82	(b)(d)
Series 2016B	368,260	—		5,520	362,740	2022-2046	5.00	
Series 2017	345,000	—	1,400	6,720	336,880	2023-2047	5.00	
Series 2018	430,000	—	—	2,000	428,000	2023-2039	3.38-5.00	
Series 2019A	215,675	—	2,500	2,500	210,675	2023-2039	3.00-5.00	
Series 2019B	284,250	—	—	—	284,250	2032-2049	1.65	
Series 2020A	237,975	—	—	2,500	235,475	2023-2040	4.00-5.00	
Series 2020B	250,000	—	—	—	250,000	2040-2050	0.85	
Series 2020C	113,975	—	—	22,360	91,615	2023	0.76	(b)
Series 2021	—	250,000	—	—	250,000	2025	1.00	
Series 2021A	—	355,755	—	—	355,755	2022-2042	1.50-5.00	
Series 2021B	—	175,000	—	—	175,000	2042-2051	1.50	
Series 2021C	—	194,390	—	—	194,390	2023	0.36	
Direct placement notes:								
Series 2015A1 FRN	51,000	—	—	—	51,000	2033	2.23	(b)(d)
Series 2015A2 FRN	149,000	—	—	—	149,000	2029	2.02	(b)(d)
Series 2016A FRN	175,000	—	—	175,000	—	—	—	(b)(d)
Subtotal	4,462,713	994,241	78,610	382,185	4,996,159			
UDSA restructuring bonds:								
Series 2013T	186,200	—	71,559	—	114,641	2022-2023	3.44	
Series 2013TE	1,374,390	—	—	—	1,374,390	2023-2039	5.00	
Series 2015	1,002,115	—	13,020	—	989,095	2022-2035	3.00-5.00	
Series 2016A	636,770	—	—	—	636,770	2023-2033	5.00	
Series 2016B	317,270	—	72,595	—	244,675	2022-2033	4.00-5.00	
Series 2017	366,030	—	22,245	—	343,785	2022-2039	5.00	
Subtotal	3,882,775	—	179,419	—	3,703,356			
	8,345,488	994,241	258,029	382,185	8,699,515			
Plus: Net premium	668,958	101,258	71,747	9,923	688,546			
Less: Current maturities	(258,029)				(247,246)			
Total Long-term debt	$ 8,756,417				9,140,815			

(a) Capital Appreciation Bonds
(b) Certain bonds of this series are subject to interest rate exchange agreements
(c) Taxable Build America Bonds subject to federal subsidy, rate shown is pre-subsidy level
(d) Variable rate (rate presented as of the December 31, 2021)

(Amounts in thousands, unless otherwise stated)

LIPA's long-term debt as of December 31, 2020 consisted of the following:

		Beginning balance	Accretion/ additions	Maturities	Repaid/ Refunding	Ending balance	Years of Maturity	Interest Rate (%)	
General revenue bonds/notes:									
Series 1998A	$	91,095	4,836	12,970	—	82,961	2021-2028	5.30	(a)
Series 2000A		284,661	15,871	35,415	—	265,117	2021-2029	5.88-5.95	(a)
Series 2003C		36,645	—	—	—	36,645	2029	5.25	
Series 2010B		210,000	—	15,285	—	194,715	2021-2041	5.10-5.85	(c)
Series 2011A		18,315	—	8,930	8,700	685	2021	5.00	(b)
Series 2012A		250,000	—	—	83,030	166,970	2037-2042	5.00	(b)
Series 2012B		179,035	—	—	—	179,035	2021-2029	5.00	(b)
Series 2014A		413,070	—	—	—	413,070	2034-2044	4.00-5.00	(b)
Series 2014B		113,485	—	19,475	—	94,010	2021-2026	3.41-4.13	(b)
Series 2014C FRN		150,000	—	—	—	150,000	2030-2033	0.86	(b)(d)
Series 2015B		115,050	—	2,285	2,395	110,370	2022-2045	3.00-5.00	
Series 2015C FRN		149,000	—	—	—	149,000	2030-2033	0.86	(b)(d)
Series 2016B		378,515	—	5,000	5,255	368,260	2022-2046	5.00	
Series 2017		350,000	—	—	5,000	345,000	2021-2047	5.00	
Series 2018		430,000	—	—	—	430,000	2022-2039	2.25-5.00	
Series 2019A		218,175	—	2,500	—	215,675	2021-2039	3.00-5.00	
Series 2019B		284,250	—	—	—	284,250	2049	1.65	
Series 2020A		—	237,975	—	—	237,975	2022-2040	4.00-5.00	
Series 2020B		—	250,000	—	—	250,000	2050	0.85	
Series 2020C		—	113,975	—	—	113,975	2022-2023	0.66-0.76	(b)
Direct placement notes:									
Series 2015A1 FRN		51,000	—	—	—	51,000	2033	2.01	(b)(d)
Series 2015A2 FRN		149,000	—	—	—	149,000	2029	1.85	(b)(d)
Series 2016A FRN		175,000	—	—	—	175,000	2033	2.02	(b)(d)
Subtotal		4,046,296	622,657	101,860	104,380	4,462,713			
UDSA restructuring bonds:									
Series 2013T		292,592	—	106,392	—	186,200	2021-2023	2.94-3.44	
Series 2013TE		1,374,390	—	—	—	1,374,390	2023-2039	5.00	
Series 2015		1,002,115	—	—	—	1,002,115	2021-2035	3.00-5.00	
Series 2016A		636,770	—	—	—	636,770	2023-2033	5.00	
Series 2016B		333,500	—	16,230	—	317,270	2021-2033	4.00-5.00	
Series 2017		369,465	—	3,435	—	366,030	2021-2039	5.00	
Subtotal		4,008,832	—	126,057	—	3,882,775			
		8,055,128	622,657	227,917	104,380	8,345,488			
Plus: Net premium		667,114	74,602	66,253	6,505	668,958			
Less: Current maturities		(227,917)				(258,029)			
Total Long-term debt	$	8,494,325				8,756,417			

(a) Capital Appreciation Bonds
(b) Certain bonds of this series are subject to interest rate exchange agreements
(c) Taxable Build America Bonds subject to federal subsidy, rate shown is pre-subsidy level
(d) Variable rate (rate presented as of the December 31, 2020)

(Amounts in thousands, unless otherwise stated)

The debt service requirements for LIPA's consolidated bonds (excluding short-term debt such as general revenue notes and revolving credit facility but including the UDSA Restructuring Bonds) as of December 31, 2021 are as follows:

Due		Principal*	Interest	Net swap payments (receipts)	Total
2022	$	247,246	341,433	26,424	615,103
2023		613,475	332,481	26,424	972,380
2024		363,975	318,606	26,427	709,008
2025		630,290	302,889	26,424	959,603
2026		390,125	284,647	26,425	701,197
2027–2031		2,196,795	1,165,690	51,275	3,413,760
2032–2036		1,965,045	701,507	(1,301)	2,665,251
2037–2041		1,447,000	295,199	—	1,742,199
2042–2046		634,945	77,835	—	712,780
2047–2051		288,365	9,955	—	298,320
Total	$	8,777,261	3,830,242	182,098	12,789,601

* Future interest on capital appreciation bonds are included in principal maturities.

Future debt service on the variable-rate bonds and the floating-rate portion of floating-to-fixed rate swaps is calculated using the relevant indices, including applicable spreads, as of December 31, 2021. Such rates, as shown in the long-term debt summary table, are assumed constant through maturity. For bonds subject to floating-to-fixed rate swap agreements, the "net swap payments" represent the fixed rate swap payment net of the assumed variable rate swap receipts for each agreement.

Terms by which interest rates change for variable rate debt are as follows:

The 2014C FRN Bonds bear interest at 70% of one-month LIBOR, plus the per annum spread of 75 basis points. The rate is determined on the second London Banking Day prior to the first business day of each month.

The 2015A-1 FRN Bonds bear interest at the sum of the prevailing 18-year AAA MMD general obligation index and the applicable spread of 90 basis points. The MMD FRN rate resets on the first business day of each month.

The 2015A-2 FRN Bonds bear interest at the sum of the prevailing 14-year AAA MMD general obligation index and the applicable spread of 90 basis points. The MMD FRN rate resets on the first business day of each month.

The 2015C FRN Bonds bear interest at 70% of one-month LIBOR, plus the per annum spread of 75 basis points. The rate is determined on the second London Banking Day prior to the first business day of each month.

During 2021, the 2016A FRN Bonds were refunded with proceeds from Series 2021A. During 2020, the 2016A FRN Bonds were bearing interest at the sum of the prevailing 17-year AAA MMD general obligation index and the applicable spread of 95 basis points. The MMD FRN rate had a reset on the first business day of each month.

(Amounts in thousands, unless otherwise stated)

(c) *Callable Bonds*

LIPA has approximately $4.2 billion of Electric Revenue Bonds callable through 2031. The UDSA has approximately $2.9 billion of Restructuring Bonds that become callable from 2023 through 2027.

(d) *Interest Rate Swap Agreements*

LIPA has entered into several interest rate swap agreements with various counterparties to modify the interest rate on outstanding debt. For further discussion, see Note 8.

(e) *Short-Term Debt*

LIPA's short-term borrowing program provides resources to meet interim working capital needs, cash flow requirements due to the seasonality of sales, and cash flow requirements from unforeseen circumstances such as severe weather events. The Board has authorized a maximum authorization of $1.2 billion in short-term borrowings. Certain amounts outstanding under this program are expected to be reimbursed by FEMA.

The dates in the table below reflect the expiration dates as of December 31, 2021. LIPA negotiated the renewal or the replacement of certain facilities with expiration dates in 2022. LIPA received statutory approval related to those facilities in March 2022.

