Long Island Power Authority

Summary of the 2020 Financial Policy Report

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PFM Financial Advisors

www.pfm.com

Discussion Topics

Recap of 2015 Report Recommendations and Results

2020 Recommended Revisions to the Financial Policy

Impacts of the Recommendations

Summary

Recap of the 2015 Report

- Prior to 2015, LIPA's financial strength, metrics, and credit ratings positioned LIPA as the "low outlier" among its peer group of major public power utilities

- LIPA was paying materially higher interest rates and bank credit costs than its peers

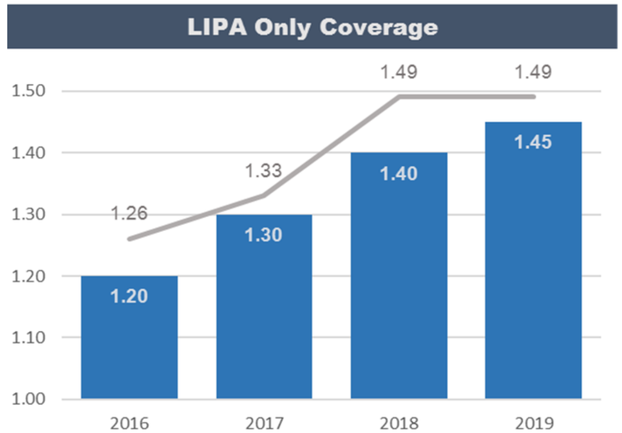
- The higher financing costs had a direct impact on customer costs, and put LIPA at risk to unexpected and adverse events in its operating environment and the financial markets

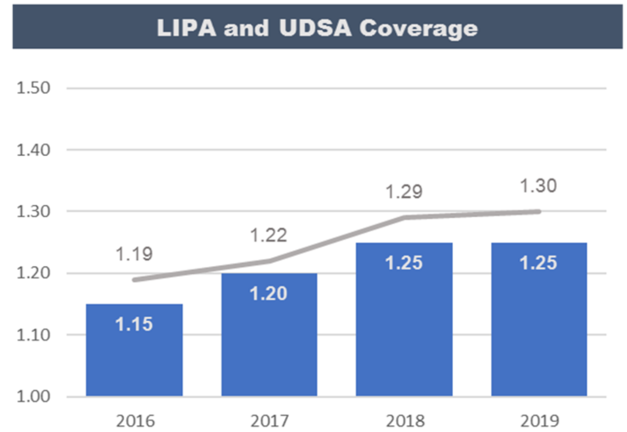
- The 2015 Report contained recommendations designed to elevate LIPA's financial condition from "at risk" to "viable", and achieve credit rating upgrades to the mid-A level:
  - Gradually improving fixed obligation coverage (cash flow for debt service and cap ex)
  - Use of "automatic" Cost Recovery Mechanisms for timely recovery of highly variable or uncertain costs
  - Monitoring/improving other financial metrics (liquidity/leverage)

- LIPA's success in establishing and achieving targets led to credit rating upgrades and materially reduced financing costs; directly benefiting customers.

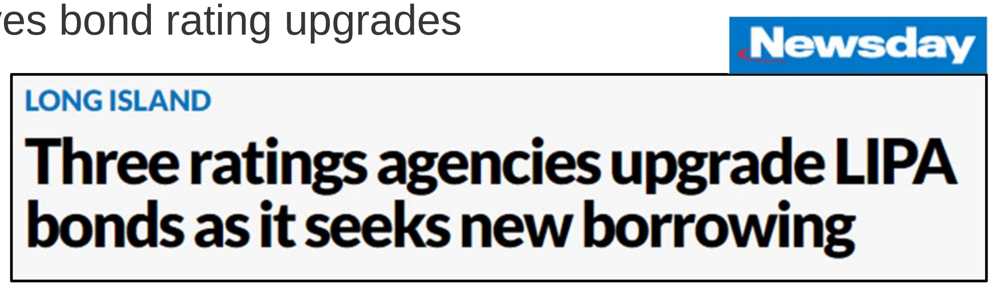
Recap of the 2015 Report

- LIPA achieves and exceeds financial objectives





- Improvement drives bond rating upgrades


Newsday

LONG ISLAND

Three ratings agencies upgrade LIPA bonds as it seeks new borrowing

(September 6, 2019) Fitch Ratings, Moody's and Standard & Poor's cited LIPA's improved financial metrics and controls, including a policy of keeping more cash on hand to fund operations… …in upgrading the Authority's debt, which had traditionally been among the lowest-rated among national public utilities. All three rated LIPA's outlook as "stable."

2020 Recommended Revisions to the Financial Policy

- LIPA is on a sound path to continued, gradual financial improvement
  - LIPA is a solid A credit
  - Any policy changes should balance near term affordability and long-term benefit

- However, LIPA remains the most highly leveraged of its large public power peer group

Public Power Peer Group Utility	Sr Bond Rating	Debt Ratio (%)
Long Island Power Authority, NY	**A2**	**97.5**
Salt River Project, AZ	Aa1	42.3
Orlando Utilities Commission, FL	Aa2	47.4
Austin Electric Enterprise, TX	Aa3	48.1
Seattle Electric Enterprise, WA	Aa2	54.6
Sacramento Muni Utility Dist, CA	Aa3	57.4
San Antonio Combined Utility Enterprise, TX	Aa1	58.1
Omaha Public Power District, NE	Aa2	63.7
Los Angeles Dept of Water & Power (LADWP), CA	Aa2	65.1
Average of Other Peer Group Members		54.6

- And more exposed to financial impacts of external events (storms, COVID, market disruption)

