Long Island Power Authority

Tamela Monroe
Chief Financial Officer
516.719.9843

November 5, 2021

To: Finance & Audit Committee
LIPA Board of Trustees

Re: Quarterly Report on Interest Rate Exchange Agreements
Quarter Ended September 30, 2021

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 March 29, 2017.

Description of the Interest Rate Exchange Agreements

As of September 30, 2021, LIPA had the following interest rate swap agreements outstanding:

Counterparty	Type of Swap	Notional Outstanding ($000)	Effective Date	Maturity Date
UBS AG	Floating-to-Fixed	$587,225	6/1/2003	12/1/2029
Citibank, N.A.	Floating-to-Fixed	$251,510	9/1/2022	9/1/2042
Wells Fargo Bank, N.A.	Floating-to-Fixed	$164,860	9/1/2022	9/1/2029
Wells Fargo Bank, N.A.	Total Return	$51,000	5/1/2020	6/29/2023
Wells Fargo Bank, N.A.	Total Return	$149,000	5/1/2020	6/29/2023

As of September 30, 2021, the estimated total mark-to-market value of the transactions was approximately negative $185 million (please see Appendix A). 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.

Counterparty Ratings

As of September 30, 2021, the Authority's counterparties had the following ratings and outlooks:

Tamela Monroe
Chief Financial Officer
516.719.9843

Counterparty	Moody's		S&P		Fitch	
	Rating	Outlook	Rating	Outlook	Rating	Outlook
UBS	Aa3	Stable	A+	Stable	AA-	Stable
Citibank	Aa3	Stable	A+	Stable	A+	Stable
Wells Fargo	Aa2	Negative	A+	Stable	AA-	Negative

Risks

The Authority is subject to certain risks under its interest rate swap transactions, including:

Counterparty Risk: the risk that a counterparty (or its guarantor) will fail to make a payment or default under the swap agreement and LIPA will lose 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. The swap agreements contain various termination events and collateral posting provision to mitigate counterparty risk for lower-rated entities (see Appendix B).

Termination Risk: the risk that a counterparty will terminate a swap with LIPA owing a termination payment. Only LIPA is entitled to terminate these transactions from time-to-time for any reason; the counterparties may only terminate 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 a swap insurer's (if any) credit rating, and events related to the underlying bonds. As of September 30, 2021, the credit ratings of LIPA and its swap insurer were as follows:

Entity	Moody's		S&P		Fitch	
	Rating	Outlook	Rating	Outlook	Rating	Outlook
LIPA	A2	Stable	A	Stable	A	Positive
Assured Guaranty Municipal Corp.[1]	A2	Stable	AA	Stable	-	-

[1]Insurer on swap with UBS.

Collateral Posting Risk: the risk that LIPA will be required to post collateral to its counterparties to secure a negative mark-to-market valuation. LIPA is only required to post collateral should its ratings fall to certain levels (see Appendix B). As of September 30, 2021, there was no collateral posted by either LIPA or its counterparties.

Basis Risk: the risk of a mismatch in the variable rates paid and received by LIPA.

Under the floating-to-fixed swap with UBS, LIPA is subject to the risk that the variable-rate received (69.47% 1M LIBOR) does not offset the payments on the underlying bonds. LIPA has minimized this risk by issuing bonds based on the LIBOR index (including when accounting for the Total Return Swaps), thus closely matching the floating rates.

Tamela Monroe
Chief Financial Officer
516.719.9843

In December 2019, LIPA executed two forward-starting floating-to-fixed swaps with Citibank and Wells Fargo in anticipation of refunding certain bonds in 2022. The floating rate LIPA is set to receive on such swaps (70% 1M LIBOR, or any potential fallback upon the discontinuation of LIBOR), may be different than the rate payable on any variable-rate refunding bonds.

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 Discontinuation of LIBOR:

On March 5, 2021, ICE Benchmark Administration Limited ("IBA") and the Financial Conduct Authorities ("FCA") announced that the LIBOR cessation date for most USD LIBOR tenors, including 1 Month LIBOR, will be June 30, 2023.

