

February 15, 2020

To: Finance & Audit Committee
LIPA Board of Trustees

Re: Quarterly Report on Interest Rate Exchange Agreements
Quarter Ended December 31, 2019

Dear Finance & Audit Committee Members:

The Long Island Power Authority (“the Authority”, “LIPA”) is filing this report pursuant to reporting requirements outlined in the Comprehensive Guidelines for the Use of Interest Rate Exchange Agreements, as approved by the Board of Trustees on May 18, 2016.

Description of the Interest Rate Exchange Agreements

LIPA entered into a separate ISDA Master Agreement and Schedule to the Master Agreement (collectively, a “Master Agreement”) with each of the bank counterparties (each individually, a “Counterparty” and collectively, the “Counterparties”) listed in the table below. Each Master Agreement, together with the related confirmation or confirmations, is hereinafter referred to as an “Interest Rate Exchange Agreement”, “IREA” or “Swap”. Details of each IREA are included in the Summary, attached hereto as Appendix A. The notional amounts of each transaction are set forth below:

	Counterparty	Original Notional Amount (000s)	Outstanding Amount (000s)	Effective Date	Termination Date	Type of Swap
1	Wells Fargo Bank, N.A. (WFB)	\$150,000	-		Terminated	
2	Societe Generale, New York Branch (SG)	\$100,000	-		Terminated	
3	UBS AG (UBS)	\$587,225	\$587,225	6/1/2003	12/1/2029	Floating-to-Fixed
4	Merrill Lynch Capital Services, Inc. (MLCS)	\$502,090	\$438,405	7/1/2004	8/15/2033	Basis Swap
5	JPMorgan Chase & Co. (JPM)	\$251,045	\$219,203	7/1/2004	8/15/2033	Basis Swap
6	Citibank, N.A., New York (CB)	\$251,045	\$219,203	7/1/2004	8/15/2033	Basis Swap
7	Morgan Stanley Capital Services LLC (MSCS)	\$110,715	-		Matured	
8	Wells Fargo Bank, N.A. (WFB)	\$200,000	\$200,000	6/29/2015	6/29/2020 ¹	Total Return ²
9	Wells Fargo Bank, N.A. (WFB)	\$175,000	\$175,000	9/15/2016	9/1/2021	Total Return ³
10	Citibank, N.A. (CB)	\$251,510	\$251,510	9/1/2022	9/1/2042	Floating-to-Fixed
11	Wells Fargo Bank, N.A. (WFB)	\$164,860	\$164,860	9/1/2022	9/1/2029	Floating-to-Fixed

¹The Authority and Wells Fargo are currently in the process of formalizing an agreement to extend the termination date an additional three years until 6/29/2023.

²Based on the Authority’s Series 2015A Bonds (MMD FRN Rate), initially purchased by Wells Fargo pursuant to an Agreement Relating to Bonds between the Authority and Wells Fargo.

³Based on the Authority’s Series 2016A Bonds (MMD FRN Rate), initially purchased by Wells Fargo pursuant to an Agreement Relating to Bonds between the Authority and Wells Fargo.

The estimated total mark-to-market value of the transactions, as of December 31, 2019, is approximately negative \$195 million. The mark-to-market value excludes transaction costs and is calculated at prevailing mid-market rates. Therefore, it represents the hypothetical amount that LIPA would owe to the Counterparties if the transactions were terminated on that date absent transaction costs.

Ratings of Counterparties

Please note that ratings below are as of December 31, 2019

Bank Counterparty	Moody's	S&P	Fitch
UBS AG, Stamford Branch	Aa3	A+	AA-
Merrill Lynch Capital Services, Inc. ^a	A2	A-	A+
JPMorgan Chase & Co. ^b	A2	A-	AA-
Citibank, N.A., New York	Aa3	A+	A+
Wells Fargo Bank, N.A.	Aa2	A+	AA-

^aRatings reflect the ratings of Bank of America Corp.