LIPA's short-term debt as of December 31, 2021 consisted of the following instruments:

		Maximum Authorized Par Amount	Beginning Balance	Additions	Payments	Ending Balance	Supporting Letter of Credit Expiration Date
General revenue notes:							
Series 2019A	Revolving Credit Agreemen	$ 200,000	2,000	—	—	2,000	3/15/2022
Series 2015 CP 1AB	Commercial Paper	200,000	60,000	405,000	415,000	50,000	6/30/2025
Series 2015 CP 2AB	Commercial Paper	150,000	85,000	150,000	185,000	50,000	6/30/2025
Series 2015 CP 3AB	Commercial Paper	100,000	100,000	—	100,000	—	5/05/2023
Series 2015 CP 4AB	Commercial Paper	200,000	170,000	260,000	280,000	150,000	3/08/2024
Series 2015 CP 5AB	Commercial Paper	100,000	—	225,000	140,000	85,000	3/11/2022
Series 2015 CP 6AB	Commercial Paper	250,000	—	235,000	150,000	85,000	3/14/2024
	Total short-term debt	$ 1,200,000	417,000	1,275,000	1,270,000	422,000	

(Amounts in thousands, unless otherwise stated)

LIPA's short-term debt as of December 31, 2020 consisted of the following instruments:

			Maximum Authorized Par Amount	Beginning Balance	Additions	Payments	Ending Balance	Supporting Letter of Credit Expiration Date
General revenue notes:								
Series 2019A	Revolving Credit Agreemen	$	200,000	2,000	198,000	198,000	2,000	3/15/2022
Series 2015 CP 1AB	Commercial Paper		200,000	65,000	400,000	405,000	60,000	6/30/2025
Series 2015 CP 2AB	Commercial Paper		150,000	45,000	195,000	155,000	85,000	6/30/2025
Series 2015 CP 3AB	Commercial Paper		100,000	—	150,000	50,000	100,000	5/05/2023
Series 2015 CP 4AB	Commercial Paper		200,000	100,000	245,000	175,000	170,000	3/08/2024
Series 2015 CP 5AB	Commercial Paper		100,000	80,000	135,000	215,000	—	3/11/2022
Series 2015 CP 6AB	Commercial Paper		250,000	—	140,000	140,000	—	3/14/2024
	Total short-term debt	$	1,200,000	292,000	1,463,000	1,338,000	417,000	

(f) *Covenants*

LIPA's General Resolution, bond agreements with purchasers of LIPA's direct placement notes, and bank agreements supporting its short-term borrowing program generally include certain covenants, events of default, and remedies including, in some cases, acceleration of the related obligations. In addition, the bond agreements and bank agreements generally include different and/or additional covenants from the General Resolution such as, among others: (i) a requirement that LIPA maintain an amount not less than $150 million in the Rate Stabilization Fund and (ii) a more rigorous rate covenant. Complete copies of LIPA's financing documents for its long-term and short-term borrowings, the bond agreements, bank agreements, and related offering documents have been filed with the Municipal Securities Rulemaking Board's EMMA website. Such documents can also be found on LIPA's website (https://www lipower org/investors/).

(g) Fixed Obligation Coverage Ratio

LIPA makes use of a fixed obligation coverage ratio to determine revenue requirements. LIPA's methodology for calculating the fixed obligation coverage ratio excludes certain specified non-cash items from expenses. Depreciation expense and amortization of the Acquisition Adjustment and other regulatory assets, including the PSEG Long Island accrual expense for future OPEB benefit cost obligations, are excluded from the coverage calculation. The revenue section of this calculation includes revenues received from certain customers used to satisfy regulatory assets that were established when LIPA issued debt to fund these projects. For calculating the coverage ratios, such cash receipts are available to meet LIPA's fixed obligation requirements, as they are a component of cash flow but are excluded from revenues for accrual accounting purposes.

Certain interest related costs, such as interest rate derivative costs, letters of credit and remarketing fees, bond administration costs, and interest related to customer deposits, are treated as ordinary operating expenses without coverage. LIPA and UDSA principal and interest payments, including interest payments on LIPA's short-term borrowing program and payments on leases, are included for coverage.

Effective in 2020, LIPA modified its financial policy related to fixed obligation coverage as a result of the impact of the adoption of GASB Statement No. 87. This new standard no longer differentiates between capital and operating leases and considers all leases with a term greater than one year to be a financing arrangement, with a corresponding asset and liability on the Consolidated Statements of Net Position.

To supply electricity to its customers, LIPA enters into long-term power supply agreements for power plants and regional transmission cables. Although these power plants and cables are not owned by LIPA, under these new accounting rules, LIPA must recognize a right-to-use asset and a corresponding lease liability in its Consolidated Statements of Net Position. The new accounting guidance does not change payments under these contracts but increases assets and liabilities, which will impact LIPA's fixed obligation coverage ratio in 2020 and beyond.

In 2020, LIPA's financial policy was updated to modify its financial target to ensure the same cash flow would be generated as the prior lease accounting rules. Effective for 2021 and 2020, LIPA's financial policy established a fixed obligation coverage ratio of 1.35x of debt and lease payments, using the new definition of leases as described above. This new target effective for 2020 will generate the same cash flow to cover fixed obligations as the prior lease accounting rules and the prior coverage target.

(Amounts in thousands, unless otherwise stated)

LIPA's calculation of its fixed obligation coverage ratio for the years ended December 31, 2021 and 2020 is shown below for informational purposes.

		2021	2020	
Operating revenues, (net of uncollectible expense)	$	3,930,788	3,900,721	(1)
Other income		75,277	89,765	(1)
Shoreham Settlement & VBA regulatory asset receipts		52,081	49,647	(2)
Total revenues and income		4,058,146	4,040,133	
Operating expenses		(3,630,026)	(3,641,086)	(1)
Add non cash expenses/(deduct cash funding):				
Depreciation and amortizations		425,898	420,977	(1)
Lease allowance		407,395	420,664	(3)
OPEB accrual expense		45,825	46,837	(4)
Other interest expense		(42,142)	(29,995)	(2)
Total expenses		(2,793,050)	(2,782,603)	
Funds available for debt service	**$**	**1,265,096**	**1,257,530**	
Principal and interest – LIPA		231,631	255,145	(2)
Principal and interest – UDSA		367,388	319,029	(2)
Lease obligations		407,395	420,664	(3)
Total fixed obligation debt service	**$**	**1,006,414**	**994,838**	
Fixed Obligation Coverage Ratio:				
Excluding UDSA		1.40	1.39	(5)
Including UDSA		1.26	1.26	
Board Approved Coverage				
Excluding UDSA		**1.35**	**1.35**	
Including UDSA		**1.15**	**1.15**	

Notes:

(1) See Statements of Revenues, Expenses and Changes in Net Position

(2) See Statements of Cash Flow

(3) See note 12 (h) (below)

(4) The financial policy adopted by LIPA's Board adds back the PSEG Long Island OPEB accrual operating expense as available to pay debt service. There are no mandatory pre-funding requirements for these OPEB expenses. LIPA voluntarily sets aside funds for OPEB obligations in an OPEB Account after payment of all operating expenses and debt service each year. See note 11 for more detail.

(5) 2021 – Excluding UDSA equal to ($1,265,096 less ($367,388))/(1,006,414 less ($367,388))
2020 – Excluding UDSA equal to ($1,257,530 less ($319,029))/(994,838 less ($319,029))

(Amounts in thousands, unless otherwise stated)

(h) Changes in noncurrent liabilities

LIPA's other long-term liabilities as of December 31, 2021 were comprised of the following:

	Beginning Balance	Increases	Decreases	Ending Balance
Long-term liabilities and unrealized credits	$ 62,838	23,844	(45,557)	41,125
Borrowings	61,786	50	(27,097)	34,739
Claims and damages	65,734	98,701	(8,976)	155,459
Lease obligations	2,457,513	71,803	(407,395)	2,121,921
Total other long-term liabilities	$ 2,647,871	194,398	(489,025)	2,353,244

LIPA's other long-term liabilities as of December 31, 2020 were comprised of the following:

	Beginning Balance	Increases	Decreases	Ending Balance
Long-term liabilities and unrealized credits	$ 49,713	175,047	(161,922)	62,838
Borrowings	67,084	—	(5,298)	61,786
Claims and damages	68,197	11,471	(13,934)	65,734
Lease obligations	2,791,610	86,567	(420,664)	2,457,513
Total other long-term liabilities	$ 2,976,604	273,085	(601,818)	2,647,871

(13) OSA – Employee Retirement Benefits Obligations

PSEG Long Island

PSEG Long Island employee pension and OPEB obligations are legal obligations of PSEG Long Island, and the employees covered by these plans are PSEG Long Island employees. However, the cost to employ PSEG Long Island's workforce, including employee pension and other post-employment benefits, are a "pass through expenditure" and contractual liability of LIPA.

When transitioning National Grid employees to PSEG Long Island, to ensure the National Grid workforce serving LIPA was protected against benefit losses from the transition, the PSEG Long Island benefit plans credited National Grid transitioned employees for service prior to the OSA for purposes such as eligibility, participation, vesting, company match levels, subsidies (including any type of early retirement subsidy), and attainment of retirement dates. In addition, those employees who immediately prior to the OSA effective date could have become eligible to participate in the National Grid post-employment health and life insurance benefit plans, are entitled to receive substantially equivalent post-employment health and life insurance benefits from PSEG Long Island. This arrangement created a prior service cost obligation totaling $126 million for pensions and $316 million for OPEBs as of January 1, 2014.

(Amounts in thousands, unless otherwise stated)

The following table provides a roll-forward of the changes to the benefit obligations and the fair value of the plan assets during each of the years ended December 31, 2021 and 2020.

		Pension benefits		Post-employment benefits	
		2021	**2020**	**2021**	**2020**
Benefit obligation at beginning of year	$	569,636	453,255	698,696	625,505
Service cost		38,307	32,706	23,267	19,814
Interest cost		13,815	14,382	17,771	20,441
Actuarial (gain) loss		(18,714)	74,707	(88,782)	41,954
Benefits paid		(7,058)	(5,414)	(11,123)	(9,018)
Plan amendment		—	—	—	—
Benefit obligation at end of year		595,986	569,636	639,829	698,696
Fair value of assets at beginning of year		343,234	282,251	—	—
Actual return on plan assets		48,877	36,397	—	—
LIPA/Employer contribution		37,400	30,000	11,123	9,018
Gross benefits paid		(7,058)	(5,414)	(11,123)	(9,018)
Fair value of assets at end of year		422,453	343,234	—	—
LIPA unfunded obligation	$	(173,533)	(226,402)	(639,829)	(698,696)

The table also provides the funded status of the PSEG Long Island plans and the amounts recognized as the long-term contractual liability on the Consolidated Statements of Net Position at the end of both years.

The table does not reflect the balance of LIPA's OPEB Account, which was established to pre-fund the contractual liability for post-employment benefits. LIPA's Board authorized the creation of an OPEB Account to allow LIPA to segregate funds to meet future OPEB obligations for PSEG Long Island employees. As of December 31, 2021 and 2020, LIPA had on deposit in the OPEB Account approximately $581 million and $475 million, respectively. For a further discussion, see Note 11.

