

CREDIT OPINION

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New Issue

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Long Island Power Authority, NY

New Issue – Moody's assigns A3 to LIPA's Series 2017 General Revenue Bonds; Outlook is Stable

Summary Rating Rationale

Moody's Investors Service assigned an A3 rating to Long Island Power Authority's (LIPA or the Authority) (NY) \$350 million Electric System General Revenue Bonds, Series 2017. These securities will rank on parity with LIPA's A3-rated outstanding senior lien debt. The rating outlook is stable.

The A3 rating reflects the utility's strong cost recovery mechanisms that support a stable and predictable cash flow stream and the economic strength and size of LIPA's service territory in the Long Island counties of Nassau and Suffolk. Other considerations supporting the A3 rating include improved operating and customer satisfaction measures and transparent and credit supportive regulatory relationships.

The rating recognizes commitments LIPA has received at both federal and state levels to assist with continuing storm hardening investment and to provide for lower interest cost through allowed securitization transactions. These efforts have helped to limit the size of requested rate increases while allowing LIPA to continue investing in operational and systems improvements.

Credit Strengths

- » Economic strength and size of the service territory
- » Credit supportive rate plan outcome
- » Expectation for sustained improvement in financial metrics and liquidity
- » Improved customer satisfaction levels

Credit Challenges

- » High electric rates among municipal electric issuers
- » Highly leveraged balance sheet
- » Increased near-term capital spending program, mitigated in part by FEMA grant funds
- » Rate regulated system could add challenges during periods of stress

Rating Outlook

The stable outlook reflects an expectation that LIPA's cost recovery mechanism will continue to provide a more stable and predictable cash flow profile.

Factors that Could Lead to an Upgrade

- » The rating is well-positioned at the lower end of the A category.
- » A sustainable improvement in credit metrics could give rise to a higher rating. For example, consideration of a higher rating could occur if the fixed obligation charge coverage on LIPA's obligations were to reach 1.40 times while its debt ratio declined below 100%, both on a sustained basis.
- » Establishment of a meaningful debt service reserve for the revenue bonds.

Factors that Could Lead to a Downgrade

- » Unexpected deterioration in financial metrics, including fixed obligation charge coverage declining to below 1.1 times and total days cash on hand declining to below 90 days on an ongoing basis.

Key Indicators

Exhibit 1

Long Island Power Authority					
	2012	2013	2014	2015	2016
Debt Outstanding (\$'000)	9,555,281	9,692,661	10,087,297	9,838,329	9,945,369
Debt Ratio (%)	131%	129%	126%	114%	110%
Adjusted Days Liquidity on Hand (incl. Bank Lines) (days)	48	122	135	165	192
Adjusted Debt Service Coverage (x) (Post Transfers/PILOTs - All Debt)	1.11x	1.42x	1.15x	1.14x	1.11x

Source: Moody's Investors Service

Detailed Rating Considerations

Revenue Generating Base

Strength and size of service territory

LIPA delivers electricity to approximately 1.1 million customers in the New York counties of Nassau and Suffolk and a small portion of Queens. With median household incomes well above the national average and low unemployment rates, the area economy is arguably one of the strongest in the country and continues to be a primary positive factor underpinning the rating.

Credit Supportive Rate Plan

LIPA is currently operating under a credit supportive three-year rate plan through December 2018 that included \$254 million of cumulative electric distribution rate increases and approved automatic recovery mechanisms, such as a revenue decoupling mechanism (RDM) and a delivery service adjustment (DSA). Collectively, these mechanisms insulate LIPA's cash flows from, among others, revenue variations that result from changes in economic conditions, weather or energy efficiency programs as well as higher-than-budgeted storm costs and interest expense.

After December 2018, the Authority is required to submit a proposed rate increase for Department of Public Service (DPS) review if it would increase the rates by more than 2.5% annually. In addition, the Authority is permitted to place rates in effect on an interim basis. The Authority's Board retains final rate setting power. The DPS is the staff arm of the New York Public Service Commission and was required to review LIPA's three-year rate plan and to make recommendations to LIPA's board.

The passage of the LIPA Reform Act by the New York State Assembly and Senate in 2013 provided LIPA the opportunity to refinance a significant amount of LIPA's general revenue bonds with lower coupon securitization debt rated Aaa (sf). These refinancing activities have reduced LIPA's interest burden relative to historical levels with such savings being passed onto customers.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Power rates among highest in nation

LIPA's average electric rates remain among the highest in the country. In 2015, LIPA's residential rates of 19.2 cents per kWh exceeded those of other similarly sized public power issuers including Los Angeles Department of Water and Power (LADWP: Aa2 stable), Sacramento Municipal Utility District (Aa3 stable) and JEA, FL Water and Sewer Enterprise (Aa2 stable) at 15.4 cents per kWh, 13.5 cents and 11.7 cents, respectively. LIPA's rates are more competitive, however, when compared to regional peers, including Consolidated Edison Company of New York (26.3 cents) and Connecticut Light and Power Company (20.0 cents).

