OPERATING ENGINEERS LOCAL NO. 77
PENSION PLAN

BOARD OF TRUSTEES MEETING

NOVEMBER 14, 2023

Operating Engineers Local No. 77
Health & Welfare and Pension Funds

911 Ridgebrook Road
Sparks, MD 21152-9451
Telephone: (410) 683-6500
Toll Free: (877) 850-0977
www.associated-admin.com

8400 Corporate Drive
Suite 430
Landover, MD 20785-2361
Telephone: (301) 459-3020
Toll Free: (877) 850-0977
www.associated-admin.com

PENSION FUND

AGENDA

November 14, 2023

I. CALL TO ORDER

II. MINUTES

- Regular meeting – August 8, 2023

III. FINANCIAL REPORT

- 2022 – Year End Audit
- Investment Performance Services

IV. ATTORNEY'S REPORT

V. ACTUARY'S REPORT

- January 1, 2023 Actuarial Valuation Report
- Update to Mortality Experience Study

VI. ADMINISTRATIVE MANAGER'S REPORT

- Gain/Loss Reports – September 2023

VII. OTHER FUND BUSINESS

- TD Cowen Commission Recapture – September 2023
- PBGC Premium Filing – October 11, 2023

VIII. NEXT MEETING DATE AND LOCATION

- February 13, 2024

IX. ADJOURNMENT

MINUTES

Operating Engineers Local No. 77
Health & Welfare and Pension Funds

911 Ridgebrook Road
Sparks, MD 21152-9451
Telephone: (410) 683-6500
Toll Free: (877) 850-0977
www.associated-admin.com

8400 Corporate Drive
Suite 430
Landover, MD 20785-2361
Telephone: (301) 459-3020
Toll Free: (877) 850-0977
www.associated-admin.com

**MINUTES OF THE MEETING OF THE
BOARD OF TRUSTEES OF THE
OPERATING ENGINEERS LOCAL 77 PENSION FUND
TUESDAY, AUGUST 8, 2023**

The following Trustees were present:

UNION TRUSTEES	**EMPLOYER TRUSTEE**
J. VanDyke, Chairman	C. Burke
R. Dennison	B. Mazzella
S. Faulkner	
T. Johnson	

ALSO PRESENT:

W. Chambers – Associated Administrators, LLC
C. Fuller – McChesney & Dale, P.C.
B. Gilroy – Training Coordinator
J. Mink – Investment Performance Services, LLC
Anne-Marie Sims – Associated Administrators, LLC

I. CALL TO ORDER

The Chairman called the meeting to order.

II. MINUTES

The Trustees waived the reading of the minutes of the regular meeting held on May 9, 2023 since the minutes had been previously circulated and,

On a motion made and seconded, the Trustees voted unanimous approval of the following resolution:

RESOLVED to approve the minutes of the regular meeting held on May 9, 2023 as presented.

III. FINANCIAL REPORT

Investment Performance Services

The Trustees welcomed Mr. Jennifer Mink of Investment Performance Services ("IPS") to the meeting. Ms. Mink reviewed the global market returns during the quarter ending June 30, 2023. She reviewed the investment performance executive summary for the quarter ending June 30, 2023. Ms. Mink reported that the total Fund assets on June 30, 2023 were $189,881,069 compared to $183,835,645 as of December 31, 2022. She provided an overview of the Fund's annualized returns for the quarter ending June 30, 2023 and noted a total Fund composite return for the quarter ending June, 2023 of 2.00%, fiscal year to date of 5.4% and a return over the past 10 years of 8.4% gross of fees.

Asset Allocation

Ms. Mink reviewed the asset allocation as of June 30, 2023. She stated that IPS recommends the Trustees consider the following: (1) to rebalance closer to the investment policy and transfer cash proceeds from the hedge fund of funds (Grosvenor Institutional Partners (PF), Ltd) redemption to investment grade fixed income Wedge Capital Management, approximately $3 million, and short duration high yield fixed income (Chartwell Investment Partners SDHY), approximately $2.5 million. The balance of the proceeds will be utilized for cash needs and capital calls, and (2) to increase the diversification of the international equity allocation by adding an international equity large cap value manager.

On a motion made and seconded, the Trustees voted unanimous approval of the following resolution:

> **RESOLVED to approve IPS's recommendation as presented above.**

Investment Manager Review

Ms. Mink discussed the Lizard/Wilmington LCAS Global Diversification investment. She noted that the strategy underperformed the blended GTAA benchmark in Q2 2023 for a third consecutive quarter, despite outperforming in 2022. Ms. Mink said that due to the continued underperformance and the strategy's lack of alpha from its tactical allocations, her firm recommends the Fund terminate the strategy.