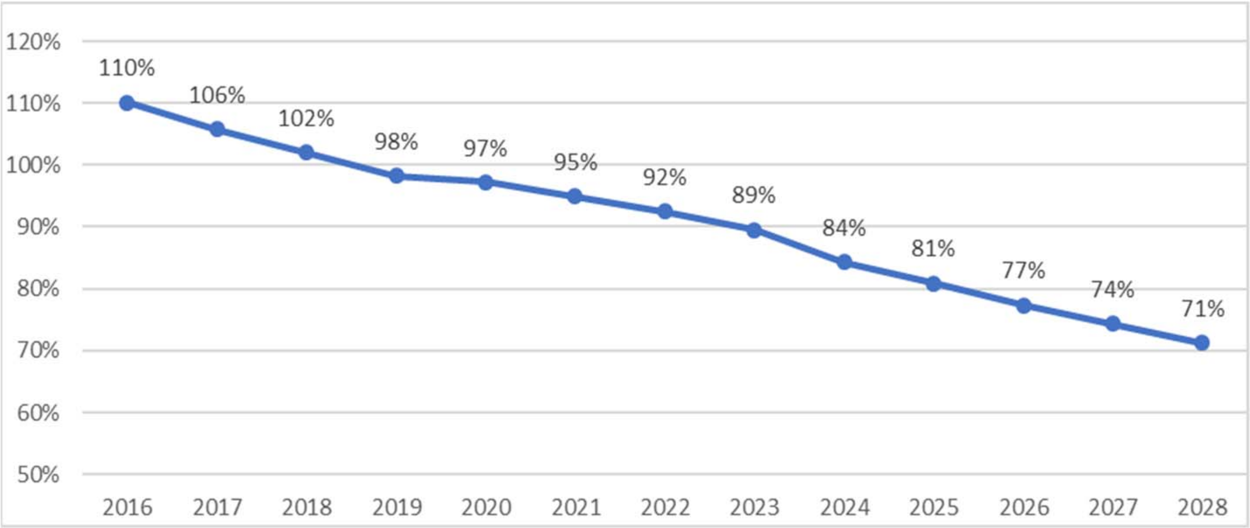
- PFM recommends a phased-in increase of the LIPA-Only coverage target up to 1.40x

Impacts of the Recommendations

- Additional, measured improvement in LIPA's Debt-to-Assets ratio is warranted
  - Achievable with a slight increase in the LIPA-Only coverage target from 1.35X to 1.40X
  - This will also achieve LIPA's long-term objective of limiting debt reliance to 64% of cap ex
  - COVID-19, Storm Costs and OPEB funding argue for a phase-in of the 1.40X target in 2022
  - The higher target can be achieved with modest rate impacts due to significant potential refinancing savings on LIPA and UDSA debt

- Reasonable targets and consistent achievement will deliver results

LIPA Historical and Projected Debt-to-Assets Ratio



Summary

- LIPA's financial and credit ratings improvement to date will translate to over $1 Billion in cost savings over the long-run, through:

  - lower new money borrowing costs
  - enhanced debt refunding savings
  - lower bank credit costs
  - greater access to low-cost, variable-rate debt

- Further affordable, achievable improvement will "de-risk" LIPA's balance sheet and reduce exposure to external disruptions, while lowering the long-term cost of electricity for customers

- This should improve LIPA's bank credit capacity and costs, and create the potential for further credit rating upgrades

- Investors will recognize and reward adherence to prudent objectives

- Questions and Comments

FINANCIAL POLICY REPORT FOR THE BOARD

PREPARED BY PFM FINANCIAL ADVISORS

NOVEMBER 18, 2020

LIPA
Long Island Power Authority

CONTENTS PAGE

EXECUTIVE SUMMARY

In 2015, the LIPA Board of Trustees requested that PFM Financial Advisors ("PFM") provide a report (the "2015 Report") containing financial policy recommendations that would reduce LIPA's debt over time to prudent industry levels, ensure consistent access to the capital markets on reasonable terms, and lower the long-term cost of electricity for LIPA's customers.

The 2015 Report's recommendations were adopted by the Board of Trustees at the December 2015 meeting and reflected in the Board Policy on Debt and Access to the Credit Markets (the "Financial Policy").

After five years of experience with the Financial Policy, the LIPA Board of Trustees requested that PFM undertake a review of the Policy.

As a result of the Board's Policy, **LIPA has received four credit rating upgrades since 2013 and achieved the stated Policy goal of mid-A ratings in 2019,** which were affirmed by all three rating agencies in 2020. The rating agencies, Moody's Investor Services, Fitch, and Standard & Poor's, cited the following key factors for such upgrades:

- Improved Coverage Ratios
- De-Leveraged Debt-to-Assets Ratio
- Adequate Liquidity
- Robust Cost Recovery Mechanisms

The Board's Financial Policy has resulted in a steady decline in the cost of borrowing, which has directly benefited LIPA's customers. This improvement reflects the bond market's assessment that LIPA has become a more credit-worthy borrower, meriting a lower cost of debt, which translates into customer savings.

LIPA continues to have elevated levels of debt compared to peer utilities. However, the Board's Policy, if followed, will result in continued de-leveraging of LIPA over time, achieving the Board's goal of prudent industry standard levels of debt by 2028.

PFM recommends that LIPA continue its present course with a few Policy modifications. The Board's current Financial Policy calls for fixed-obligation coverage of 1.35x of LIPA debt service and lease payments. The Policy also calls for borrowing 64% or less of capital expenditures. The 1.35x fixed obligation coverage ratio is projected to be insufficient to meet the 64% or less borrowing threshold. To reduce borrowing, PFM recommends:

- Increasing the fixed-obligation coverage ratio target to 1.40x in 2022;
- Phasing in the funding of Other Post Employment Benefit ("OPEB") benefits from Operating Expenses rather than from fixed-obligation coverage;
- Continuing to use CRMs for costs that are outside the utility's control and could fluctuate materially, resulting in greater than anticipated borrowing (or alternatively, to budget for a level of fixed obligation coverage in excess of the Board's target ratio); and
- Maintaining the target for cash and available credit at 120 days of operating expense.

These recommendations should enable LIPA to achieve a Debt-to-Assets ratio of 70% by 2028. A 70% Debt-to-Assets ratio would still leave LIPA at the upper end of its municipal utility industry peer group for leverage.