^bThe original counterparty was Bear Stearns Capital Markets Inc.

- 1) UBS AG, Stamford Branch is a Swiss bank with ratings of Aa3/A+/AA-.
- 2) As of October 1, 2013, Bank of America completed the merger of its Merrill Lynch & Co., Inc. subsidiary into Bank of America Corporation ("BAC"). In connection with this merger, Bank of America Corp. assumed all of Merrill Lynch & Co., Inc.'s obligations including those of its subsidiaries. Merrill Lynch Capital Services, Inc. ("MLCS") is a Delaware corporation and was a subsidiary of Merrill Lynch & Co., Inc., therefore, Bank of America Corp. is the guarantor on the swap with MLCS, and is rated A2/A-/A+.
- 3) On May 30, 2008, The Bear Stearns Companies, Inc. ("TBSCI") was acquired by JPMorgan Chase & Co. (JPMC & Co.), a Delaware Corporation currently rated A2/A-/AA-. All payments payable by Bear Stearns Capital Markets, Inc. ("BSCM"), a subsidiary of TBSCI, are guaranteed by JPMC & Co. following the acquisition.
- 4) Citibank, N.A., New York, a National Banking Association, is rated Aa3/A+/A+.
- 5) Wells Fargo Bank, N.A., a National Banking Association, is rated Aa2/A+/AA-.

Risk Assessment

Counterparty Risk: This is the risk that a Counterparty (or its guarantor) will default under its agreement and LIPA loses the benefit of the hedge. If a counterparty were to default under its agreement when owing a termination payment to LIPA, LIPA may have to pay another entity to assume the position of the defaulting counterparty.

LIPA sought to limit counterparty risk in these transactions by contracting with highly rated counterparties (see “Ratings of Counterparties” above) or requiring guarantees and/or collateralization of the counterparty’s obligations under the IREA. LIPA monitors the credit rating and overall financial condition of the Counterparties (or their guarantors) and may exercise its right to assign the agreement to another counterparty, if necessary, to mitigate counterparty risk. LIPA also has the express written option, upon certain specified notice, to optionally terminate Swaps 4 through 6 and Swaps 8 through 11 at any time at market. Additionally, under Swaps 10 and 11 LIPA has the right to terminate at par (i.e. for no payment) at certain times (see “Termination Risk” below). The unilateral option to terminate is not provided in Swap 3 (UBS); however, Counterparty Risk on this swap is limited as the mark-to-market is negative. Moreover, LIPA has included additional termination provisions in all of its swaps as well as certain collateral posting arrangements, which limit exposure to lower-rated counterparties should the mark-to-market of the swaps become positive.

Termination Risk: Another risk associated with these transactions is the possibility that an agreement could be terminated by a Counterparty with LIPA owing a termination payment to the Counterparty. Only LIPA is entitled to terminate these transactions from time-to-time without cause. As long as LIPA fulfills its obligations under the contracts and does not default under the agreements, the Counterparties do not have the right to terminate these agreements. LIPA believes that termination risk is low because the Counterparties may terminate only upon the occurrence of certain events such as payment defaults, other defaults which remain uncured for 30 days after notice, the bankruptcy or insolvency of LIPA (or similar events), certain downgrades of LIPA’s and its insurer’s, if any, credit rating, or in the case of Swaps 8 and 9, certain events related specifically to the associated bonds. LIPA’s credit rating as of December 31, 2019 was A2/A/A, with stable outlooks from Moody’s, S&P, and Fitch. LIPA’s insurer on Swaps 3 and 4, Assured Guaranty Municipal Corp. (“AGM”), formerly Financial Security Assurance (“FSA”), was rated A2/AA by Moody’s and S&P as of December 31, 2019. Moody’s has a “Stable Outlook” for AGM, and S&P has a “Stable Outlook”.