The unfunded contractual liability related to pension and post-employment benefits decreased during 2021 due to gains on pension assets combined with the impact of an update of certain assumptions regarding the census data, claims costs, excise taxes, and the discount rate. These changes resulted in a net actuarial gain of approximately $19 million for pension benefits and approximately $89 million for post-employment benefits as follows:

(amounts in millions)		Pension benefits	Post-employment benefits
Updated census data	$	0.6	4.1
Updated assumptions		(0.2)	(78.4)
Impact of adopting granular method		5.1	6.3
Discount rate changes (see table below)		(24.2)	(20.8)
Total (gain) loss	$	(18.7)	(88.8)

The actuarial valuations related to pension and post-employment benefits involve estimates and assumptions regarding the probability of events in the future. Below are the weighted average assumptions used to calculate actuarial present values of benefit obligations as of December 31, 2021 and 2020:

	Pension benefits		Post-employment benefits	
	2021	**2020**	**2021**	**2020**
Discount rate	3.21 %	2.98 %	3.28 %	3.08 %
Rate of compensation increase	3.95 %	3.95 %	3.95 %	3.95 %

Pension Plan Assets

During 2021 and 2020, LIPA provided $37 million and $30 million, respectively, to PSEG Long Island for deposit in its pension plan trust fund. The trust is sponsored, overseen, and managed by the PSEG Thrift & Pension Investment Committee. The benefit plan assets are maintained separately and are not commingled with other PSEG plans. The benefit plan assets are not LIPA assets and, therefore, are not reflected on the Consolidated Statements of Net Position. These assets, however, reduce LIPA's contractual obligation to PSEG Long Island for the benefit obligations of the PSEG Long Island employees. The following table outlines the PSEG Long Island pension assets as of December 31, 2021 and 2020:

		2021		2020	
Investment type		**Amount**	**Allocation**	**Amount**	**Allocation**
Equity	$	319,122	75.6%	259,421	75.6%
Fixed-income		102,197	24.2	82,949	24.2
Other		1,134	0.2	864	0.2
	$	422,453	100.0%	343,234	100.0%

National Grid A&R PSA

The capacity charge of the A&R PSA is adjusted each year for the actuarially required contributions for the pension and OPEB (P&OPEB) benefits of the employees that work at these National Grid power plants. The actuarially required contributions are reflected in annual filings by National Grid with FERC. As of the most recent estimate provided by National Grid's actuary dated March 2021, the P&OPEB obligations are underfunded by approximately $23 million. This underfunding is a component in the development of the actuarially required contributions in each year. LIPA does not expect to have a material liability for P&OPEB obligations under the A&R PSA upon termination of the contract.

(14) LIPA Employee Benefits

All full-time LIPA employees must participate in one of two employee retirement plans offered by LIPA, either: (i) the New York State and Local Retirement System (the Retirement System); or (ii) the New York State Voluntary Defined Contribution Plan (VDC). Employees in part-time positions have the option of enrolling in the Retirement System.

(a) Pension Plans

(i) Plan Description

The Retirement System is a cost-sharing multiple-employer defined benefit retirement system. The net position of the Retirement System is held in the New York State Common Retirement Fund (the Fund), which was established to hold all net assets and record changes in fiduciary net position allocated to the Retirement System. The Comptroller of the State of New York serves as the trustee of the Fund and is the administrative head of the Retirement System. Retirement System benefits are established under the provisions of the New York State Retirement and Social Security Law (NYSRSSL). Once a public employer elects to participate in the Retirement System, the election is irrevocable. The New York State Constitution provides that pension membership is a contractual relationship and plan benefits cannot be diminished or impaired. Benefits can be changed for future members only by enactment of a State statute. The Retirement System is included in the State's financial report as a pension trust fund. That report, including information with regard to benefits provided, may be found at www.osc.state.ny.us/retire/publications or obtained by writing to the New York State and Local Retirement System, 110 State Street, Albany, NY 12244.

(ii) Benefits

The Retirement System provides retirement benefits as well as death and disability benefits and 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 Retirement System. The Retirement System is noncontributory for Tier 1 and 2 employees who joined on or prior to July 26, 1976. Tiers 3 and 4 employees, who joined between July 27, 1976 and December 31, 2009, are required to contribute 3% of their gross earnings toward their retirement benefits until the employee either accrues ten years of service credit or has been a member of the Retirement System for ten years after their date of membership. Employees who joined the Retirement System after January 1, 2010 are Tier 5 employees and contribute 3% of their salary during their entire length of service. Employees who joined the Retirement System on or after April 1, 2012 are Tier 6 employees and must contribute for their entire length of service.

Tier 6 contribution rates vary based on annual compensation. During the first three years of membership, the Tier 6 employee contribution rate is based on the employee's annual wage. After this three-year period, the employee's contribution rate will be based on actual earnings in the two years prior. The contribution rate varies between 3% and 6% depending on an employee's actual salary.

Members in Tiers 1, 2, 3, and 4 become vested in the pension plan after five years of credited service and members in Tiers 5 and 6 after ten years of credited service. All members are generally eligible to receive benefits at age 55. The benefit is generally 1.66% of final average salary (FAS), multiplied by the number of years of service, for members who retire with less than 20 years of service. The benefit calculation for Tiers 1 and 2 members with greater than 20 years of service credit, or Tiers 3 through 5 members between 20 and 30 years of service credit is calculated using 2% of FAS for each year of service. Tier 3 through 5 members are eligible for an additional 1.5% of FAS applied to each year of service over 30 years. The benefit for Tier 6 members with more than 20 years of service is 1.75% of FAS for 20 years of service plus 2% of FAS for each year of service credit in excess of 20 years. The Retirement System provides an annual automatic cost of living adjustment to members or surviving spouses based on certain eligibility criteria.

(iii) Post-Employment Benefit Increases

A cost-of-living adjustment is provided annually to: (i) all pensioners who have attained age 62 and have been retired for five years; (ii) all pensioners who have attained age 55 and have been retired for ten years; (iii) all disability pensioners, regardless of age, who have been retired for five years; (iv) Retirement System recipients of an accidental death benefit, regardless of age, who have been receiving such benefit for five years; and (v) the spouse of a deceased retiree receiving a lifetime benefit under an option elected by the retiree at retirement. An eligible spouse is entitled to one-half the cost-of-living adjustment amount that would have been paid to the retiree when the retiree would have met the eligibility criteria.

(iv) Employers Contributions

Under the authority of the NYSRSSL, the Comptroller annually certifies the actuarially determined rates expressly used in computing the employers' contributions based on salaries paid during the Retirement Systems' fiscal year ending March 31. LIPA's contributions for the year ended December 31, 2021, 2020, and 2019, were equal to 100% of the contributions required, and were $0.72 million, $0.61 million, $0.57 million, respectively.

(Amounts in thousands, unless otherwise stated)

(v) Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred In-flows of Resources Related to Pensions

As of December 31, 2021 and 2020, LIPA reported a liability of $10 thousand and $2.7 million, respectively, for its proportionate share of the Retirement System net pension liability. The total pension liability, as reported by the Retirement System, as of March 31, 2021 was determined using an actuarial valuation as of April 1, 2020, with update procedures used to roll-forward the total pension liability to March 31, 2021. LIPA's proportionate share of the net pension liability was based on a projection of LIPA's long-term share of contributions to the pension plan relative to the projected contributions of all participating members, actuarially determined.

As of December 31, 2021 and 2020, LIPA's proportionate share was 0.01% of the Retirement System net pension liability.

For the year ended December 31, 2021 and 2020, LIPA recognized pension expense of $0.40 million and $0.81 million, respectively. As of December 31, 2021 and 2020, LIPA reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

		2021		2020	
		Deferred Outflows of Resources	**Deferred Inflows of Resources**	**Deferred Outflows of Resources**	**Deferred Inflows of Resources**
Difference between expected and actual expense	$	120	—	161	—
Net difference between projected and actual earnings on investments		—	2,820	1,399	—
Changes in assumptions		1,805	34	55	48
Net difference between LIPA's contributions and proportionate share of contributions		398	46	376	15
LIPA's contributions subsequent to the measurement date		722	—	606	—
	$	3,045	2,900	2,597	63

(Amounts in thousands, unless otherwise stated)

The net amount of LIPA's balances of deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Plan years ended December 31:		
2022		(24)
2023		51
2024		(91)
2025		(513)
	$	(577)

(vi) Actuarial Assumptions

For December 31, 2021, the total pension liability as of the measurement date was determined by using an actuarial valuation as of April 1, 2020, with update procedures used to roll-forward the total pension liability to the measurement date. The actuarial valuation used the following assumptions:

Measurement date:	March 31, 2021
Actuarial valuation date:	April 1, 2020
Actuarial cost method:	Aggregate Cost Method
Inflation:	2.70 %
Salary scale:	4.40 %
Investment rate of return, including inflation (compounded annually, net of expenses):	5.90 %
Cost of living adjustments, annually:	1.40 %
Decrement tables:	April 1, 2015 – March 31, 2020 Retirement System's Experience
Mortality improvement:	Society of Actuaries Scale MP-2020

For December 31, 2020, the total pension liability as of the measurement date was determined by using an actuarial valuation as of April 1, 2019, with update procedures used to roll-forward the total pension liability to the measurement date. The actuarial valuation used the following assumptions:

Measurement date:	March 31, 2020
Actuarial valuation date:	April 1, 2019
Actuarial cost method:	Aggregate Cost Method
Inflation:	2.50 %
Salary scale:	4.20 %
Investment rate of return, including inflation (compounded annually, net of expenses):	6.80 %
Cost of living adjustments, annually:	1.30 %
Decrement tables:	April 1, 2010 – March 31, 2015 Retirement System's Experience
Mortality improvement:	Society of Actuaries Scale MP-2018

(Amounts in thousands, unless otherwise stated)

The 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 return, net of investment expenses and inflation) are developed for each major class 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 any by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized below:

Asset class	Long-term expected real rate of return (%)
Domestic equity	4.05
International equity	6.30
Private equity	6.75
Real estate	4.95
Opportunistic/Absolute return strategies	4.50
Credit	3.63
Real assets	5.95
Fixed income	—
Cash	0.50

(vii) Discount Rate

The discount rate used to calculate the total pension liability was 5.90% and 6.80% as of December 31, 2021 and 2020, respectively. The projection of cash flows used to determine the discount rate assumes that contributions from pension plan members will be made at the current contribution rates and that contributions from employers will be made at statutorily required rates, actuarially determined. Based upon those assumptions, the Retirement System's fiduciary net position was projected to be available to make all projected future benefit payments of current pension 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.

(Amounts in thousands, unless otherwise stated)

(viii) Sensitivity of the Net Pension Liability to the Discount Rate Assumption

The following represents the current-period net pension liability of LIPA's proportionate share of the net pension liability, as of December 31, 2021, calculated using the current-period discount rate assumption of 5.90%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (4.90%) or 1-percentage-point higher (6.90%) than the current assumption:

		1% Decrease (4.9%)	Assumption (5.9%)	1% Increase (6.9%)
LIPA's proportionate share of the net pension liability	$	2.7 million	10,000	(2.5) million

The following represents the sensitivity to the net pension liability (asset) of LIPA's proportionate share as of December 31, 2020, calculated using the discount rate assumption of 6.80%:

		1% Decrease (5.8%)	Assumption (6.8%)	1% Increase (7.8%)
LIPA's proportionate share of the net pension liability	$	5.0 million	2.7 million	0.6 million

(b) New York State Voluntary Defined Contribution Plan

LIPA offers certain full-time employees participation in a VDC Plan, which is an alternative to the State's Retirement System. The VDC option is available to all unrepresented State, New York City, and local public employees who are hired on or after July 1, 2013 and are paid at a rate of $75 thousand or more on an annual basis. For those employees choosing this option, LIPA is required to contribute 8% of their gross salary and the employee contributes between 3% and 6% depending on salary. All contributions are fully vested after one year.