It is important to note there are near-term issues such as the COVID-19 pandemic; and long-term challenges, including meeting the Board's clean energy and service improvement objectives. These near- and long-term challenges may affect LIPA's year-to-year ability to achieve certain financial objectives. Based on projections, these could result in a lengthening of the period to achieve a 70% Debt-to-Assets ratio. However, the long-range goal should be one of continued de-leveraging and gradual improvement in LIPA's financial condition.

LIPA's improved financial performance, improved credit ratings, and lower borrowing costs represent the benefits of establishing and following prudent financial objectives. LIPA's customers have benefited from the financing cost savings resulting from the Board's prudent Financial Policy.

BACKGROUND ON PUBLIC POWER FINANCIAL POLICIES

In 2015, PFM issued its 2015 Report and recommendations to LIPA. As the Board reviews its Financial Policy, PFM has been requested to provide an update to continue to reduce LIPA's debt over time to prudent industry levels, ensure consistent access to the capital markets on reasonable terms, and lower the long-term cost of electricity for LIPA's customers.

The 2020 Report: (1) evaluates LIPA's performance against the established targets, (2) discusses the credit rating agencies' reactions to LIPA's financial performance, and (3) evaluates potential adjustments to the Financial Policy to maintain LIPA's recent favorable financial trajectory.

There are several factors public power utilities consider in establishing financial policies. Listed below are the major financial metric categories credit analysts examine in order to determine relative credit strength in the public power industry.

i. Coverage Ratios

Debt service coverage is the amount of funds available, after payment of operating costs, to pay debt service; divided by the principal and interest due in the year. Considerations specific to LIPA's approach to coverage include:

- LIPA, like many utilities, has debt-like features in certain long-term power purchase agreements. In calculating coverage, such costs are excluded from operating expenses and considered debt service in the calculation of a utility's total "Fixed Obligation Coverage." The rating agencies and credit analysts focus intently on this broader measure of cash flow coverage.
- LIPA's utilization of Utility Debt Securitization Authority ("UDSA") securitization debt as a low-cost financing alternative is unique among public power utilities. Some rating agencies consider the fixed obligation coverage ratio on only LIPA debt, while others combine the LIPA and UDSA coverage requirements into a single composite ratio.

ii. Debt Ratios and Leverage

Credit analysts are also concerned with the amount of debt a utility owes in comparison to its assets. Leverage is the relationship between debt and other sources of capital and the degree to which an entity uses debt to finance its assets.

In 1998, LIPA borrowed over $7.0 billion to acquire the Long Island Lighting Company (LILCO). At the time, the transaction was the largest municipal debt financing ever issued in the nation.

To reduce the cost of LIPA's debt, in 2013, the LIPA Reform Act created the Securitization Law and established the UDSA. The Securitization Law allowed the UDSA to issue restructuring bonds totaling approximately $4.5 billion, the proceeds of which refunded LIPA bonds and generated total net present value debt service savings of $492 million for LIPA's customers.

In addition, PFM recommended LIPA reduce its leverage by achieving a lower Debt-to-Assets ratio. As with coverage ratios, there are multiple methods to calculate leverage and debt ratios. LIPA uses the Debt-to-Assets ratio outlined by Moody's Investors Services described below:

(Gross debt – debt service funds – interest payable – debt service reserve funds)

Divided by

(Gross fixed plant assets – accumulated depreciation + net working capital)

(Net working capital is defined as cash and investments plus receivables expected to be collected minus current liabilities unrelated to debt.)

This calculation provides a good indication of overall financial strength by comparing "net debt" to "net assets." With the adoption of the Board's Financial Policy in 2015, and reduced reliance on debt funding for the capital program, **LIPA was able to generate considerable cash flow for capital funding, thereby improving its Debt-to-Assets ratio from 110% in 2015 to roughly 98% in 2020.**

iii. Liquidity and Days Cash on Hand

Most municipal and investor-owned utility financial policies include liquidity targets. The targets often specify which funds can be drawn upon to meet liquidity needs. The targets may also establish the timeframe for rebuilding cash balances if they are drawn down below targeted reserve levels. **LIPA targeted to maintain liquidity levels equal to roughly 120 days of average cash expenditures.** This level is consistent with other large public power utilities and within the range viewed by rating agencies as prudent and reasonable.

iv. Cost Recovery Mechanisms

The existence of effective CRMs for volatile or hard-to-predict costs is an important, positive consideration for credit analysts who follow public power utilities. CRMs reduce the chance unexpected cost increases could reduce debt service coverage and liquidity metrics. The resulting stability in financial performance enables a utility with CRMs to function with less coverage and lower liquidity than a utility that is unable to make these timely adjustments to reflect actual costs (and thus defers these costs for future collection).

RECOMMENDATIONS FROM THE 2015 REPORT

PFM's 2015 Report provided three general recommendations:

Recommendation #1: Establish Fixed Obligation Coverage Ratio Targets That Support Mid-Single-A (A2/A/A) Credit Ratings Within Five Years by achieving the following key financial metric targets:

- "LIPA-only" Fixed Obligation Coverage of 1.45x over the next four years.[1]
- "Combined LIPA/UDSA" Fixed Obligation Coverage of 1.25x over the next four years.

Recommendation #2: Implement Cost Recovery Mechanisms to Enhance Financial Stability and Allow for Lower Overall Electric Rate Levels.

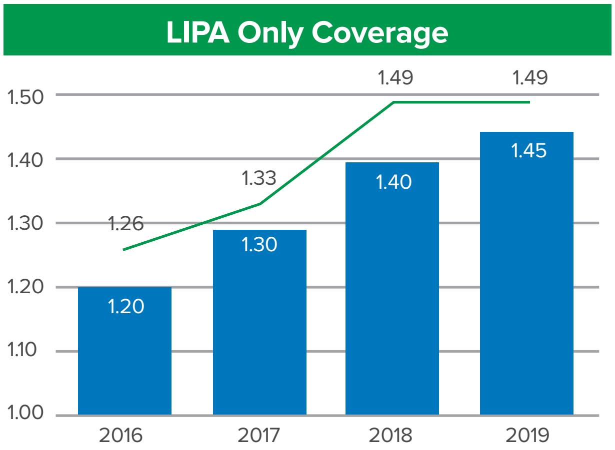
Recommendation #3: Monitor Other Financial Metrics (i.e., debt ratios) Affected by Coverage and which are Important to Credit Analysts.