High electric rates expose LIPA to public and political scrutiny, especially when rate hikes are requested to address system reliability needs.

Significant financial leverage profile

LIPA remains highly levered, limiting the utility's financial flexibility. Specifically, LIPA's debt obligations, including capital leases and securitization bonds, was approximately \$10 billion at year end 2016 and its debt ratio stood at 110%. While we acknowledge the financial benefit of LIPA's securitization debt for the Authority, debt service costs for the securitization debt are in LIPA rates and will continue to be so for an extended period. LIPA's securitization debt has increased to \$4.1 billion as of December 31, 2016 while senior lien debt has declined to \$3.5 billion. Going forward, we expect LIPA's absolute level of debt to grow as it funds needed capital investments. Although the absolute debt level is likely to remain elevated, we expect LIPA's debt ratio to continue to decline with scheduled amortization and is in alignment with management's plan to reduce overall system leverage.

The Securitization Law, enacted under the LIPA Reform Act and as amended, allows for a total issuance of up to \$4.5 billion of restructuring bonds by the Utility Debt Securitization Authority (UDSA), an affiliate of LIPA, with proceeds used to repay higher coupon revenue bonds.

Operational and Financial Performance

Operational

The day-to-day operations of the electric system have been the responsibility of PSEG-Long Island, a subsidiary of Public Service Enterprise Group Inc. (PSEG: Baa1 stable), since 2014 under a contract that extends to December 31, 2025. Services include the day-to-day operation and maintenance of the T&D System, customer service, billing and collection, meter reading and forecasting.

Under the contract, PSEG-Long Island is paid a fixed management fee and may earn incentives related to specified performance metrics. Moreover, all the costs of operating and maintaining the Authority's T&D systems incurred by PSEG-Long Island are passed through to and paid for by the Authority.

The transition to operations by PSEG-Long Island has been successful. Customer complaints have declined since 2014 while key measures of customer service and satisfaction have shown improvement. In fact, LIPA was recognized as the most improved utility in the nation according to J.D. Power's Residential Customer Service Satisfaction Score which compared scores from 2013 to 2017. Increased communications with customers and a new outage management system are factors that likely contributed to the improved score. We consider LIPA's improved performance as a credit positive.

Increased near-term capital spending program

System reliability is expected to benefit from an enhanced capital investment program estimated to cost approximately \$2.8 billion between 2016-2019. By comparison, LIPA's capital expenditures during period 2013-2015 totaled approximately \$1.2 billion.

The centerpiece of the enhanced capital investment program is a \$730 million storm-hardening program focused on hardening some of the systems most vulnerable circuits and substations. Importantly, LIPA has secured a federal grant to fund 90% of the cost of storm-hardening program. Federal funding is viewed positively from a credit perspective as it enables the utility to harden its system without the need to recover these particular costs from ratepayers and with less incremental indebtedness.

Financial

LIPA's financial position has strengthened as its securitization debt has resulted in lower interest expense for the Authority. Given lower interest expense and higher revenues, management projects minimum fixed obligation charge coverage ratios of 1.25x over 2018 and 2019, which is an improvement from 2014 to 2016, when that ratio averaged 1.13x. While the incremental improvement is expected

to be slow but steady, we believe that LIPA's cost recovery mechanisms increase the likelihood of the utility being able to achieve these financial objectives.

LIQUIDITY

Improved liquidity profile

LIPA's internal liquidity profile has improved with total days cash on hand at approximately 143 days in 2016 compared to 123 days in 2013. The improvement has been driven in part by a requirement since December 2013 that the Authority prefund 90 days of operating and maintenance expenses into an account for use by PSEG-Long Island. Separately, and not included in our calculations, LIPA had restricted cash of approximately \$470 million at year end 2016 that was provided by FEMA to fund its storm-hardening program.

LIPA's external liquidity arrangements include a \$350 million revolving credit facility due March 2019, and \$625 million of commercial paper capacity backstopped by a like amount of letters of credit. In accordance with LIPA's August 2014 board resolution, the amount of commercial paper notes and revolving credit outstanding may not exceed \$1.0 billion. Commercial paper outstanding as of December 31, 2016 was \$406 million. As of year-end 2016, the combination of LIPA's unrestricted cash balances and commercial paper availability resulted in approximately 143 days of liquidity on hand.

LIPA's Board requires the utility to maintain cash on hand and available credit of at least 120 days of operating expenses. Our rating recognizes the lack of a dedicated debt service reserve fund which remains a comparative weakness in LIPA's otherwise strengthened liquidity profile. That said, LIPA had \$129 million at year-end 2016 in OPEB funds that are unrestricted and available for debt service, if needed.