On a motion made and seconded, the Trustees voted unanimous approval of the following resolution:

> **RESOLVED to terminate Lazard/Wilmington LCAS Global Diversified – CIT strategy.**

Ms. Mink provided an executive summary of IPS's manager search process, which included assisting the Trustees in specifying the characteristics of the investment managers that will satisfy the needs of the Fund within the scope of the Investment Policy Statement. Ms. Mink provided an overview of three International Value Equity firms: (1) Barrow, Hanley, Mewhinny & Strauss, LLC, (2) First Eagle Investment Management, LLC, and (3) RBC Global Asset Management. She reviewed the strategy, investment terms and fees for each firm.

On Motion made and seconded, the Trustees voted unanimous approval of the following resolution:

> **RESOLVED to approve the hiring of Barrow, Hanley, Mewhinny & Strauss, LLC – Co-mingled Fund and funding approximately $4.5 million, subject to Co-Counsel's review of the contract.**

Asset Allocation Overview

Ms. Mink presented an asset allocation review/modelling to assist the Trustees in identifying investment portfolios that meet the investment objectives, risk tolerance, and liquidity requirements of the Fund. She provided an overview of the annualized expected risk and returns over 10-20 years in the Equity Asset Class, Fixed Income Asset Class and Alternative Asset Class, along with asset allocation class constraints for each investment strategy. Ms. Mink reviewed four different portfolios with varying degrees of risk and, therefore, varying rates of expected return.

After discussion, on Motion made and seconded, the Trustees voted unanimous approval of the following resolution:

RESOLVED to adopt Portfolio D which reflects a target of 15.0% to US Large Cap Equity, 5% to US Small/Mid Cap Equity, 5% to US Small Cap Equity, 5% to Large International Equity, 5% to US Short Cap Equity, 10% to Intermediate Fixed Income, 12.5% to Short Term High Yield Fixed Income, 0% to Global Tactical Asset Allocation, 10% to Real Estate – Core, 10% to Real Estate- Value Add, 10% to opportunistic strategy, 5% to Private Equity, 2.5% to infrastructure with an expected return (net of fees) of 7.12% and a risk assessment of 8.88% (representing the projected volatility of returns, as measured by calculating the standard deviation).

The Trustees thanked Ms. Mink for her report.

IV. ATTORNEY'S REPORT

Mr. Fuller reported on the provisions relating to the Secure 2.O Act of 2022. Mr. Fuller presented an Amendment to the Operating Engineers Local No. 77 Pension Plan dated August 8, 2023. He stated that this amendment changed the definition of "Lump Sum Distribution Amount', increasing it from $5,000 to $7,000, after December 31, 2023.

After discussion, on Motion made and seconded, the Trustees voted unanimous approval of the following resolution:

RESOLVED to adopt the August 8, 2023 Amendment to the Operating Engineers Local No. 77 Pension Plan to increase the dollar limit on mandatory distributions from $5,000 to $7,000.

Mr. Fuller stated that Counsel would prepare a Summary of Material Modifications to be mailed to participants.

V. ADMINISTRATIVE MANAGER'S REPORT

Gain/Loss Reports

Ms. Chambers presented the Administrative Manager's Report for the period January 1, 2023 through June 30, 2023. Such report indicated total contributions of $3,053,011, reciprocity income of $109,029, reciprocity payments of $105,381, liquidated damages of $3,420, interest on delinquencies of $2,701, class action settlements of $1,360, interest income of $310,053, dividend income of $155,661, and commission recapture income of $2,958. There were gains in the Wedge account of $135,051, gains in the Wedge Fixed income account of $165,165, gains in the Washington Capital Management - Infrastructure account of $113,321, gains in the TimeSquare account of $460,374, gains in the Hardman Johnston account of $857,033, gains in the Grosvenor account of $890,280, gains in the Chartwell account of $54,628, gains in the Lazard account of $628,738, gains in the Alger account of $1,920,769, and gains in the Victory Capital account of $766,576, and gains in the Washington Capital Management – Mortgage of $48,242. There were losses on investments in the Corbin account of $8,073, and losses in the Ullico account of $18,920, losses in the Principal account of $229,724, losses in the New Tower account of $188,832, and losses in the Boyd Watterson GSA account of $40,563. There were expenses totaling $5,574,631. The foregoing produced a net gain for the period January 1, 2023 through June 30, 2023 of $3,061,172.

On a motion made and seconded, the Trustees voted unanimous approval of the following resolution:

> **RESOLVED to accept the Administrative Manager's Report as presented.**

VI. PARTICIPATION APPEAL

Participant Appeal # P23/171-7690

Mr. Fuller presented an appeal from a participant's spouse who has been appointed by the participant to be his authorized representative for the purposes of this appeal. The participant's spouse is appealing for the participant to be granted an Occupational Disability Pension benefit. Fund records indicate that the participant submitted a completed pension application on February 2, 2023, indicating that he was applying for an Occupational Disability Pension benefit. In accordance with Fund rules, the participant is required to have an independent medical evaluation in order to establish disability. At the participant's request, payment of an Early Reduced (non-Occupational Disability) Pension benefit commenced effective March 1, 2023. Medical documentation provided by the participant was reviewed by MES Peer Review Services ("MES"), an independent medical reviewer. MES subsequently advised the Fund office that disability was not established. MES stated in summary that it was their opinion that the participant was able to work even when he had complaints of difficulty with memory, and there was no documentation of progression of this issue. The Fund office mailed a letter to the participant on May 31, 2023 advising that he is not eligible for an Occupational Disability Pension benefit based on the foregoing. The participant's appeal was received on July 24, 2023.