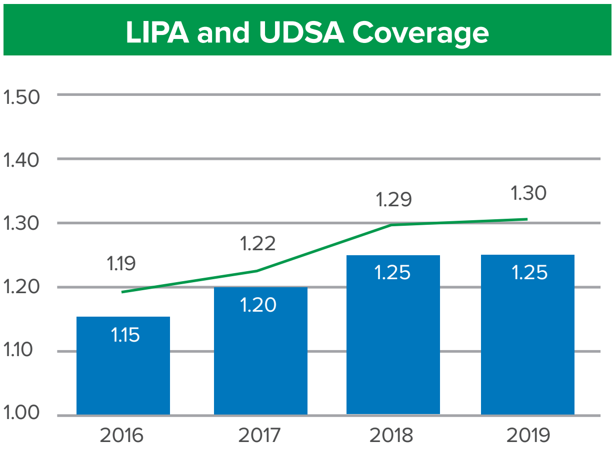
[1] Due to a subsequent change in accounting rules related to the capitalization of leases, PFM's original 1.45x fixed obligation coverage ratio is equivalent to 1.35x today.

LIPA'S FINANCIAL TARGETS AND RECENT BOND RATING UPGRADES

PFM's recommendations in the 2015 Report were designed to achieve mid-A level credit ratings within five years. PFM advised LIPA to: (1) develop sound financial policies; and (2) implement the policies consistently over three to five years. PFM believed LIPA would attain mid-A credit ratings by achieving a "LIPA-Only" Fixed Obligation Coverage ratio of 1.45x and a "Combined LIPA/UDSA" Fixed Obligation Coverage ratio of 1.25x over the three to five-year period. LIPA's Board of Trustees adopted these goals in the Board's Financial Policy.

As the following charts demonstrate, **LIPA has met or exceeded the Board's Financial Policy targets in each year.**





The Board's Financial Policy, which targeted the above fixed obligation coverage ratios, was intended to provide adequate cash flow to limit borrowing to no more than 64% of capital spending. LIPA exceeded its coverage target in every year and was able to fund less than 64% of its capital expenditures from new debt.

As a result of achieving (and exceeding) its financial targets, **LIPA achieved its objective of improved credit ratings in the mid-A range in 2019**. The excerpts from the rating agency reports contained in Appendix 1 provide a summary of the rationale for the upgrades, which relate primarily to LIPA's financial policy. PFM also recommends that readers examine each of the referenced reports in their entirety.

BENEFITS OF THE FINANCIAL POLICIES TO CUSTOMERS

Beyond achieving its target financial metrics and credit ratings, **LIPA accomplished its overall goal of reducing interest rates on its debt and delivering lower costs to its customers**. Most public power bond issuers compare their new issue borrowing costs over time to the Municipal Market Daily Index ("MMD Index"). The MMD Index contains a collection of independent market-based data with daily general market rates for the highest-rated (AAA) municipal market borrows. The municipal market describes interest rates on individual municipal bonds in terms of their "Spread to MMD." This is the amount by which the market rate on a particular bond exceeds the rate on the highest quality AAA-rated bonds. This differential is typically expressed in "basis points" – with 1 basis point equaling 0.01%, or 100 basis points equaling one full percentage point in interest rate. LIPA's new issue MMD spreads declined by roughly 75 basis points (or 3/4s of 1%) between 2012 and 2019.

This reduction in borrowing cost may not seem like a large amount. However, when this interest rate reduction is applied to a $500 million 30-year bond issuance, which is approximately the size of LIPA's annual borrowings, the annual interest savings is $3.8 million, and the interest savings total to about $75 million over 30 years.

In addition to the interest savings on the funds LIPA **does** borrow each year, **customers also realize the benefits of avoided principal and interest on the reduced amount of borrowing LIPA will require over time.** For example, if LIPA's prudent Financial Policy decreases annual borrowings by roughly $60 million each year, the avoided long-term debt service savings applicable to the $60 million debt avoidance is roughly another $100 million. LIPA's Financial Policy provides long-term savings on both borrowing and avoided borrowing. It is these savings, which will accrue to LIPA's customers, that are the primary objective of LIPA's Financial Policy.

Recent events related to the COVID-19 pandemic have caused concerns within the overall bond markets. New issue trading spreads relative to the AAA MMD Index have increased across the municipal market. While MMD spreads on LIPA's recent 2020 bond issue increased slightly relative to 2019 levels, the spreads were materially less than if LIPA had not achieved its recent credit rating upgrades. It should be noted that the interest rates on LIPA's recent 2020 bonds sale were the lowest in its history – attributable to LIPA's improved financial performance combined with lower interest rates in general.

RECOMMENDED REVISIONS TO THE FINANCIAL TARGETS

The Board's well-designed Financial Policy and CRMs have earned LIPA a high level of investor confidence, as exhibited by its improved credit ratings and lower borrowing costs. PFM believes LIPA is well positioned from the standpoint of its current financial direction and credit ratings. PFM's recommendation for LIPA's future financial targets are to continue with its current path with minor adjustments.

PFM's 2015 recommendations were designed to improve LIPA's credit ratings to the mid-A level within five years. PFM believes LIPA's adoption of the Policy revisions will keep LIPA on the path of continued improved financial strength based on reduced reliance on debt and an improving Debt-to-Assets ratio. Consistent achievement of the objectives will translate to further improvements in LIPA's credit ratings, likely within five years.

COVERAGE AND DEBT FUNDING STRATEGIES

The fixed obligation coverage ratio targets in the 2015 Report were designed to: (1) provide coverage metrics that were expected to achieve LIPA's mid-A credit rating objective, and (2) reduce LIPA's Debt-to-Assets ratio by providing sufficient cash flow to fund at least 36% of LIPA's capital expenditures.