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 is considering adhering to the Fallback Protocol; however, the Authority is also evaluating legislation the Governor signed into law in April 2021 that provides some alternative fallback for transactions governed by State law.

Interest Rate Exposure: As of September 30, 2021, LIPA's net floating rate exposure is -4.61% (from LIPA) as summarized in Appendix C.

/s/ Tamela Monroe

Tamela Monroe
Chief Financial Officer

Appendix A: Swap Details

Swap Type	**Floating-to-Fixed**			**Total Return**		**Total**
Counterparty	UBS	Citibank	Wells Fargo	Wells Fargo	Wells Fargo	
Original Notional Amount	$587,225,000	$251,510,000	$164,860,000	$51,000,000	$149,000,000	**$1,203,595,000**
Outstanding Notional Amount	$587,225,000	$251,510,000	$164,860,000	$51,000,000	$149,000,000	**$1,203,595,000**
Termination Date	12/1/2029	9/1/2042	9/1/2029	6/29/2023	6/29/2023	-
LIPA Pays	5.12%	1.8571%	1.315%	69.4% of 1-Month LIBOR + 0.36%	69.4% of 1-Month LIBOR + 0.36%	-
LIPA Receives	69.47% of 1-Month LIBOR	70% of 1-Month LIBOR	70% of 1-Month LIBOR	Bond Rate (MMD Index plus Spread)	Bond Rate (MMD Index plus Spread)	-
First Counterparty Payment Date	7/1/2003	10/3/2022	10/3/2022	11/6/2015	11/6/2015	-
First LIPA Payment Date	7/1/2003	10/3/2022	10/3/2022	7/1/2015	7/1/2015	-
Up Front Cash Payment to LIPA	$82,000,000	-	-	-	-	**$82,000,000**
Payments Made by LIPA as of 9/30/2021	($551,125,016)	-	-	($3,638,251)	($10,629,841)	**($565,393,109)**
Payments Received by LIPA as of 9/30/2021 (excluding upfront payment)	$109,227,386	-	-	$9,704,790	$26,854,270	**$145,786,446**
LIPA Accrued Interest as of 9/30/2021	($2,505,493)	-	-	($17,836)	($52,110)	**($2,575,440)**
Counterparty Accrued Interest as of 9/30/2021	$28,836	-	-	$454,623	$1,007,695	**$1,491,153**
Mid Mark-to-Market Valuation @ 9/30/2021	($178,316,646)	($5,123,417)	($2,843,337)	$436,786	$955,585	**($184,891,028)**
DV01 (Sensitivity to 1bp Increase in LIBOR Swap Rates) @ 9/30/2021	$344,619	$176,169	$53,274	-	-	**$574,062**
Ratio 01 (Sensitivity to 1% Increase in SIFMA/LIBOR Ratios @ 9/30/2021	-	-	-	-	-	-
Collateral Posted by LIPA @ 9/30/2021	-	-	-	-	-	-
Collateral Held by LIPA @ 9/30/2021	-	-	-	-	-	-

Appendix B: Additional Termination Events/Collateral Posting Thresholds

Terms Applicable to LIPA: A2 (Moody's), A (S&P), A (Fitch)			
Counterparty	**Citibank**	**UBS**	**Wells Fargo**
Insurer		**Assured Guaranty**	
Additional Termination Event (below)	Baa2 (Moody's) or BBB (S&P or Fitch)[1] Baa3 (Moody's) or BBB- (S&P or Fitch)	See Note 3	Baa3 (Moody's) or BBB- (S&P or Fitch)
Insurer Event (below)		A2 (Moody's) and A (S&P)[2]	
Collateral Thresholds (Lowest Rating)	*N/A - No CSA*	*N/A - No CSA*	*(Moody's / S&P / Fitch):*[3]
Aa3 or AA- and above			Infinite
A1 or A+			Infinite
A2 or A			Infinite
A3 or A-			Infinite
Baa1 or BBB+			Infinite
Baa2 or BBB			Infinite
Baa3 or BBB-			Zero
Below Baa3 or BBB- / NR			Zero
Notes:	[1]It shall constitute an ATE if LIPA has been notified of the downgrade and within 20 days does not (a) provide a guarantee/insurance, (b) transfer to an acceptable counterparty, or (c) execute a CSA. [2]It shall constitute an ATE if, within 30 days of receiving notice of an Insurer Event, LIPA does not provide a Credit Support Provider, deliver proof of ratings of A3 (Moody's) or A- (S&P), or execute a CSA. [3]LIPA is not subject to collateral posting on the Total Return Swaps.		