Debt and Other Liabilities

DEBT STRUCTURE

LIPA has approximately \$10 billion of total debt outstanding including about \$4.1 billion of securitization bonds issued by UDSA, \$3.5 billion of senior lien debt, and \$2.0 billion of capital leases. At 12/31/2016, approximately 24% of LIPA's total debt is variable rate.

DEBT-RELATED DERIVATIVES

The Authority uses derivative instruments to manage the impact to its customers of changing interest rates and market prices, including the purchase of fuel oil, natural gas, and electricity. At 12/31/2016, these derivative positions did not have a material impact on the Authority's financial position.

PENSIONS AND OPEB

The Authority's employees participates in the New York State and Local Retirement System, which is a cost sharing, multiple employer and public employee retirement system. The plan benefits are provided under the provisions of the New York State Retirement and Social Security Law that are guaranteed by the state constitution and may be amended only by the State Legislature. In addition, the cost of pensions and other post-retirement health and life insurance benefits (OPEBs) for the LIPA-serving workforce of its service provider are a contractual obligation of LIPA. As of January 1, 2014, PSEG-LI estimated its prior service cost obligation to be approximately \$126 million. The unfunded pension obligation as of December 31, 2016 was approximately \$128 million.

Management and Governance

The Authority is governed by a Board of Trustees. The membership of the Board of Trustees is limited to nine, five of whom are appointed by the Governor, two by the Majority Leader of the NY State Senate and two by the Speaker of the NY State Assembly. The Authority's Board retains final rate setting power.

Day-to-day operations of LIPA's electric system are handled by PSEG-Long Island. Staffing at the Authority is required to be kept at levels only necessary to ensure that the Authority is able to meet obligations with respect to its bonds and all applicable statutes and contracts, and to oversee the activities of PSEG-Long Island.

Legal Security

The 2017 Bonds will be issued *pari passu* to all outstanding senior debt obligations of the Authority and are secured by the revenues generated by the operation of LIPA's electric transmission and distribution system. The bond resolution contains a basic flow of funds

including a Rate Stabilization Fund. The Authority is required at all times maintain on deposit in the Rate Stabilization Fund an amount not less than \$150,000,000. There is no debt service reserve fund, which we consider credit negative.

Use of Proceeds

The \$350 million issuance will fund in part the Authority's \$761 million capital budget for 2018. Cash from operations and FEMA grants will provide the remainder of funding. The capital projects to be funded cover a vast array of projects. Some examples include installing 200 smart switches to minimize storm-related outages, replacing 60,000 feet of underground cable, upgrading four substations to improve service reliability, and rebuilding 320 miles of distribution circuits with stronger wires and poles.

Obligor Profile

LIPA was established in 1986 as a corporate municipal instrumentality of the State of New York under the Long Island Power Authority Act (the LIPA Act). In 1998, the Authority became the retail supplier of electric service in most of Nassau and Suffolk Counties and the Rockaway Peninsula of Queens by acquiring the Long Island Lighting Company (LILCO) as a wholly owned subsidiary which does business as LIPA. LIPA's assets currently consist of a transmission and distribution system that is used to serve approximately 1.1 million customers in an approximately 1,230 square mile service territory.

Scorecard Factors and Other Considerations

The grid indicated rating of A3 is the same as the assigned rating of A3.

Note: The grid is a reference tool that can be used to approximate credit profiles in the U.S. Public Power Electric Utility Industry in most cases. However, the grid is a summary that does not include every rating consideration. Please see U.S. Public Power Electric Utilities with Generation Ownership Exposure Rating Methodology for more information about the limitations inherent to grids.

Exhibit 2

Rating Factor Scorecard

Factor	Subfactor	Score
1. Cost Recovery Framework Within Service Territory		Aa
2. Willingness and Ability to Recover Costs with Sound Financial Metrics		A
3. Generation and Power Procurement Risk Exposure		A
4. Competitiveness		A
5. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year average) (days)	A
	b) Debt ratio (3-year average) (%)	B
	c) Adjusted Debt Service Coverage or Fixed Obligation Charge Coverage (3-year average) (x)	Baa
Preliminary Grid Indicated rating from Grid Factors 1-5		A2
Notching	6. Operational Considerations	0.0
	7. Debt Structure and Reserves	-0.5
	8. Revenue Stability and Diversity	0.0
Grid Indicated Rating		A3

Source: Moody's Investors Service

Methodology

The principal methodology used in this rating was US Public Power Electric Utilities With Generation Ownership Exposure published in March 2016. Please see the Rating Methodologies page on www.moody's.com for a copy of this methodology.

Ratings

Exhibit 3

Long Island Power Authority

Issue	Rating
LIPA Series 2017 General Revenue Bonds	A3
Rating Type	Underlying LT
Sale Amount	\$350,000,000
Expected Sale Date	12/05/2017
Rating Description	Revenue: Government Enterprise

Source: Moody's Investors Service

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