(c) Deferred Compensation Savings Plan

LIPA also offers all employees an option to participate in a deferred compensation plan created in accordance with the Internal Revenue Code, Section 457(b). 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 an unforeseeable emergency. An independent trustee is also responsible for the administration of this plan.

(d) Other Post-Employment Benefits

OPEBs are a form of employee compensation that are recognized in the same period in which the compensated service is provided by the employees. OPEB includes post-employment healthcare benefits (including medical, dental, vision, hearing, and other health-related benefits) and other forms of post-employment benefits (including life insurance, disability, and long-term care).

LIPA is a participating employer in the New York State Health Insurance Program (NYSHIP), which is an agent multiple-employer plan administered by the New York State Department of Civil Service. Through NYSHIP, LIPA provides certain medical benefits for eligible retired employees and their dependents. Participation in the NYSHIP program provides for employees and/or their dependents to continue eligibility for these benefits in retirement. Employees with membership in the NYSLRS are eligible for retiree medical insurance if the employee has at least one year of full-time service with LIPA and satisfied the requirements for retiring as a member of the Retirement System. Employees enrolled in the VDC are eligible for retiree medical insurance if the employee has five years of full-time service with LIPA and meet the age requirement of the Retirement System tier in effect at the time the employee last entered service.

NYSHIP does not issue a stand-alone financial report and NYSHIP's agent activities are included within the financial statements of the State.

LIPA's OPEB liability totaled approximately $23 million as of December 31, 2021 and 2020, respectively. LIPA's OPEB Trust, a legally separate Section 115 trust approved by LIPA's Board to accumulate resources for its OPEB obligation, totaled approximately $30 million and $26 million as December 31, 2021 and 2020, respectively, for a total respective funding of 130.1% and 113.8%. Contributions to the OPEB Trust are based on an actuarial valuation.

(15) Commitments and Contingencies

(a) Leases

In 2020, LIPA adopted the provisions of GASB Statement No. 87. As such LIPA recognized a lease obligation and a right-to-use asset for agreements whereby LIPA obtains the right to the present service capacity of an underlying asset and the right to determine the nature and manner of an underlying asset's use for a period of one year or greater. Below is a description of these lease arrangements:

(i) Capacity Arrangements

In providing electricity to its customers, LIPA has entered into a variety of power purchase agreements that ensure LIPA has the ability to meet the electricity needs of its customers. These arrangements can range from contracts where LIPA acquires a product such as power without controlling the underlying facility, to arrangements where LIPA obtains the right to control the underlying facility by controlling a plant's output or a transmission lines throughput. LIPA has recorded a right-to-use asset and a corresponding lease obligation in each power and transmission contract where it has obtained control. A common feature of arrangements where LIPA has recorded a right-to-use asset and a corresponding lease obligation involves the plant owner transferring to LIPA the right to bid capacity prices into the NYS capacity markets during the term of the contract.

The right-to-use assets associated with capacity arrangements include tolling arrangements, capacity-only arrangements, and firm transmission contracts. The lessors to these capacity agreements typically bill LIPA based upon a fixed monthly capacity charge applied to the megawatts under contract for the term of the contract. During the term of the arrangement, the megawatts under contract are subject to a capacity test to determine each years contractual megawatts, whereas the fixed monthly capacity charge maybe be subject to adjustment based upon fixed rate scheduled changes, price indexes and other computations. These arrangements do not contain any residual value guarantees by LIPA and LIPA has not paid any termination penalties associated with these agreements in 2021 or 2020. Contractual elements such as service arrangements included within these capacity arrangements have been excluded from the determination of the right-to-use asset and corresponding lease obligation. As of December 31, 2021 and 2020, the right-to-use asset, net of amortization and the corresponding lease obligation for capacity arrangements amounted to approximately $2.4 billion and $2.7 billion, respectively.

(ii) Property Leases

LIPA leases 16 facilities throughout Long Island in order to serve its customers. These sites include its corporate offices, customer service centers, operation centers and staging sites. While terms vary by lease, each lease provides for a monthly lease payment subject to a fixed escalation on the anniversary date of each agreement. None of the leases contain provisions for variable payments or residual value guarantees. Additionally, there are no other payments such as residual value guarantees or termination penalties, not previously included in the measurement of the lease liability reflected as outflows of resources in either 2021 or 2020. As of December 31, 2021 and 2020, the right-to-use asset, net of amortization and the corresponding lease obligation for property leases amounted to approximately $79 million and $90 million, respectively.

(iii) Vehicles

LIPA leases a fleet of vehicles ranging from passenger cars to heavy duty trucks. Lease terms range up to 120 months. The monthly lease payment is based upon a straight-line depreciation of the vehicle cost over its term, a monthly variable interest rate based upon LIBOR plus 1.95% and a management fee. The management fee is excluded from the computation of the right-to-use asset and corresponding obligation. If LIPA decides to end an individual vehicle lease prior to term end, any difference between the undepreciated vehicle cost, (as calculated under the lease) and the proceeds received from the sale of the vehicle by the leasing company are either returned to LIPA if the proceeds are greater than the undepreciated cost or charged to LIPA if less than the undepreciated cost.

There are no other payments such as residual value guarantees or termination penalties, not previously included in the measurement of the lease liability reflected as outflows of resources. As of December 31, 2021 and 2020, the right-to-use asset, net of amortization and the corresponding lease obligation for the fleet amounted to approximately $7 million and $10 million, respectively.

(Amounts in thousands, unless otherwise stated)

Presented below is a summary of the principal and interest requirements to maturity for the capacity, property lease and fleet lease liability for each of the five subsequent fiscal years and in five-year increments thereafter:

Year		Principal	Interest	Total
2022	$	348,638	57,695	406,333
2023		353,101	48,932	402,033
2024		348,296	40,170	388,466
2025		344,131	31,387	375,518
2026		339,304	22,827	362,131
2027-2031		689,552	31,803	721,355
2032-2036		37,556	2,896	40,452
2037-2041		9,981	239	10,220
Total	$	2,470,559	235,949	2,706,508

(b) Other Energy Agreements and Transmission Agreements

LIPA has entered into other power purchase agreements with terms that extend beyond one year, with varying terms expiring through 2034. While these agreements do not qualify as leases, certain agreements have certain minimum payment terms. The approximate minimum obligation associated with such agreements are approximately $2 million per year for remaining term of agreement.

LIPA has natural gas transportation agreements for the delivery of gas to its contracted gas-fueled power generating facilities. Certain of these agreements have minimum obligations. As of December 31, 2021, the approximate minimum obligation associated with such agreements are approximately $5 million per year from 2022 through 2023 and approximately $4 million per year from 2024 through 2028, and approximately $2 million for 2029.

LIPA also has natural gas physical supply contracts which have no fixed costs associated with them.

LIPA has several contracts to purchase renewable energy and energy from waste facilities. These contracts do not have minimum obligations and LIPA only pays if the energy is delivered. For the years ended December 31, 2021 and 2020, LIPA paid approximately $101 million and $115 million for energy related to these contracts, respectively.

LIPA also has a 20-year power purchase agreement for a 130-megawatt offshore wind farm to be installed off the coast of Long Island that is expected to be commercially operational by the end of 2023. LIPA will only pay for energy when delivered without taking construction risk and has no financial commitment until the wind farm is commercially operational.

As provided by LIPA's tariff, the cost of all the facilities noted above are includable and recoverable through the Power Supply Charge.

(c) Insurance Programs

LIPA's insurance program is comprised of a combination of policies, from major insurance companies, self-insurance, and contractual transfer of liability, including naming LIPA as an additional named insured and indemnification.

LIPA has purchased Workers' Compensation insurance from the New York State Insurance Fund to provide coverage for claims arising from employee accidents or injuries. In addition, LIPA carries Employment Practices Liability Insurance from a major insurance company and LIPA's office property and liability coverage is administered by the New York State Office of General Services Bureau of Risk & Insurance Management through a master policy the State procures for various State entities, including LIPA. Liability related to construction projects and similar risks is transferred through contractual indemnification and compliance with insurance requirements. LIPA also has insurance coverage on its interest in NMP2 as disclosed in Note 10.

LIPA has commercially available excess general liability, property, and cyber insurance for claims above its self-insurance provisions. For general liability, including automobile liability, LIPA is self-insured up to $3.0 million per occurrence. For property damage and extra expense combined, LIPA is self-insured up to $1.5 million per occurrence. For property damage or loss due to a named windstorm and flood, 2% of the value at risk is self-insured per occurrence with a minimum of $1.5 million and up to a maximum self-insured level of $7.5 million. For cyber-related events, including an event relating to LIPA's information technology system, LIPA is self-insured for up to $15 thousand per event. Similarly, LIPA's service provider, PSEG Long Island, also maintains cyber insurance covering events related to information technology and operating systems where LIPA is an additional named insured.

LIPA has no general property insurance for damage to its poles and wires and is self-insured.

(16) Legal Proceedings

(a) PSEG Long Island

PSEG Long Island's liability for third-party claims in performing its obligations to operate and maintain LIPA's T&D system is generally limited to the aggregate loss and expense between $2.5 million and $5.0 million in any contract year other than for loss and expense attributable to PSEG Long Island's gross negligence or willful misconduct, for which there is no limitation on PSEG Long Island's liability. PSEG Long Island is not responsible for any liabilities that occurred prior to January 1, 2014.

(b) Superstorm Sandy

Four purported class action lawsuits were filed against LIPA and National Grid related to Superstorm Sandy that contain common allegations of wrongdoing and/or gross negligence relating to LIPA's and National Grid's preparedness and response to the storm. These actions seek monetary damages, fees, and other relief. The four suits were consolidated into a single class action.

In June 2018, the court granted plaintiffs' motion to certify a class consisting of residential customers who lost power for more than three days and did not require an electrical inspection due to flooding before service could be restored. LIPA appealed that ruling. On December 29, 2021, the appellate court issued a decision and order reversing the lower court's class certification order. The plaintiffs have filed a motion to renew and reargue the December 29 decision and in the alternative for leave to appeal to New York's highest court. That motion is currently awaiting decision.

Twelve more individual actions have been filed on behalf of the owners of approximately 100 properties in the Breezy Point, Belle Harbor, and Rockaway Park neighborhoods of the Rockaway Peninsula, in the Queens portion of the Service Area. These suits allege generally that the failure to de-energize the electrical system in the Rockaways in advance of the tidal surges experienced during the storm resulted in fires that caused various types of property damage, ranging from all or partial loss of plaintiffs' customers' homes. In February 2018, the Court of Appeals, New York State's highest court, affirmed lower court rulings that LIPA is not entitled at this point to dismissal of the fire cases.

The class action and the fire cases, are being defended, and although the amounts sought in damages are significant, the outcome of these matters cannot be predicted with certainty at this time. LIPA does not believe that they will have a material impact on the operating results or financial condition of LIPA.