LIPA is currently on a path to continually reduce its Debt-to-Assets ratio over time. Actions LIPA can take to impact this trend involve the amount of funds generated from coverage relative to the level of capital spending.

LIPA continues to be the most highly leveraged of its peer group of large public power utilities. While LIPA has made tremendous improvement to credit strength, its greater reliance on debt than its peer group translates to higher interest rates, higher debt-related costs, and more risk than its public power utility peer group.

Following is a listing of the Debt-to-Assets ratios of what PFM considers to be LIPA's most applicable peer group of large, vertically-integrated public power utilities. The Debt-to-Assets ratios were obtained from Moody's Financial Ratio Analysis data listing the most recently recorded Debt-to-Assets ratios in their database. The ratios calculated by Moody's may vary from those calculated by the utilities themselves, or by other third parties. We utilize the Moody's data for its calculation consistency across the group – as all of them are rated by Moody's.

Public Power Peer Group Utility	Sr Bond Rating	Debt Ratio (%)
Long Island Power Authority, NY	A2	97.5
Salt River Project, AZ	Aa1	42.3
Orlando Utilities Commission, FL	Aa2	47.4
Austin Electric Enterprise, TX	Aa3	48.1
Seattle Electric Enterprise, WA	Aa2	54.6
Sacramento Muni Utility Dist, CA	Aa3	57.4
San Antonio Combined Utility Enterprise, TX	Aa1	58.1
Omaha Public Power District, NE	Aa2	63.7
Los Angeles Dept of Water & Power (LADWP), CA	Aa2	65.1
Average of Other Peer Group Members		54.6

The average debt ratio of the other peer group members is roughly 55%, which compares to 97.5% for LIPA. The average Moody's rating of the other peer group members is close to Aa2. While it would certainly benefit LIPA to have a roughly 50% debt ratio and an Aa2 credit rating, it would simply be unaffordable for LIPA's customers to increase electric rates to achieve these metrics in the next 3-5 years.

LIPA cannot change the history behind its currently high Debt-to-Assets ratio. Nor can it burden customers by targeting an unachievable goal of getting to its peer group average over a few years. But it can stay on the current path of continued improvement. This is a path that has allowed LIPA to borrow at very competitive interest rates and gain the confidence of investors and rating agencies.

PFM recommends the LIPA Board consider two changes to ensure LIPA achieves a prudent balancing of its capital program from both debt and cash flow coverage for the next five years: (1) implement a slight increase to the fixed obligation coverage target beginning in 2022; and (2) phase in collection of OPEB expense as a component of operating expense, so that coverage dollars can be used predominately to lower borrowing needs for capital expenditures, thereby further improving LIPA's Debt-to-Assets ratio.

PFM's 2015 Report recommended a LIPA-only fixed-obligation coverage ratio of 1.45x beginning in 2019 and thereafter. The 1.45x coverage ratio target was adjusted by LIPA to reflect a new accounting definition of lease payments issued by the Government Accounting Standards Board (Statement no. 87 – Leases). The revised ratio of 1.35x coverage, combined with the new lease definition, provides the same level of cash flow available for capital improvement funding as the prior 1.45x coverage target.

PFM believes LIPA should increase its LIPA-only fixed obligation coverage ratio from 1.35x to 1.40x beginning in 2022 to reduce future borrowing. Transitioning from a 1.35x to a 1.40x coverage ratio will reduce LIPA's annual borrowings by approximately $33 million per year.

PRE-FUND LIPA'S FUTURE OBLIGATIONS FOR OTHER POST-EMPLOYMENT BENEFITS

LIPA "pre-funds" future obligations for Service Provider pension and employee OPEB benefits by contributing to a pension trust and a dedicated OPEB Account. Pre-funding involves contributing to reserves for these future obligations each year, rather than waiting until the obligations come due in the future.

Due to the high level of OPEB obligations upon transitioning to its new Service Provider, LIPA was not able to immediately collect such costs in rates derived from operating costs without causing undue burden on customer bills. Rather, the dedicated OPEB Account was built up over time based on a forecast of actuarially determined funding using funds generated from the coverage ratio (i.e. in lieu of reducing borrowing).

Given LIPA's actuarially determined OPEB expense has levelized, LIPA should change its source of annual OPEB Account funding to an operating expense, as opposed to the current approach of funding with coverage dollars. The new policy should be phased in over three years (2023 – 2025) to avoid a substantial increase in the revenue requirement for OPEB costs in one year.

A sound, consistent OPEB funding mechanism will allow LIPA to appropriately fund this material future financial obligation as it is incurred. This will more clearly align the timing and nature of the OPEB cost as a current year operating expense, and designate dollars collected and labeled as fixed obligation coverage to reduce borrowing needs for capital expenditures. Moving funding of OPEBs to operating expenses will reduce LIPA borrowing by approximately $30 million per year when fully implemented.

NEAR TERM IMPACTS OF COVID-19 AND TROPICAL STORM ISAIAS

LIPA's coverage ratio targets were designed to reduce LIPA's debt ratio by providing sufficient cash flow to fund at least 36% of LIPA's capital expenditures on an ongoing basis. Recent events have impacted financial results and the borrowing levels in LIPA's financial plan.

The financial impacts from the COVID-19 pandemic include loss of commercial revenues, waiver of various miscellaneous revenues, and higher operating expenses. LIPA is forecasting it will fall below its revenue and coverage targets for 2020. However, LIPA's strong cash position and access to the credit markets, which were a direct result of its strong financial policies, ensured these operating impacts were properly managed without imposing significant rate impacts on customers. In the midst of the COVID-19 crisis, the rating agencies maintained LIPA's credit ratings, with the caveat that potential further COVID-19 impacts were not yet known.