With respect to Swap 3, an early termination event may occur should the claims-paying ability of AGM be rated below both A2 by Moody’s and A by S&P, and LIPA has not: (a) provided a replacement credit enhancement, (b) maintained a credit rating of at least either A3 by Moody’s or A- by S&P, or (c) negotiated a Credit Support Annex with UBS and provided collateral as required thereunder. Under such an event, the counterparty would have a right to terminate the transaction and LIPA may be required to make up to five annual payments of up to \$35 million for the first four years with the remaining balance due on the fifth year arising from such termination, depending on the market at that time. Additionally, should LIPA redeem any of the underlying bonds and not reassign the swap to other outstanding variable rate debt, the swap would terminate proportionately and be subject to the same deferred payment provisions identified above.

With respect to Swap 4, an early termination event may occur should LIPA be downgraded below either Baa3 by Moody's or BBB- by S&P, or the claims-paying ability of AGM be rated below either A3 by Moody's or A- by S&P and LIPA has not: a) provided replacement credit enhancement (including compliance with collateral posting provisions, which require: (i) the posting of the negative mark-to-market in excess of a \$30 million threshold if LIPA's lowest rating from any one of Moody's, S&P or Fitch falls to the Baa3/BBB-/BBB- level, or (ii) full collateralization if LIPA's lowest rating from any one of Moody's, S&P or Fitch falls below the Baa3/BBB-/BBB- level, as more fully described in "Collateral Posting" below), or b) provided a substitute swap insurance policy reasonably acceptable to MLCS. Under such an event, the counterparty would have a right to terminate the transaction and LIPA may be required to make a termination payment from such termination, depending on the market at that time.

With respect to Swap 5, an early termination event may occur should LIPA be downgraded below either Baa3 by Moody's or BBB- by S&P.

With respect to Swap 6 and Swap 10, an early termination event may occur should LIPA be downgraded by any one of Moody's, S&P or Fitch below Baa3/BBB-/BBB-, or if LIPA is downgraded by any one of Moody's, S&P or Fitch below Baa2/BBB/BBB and within 20 days of receiving notice of such downgrade from the counterparty LIPA has not (a) provided a guarantee, letter of credit, surety bond, insurance policy or other credit support document, (b) transferred the Swap to an acceptable counterparty, or (c) executed a credit support annex. Under Swap 10, LIPA has the right to terminate the swap at par (i.e. for no payment) beginning on September 1, 2027 and monthly thereafter.

With respect to Swaps 8 and 9 (Total Return Swaps), an early termination event may occur should the rating on the associated bonds (the Authority's Series 2015A Bonds - MMD FRN Rate and Series 2016A Bonds- MMD FRN Rate) be downgraded by any one of Moody's, S&P or Fitch below Baa3/BBB-/BBB-. Unlike Swaps 3-6 and 10-11, the counterparty also has the right to terminate following certain other events related specifically to the associated bonds, such as: if LIPA fails to pay principal or interest on the underlying bonds; if interest on the bonds is no longer deemed tax-exempt; if the bonds are found to be invalid, illegal or unenforceable; or if an event of default occurs under the purchase agreement for the bonds. If a termination event were to occur with respect to LIPA, the counterparty would have a right to terminate the transaction and LIPA would make or receive any payment arising from such termination, depending on the change in market value of the associated bonds. These termination events are similar to the termination events under LIPA's letter of credit and other bank agreements.

Additionally, under the structure of Swaps 8 and 9, upon the swap's maturity, a termination amount will be payable by either LIPA or the counterparty based on the market value of the associated bonds. The bonds are callable at par at the scheduled termination of the swap, and if called, would not result in a termination amount payable by either party.

With respect to Swap 11, an early termination event may occur should LIPA be downgraded by any one of Moody's, S&P or Fitch below Baa3/BBB-/BBB-. LIPA has the right to terminate this swap at par (i.e. for no payment) beginning on September 1, 2027 and monthly thereafter.