(c) *Environmental*

National Grid and LIPA are parties to Liabilities Undertaking and Indemnification Agreements which, when taken together, provide, generally, that environmental liabilities will be divided between National Grid and LIPA on the basis of whether they relate to assets transferred to National Grid or retained by LIPA as part of the 1998 LIPA/LILCO Merger (Merger). In addition, to clarify and supplement these agreements, National Grid and LIPA also entered into an agreement to allocate between them certain liabilities, including environmental liabilities, arising from events occurring prior to the Merger and relating to the business and operations to be conducted by LIPA after the Merger (the Retained Business) and to the business and operations to be conducted by National Grid after the Merger (the Transferred Business).

National Grid is responsible for all liabilities arising from all manufactured gas plant operations on Long Island (MGP Sites), including those currently or formerly operated by National Grid or any of its predecessors, whether or not such MGP Sites were related to the Transferred Business or the Retained Business. In addition, National Grid is responsible for all environmental liabilities traceable to the Transferred Business and certain scheduled environmental liabilities. Environmental liabilities that arise from the non-nuclear generating business (a Transferred Business) may be recoverable by National Grid as part of the capacity charge under the A&R PSA. LIPA is responsible for all environmental liabilities traceable to the Retained Business and certain scheduled environmental liabilities.

Environmental liabilities, other than those related to MGP sites that existed as of the date of the Merger that are untraceable, including untraceable liabilities that arise out of common and/or shared services, have been allocated to LIPA and National Grid, as provided for in the Merger.

The A&R PSA addresses the terms by which LIPA will continue to purchase electricity from certain National Grid facilities. Generally, National Grid's liabilities under this contract are limited to losses due to gross negligence or willful misconduct or violations of environmental laws not consistent with prudent utility practices.

(d) Environmental Matters Retained by LIPA

Superfund Sites—Under Section 107(a) of the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, also commonly referred to as Superfund), parties that generated or arranged for disposal of hazardous substances are liable for costs incurred by the Environmental Protection Agency (EPA) or others that are responding to a release or threat of release of hazardous substances.

Metal Bank—Cottman Avenue is a National Priorities List site with polychlorinated biphenyl (PCB) contamination on the Delaware River in Philadelphia, Pennsylvania. EPA sued a number of potentially responsible parties (PRPs) and subsequently settled with all defendants, among them a number of utility companies—including LILCO—alleged to have sent used transformers to the site during the 1960s and 1970s. The remediation has been completed and monitoring at the site continues. LIPA's contribution toward the settlement and monitoring costs has not been material. One feature of the long-term remedy began to fail within two years of construction, and the EPA required the PRP group to repair it. The repair costs were not material to LIPA.

The U.S. Department of Interior, the National Oceanic and Atmospheric Administration and the Pennsylvania Fish and Boat Commission and Departments of Environmental Protection and Conservation and Natural Resources notified the PRP group that they have claims for damages to natural resources allegedly impacted by releases of hazardous substances to and from the Cottman site. While disputing the liability, the PRP group engaged in settlement discussions with these agencies and, at the end of 2018, reached a tentative agreement to resolve their claims. The parties negotiated a settlement agreement and, following two notice and comment periods, the trustees executed the agreement effective November 4, 2021. The PRP group made a timely settlement payment on November 30, 2021 that resolved the matter. The settlement will not have a material impact on the operating results or financial condition of LIPA.

EPA has alleged that LILCO and other utility companies have liability for PCB contamination at another site in Philadelphia at which Metal Bank of America managed used transformers until the mid-1980s. In September 2020, EPA advised the PRPs that it has a cost recovery claim against them for response costs that EPA allegedly has incurred. The PRP group and EPA have entered into a tolling agreement extending the period of limitations on the claim, and that period currently expires on September 15, 2022. The likelihood and size of any claim by EPA against the PRPs are uncertain, but LIPA believes that any such claim would not have a material impact on the operating results or financial condition of LIPA.

(e) Asbestos Proceedings

Litigation is pending in New York State Court against LIPA, LILCO, National Grid and various other defendants involving thousands of plaintiffs seeking damages for personal injuries or wrongful death allegedly caused by exposure to asbestos. The cases for which LIPA may have financial responsibility involve employees of various contractors and subcontractors engaged in the construction or renovation of certain power plants formerly owned by LILCO. These cases include extraordinarily large damage claims, which have historically proven to be excessive. The actual aggregate amount paid to plaintiffs alleging exposure to asbestos at these power plants over the years has not been material to LIPA. Due to the nature of how these cases are litigated, it is difficult to determine how many of the remaining cases that have been filed (or of those that will be filed in the future) involve plaintiffs who were exposed to asbestos at any of these power plants. Based upon experience, it does not appear that currently pending or future claims involving plaintiffs who allege exposure to asbestos at any of these power plants will have a material impact on the operating results or financial condition of LIPA.

(Amounts in thousands, unless otherwise stated)

(17) Component Unit Consolidating Condensed Statements

UDSA is a component unit of LIPA and all of the activities and balances of the UDSA are blended into and reported as part of LIPA. The consolidating condensed information for December 31, 2021 and 2020 are below:

Consolidating Condensed Statement of Net Position
December 31, 2021

		LIPA	UDSA	Eliminations	Consolidated
Assets and deferred outflows of resources:					
Capital assets	$	10,414,617		—	10,414,617
Current assets		2,607,836	165,917	—	2,773,753
Regulatory assets		1,420,491	15,704	—	1,436,195
Noncurrent assets		994,447	3,931,161	(3,931,161)	994,447
Deferred outflows of resources		173,975	—	—	173,975
Total assets and deferred outflows of resources		15,611,366	4,112,782	(3,931,161)	15,792,987
Liabilities, deferred inflows of resources, and net position:					
Long-term debt, net of current maturities		5,301,796	3,839,019	—	9,140,815
Current liabilities		1,471,688	186,125	—	1,657,813
Regulatory liabilities		203,635	—	—	203,635
Noncurrent liabilities		7,326,067	—	(3,931,161)	3,394,906
Deferred inflows of resources		793,439	—	—	793,439
Net position		514,741	87,638	—	602,379
Total liabilities, deferred inflows of resources, and net position	$	15,611,366	4,112,782	(3,931,161)	15,792,987

Consolidating Condensed Statement of Revenues, Expenses, and Changes in Net Position
For the year ended December 31, 2021

		LIPA	UDSA	Eliminations	Consolidated
Operating revenues	$	3,579,128	354,409	(2,749)	3,930,788
Operating expenses		3,394,833	237,942	(2,749)	3,630,026
Operating income		184,295	116,467	—	300,762
Nonoperating revenue and expenses		121,133	39	—	121,172
Interest charges and (credits)		212,554	144,689	—	357,243
Change in net position		92,874	(28,183)	—	64,691
Beginning net position		421,867	115,821	—	537,688
Ending net position	$	514,741	87,638	—	602,379

Consolidating Condensed Statement of Cash Flows
For the year ended December 31, 2021

		LIPA	UDSA	Eliminations	Total
Net cash provided by operating activities	$	850,833	350,340	—	1,201,173
Net cash (used in) provided by investing activities		(104,382)	39	—	(104,343)
Net cash provided by noncapital related activities		288,267	—	—	288,267
Net cash used in capital and related financing activities		(964,215)	(367,518)	—	(1,331,733)
Net increase (decrease) in cash and cash equivalents		70,503	(17,139)	—	53,364
Cash and cash equivalents at beginning of year		346,303	128,833	—	475,136
Cash and cash equivalents at end of year	$	416,806	111,694	—	528,500

(Amounts in thousands, unless otherwise stated)

Consolidating Condensed Statement of Net Position
December 31, 2020

		LIPA	UDSA	Eliminations	Consolidated
Assets and deferred outflows of resources:					
Capital assets	$	10,313,576	—	—	10,313,576
Current assets		2,267,141	181,819	(10)	2,448,950
Regulatory assets		1,440,101	17,739	—	1,457,840
Noncurrent assets		1,029,375	4,165,967	(4,165,967)	1,029,375
Deferred outflows of resources		226,254	—	—	226,254
Total assets and deferred outflows of resources		15,276,447	4,365,525	(4,165,977)	15,475,995
Liabilities, deferred inflows of resources, and net position:					
Long-term debt, net of current maturities		4,694,767	4,061,650	—	8,756,417
Current liabilities		1,490,825	188,054	(10)	1,678,869
Regulatory liabilities		98,731	—	—	98,731
Noncurrent liabilities		7,989,681	—	(4,165,967)	3,823,714
Deferred inflows of resources		580,576	—	—	580,576
Net position		421,867	115,821	—	537,688
Total liabilities, deferred inflows of resources, and net position	$	15,276,447	4,365,525	(4,165,977)	15,475,995

Consolidating Condensed Statement of Revenues, Expenses, and Changes in Net Position
For the year ended December 31, 2020

		LIPA	UDSA	Eliminations	Consolidated
Operating revenues	$	3,554,603	348,867	(2,749)	3,900,721
Operating expenses		3,474,744	169,091	(2,749)	3,641,086
Operating income		79,859	179,776	—	259,635
Nonoperating revenue and expenses		117,405	775	—	118,180
Interest charges and (credits)		209,443	149,552	—	358,995
Change in net position		(12,179)	30,999	—	18,820
Beginning net position		434,046	84,822	—	518,868
Ending net position	$	421,867	115,821	—	537,688

Consolidating Condensed Statement of Cash Flows
For the year ended December 31, 2020

		LIPA	UDSA	Eliminations	Total
Net cash provided by operating activities	$	732,661	338,304	—	1,070,965
Net cash (used in) provided by investing activities		(30,562)	775	—	(29,787)
Net cash provided by noncapital related activities		152,448	—	—	152,448
Net cash used in capital and related financing activities		(924,893)	(319,295)	—	(1,244,188)
Net (decrease) increase in cash and cash equivalents		(70,346)	19,784	—	(50,562)
Cash and cash equivalents at beginning of year		416,649	109,049	—	525,698
Cash and cash equivalents at end of year	$	346,303	128,833	—	475,136

(18) Subsequent Events

Subsequent events have been evaluated through March 30, 2022, which is the date that the financial statements were available to be issued.