LIPA's finances were also affected by Tropical Storm Isaias, which devastated the North-East Atlantic coastal region in August of 2020. Damage on Long Island reached levels not seen since Superstorm Sandy, making it one of the most damaging storms ever to hit Long Island's electric grid, with estimated repair costs in the range of $300 million. LIPA expects FEMA to reimburse roughly 75% of the cost of restoration. However, typical FEMA reimbursements lag actual expenses considerably. LIPA has the financial responsibility to fund the restoration costs prior to the anticipated reimbursement. LIPA will also be responsible for any amounts that are not reimbursed by FEMA; and as such LIPA expects to use interim borrowing for storm costs. This will temporarily increase LIPA's debt levels.

With LIPA's strong financial policies in place, LIPA was able to manage both COVID-19 and Tropical Storm Isaias in 2020. However, their costs have led to temporary deterioration in certain of LIPA's financial metrics. PFM sees this as a temporary impact, and believes LIPA is positioned to meet its overall target of reducing its debt-levels over the longer term.

LIQUIDITY LEVELS

Liquidity levels and targets are designed to ensure a utility has sufficient cash on hand to meet ongoing cash flow needs – even in the event of revenue disruption or unexpected costs. LIPA's Board has established a goal of approximately $250 million of available cash on hand at all times, and a combination of cash and available borrowing lines equal to 120 days of operating expense. The rating agencies are generally comfortable with 90 to 150 days liquidity for A rated utilities, and LIPA's 120 days target is in the middle of this range. **PFM believes LIPA should maintain the current liquidity target as it falls in the midrange for what credit rating agencies and investors expect of a mid-A rated utility.**

COST RECOVERY MECHANISMS

Rating agencies and investors place considerable emphasis on LIPA's CRMs to enhance LIPA's ability to consistently deliver upon its financial objectives. The value of these CRMs is clear in the language of the credit rating report excerpts listed previously in this report, and further highlighted below.

Moody's Investors Service – September 06, 2019

While LIPA's fixed charge coverage ratio is somewhat weak for a mid-A rated public power utility, its cash flow stream is more stable than certain comparable utilities due to the strong suite of cost recovery mechanisms. For example, these mechanisms provide recovery should a shortfall from budgeted revenue and expense items occur due to external factors, including weather, storms and economic conditions.

Fitch Ratings – September 5, 2019

LIPA's revenue defensibility assessment is further supported by its electric rate structure that includes recovery mechanisms for more than 80% of its revenue requirements and a revenue decoupling mechanism that will annually adjust for the difference in actual revenues versus DPS recommended revenues. Most of the recovery mechanisms are adjusted at least annually, including the Authority's power supply charge which is adjusted monthly. LIPA's largest adjustment factor remains the fuel and purchased power adjustment charge, which recovers 50% of total revenue.

S&P Global Ratings – September 5, 2019

… the operational and management assessment reflects the benefits of a basket of financial tools that facilitate passing along to customers the changes it could experience in a wide range of variable costs, including a decoupling mechanism that tempers the exposure of energy sales and revenue to energy-efficiency programs, distributed generation, and weather.

The stable outlook reflects expectations of strengthening fixed charge coverage, the availability of robust pass-through mechanisms for recovering rising costs…

Beyond base rates, retail rates include monthly and other periodic adjustment mechanisms for recovering changes in sales, purchased power costs, delivery costs, debt service, storm costs, payments in lieu of taxes, and other adjustments. We consider these mechanisms as supporting revenue-stream stability. Among these is a revenue-decoupling mechanism that provides for the collection of revenues deemed to have been lost to energy-efficiency programs, distributed generation, weather, and changes in economic conditions.

The rating analysts' excerpts clearly support LIPA's CRMs as positive credit features. **PFM recommends LIPA continue to use CRMs to manage major variable cost components largely outside of the utility's control.** PFM is confident LIPA's customers will be well served by maintaining LIPA's CRMs and its financial objectives – along with potential future modifications to these policies as needed to reflect changing credit rating agency methodologies and emerging industry trends.

In the absence of a CRM for a significant variable cost component, LIPA should consider budgeting for a fixed obligation coverage ratio in excess of the minimum called for in the Board's Financial Policy. LIPA will only achieve its financial objectives by meeting its minimum financial ratios in each year.

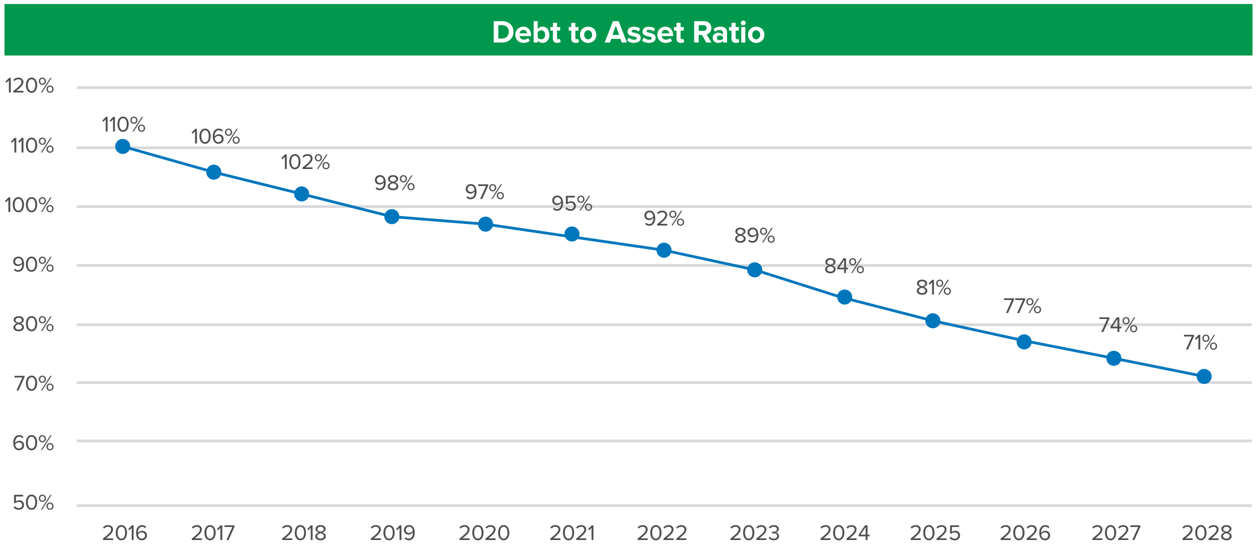
IMPACT OF RECOMMENDATIONS ON LIPA'S METRICS