Collateral Posting: Under some of the swap agreements, LIPA may be required to post collateral to its counterparties in the event the mark-to-market is negative and its ratings fall below certain levels.

Under Swap 4, if LIPA's lowest rating from any one of Moody's, S&P or Fitch falls to the Baa3/BBB-/BBB- level it must post the negative mark-to-market in excess of a \$30 million threshold. A further downgrade from any one of Moody's, S&P or Fitch below the Baa3/BBB-/BBB- level would require LIPA to fully collateralize the mark-to-market in the event the counterparty does not exercise its termination rights under the agreement.

Under Swap 5, LIPA must fully collateralize the mark-to-market if its lowest rating from either Moody's or S&P falls to the Baa3/BBB- level.

Under Swap 11, LIPA must fully collateralize the mark-to-market if its lowest rating from Moody's, S&P or Fitch falls to the Baa3/BBB- level.

As of December 31, 2019, LIPA would be required to post a total of \$1.5 million in collateral upon a downgrade by Moody's or S&P to the Baa3/BBB- level. Collateral may be posted in the form of cash or eligible securities.

There are currently no collateral posting requirements with respect to Swaps 3, 6 and 10; however, LIPA may be required to execute documentation containing such provisions and post additional collateral upon the occurrence of certain events, as described further in "Termination Risk" above.

Swaps 8 and 9 are not subject to any collateral posting by LIPA.

Basis Risk: The variable interest rate (69.47% of 1-month LIBOR) LIPA receives under Swap 3 may differ from the amount LIPA is required to pay on associated similar amount of variable rate bonds⁴, potentially resulting in net increased payments by LIPA. This is referred to as "Basis Risk." LIPA's variable rate bonds have traded, from time to time, at yields above and below the variable rates received under Swap 3. LIPA has attempted to mitigate this risk by more closely matching the variable rate payable on its bonds to that received under Swap 3. Specifically, in December 2014, LIPA refunded \$150 million of outstanding variable rate bonds with Floating Rate Notes (FRNs) that bear interest at 70% of LIBOR, plus a fixed spread. Additionally, LIPA refunded \$200 million of outstanding variable rate bonds in June 2015 with MMD FRN bonds. The interest rate payable on these MMD FRN bonds, taking into account payments made and received under Swap 8 (69.4% of 1-month LIBOR plus a fixed spread), is closely associated with the floating rate received under Swap 3. Similarly, LIPA refunded \$175 million of outstanding variable rate bonds in September 2016 with MMD FRN bonds. The interest rate payable on these MMD FRN bonds, taking into account payments made and received under Swap 9 (69.4% of 1-month LIBOR plus a fixed spread), is closely associated with the floating rate received under Swap 3. In November 2015, LIPA refunded \$149,000,000 of outstanding variable rate bonds with FRNs that bear interest at 70% of LIBOR, plus a fixed spread.

In December 2019, LIPA executed two forward-starting fixed payer swaps (Swaps 10 and 11) in anticipation of issuing variable-rate bonds to refund the Series 2012A and 2012B Bonds in

⁴ Series 2016A is assumed to be hedged; however, upon the refunding of Series 2012C by Series 2016A, an equal amount of Swap 3, previously assigned to Series 2012C, was reassigned per the swap documentation to both Series 2015C and GR CP-1 (86.775mm and 88.225mm, respectively). As of March 23, 2018, GR Notes 4 replaced GR CP-1.

2022. The floating rate LIPA is set to receive on such swaps (70% of 1M LIBOR, or any potential fallback upon the discontinuation of LIBOR), may be different than the rate payable on the variable-rate refunding bonds. In such case, LIPA would be subject to Basis Risk on the synthetic fixed-rate structures.