(Amounts not in thousands)

Schedule of the LIPA's Proportionate Share of the Net Pension Liability
New York State and Local Employees' Retirement System

As of measurement date March 31,	2021	2020	2019	2018	2017	2016	2015
Proportionate percentage of net pension liability	0.0098574%	0.0103052%	0.0103343%	0.0096075%	0.0099883%	0.0106679%	0.0280362%
Proportionate share of the net pension liability	$ 9,815	$ 2,728,884	$ 732,219	$ 310,076	$ 938,526	$ 1,712,234	$ 947,131
LIPA's covered-employee payroll	$ 4,720,000	$ 4,279,104	$ 3,883,794	$ 4,088,041	$ 3,782,636	$ 3,511,480	$ 8,246,620
LIPA's proportionate share of the net pension liability as a percentage of its covered-employee payroll	0.21%	63.77%	18.85%	7.58%	24.81%	48.76%	11.49%
Plan fiduciary net position as a percentage of the total pension liability	99.95%	96.27%	98.24%	94.70%	90.70%	97.95%	97.20%

Schedule of the LIPA's Contributions
New York State and Local Employees' Retirement System

As of December 31,	2021	2020	2019	2018	2017	2016	2015
Statutorily required contribution	$ 723,107	605,939	$ 568,817	$ 608,517	$ 558,890	$ 198,948	$ 850,124
Contributions in relation to statutorily required contributions	$ 723,107	605,939	$ 568,817	$ 608,517	$ 558,890	$ 198,948	$ 850,124
Contribution deficiency (excess)	—	—	—	—	—	—	—
LIPA's covered-employee payroll	$ 4,720,000	4,279,104	3,883,794	4,088,041	3,782,636	3,511,480	8,246,620
Contributions as a percentage of covered payroll	15.32%	14.16%	14.65%	14.89%	14.78%	5.67%	10.31%

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the Authority has presented information for those years for which information is available.

See accompanying independent auditors' report.

KPMG LLP
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1305 Walt Whitman Road
Melville, NY 11747-4302

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
Long Island Power Authority:

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 of the Long Island Power Authority (LIPA), a component unit of the State of New York, as of and for the year ended December 31, 2021, and the related notes to the consolidated financial statements, which collectively comprise LIPA's consolidated financial statements, and have issued our report thereon dated March 30, 2022.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the consolidated financial statements, we considered LIPA's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the consolidated financial statements, but not for the purpose of expressing an opinion on the effectiveness of LIPA's internal control. Accordingly, we do not express an opinion on the effectiveness of LIPA'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 consolidated 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 or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether LIPA'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 consolidated financial statements. 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*.

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 LIPA's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering LIPA's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

Melville, NY
March 30, 2022

LIPA
Long Island Power Authority

APPENDIX B

Glossary of Certain Defined Terms

The following terms, as generally used in offering documents of the Authority, have the respective meanings provided below. These summary definitions do not purport to be complete or definitive and are qualified in their entirety by reference to the Resolution, the Financing Agreement, the OSA and the PSA, copies of which have been filed with EMMA and are on file with the Trustee.

"**Administrative Services Agreement**" means the Administrative Services Agreement, dated as of May 1, 1998, between the Authority and LIPA, as the same may be amended and supplemented.

"**Authorized Representative**" means in the case of the Authority and LIPA, their respective Chairman, Chief Executive Officer, Executive Director, Chief Financial Officer, Controller or Chief Operating Officer, or such other person or persons so designated by resolution of the Authority or LIPA, as the case may be.

"**Business Day**" means any day other than a Saturday, Sunday or legal holiday.

"**Certificate**" means (i) a signed document attesting to or acknowledging the matters therein stated or setting forth matters to be determined pursuant to the Resolution or otherwise, (ii) the report of an Accountant as to an audit or compliance called for by the Resolution, or (iii) any report of the Consulting Engineer or Rate Consultant as to any matter called for by the Resolution or the Financing Agreement.

"**Change in Regulatory Law**" has the meaning set forth in the OSA.

"**Change of Control**" has the meaning set forth in the OSA.

"**Construction Fund**" means the fund by that name established pursuant to the Resolution.

"**Consulting Engineer**" means, when such term is used in the Resolution and the Financing Agreement, any independent engineer or firm of engineers of recognized standing selected by the Authority and may include an independent engineer or firm of engineers of recognized standing selected by the Authority or LIPA in one or more other capacities.

"**Debt Service**" for any Fiscal Year or part thereof means, as of any date of calculation, the sum of (i) with respect to any Outstanding Bonds, an amount equal to the sum of (a) interest payable during such Fiscal Year or part thereof on such Bonds, except to the extent that such interest is to be paid from amounts representing Capitalized Interest and (b) the Principal Installments of such Bonds payable during such Fiscal Year or part thereof and (ii) with respect to a Parity Reimbursement Obligation, an amount equal to the sum of (a) interest payable during such Fiscal Year or part thereof on such Parity Reimbursement Obligation and (b) the Principal Installments of such Parity Reimbursement Obligation payable during such Fiscal Year or part thereof. Such interest and Principal Installments shall be calculated on the assumption that (x) no such Bonds, or Parity Reimbursement Obligations Outstanding at the date of calculation will cease to be Outstanding except by reason of the payment thereof upon stated maturity or upon mandatory redemption by application of Sinking Fund Installments and (y) variable rate Bonds will bear interest at the greater of (A) the rate or rates which were assumed by LIPA in the Authority Budget for such Fiscal Year to be borne by Variable Rate Bonds during such Fiscal Year or (B) the average rate or rates borne on variable rate Bonds Outstanding during the twelve calendar months preceding the date of calculation, but at a rate not less than the rate or rates borne thereon as of such date of calculation; provided, however, that if LIPA has in connection with any variable rate Bonds entered into a Financial Contract which provides that the Authority is to pay to the Qualified Counterparty an amount determined based upon a fixed rate of interest on the Outstanding principal amount of such variable rate Bonds or that the Qualified Counterparty is to pay to the Authority an amount determined based upon the amount by which the rate at which such variable rate Bonds bear interest exceeds a stated rate of interest on all or any portion of such variable rate Bonds, it will be assumed that such variable rate Bond bears interest at the fixed rate of interest to be paid by the Authority or the rate in excess of which the Qualified Counterparty is to make payment to the Authority in accordance with such agreement.

"**Debt Service Fund**" means the fund by that name established pursuant to the Resolution.

"**Event of Default**" means, (i) when such term is used in the Resolution and the Financing Agreement, any event specified in the Resolution as an "Event of Default" (and as summarized in the summary thereof under the caption "Event of Default; Remedies Upon Default") and (ii) when such term is used in the OSA or the PSA, such events as defined in the OSA or the PSA.

"**FERC**" means the Federal Energy Regulatory Commission.

"**Financing Agreement**" means the Financing Agreement, dated as of May 1, 1998, by and between the Authority and LIPA to provide for their respective duties and obligations relating to the financing and operation of the retail electric business in the Service Area, as the same may be amended or supplemented.

"**Fiscal Year**" means the twelve-month period commencing on January 1 of each year; provided, however, that the Authority and LIPA may, from time to time, mutually agree on a different twelve-month period as the Fiscal Year, in which case January 1, when with reference to Fiscal Year, shall be construed to mean the first day of the first calendar month of such different Fiscal Year.

"**GASB**" means the Governmental Accounting Standards Board.

"**ISO-NE**" means The New England Independent System Operator.

"**LIPA Parties**" means the Authority and LIPA.

"**LIPA Budget**" means the annual budget of LIPA, as amended or supplemented, adopted or in effect for a particular Fiscal Year as provided in the Financing Agreement.

"**LIPA Unsecured Debt Fund**" means the fund by that name established pursuant to the Resolution.

"**Municipalization**" has the meaning set forth in the OSA.

"**National Grid Parties**" means Keyspan Corporation and various National Grid subsidiaries.

"**NYISO**" means the New York Independent System Operator and any successor thereto.

"**Operating Expense Fund**" means the fund by that name established pursuant to the Resolution.

"**Operating Expenses**" means any and all current expenses of maintaining, repairing, operating and managing the System, including but not limited to the costs of supplies, fuel, fuel assemblies and components required for the operation of the System (including but not limited to any payments made under Supply Contracts other than the Debt Service Component thereof); payments relating to fuel or electricity hedging instruments; all payments under any System Agreements; all salaries, administrative, general, commercial, architectural, engineering, advertising, public notices, auditing, billing, collection and enforcement and legal expenses; insurance and surety bond premiums; consultants' fees and charges; payments to pension, retirement, health and hospitalization funds; any taxes which may lawfully be imposed on the System or the income or operation thereof or of LIPA; costs of public hearings; ordinary and current rentals of equipment or other property; lease payments for real property or interests therein; expenses of maintenance and repair (including replacements); expenses, liabilities and compensation of the Trustee or any other Fiduciary or Depositary; to the extent provided by by-law, agreement or other instrument of the Authority or LIPA, indemnification of Fiduciaries, Trustees, officers and employees of the Authority, directors, officers and employees of LIPA, and others and premiums for insurance related thereto; reasonable reserves for operation, maintenance and repair and for self-insurance; and all other expenses necessary, incidental or convenient for the efficient operation of the System; all costs and expenses associated with or arising out of the research, development (including feasibility and other studies, including but not limited to resource planning and studies and reports relating to demand side management) and/or implementation of any project, facility, system, task or measure related to the System including but not limited to demand side management programs, deemed desirable or necessary by the Authority or LIPA; all other costs and expenses arising out of or in connection with the conduct of LIPA's business or necessary, incidental or convenient for the efficient operation of LIPA; and all expenses necessary, incidental or convenient for the efficient operation of the Authority and the performance of the obligations of the Authority under the Administrative Services Agreement. Notwithstanding the foregoing, Operating Expenses shall not include (i) any costs and expenses attributable to a Separately Financed Project, (ii) any costs or expenses for new construction or for reconstruction other than restoration of any part of the System to the condition of serviceability thereof when new, (iii) the Debt Service Component of any Supply Contract, (iv) to the extent so specified by the Authority, any incentive payments payable by LIPA under any System Agreement, (v) any payments payable by LIPA under any other agreement the terms of which specify that the same shall not constitute an Operating Expense under the Resolution, (vi) any allowance for depreciation, (vii) payment under any Capital Leases, or (viii) any PILOTs.

"**Outstanding**" when used with reference to Parity Reimbursement Obligations, shall have the meaning given to such term in the agreement creating such Parity Reimbursement Obligations, and, when used with reference to Bonds, means, as of any date, all Bonds theretofore or thereupon being authenticated and delivered under the Resolution except: (a) any Bonds canceled by the Trustee at or prior to such date; (b) any Bonds the principal and Redemption Price, if any, of and interest on which have been paid in accordance with the terms thereof; (c) any Bonds in lieu of or in substitution for which other Bonds have been authenticated and delivered pursuant to the Resolution; and (d) any Bonds deemed to have been paid as provided in the Resolution.

"**Outstanding LIPA Unsecured Debt**" means certain unsecured financial obligations of LIPA outstanding as of the acquisition of LILCO, all of which has been retired as of the date hereof.

"**Parity Contract Obligation**" means the obligation of the Authority or LIPA to pay the Debt Service Component of Supply Contracts and Capital Leases from Revenues and secured by a pledge of and lien on the Trust Estate on a parity with the Bonds.

"**Parity Contract Obligations Fund**" means the fund by that name established pursuant to the Resolution from which amounts shall be applied for the payment of Parity Contract Obligations in accordance with the Resolution.

"**Pass-Through Expenditures**" has the meaning set forth in the OSA.