The Board's Financial Policy targets roughly 36% of the capital program to be funded with coverage dollars. Based on projections provided by LIPA, it appears a LIPA-only fixed-obligation coverage ratio of 1.40x, combined with phasing in funding of OPEBs from operating expenses, will provide this level of coverage dollars for capital beginning in 2025, and gradually reduce LIPA's Debt-to-Assets ratio to a level of roughly 70% by 2028. These projections were based on a capital budget of approximately $850 million per year.

PERCENT OF CAPITAL FUNDED FROM DEBT	2021	2022	2023	2024	2025	2026	2027	2028
With Report Recommendations	72.0%	67.6%	66.2%	65.7%	62.6%	61.4%	58.4%	58.8%
No Change to Coverage Ratio and OPEB Policy	72.0%	71.8%	71.8%	72.3%	70.7%	69.3%	66.7%	66.9%

Without these adjustments, LIPA would fail to meet its upper threshold of 64% of debt funding of the capital program. Implementing the 1.40x coverage target will reduce LIPA's debt burden by approximately $500 million by 2028.

The following graph demonstrates LIPA's improvement since the inception of the Board's Financial Policy in 2016 and the path toward achieving a 70% ratio by 2028.



SUMMARY

PFM has reviewed LIPA's financial performance since the 2015 Report and believes:

- LIPA's adherence to the recommendations made in the 2015 Report as reflected in the Board's Financial Policy has produced significantly improved financial performance and has directly contributed to the upgrades to single-A credit ratings in 2019 by all three rating agencies.
- LIPA's financial projections demonstrate that major changes to LIPA's Financial Policy are not necessary to achieve LIPA's overall goal of maintaining coverage and cash flow to ensure financial strength and to reduced reliance on debt.

PFM recommends LIPA:

Coverage Ratios

- Increase the fixed obligation coverage ratio target to 1.40x in 2022 and maintain that level, subject to two qualifications:
  - The ratio may need reconsideration for 2024 and beyond if higher than expected capital spending is required;
  - Changes in accounting standards impacting LIPA's long-term lease obligations may require downward or upward adjustments to the coverage ratio in order to maintain the appropriate amount of coverage dollars to fund future capital expenditures.

Pension & Other Post-Employment Benefit Funding

- Transition to funding the OPEB Account with monies sourced and categorized as an operating expense in LIPA's consolidated budget. This will eventually lead to a prefunded plan that appropriately meets future obligations and allow coverage dollars to be used predominately to fund capital expenditures (thereby reducing debt);
- Continue to fund the Service Provider's Pension Trust from operating expenses.

Debt Funding Capital Ratios and Leverage

- Allow the percentage of Capital Expenditure Funded from New Debt to exceed 64% target on a forward-looking three-year rolling average in 2021 and 2022 as LIPA responds to the effects of the COVID-19 pandemic and Tropical Storm Isaias. Afterward the target percentage should return to 64% or below on a forward-looking basis;
- Adhere to a goal of achieving a Debt-to-Assets ratio of 70% by 2028, with continued improvement beyond that date. This metric will be managed through interim adjustments as needed to the annual targets for the fixed obligation coverage ratio.

Liquidity, Days Cash on Hand, and CRMs

- Maintain the cash and available credit target of 120 days which has successfully provided a suitable cushion for unanticipated events.
- Continue to use its CRMs to ensure collectability of costs that could fluctuate materially and are largely outside of the utility's control (or alternatively budget for a coverage ratio in excess of the minimum stated in the Board's Financial Policy).

APPENDIX 1 – 2019 RATING AGENCY REPORTS

MOODY'S INVESTORS SERVICE – SEPTEMBER 6, 2019

RATINGS RATIONALE

The upgrade and rating assignment reflect the economic strength of LIPA's service territory along with the continued improvement in LIPA's financial performance. Moreover, it considers our expectation for execution on the company's strategic goal focused on continual improvement on the company's financial position and operating performance. LIPA's key financial metrics in 2018 continue to improve. Specifically, the company's fixed charge coverage, as calculated by Moody's, improved to 1.27x in 2018 from 1.16x in 2017 and 1.11x in 2016, while its debt ratio declined to less than 100% from 110% during the same timeframe.

Going forward, we expect LIPA to maintain a fixed charge coverage in excess of 1.2x and its debt ratio to continue to trend downward. LIPA's capital spending in 2019 and 2020 are expected to exceed historical levels and approximate $1.6 billion over this timeframe. LIPA intends on funding approximately 65% of its capital expenditures with new debt, resulting in approximately $1 billion of incremental general revenue debt over this period. LIPA's debt ratio over this timeframe is expected to decline, however, driven by the sizeable increase in plant property and equipment combined with operating cash flow, scheduled amortization, and the use of remaining FEMA grant funds as a funding source.

While LIPA's fixed charge coverage ratio is somewhat weak for a mid-A rated public power utility, its cash flow stream is more stable than certain comparable utilities due to the strong suite of cost recovery mechanisms. For example, these mechanisms provide recovery should a shortfall from budgeted revenue and expense items occur due to external factors, including weather, storms and economic conditions. Moreover, its rate setting capacity is premised around an ability to meet a target debt service coverage ratio, which we view as a credit supportive feature.

RATING OUTLOOK

The stable outlook assumes LIPA maintains a sound operating track record while maintaining at least 140 days cash on hand for liquidity support. LIPA's days cash on hand in 2018 was approximately 160 days.

FACTORS THAT COULD LEAD TO AN UPGRADE

LIPA's rating is well-positioned at the mid-A category and is not expected to move upward in the foreseeable future. Longer term, 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 were to reach 1.50 times on a sustained basis while its debt ratio fell below 80%.