In addition, LIPA has three basis swaps (Swaps 4, 5 and 6) whereby LIPA pays SIFMA and receives 70.5% of 1-Month LIBOR. On these swaps, LIPA is subject to the risk that SIFMA trades at a level higher than 70.5% of 1-Month LIBOR, thus resulting in negative cash flows. The relationship between these two rates can be affected by multiple variables, such as absolute levels of interest rates, supply and demand considerations, and tax factors. The weekly SIFMA/1-Month LIBOR ratio has fluctuated over time, having averaged 70.68% since the inception of these swaps (2004).

The Authority views Basis Risk as a limited form of variable rate exposure, and therefore takes Basis Risk into account when analyzing outstanding interest rate exposure, as shown in Appendix C.

Risk of Potential Discontinuation of LIBOR: The United Kingdom’s Financial Conduct Authority has announced that it will no longer require LIBOR panel banks to provide quotes to set the LIBOR benchmark as of the end of 2021. Swaps 3, 4, 5, and 6 are scheduled to still be in effect at such time and Swaps 10 and 11 are scheduled to become effective after such time. Following this date, it is unclear whether banks will continue to provide quotes voluntarily, or if LIBOR will continue to be deemed a viable index by market participants.

In the United States, the Alternative Reference Rates Committee (ARRC) has developed the Secured Overnight Financing Rate (SOFR) as an alternative risk-free rate, and subsequently identified SOFR as a possible replacement rate for LIBOR. SOFR is a broad measure of the cost of borrowing U.S. Treasury securities overnight. ARRC and market participants are currently in the process of identifying methodology for which LIBOR-based instruments may be transitioned into using SOFR, in the event LIBOR is no longer published or utilized.

It is currently unclear what the impact, if any, of such a transition could be on the Authority and its Swaps. The Authority is monitoring all developments related to the potential LIBOR discontinuation in order to understand how it may be affected going forward.

Interest Rate Exposure

As of December 31, 2019, LIPA’s net floating rate exposure is -7.19% as summarized in Appendix C.

Status of Qualified Independent Representative (“QIR”)

The Authority has reviewed and approved the use of QIRs meeting the standards established under the Dodd-Frank Act and contained at present in rulemaking by the Commodity Futures Trading Commission. The Authority’s QIR has previously represented that it meets all applicable standards and as of the date hereof, the Authority is not aware of any material changes to the status of such representation.