"**Parity Obligations**" means, collectively, all Parity Contract Obligations and Parity Reimbursement Obligations.

"**Parity Reimbursement Obligation**" shall have the meaning assigned thereto under the heading "Special Provisions Relating to Option Securities, Financial Contracts, Subordinated Credit Facilities, Parity Obligations and Subordinated Indebtedness" in the summary of the Resolution.

"**PILOTs**" means any payment in lieu of taxes due and owing by the Authority or LIPA in accordance with the Act or other applicable law.

"**PILOTs Fund**" means the fund by that name established by the Resolution, and used to make payments to the State or any municipality or other political subdivision of the State, which shall be entitled to receive PILOTs under the Act, subject to the provisions of the Resolution.

"**PJM**" means the Pennsylvania-New Jersey-Maryland Regional Transmission Organization.

"**Power and Energy**" means the electrical energy and capacity available from the System Power Supply.

"**Principal Installment**" means, as of any date of calculation and with respect to any Outstanding Bonds, (i) the principal amount of such Bonds (including (x) any amount designated in, or determined pursuant to, the applicable Supplemental Resolution, as the "principal amount" with respect to any Bonds which do not pay full current interest for all or any part of their term and (y) the principal amount of any Parity Reimbursement Obligation) due on a certain future date for which no Sinking Fund Installments have been established, or (ii) the unsatisfied balance of any Sinking Fund Installments due on a certain future date for such Bonds, or (iii) if such future dates coincide as to different Bonds, the sum of such principal amount of Bonds and of such unsatisfied balance of Sinking Fund Installments due on such future date.

"**Privatization**" has the meaning set forth in the OSA.

"**Property Tax Settlement**" as used in the Resolution, means the Authority's program of rebates and credits to System customers in respect of the amounts otherwise payable by the Suffolk Taxing Jurisdictions as refunds of taxes and payments in lieu of taxes relating to Shoreham.

"**PSA**" or "**Power Supply Agreement**" means the Amended and Restated Power Supply Agreement that commenced in May 2013, between GENCO and LIPA, as amended and supplemented.

"**Rate Covenant**" means the covenants by the Authority in the Resolution to establish and maintain System fees, rates, rents, charges and surcharges at a level sufficient to achieve Revenues sufficient to pay Debt Service, Operating Expenses and other expenses.

"**Rate Stabilization Fund**" means the fund by that name established by the Resolution, and used for any lawful purpose of the Authority or LIPA, including but not limited to making any deposits required by the Resolution to any Fund or Account, in accordance with the Resolution.

"**Redemption Price**" means, when used with respect to a Bond or portion thereof, the principal amount thereof plus the applicable premium, if any, payable upon either optional or mandatory redemption thereof pursuant to the Resolution.

"**Reimbursement Obligation**" shall have the meaning provided under the heading "Special Provisions Relating to Option Securities, Financial Contracts, Subordinated Credit Facilities, Parity Obligations and Subordinated Indebtedness" in the summary of the Resolution.

"**Required Deposits**" means the amount, if any, payable into the Operating Expense Fund, the Debt Service Fund, the Parity Contract Obligations Fund, the Subordinated Indebtedness Fund, LIPA Unsecured Debt Fund and the PILOTs Fund, but in each case only to the extent such payments are required to be made from Revenues.

"**Retained Assets**" means (i) certain regulatory assets of LILCO, including the Shoreham Regulatory Asset, (ii) the judgments, actions and claims of LILCO for refunds of property taxes, including the judgment resulting from the litigation contesting the assessment of certain Shoreham Nuclear Power Station property and (iii) other intangible assets of LILCO's former retail electric business, including the right to provide electric service in the Service Area.

"**Revenue Fund**" means the fund into which Revenues are deposited by the Authority or by LIPA, unless required by the Resolution to be deposited to any other Fund or Account, in accordance with the Resolution or the Financing Agreement.

"**Revenues**" means all revenues, rates, fees, charges, surcharges, rents, proceeds from the sale of LIPA Assets, proceeds of insurance, and other income and receipts, as derived in cash, directly or indirectly from any of LIPA's operations, by or for the account of the Authority or LIPA, including but not limited to (i) all payments received by the Authority or LIPA with respect to the Promissory Notes, (ii) any guaranty of performance under any System Agreement and (iii) all dividends received by the Authority as a result of ownership of any stock or other evidences of an equity interest in LIPA; provided, however, that Revenues shall not include (a) any Transition Charge, (b) any of the foregoing attributable directly or indirectly to the ownership or operation of any Separately Financed Project, or (c) any federal or State grant moneys the receipt of which is conditioned upon their expenditure for a particular purpose unless the Authority determines that such grant moneys shall constitute Revenues. Notwithstanding the foregoing, Revenues also shall not include any amounts, or amounts from any sources, as may be specified from time to time by a Supplemental Resolution; provided, however that at the time such Supplemental Resolution becomes effective the tests set forth in the Resolution under the heading "**Conditions Precedent to Delivery of Bonds**" in the Resolution shall be satisfied in accordance with the Resolution.

"**Separately Financed Project**" means any such project financed by revenues or other income derived solely from the ownership or operation of such project or from other funds withdrawn from the Revenue Fund in accordance with the Resolution.

"**Service Area**" or "**LIPA Service Area**" means the Counties of Suffolk and Nassau and that portion of the County of Queens known as the Rockaways constituting LILCO's electric franchise area as of the effective date of the

Act. “**Service Area**” does not include the Nassau County Villages of Freeport and Rockville Centre, and the Suffolk County Village of Greenport.

“**Shoreham**” means the Shoreham Nuclear Power Station located at Shoreham, Long Island.

“**Shoreham Credits**” means credits to the bills of System ratepayers arising from the settlement of the Shoreham Property Tax Litigation, in each of the five years of 1998-2003 in Nassau County and the Rockaways in the aggregate amount of $50 million per year and in Suffolk County in the aggregate amount of $30 million per year.

“**State**” means the State of New York.

“**Subordinated Indebtedness**” means any bond, note or other evidence of indebtedness issued by LIPA in furtherance of its corporate purposes under the Act and secured by a pledge of the Trust Estate subordinate to the pledge thereof made by the Resolution in favor of the Bonds and Parity Obligations and otherwise as provided by the Resolution. Subordinated Indebtedness shall include, but shall not be limited to, Option Securities, Reimbursement Obligations other than Parity Reimbursement Obligations, and Financial Contracts to the extent provided by the Resolution.

“**Subordinated Indebtedness Fund**” means the fund established in accordance with the Resolution for payment of the principal and redemption price of and interest on Subordinated Indebtedness, subject to the provisions of the Resolution.

“**Supplemental Resolution**” or “**Supplemental Resolutions**” means, as the context requires, (a) the Twenty-Sixth Supplemental Resolution or (b) a resolution or resolutions of the Authority authorizing the issuance of a Series of Bonds or otherwise amending or supplementing the Resolution, adopted in accordance with the Resolution.

“**System**” means the Retained Assets and any System Improvements, but shall not include any Separately Financed Projects.

“**System Agreements**” means any agreements relating to the operation or maintenance of the System, the supply of power and energy to the System, and the provision of transmission and distribution services and capacity for the System.

“**System Budget**” means the combined Authority Budget and LIPA Budget, as amended or supplemented, adopted or in effect for a particular Fiscal Year, as provided in the Resolution and in the Financing Agreement.

“**System Improvement**” means 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 LIPA, including any capacity or output in which LIPA has an interest, heretofore or hereafter authorized by the Act or by other applicable State statutory provisions, including but not limited to demand side management programs; provided, however, that the term “System Improvement” shall not include any Separately Financed Project.

“**T&D System**” means the electricity transmission and distribution system owned by LIPA from time to time and all other assets, facilities, equipment or contractual arrangements of LIPA used to provide the transmission and distribution of Power and Energy within or to the Service Area.

“**Transition Charge**” means any rates, fees, charges or surcharges relating to the System or the customers thereof established by irrevocable rate order or other action or instrument, and applicable to or by the Authority or LIPA, in conjunction with the issuance of debt or other securities under a separate resolution, indenture or similar instrument (other than the Resolution) to the extent such rates, fees, charges or surcharges are pledged or otherwise encumbered or conveyed as security for such debt or other securities.

“**Trust Estate**” means collectively: (i) all payments received by the Authority from LIPA under the Financing Agreement, and all rights to collect and receive the same; (ii) all Revenues and all right, title and interest of the Authority in and to the Revenues, including all rights of the Authority to collect and receive the same, including but not limited to (a) all payments received by the Authority with respect to the Promissory Notes and all right, title and interest of the Authority in and to the Promissory Notes, including all rights of the Authority to collect and receive amounts payable thereunder and (b) any dividends received by the Authority as a result of ownership of any common or preferred stock or other evidences or an equity interest of the Authority in LIPA, and all rights to receive the same; (iii) the proceeds of sale of Bonds until expended for the purposes authorized by the Resolution; (iv) all Funds, Accounts and subaccounts established by the Resolution, including securities credited thereto and investment earnings thereon; and (v) all funds, moneys and securities and any and all other rights and interests in property, whether tangible or intangible, from time to time hereafter by delivery or by writing of any kind conveyed, mortgaged, pledged, assigned or transferred as and for additional security under the Resolution for the Bonds by the Authority, or by anyone on its behalf, or with its written consent, to the Trustee, which is authorized by the Resolution to receive any and all such property at any and all times, and to hold and apply the same subject to the terms of the Resolution.