Appendix B (continued):

Terms Applicable to Counterparties			
Counterparty (Moody's / S&P / Fitch)	**Citibank Aa3 / A+ / A+**	**UBS Aa3 / A+ / AA-**	**Wells Fargo Aa2 / A+ / AA-**
Additional Termination Event (below)	A3 (Moody's) or A- (S&P or Fitch)[1] Baa3 (Moody's) or BBB- (S&P or Fitch	A3 (Moody's) or A- (S&P)[2]	Baa1 (Moody's) or BBB+ (S&P or Fitch)
Collateral Thresholds (Lowest Rating)	*N/A - No CSA*	*N/A - No CSA*	*(Moody's / S&P / Fitch):*
Aa3 or AA- and above			Infinite
A1 or A+			Infinite
A2 or A			Infinite
A3 or A-			Infinite
Baa1 or BBB+			Zero
Baa2 or BBB			Zero
Baa3 or BBB-			Zero
Below Baa3 or BBB- / NR			Zero
Notes:	[1]It shall constitute an ATE if Citibank has been notified of the downgrade and within 20 days does not (a) provide a guarantee/insurance, (b) transfer to an acceptable counterparty, or (c) execute a CSA. [2]May also include an equivalent rating determined by a nationally-recognized ratings service acceptable to both parties. It shall constitute an ATE if, within 30 days, UBS does not execute a CSA.		

Information below provided by LIPA

Appendix C	
Long Island Power Authority & UDSA Floating Rate Exposure	**6/30/2021**
Fixed Rate Bonds	
1998 A	84,054,379
2000 A	269,024,214
2003 C	36,645,000
2010 B	194,715,000
2011 A	685,000
2012 A	166,970,000
2012 B	179,035,000
2014A	413,070,000
2014B	94,010,000
2015B	110,370,000
2016B	368,260,000
2017	345,000,000
2018	430,000,000
2019 A	215,675,000
2019 B	284,250,000
2020 A	237,975,000
2020 B	250,000,000
2020 C	113,975,000
2021 Notes	250,000,000
Sub-Total (LIPA)	4,043,713,593
Utility Debt Securitization Authority	
UDSA Series 2013	1,560,590,000
UDSA Series 2015	1,002,115,000
UDSA Series 2016A	636,770,000
UDSA Series 2016B	317,270,000
UDSA Series 2017	366,030,000
Sub-Total (UDSA)	3,882,775,000
Sub-Total (LIPA & UDSA)	**7,926,488,593**
Floating Rate Bonds	
2013 A RCA	200,000,000
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	154,000,000
General Revenue Notes - 2	25,000,000
General Revenue Notes - 3	75,000,000
General Revenue Notes - 4	0
General Revenue Notes - 5	100,000,000
General Revenue Notes - 6	180,000,000
Sub-Total	**$1,408,000,000**
TOTAL BONDS ISSUED (a)	**$9,334,488,593**
Total Floating Rate Bonds	**$1,408,000,000**
Net Floating Rate Exposure of Swaps	
Floating-to-Fixed (2)	(585,842,058)
Basis Swap (Floating) (3)	116,882,688
Total Net Floating Rate Exposure of Swaps	**(468,959,370)**
Cash & Short-Term Investments Net of Restricted Funds	**(1,369,225,872)**
NET FLOATING RATE BONDS (b)	**($430,185,242)**
Net Floating Rate Exposure (b) / (a)	-4.61%

1) The 2015A and 2016A Bonds have associated Total Return Swaps 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 with UBS 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 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 the UBS swap, previously assigned to Series 2012, 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 replaced GR CP-1.