/s/ Kenneth Kane

Kenneth Kane

Interim Chief Financial Officer

Appendix A

<u>Appendix A</u>									
Swap Transaction Summary	3	4	5	6	8	9	10	11	
Corresponding Bond Series	2014C, 2015A, 2015C, GR CP	2011A, 2012A, 2012B, 2014A, 2014B			Series 2015A-1, A-2	Series 2016A	2022 Variable-Rate Refunding Bonds	2022 Variable-Rate Refunding Bonds	
Swap Type	Synthetic Fixed	Basis Swap			Total Return	Total Return	Synthetic Fixed	Synthetic Fixed	
Counterparty	UBS AG	Merrill Lynch Capital Services, Inc.	JP Morgan / Bear Stearns Capital Markets, Inc.	Citibank, N.A., New York	Wells Fargo Bank, N.A.	Wells Fargo Bank, N.A.	Citibank, N.A.	Wells Fargo Bank, N.A.	
Original Notional Amount	\$587,225,000	\$502,090,000	\$251,045,000	\$251,045,000	\$200,000,000	\$175,000,000	\$251,510,000	\$164,860,000	
Outstanding Notional Amount	\$587,225,000	\$438,405,000	\$219,202,500	\$219,202,500	\$200,000,000	\$175,000,000	\$251,510,000	\$164,860,000	
Effective Date	6/1/2003	7/1/2004	7/1/2004	7/1/2004	6/29/2015	9/15/2016	9/1/2022	9/1/2022	
Termination Date	12/1/2029	8/15/2033	8/15/2033	8/15/2033	6/29/2020	9/1/2021	9/1/2042	9/1/2027	
LIPA Pays	5.12%	SIFMA	SIFMA	SIFMA	69.4% of 1-Month LIBOR + 0.40%	69.4% of 1-Month LIBOR + 0.30%	1.8571%	1.315%	
LIPA Receives	69.47% of 1-Month LIBOR	70.5% of 1-Month LIBOR	70.5% of 1-Month LIBOR	70.5% of 1-Month LIBOR	Bond Rate (MMD Index plus Spread)	Bond Rate (MMD Index plus Spread)	70% of 1-Month LIBOR	70% of 1-Month LIBOR	
First Counterparty Payment Date	7/1/2003	7/15/2004	7/15/2004	7/15/2004	11/6/2015	11/8/2016	10/3/2022	10/3/2022	
First LIPA Payment Date	7/1/2003	7/15/2004	7/15/2004	7/15/2004	7/1/2015	10/3/2016	10/3/2022	10/3/2022	
Up Front Cash Payment to LIPA	\$82,000,000	\$17,500,000	\$8,750,000	\$8,750,000	-	-	-	-	
Payments Made by LIPA as of 12/31/2019	(\$498,509,656)	(\$90,876,678)	(\$45,245,855)	(\$45,245,828)	(\$11,977,174)	(\$8,514,235)	-	-	
Payments Received by LIPA as of 12/31/2019 (excluding upfront payment)	\$106,390,149	\$90,650,315	\$45,126,254	\$45,125,633	\$30,448,229	\$19,023,668	-	-	
LIPA Accrued Interest as of 12/31/2019	(\$2,505,493)	(\$262,803)	(\$131,401)	(\$131,401)	(\$264,283)	(\$216,665)	-	-	
Counterparty Accrued Interest as of 12/31/2019	\$572,853	\$243,502	\$121,751	\$121,751	\$555,511	\$801,889	-	-	
Mid Mark-to-Market Valuation @ 12/31/2019	(\$192,125,584)	(\$2,973,043)	(\$1,486,522)	(\$1,486,522)	\$900,042	\$1,322,324	\$1,353,842	(\$53,131)	

APPENDIX B

Additional Termination Events – Collateral Posting Thresholds

Under the respective Master Agreements, LIPA or its counterparty must post collateral in the event of certain downgrades, as described below:

Transaction	Counterparty	Relating to Counterparty Downgrade	Relating to LIPA Downgrade
1.	Terminated December 10, 2013		
2.	Terminated December 10, 2013		
3.	UBS AG (UBS)	No current collateral posting provisions. LIPA has the right to terminate the swap if UBS fails to maintain rating of A3 (Moody's) or A- (S&P) and fails to execute a Credit Support Annex (or CSA) with LIPA	No current collateral posting provisions. UBS has the right to terminate the swap if: <ol style="list-style-type: none"> 1 - Swap Insurer (AGM) fails to meet its payment obligations and such failure is continuing pursuant to the Swap Insurance Policy 2 - Insurer ratings fall below A2 (Moody's) and A (S&P) and an event of default has occurred with LIPA as the defaulting party 3 - All the Swap Insurer ratings fall below A2 (Moody's) and A (S&P) and LIPA has not: <ol style="list-style-type: none"> i) provided a replacement credit enhancement ii) maintained a credit rating of at least A3 (Moody's) or A- (S&P) iii) negotiated a Credit Support Annex with UBS and provided collateral as required thereunder
4.	Merrill Lynch Capital Services, Inc. (MLCS)	Rating of BAC (Guarantor of MLCS) falls below A3 (Moody's), A- (S&P), or A- (Fitch), as set out in CSA. In the event BAC falls below A3 (Moody's) or A- (S&P), LIPA has the right to terminate the swap.	Rating of LIPA falls to Baa3 (Moody's), BBB- (S&P), or BBB- (Fitch) (\$30 million threshold) or below Baa3 (Moody's), BBB- (S&P), or BBB- (Fitch) (\$0 threshold), as set out in CSA (Swap Insurer (AGM) provisions and/or ratings do not affect collateral posting requirements by LIPA). In the event LIPA falls below Baa3 (Moody's) or BBB- (S&P), or in the event AGM falls below A3 (Moody's) or A- (S&P) and LIPA does not provide a substitute insurance policy or credit enhancement/collateral (see "Termination Risk" above), MLCS has the right to terminate the swap.
5.	JPMorgan Chase & Co. (JPM)	Rating of JPMC & Co. (Guarantor of BSCM) falls below A3 (Moody's) or A- (S&P). In the event JPMC & Co. falls below Baa3 (Moody's) or BBB- (S&P),	Rating of LIPA falls below Baa2 (Moody's) or BBB (S&P). In the event LIPA falls below Baa3 (Moody's) or BBB- (S&P), BSCM has the right to terminate the swap.