APPENDIX C

LIST OF CUSIP* NUMBERS

Series	CUSIP	Maturity/ Mandatory Purchase	Coupon or Yield	Serial/Term
Electric System General Revenue Bonds				
Capital Appreciation Bonds				
1998A	542690CG5	12/1/2022	5.300%	CABs
1998A	542690CH3	12/1/2023	5.300%	CABs
1998A	542690CJ9	12/1/2024	5.300%	CABs
1998A	542690CK6	12/1/2025	5.300%	CABs
1998A	542690CL4	12/1/2026	5.300%	CABs
1998A	542690CM2	12/1/2027	5.300%	CABs
1998A	542690CN0	12/1/2028	5.300%	CABs
Capital Appreciation Bonds				
2000A	542690NV0	6/1/2022	5.900%	CABs
2000A	542690NW8	6/1/2023	5.910%	CABs
2000A	542690NX6	6/1/2024	5.920%	CABs
2000A	542690NY4	6/1/2025	5.930%	CABs
2000A	542690NZ1	6/1/2026	5.940%	CABs
2000A	542690PA4	6/1/2027	5.950%	CABs
2000A	542690PB2	6/1/2028	5.950%	CABs
2000A	542690PC0	6/1/2029	5.950%	CABs
Current Interest Bonds				
2003C	542690UY6	9/1/2029	5.250%	Term
(Federally Taxable - Issuer Subsidy - Build America Bonds)				
Current Interest Bonds				
2010B	542690W65	5/1/2024	5.450%	Serial
2010B	542690W73	5/1/2025	5.600%	Serial
2010B	542690W81	5/1/2026	5.700%	Serial
2010B	542690W99	5/1/2041	5.850%	Serial
Current Interest Bonds				
2012A	542691FC9	9/1/2037	5.000%	Term
2012A	542691FB1	9/1/2042	5.000%	Term
Current Interest Bonds				
2012B	5426902D3	9/1/2022	5.000%	Serial
2012B	5426902E1	9/1/2023	5.000%	Serial
2012B	5426902F8	9/1/2024	5.000%	Serial
2012B	5426902G6	9/1/2025	5.000%	Serial
2012B	5426902H4	9/1/2026	5.000%	Serial
2012B	5426902J0	9/1/2027	5.000%	Serial
2012B	5426902K7	9/1/2029	5.000%	Serial
Current Interest Bonds				
2014A	5426903D2	9/1/2034	5.00%	Serial
2014A	5426903E0	9/1/2035	5.00%	Serial
2014A	5426903F7	9/1/2039	5.00%	Term

Series	CUSIP	Maturity/ Mandatory Purchase	Coupon or Yield	Serial/Term
2014A	5426903B6	9/1/2039	4.00%	Term
2014A	5426903C4	9/1/2044	5.00%	Term
Current Interest Bonds				
2014B	5426903M2	9/1/2024	3.883%	Serial
2014B	5426903N0	9/1/2025	3.983%	Serial
2014B	5426903P5	9/1/2026	4.133%	Serial
LIBOR Floating Rate Tender Notes				
2014C	5426903A8	5/1/2033	Variable	Term
Current Interest Bonds				
2015B	5426904Q2	9/1/2023	5.00%	Serial
2015B	5426904R0	9/1/2024	5.00%	Serial
2015B	5426904S8	9/1/2025	3.00%	Serial
2015B	5426905F5	9/1/2025	5.00%	Serial
2015B	5426904T6	9/1/2026	5.00%	Serial
2015B	5426904U3	9/1/2027	5.00%	Serial
2015B	5426904V1	9/1/2028	5.00%	Serial
2015B	5426904W9	9/1/2029	5.00%	Serial
2015B	5426904X7	9/1/2030	5.00%	Serial
2015B	5426904Y5	9/1/2031	5.00%	Serial
2015B	5426904Z2	9/1/2032	5.00%	Serial
2015B	5426905A6	9/1/2033	5.00%	Serial
2015B	5426904G4	9/1/2034	5.00%	Serial
2015B	5426904H2	9/1/2035	5.00%	Serial
2015B	5426905G3	9/1/2036	5.00%	Serial
2015B	5426905H1	9/1/2037	5.00%	Serial
2015B	5426905J7	9/1/2038	5.00%	Serial
2015B	5426904J8	9/1/2040	4.00%	Term
2015B	5426904K5	9/1/2045	5.00%	Term
LIBOR Floating Rate Tender Notes				
2015C	5426904F6	5/1/2033	Variable	Term
Current Interest Bonds				
2016B	542691FE5	9/1/2022	5.00%	Serial
2016B	5426907W6	9/1/2023	5.00%	Serial
2016B	5426907X4	9/1/2024	5.00%	Serial
2016B	5426907Y2	9/1/2025	5.00%	Serial
2016B	5426907Z9	9/1/2026	5.00%	Serial
2016B	5426908A3	9/1/2027	5.00%	Serial
2016B	5426908B1	9/1/2028	5.00%	Serial
2016B	5426908C9	9/1/2029	5.00%	Serial
2016B	5426908D7	9/1/2030	5.00%	Serial
2016B	5426908E5	9/1/2031	5.00%	Serial
2016B	5426908F2	9/1/2032	5.00%	Serial
2016B	5426908G0	9/1/2033	5.00%	Serial
2016B	5426908H8	9/1/2034	5.00%	Serial
2016B	5426908J4	9/1/2035	5.00%	Serial
2016B	5426908K1	9/1/2036	5.00%	Serial
2016B	5426908L9	9/1/2041	5.00%	Term
2016B	5426908M7	9/1/2046	5.00%	Term

Series	CUSIP	Maturity/ Mandatory Purchase	Coupon or Yield	Serial/Term
Current Interest Bonds				
2017	542691AC4	9/1/2023	5.000%	Serial
2017	542691AD2	9/1/2024	5.000%	Serial
2017	542691AE0	9/1/2025	5.000%	Serial
2017	542691AF7	9/1/2026	5.000%	Serial
2017	542691AG5	9/1/2027	5.000%	Serial
2017	542691AH3	9/1/2028	5.000%	Serial
2017	542691AJ9	9/1/2029	5.000%	Serial
2017	542691AK6	9/1/2030	5.000%	Serial
2017	542691AL4	9/1/2031	5.000%	Serial
2017	542691AM2	9/1/2032	5.000%	Serial
2017	542691AN0	9/1/2033	5.000%	Serial
2017	542691AP5	9/1/2034	5.000%	Serial
2017	542691AQ3	9/1/2035	5.000%	Serial
2017	542691AR1	9/1/2036	5.000%	Serial
2017	542691AS9	9/1/2037	5.000%	Serial
2017	542691AT7	9/1/2042	5.000%	Term
2017	542691AU4	9/1/2047	5.000%	Term
Current Interest Bonds				
2018	542691BE9	9/1/2023	5.000%	Serial
2018	542691BF6	9/1/2024	5.000%	Serial
2018	542691BG4	9/1/2025	5.000%	Serial
2018	542691BH2	9/1/2026	5.000%	Serial
2018	542691BJ8	9/1/2027	5.000%	Serial
2018	542691BK5	9/1/2028	5.000%	Serial
2018	542691BL3	9/1/2029	5.000%	Serial
2018	542691BM1	9/1/2031	3.375%	Serial
2018	542691BN9	9/1/2032	5.000%	Serial
2018	542691BP4	9/1/2033	5.000%	Serial
2018	542691BQ2	9/1/2034	5.000%	Serial
2018	542691BR0	9/1/2035	5.000%	Serial
2018	542691BS8	9/1/2036	5.000%	Serial
2018	542691BT6	9/1/2037	5.000%	Serial
2018	542691BU3	9/1/2038	5.000%	Serial
2018	542691BV1	9/1/2039	5.000%	Serial
Current Interest Bonds				
2019A	542691CA6	9/1/2023	5.00%	Serial
2019A	542691CB4	9/1/2024	5.00%	Serial
2019A	542691CC2	9/1/2025	5.00%	Serial
2019A	542691CD0	9/1/2026	5.00%	Serial
2019A	542691CE8	9/1/2027	5.00%	Serial
2019A	542691CF5	9/1/2028	5.00%	Serial
2019A	542691CG3	9/1/2029	5.00%	Serial
2019A	542691CH1	9/1/2030	5.00%	Serial
2019A	542691CJ7	9/1/2031	5.00%	Serial
2019A	542691CK4	9/1/2034	4.00%	Serial
2019A	542691CL2	9/1/2035	4.00%	Serial
2019A	542691CM0	9/1/2036	3.00%	Serial
2019A	542691CN8	9/1/2037	4.00%	Serial
2019A	542691CP3	9/1/2038	4.00%	Serial
2019A	542691CQ1	9/1/2039	4.00%	Serial

Series	CUSIP	Maturity/ Mandatory Purchase	Coupon or Yield	Serial/Term
Mandatory Tender Bonds				
2019B	542691CR9	9/1/2049	Variable	Term
Current Interest Bonds				
2020A	542691CT5	9/1/2023	5.00%	Serial
2020A	542691CU2	9/1/2024	5.00%	Serial
2020A	542691CV0	9/1/2025	5.00%	Serial
2020A	542691CW8	9/1/2026	5.00%	Serial
2020A	542691CX6	9/1/2027	5.00%	Serial
2020A	542691CY4	9/1/2028	5.00%	Serial
2020A	542691CZ1	9/1/2029	5.00%	Serial
2020A	542691DA5	9/1/2030	5.00%	Serial
2020A	542691DB3	9/1/2031	5.00%	Serial
2020A	542691DC1	9/1/2032	5.00%	Serial
2020A	542691DD9	9/1/2033	5.00%	Serial
2020A	542691DE7	9/1/2034	5.00%	Serial
2020A	542691DF4	9/1/2035	5.00%	Serial
2020A	542691DG2	9/1/2036	5.00%	Serial
2020A	542691DH0	9/1/2037	5.00%	Serial
2020A	542691DJ6	9/1/2038	5.00%	Serial
2020A	542691DK3	9/1/2039	4.00%	Serial
2020A	542691DL1	9/1/2040	4.00%	Serial
Mandatory Tender Bonds				
2020B	542691DM9	9/1/2050	Variable	Term
Federally Taxable Current Interest Bonds				
2020C	542691DP2	9/1/2023	0.764%	Serial
Medium Term Notes				
2021	542691DY3	9/1/2025	1.00%	Serial
Current Interest Bonds				
2021A	542691DZ0	9/1/2022	5.00%	Serial
2021A	542691EA4	9/1/2023	5.00%	Serial
2021A	542691EB2	9/1/2024	5.00%	Serial
2021A	542691EC0	9/1/2025	5.00%	Serial
2021A	542691ED8	9/1/2026	5.00%	Serial
2021A	542691EE6	9/1/2027	5.00%	Serial
2021A	542691EF3	9/1/2028	5.00%	Serial
2021A	542691EG1	9/1/2029	5.00%	Serial
2021A	542691EJ5	9/1/2030	1.50%	Serial
2021A	542691EH9	9/1/2030	5.00%	Serial
2021A	542691EK2	9/1/2031	5.00%	Serial
2021A	542691EL0	9/1/2032	4.00%	Serial
2021A	542691EM8	9/1/2033	4.00%	Serial
2021A	542691EN6	9/1/2034	5.00%	Serial
2021A	542691EP1	9/1/2035	5.00%	Serial
2021A	542691EQ9	9/1/2036	5.00%	Serial
2021A	542691ER7	9/1/2037	4.00%	Serial
2021A	542691ES5	9/1/2038	4.00%	Serial

Series	CUSIP	Maturity/ Mandatory Purchase	Coupon or Yield	Serial/Term
2021A	542691ET3	9/1/2039	4.00%	Serial
2021A	542691EU0	9/1/2040	3.00%	Serial
2021A	542691EV8	9/1/2041	4.00%	Serial
2021A	542691EW6	9/1/2042	4.00%	Serial
Mandatory Tender Bonds				
2021B	542691EX4	9/1/2051	Variable	Term
Federally Taxable Current Interest Bonds				
2021C	542691EY2	9/1/2023	0.359%	Serial

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* CUSIP numbers have been assigned by an organization not affiliated with the Authority and are included solely for the convenience of the holders of the Authority's bonds. The Authority is not responsible for the selection or uses of these CUSIP numbers, nor is any representation made as to the correctness of the CUSIP numbers as indicated in this Appendix A.