APPENDIX 1 – 2019 RATING AGENCY REPORTS

FITCH RATINGS – SEPTEMBER 5, 2019

ANALYTICAL CONCLUSION

The rating upgrade reflects LIPA's improving leverage ratio and Fitch's expectation that the deleveraging trend that began in 2015 will result in a sustained ratio of below 9.0x. The reduction in leverage is largely attributable to more robust operating cash flow, driven by series of rate increases and improved cost recovery, as well as debt balances that remain nearly unchanged. LIPA's very strong service area and its more disciplined approach to rate setting should sustain the authority's very strong revenue defensibility and overall performance even through a period of moderate stress, further supporting its financial profile and the final rating.

RATING SENSITIVITIES

Reversal of Deleveraging Trend: A reversal in LIPA's trend toward deleveraging, whether as a result of a failure to implement planned rate increases or higher than anticipated capital expenditures, and a resulting leverage ratio that fails to consistently remain below 9.0x would likely result in downward rating pressure.

Legal Ability to Set Rates

LIPA's revenue defensibility assessment is further supported by its electric rate structure that includes recovery mechanisms for more than 80% of its revenue requirements and a revenue decoupling mechanism that will annually adjust for the difference in actual revenues versus DPS recommended revenues. Most of the recovery mechanisms are adjusted at least annually, including the authority's power supply charge which is adjusted monthly. LIPA's largest adjustment factor remains the fuel and purchased power adjustment charge, which recovers 50% of total revenue.

Operating Risk – Above Average Operating Costs

LIPA's operating cost burden is assessed as midrange, reflecting operating costs that are well above the national average and have consistently exceeded 15 cents/kWh over the last five years. Despite limited generation needs, LIPA's five-year capital budget includes $3.26 billion of capital expenditures, which remains elevated. Favorably, LIPA expects to debt finance less than 64% of the planned expenditures. FEMA grants and cash from operations will provide the remainder of funding.

Financial Profile – Improving Cash Flow Supports Declining Leverage

LIPA's financial profile assessment reflects the authority's improving leverage ratio, cash flow and coverage metrics. Overall, FADS grew from $1.21 billion in 2014 to $1.39 billion in 2018. Coverage of LIPA's full obligations, which conservatively incorporates the authority's sizable PILOT payments and a portion of purchased power expense as fixed obligation, improved from 1.06x in 2014 to 1.21x in 2018. Leverage, as measured by the ratio of net adjusted debt to adjusted FADS, has also steadily improved from over 10.5x in 2014 to 8.79x at year-end 2018, due to the authority's improved cash flow and its accumulation of cash reserves.

LIPA's liquidity profile has also improved supporting a neutral assessment. Total liquidity, including borrowing capacity under its revolving credit agreement and commercial paper program, improved from 195 days in 2014 to 258 days in 2018. LIPA intends to maintain solid liquidity levels of at least $250 million in cash and available credit of at least 120 days of operating expenses.

APPENDIX 1 – 2019 RATING AGENCY REPORTS

S&P GLOBAL RATINGS – SEPTEMBER 5, 2019

S&P Global Ratings raised its rating on the Long Island Power Authority (LIPA), N.Y.'s $4.07 billion unsecured revenue bonds to 'A' from 'A-'. The outlook is stable. The upgrade reflects expectations of strong fixed charge coverage (FCC) metrics that require moderate rate increases. In addition, the operational and management assessment reflects the benefits of a basket of financial tools that facilitate passing along to customers the changes it could experience in a wide range of variable costs, including a decoupling mechanism that tempers the exposure of energy sales and revenue to energy-efficiency programs, distributed generation, and weather.

Our FCC calculation treats capacity charges paid to other generation owners as debt service rather than as operating expenses, because we view these payments as funding the suppliers' recovery of their investments in generation assets that they dedicate to LIPA. FCC was unusually robust at 1.5x in 2018 because of the year's low principal amortization. We consider liquidity to be very strong based on $952 million of unrestricted cash and investments at year-end 2018.

Outlook – The stable outlook reflects expectations of strengthening FCC, the availability of robust pass-through mechanisms for recovering rising costs, and favorable service area demographics that can support the utility's high rates.

Enterprise Risk Profile: Very Strong

In our opinion, the rate oversight distinguishes the utility from most other public power utilities. However, the several available pass-through and decoupling mechanisms could diminish the need for base-rate adjustments that exceed the threshold. Beyond base rates, retail rates include monthly and other periodic adjustment mechanisms for recovering changes in sales, purchased power costs, delivery costs, debt service, storm costs, payments in lieu of taxes, and other adjustments. We consider these mechanisms as supporting revenue-stream stability. Among these is a revenue-decoupling mechanism that provides for the collection of revenues deemed to have been lost to energy-efficiency programs, distributed generation, weather, and changes in economic conditions.

Financial Risk Profile: Strong

Debt and liabilities: Highly vulnerable

As of Dec. 31, 2018, the utility reported $3.8 billion of unsecuritized long-term debt, and $235 million of short-term debt. By comparison, its 2018 net position was only $495 million, translating into what we consider an extremely high debt-to-capitalization ratio of 89%. The utility has identified $3.1 billion of 2019-2023 capital needs, requiring almost $2 billion of new debt.

Coverage metrics: Strong

Securitization transactions produced multi-billion-dollar debt reductions and improved DSC of unsecuritized debt, which reached 1.8x in 2018 on the year's uncharacteristically low principal obligations. The minimum lease payments LIPA projects in the notes to its financial statements indicate that FCC could be at least 1.2x through 2023, which we consider strong.

Liquidity and reserves: Very strong

The utility recorded $952 million of unrestricted cash and investments on its balance sheet as of Dec. 31, 2018, which we view as representing a strong four-months' operating expenses. Undrawn capacity available under credit facilities brings this ratio up to about five-months' operating expenses.

LIPA

Long Island Power Authority