LIPA has the right to terminate the swap.

Transaction	Counterparty	Relating to Counterparty Downgrade	Relating to LIPA Downgrade
6.	Citibank, N.A., New York (CB)	No current collateral posting provisions. LIPA has the right to terminate the swap if rating of CB falls below Baa3 (Moody's), BBB- (S&P), or BBB- (Fitch); or if rating of CB falls below A3 (Moody's), A- (S&P), or A- (Fitch) and CB has not provided a guarantee, letter of credit, surety bond, insurance policy or other credit support document, or Citibank has not executed a Credit Support Annex to be negotiated with LIPA	No current collateral provisions. CB has the right to terminate the swap if: 1 - Rating of LIPA falls below Baa3 (Moody's), BBB- (S&P), or BBB- (Fitch) 2 - Rating of LIPA falls below Baa2 (Moody's), BBB (S&P), or BBB (Fitch) and LIPA has not provided a guarantee, letter of credit, surety bond, insurance policy or other credit support document, or LIPA has not executed a Credit Support Annex to be negotiated with Citibank
7.	Matured September 1, 2015		
8.	Wells Fargo Bank, N.A. (WFB)	Rating of WFB falls below A3 (Moody's), A- (S&P), or A- (Fitch). In the event WFB falls below Baa1 (Moody's), BBB+ (S&P) or BBB+ (Fitch), LIPA has the right to terminate the swap.	LIPA does not post collateral under Swap 8. If the rating of the associated bonds (Series 2015A - MMD FRN Rate) falls below Baa3 (Moody's), BBB- (S&P), or BBB- (S&P), WFB has the right to terminate the swap.
9.	Wells Fargo Bank, N.A. (WFB)	Rating of WFB falls below A3 (Moody's), A- (S&P), or A- (Fitch). In the event WFB falls below Baa1 (Moody's), BBB+ (S&P), or BBB+ (Fitch), LIPA has the right to terminate the swap.	LIPA does not post collateral under Swap 9. If the rating of the associated bonds (Series 2016A - MMD FRN Rate) falls below Baa3 (Moody's), BBB- (S&P), or BBB- (S&P), WFB has the right to terminate the swap.
10.	Citibank, N.A. (CB)	No current collateral posting provisions. LIPA has the right to terminate the swap if rating of CB falls below Baa3 (Moody's), BBB- (S&P), or BBB- (Fitch); or if rating of CB falls below A3 (Moody's), A- (S&P), or A- (Fitch) and CB has not provided a guarantee, letter of credit, surety bond, insurance policy or other credit support document, or Citibank has not	No current collateral provisions. CB has the right to terminate the swap if: 1 – Rating of LIPA falls below Baa3 (Moody's), BBB- (S&P), or BBB- (Fitch) 2 – Rating of LIPA falls below Baa2 (Moody's), BBB (S&P), or BBB (Fitch) and LIPA has not provided a guarantee, letter of credit, surety bond, insurance policy or other credit support document, or LIPA has not executed a Credit Support Annex to be negotiated with Citibank.

executed a Credit Support
Annex to be negotiated with
LIPA.

11.	Wells Fargo Bank, N.A. (WFB)	Rating of WFB falls below A3 (Moody's), A- (S&P), or A- (Fitch). In the event WFB falls below Baa1 (Moody's), BBB+ (S&P), or BBB+ (Fitch), LIPA has the right to terminate the swap.	Rating of LIPA falls below Baa2 (Moody's), BBB (S&P), or BBB (Fitch). In the event LIPA falls below Baa3 (Moody's), BBB- (S&P), or BBB- (Fitch), WFB has the right to terminate the swap.
------------	---------------------------------	--	--

Appendix C	
Long Island Power Authority & UDSA Floating Rate Exposure	12/30/2019
Fixed Rate Bonds	
1998 A	91,095,853
2000 A	284,661,177
2003 C	36,645,000
2010 B	210,000,000
2011 A	18,315,000
2012 A	250,000,000
2012 B	179,035,000
2014A	413,070,000
2014B	113,485,000
2015B	115,050,000
2016B	378,515,000
2017	350,000,000
2018	430,000,000
2019 A	218,175,000
2019 B	284,250,000
Sub-Total (LIPA)	3,372,297,029
Utility Debt Securitization Authority	
UDSA Series 2013	1,666,982,000
UDSA Series 2015	1,002,115,000
UDSA Series 2016A	636,770,000
UDSA Series 2016B	333,500,000
UDSA Series 2017	369,465,000
Sub-Total (UDSA)	4,008,832,000
Sub-Total (LIPA & UDSA)	7,381,129,029
Floating Rate Bonds	
2013 A RCA	2,000,000
2014 C Floating Rate Note	150,000,000
2015 A MMD FRN Rate (1)	200,000,000
2015 C Floating Rate Note	149,000,000
2016 A MMD FRN Rate (1)	175,000,000
General Revenue Notes -1	65,000,000
General Revenue Notes - 2	45,000,000
General Revenue Notes - 3	0
General Revenue Notes - 4	100,000,000
General Revenue Notes - 5	80,000,000
General Revenue Notes - 6	0
Sub-Total	\$966,000,000
TOTAL BONDS ISSUED (a)	\$8,347,129,029
Total Floating Rate Bonds	\$966,000,000
Net Floating Rate Exposure of Swaps (4)	
Floating-to-Fixed (related to Swap 3, 8 and 9) (2)	(585,842,058)
Basis Swap (Floating) (related to Swaps 4, 5 and 6) (3)	258,658,950
Total Net Floating Rate Exposure of Swaps	(327,183,108)
Cash & Short-Term Investments Net of Restricted Funds	(1,238,619,140)
NET FLOATING RATE BONDS (b)	(\$599,802,248)
Net Floating Rate Exposure (b) / (a)	-7.19%

- 1) The 2015A and 2016A Bonds have associated Total Return Swaps (8 and 9) whereby LIPA receives the rate paid on the Bonds (MMD Index plus a spread) and pays a rate of 69.4% 1-Month LIBOR plus a spread.
- 2) Swap 3 treated as having floating rate exposure equal to the net differential between the floating receiver rate on the swap and the floating rate obligation on the LIBOR-based bonds. For purposes of this analysis (netting LIBOR vs. LIBOR exposure) Series 2016A is assumed to be hedged however upon the refunding of Series 2012C by 2016A, an equal amount of swap 3, previously assigned to Series 2012C, was reassigned per the swap documentation to both Series 2015C and GR CP-1 (\$86.775mm and \$88.225mm, respectively).
- 3) Basis Swaps treated as having floating rate exposure equal to a SIFMA/LIBOR ratio of 100% minus the receiver ratio of 70.5%.
- 4) Swaps numbered as shown on page 1.