The participant's spouse states in summary that the participant has various issues such as cognitive impairment and issues with memory that prevent him from doing his job to the best of his ability. The participant's spouse further states that the participant is concerned about the safety of himself and others if he were to continue to work as a crane mechanic. Lastly, the participant's spouse states that the participant has other health issues as well, such as heart, vision, kidney, prostate, blood pressure, and cholesterol problems. Included with the appeal was a letter from James L. Bicksel, MD, dated June 30, 2023. Dr. Bicksel states in summary that the participant had neuropsychological testing done on November 10, 2022, and tested in the "impaired" range on memory. Dr. Bicksel further states that the participant is now starting to become lost while driving in his own neighborhood, and it is Dr. Bicksel's opinion that the participant not return to his job as a crane mechanic because doing so would be dangerous.

Upon a motion made and seconded, the Trustees voted unanimous approval of the following resolution:

RESOLVED to grant the appeal for an occupational disability pension benefit.

VII. <u>NEXT MEETING DATE AND LOCATION</u>

After discussion, the Trustees selected November 14, 2023. Meetings will take place at the offices of Associated Administrators in Landover, Maryland immediately following the Apprenticeship meetings.

VIII. ADJOURNMENT

There being no further business to come before the Trustees, the meeting was adjourned.

Respectfully submitted,

Joshua VanDyke, Chairman

FINANCIAL REPORT

ATTORNEY’S REPORT

ACTUARY’S REPORT

Operating Engineers Local No. 77 Pension Plan

Actuarial Valuation
As of January 1, 2023

Bolton

Submitted by:
Timothy D. Boles, ASA, EA
Consulting Actuary
(443) 573-3938
tboles@boltonusa.com

Table of Contents

November 8, 2023

Trustees
Operating Engineers Local No. 77 Pension Plan
c/o Associated Administrators, LLC
911 Ridgebrook Rd.
Sparks, MD 21152

Re: ***January 1, 2023 Actuarial Valuation***

Dear Trustees:

This report sets forth the actuarial valuation of the Operating Engineers Local No. 77 Pension Plan as of January 1, 2023 for the plan year beginning on that date. The report is based on census and contribution data submitted by Associated Administrators, LLC. Financial data for the plan year ended December 31, 2022 was submitted by Calibre CPA Group, PLLC. We have relied on the accuracy of this data.

Actuarial Methods and Assumptions

The interest rate used to calculate the Unfunded Vested Benefits for withdrawal liability purposes as of December 31, 2022 has been updated to use PBGC interest rates. In the prior year, the PPA corporate bond spot-rate yield curve was used. All other methods and assumptions remain the same as those used in the prior valuation.

Plan Provisions

All plan provisions remain the same as those used in the prior valuation.

Plan Assets and Investment Performance

The market value of assets (MVA) as of January 1, 2023 is $185,942,372. The actuarial value of assets (AVA) as of the same date is $201,135,383.

The net return for the year ended December 31, 2022 after investment expenses was -10.7% on a market value basis and 5.9% on an actuarial value basis.

PPA Zone Status

The Plan is in Neither Critical Nor Endangered Status for the 2023 plan year. Our current projections of the funded percentage and credit balance using the assumed 7.0% investment return assumption indicate that the plan will remain in Neither Critical Nor Endangered Status for the 2024 plan year. However, the financial markets have performed very poorly this year, and it is possible that the Plan could be certified next year as being projected to be in Critical Status within 5 years of the 2024 PPA Zone Status Certification.

Minimum Funding

The minimum funding requirement is the normal cost including expenses for the year plus an amortization of unfunded liabilities under the plan's actuarial cost method, with interest to the end of the year.

Minimum Funding Requirement before the Credit Balance		
Total Normal Cost	$	6,139,283
Net Amortization Charges		9,551,398
Interest		1,098,348
Total Minimum Funding Requirement	**$**	**16,789,029**

For the plan to satisfy minimum funding requirements, employer contributions to the plan plus the credit balance for prior contributions in excess of minimums must exceed this total. Total contributions plus interest for 2023 are anticipated to be $9,015,438. The credit balance with interest is $53,988,347. These total 663,003,785. Thus, assuming all assumptions are met, the minimum contribution requirements are met for the year.

Each year's actuarial gain or loss is amortized over a 15-year period. Most plan amendments and actuarial assumption changes are amortized over a 15-year period. One-time bonus checks, like 13th checks, are recognized immediately. A schedule later in this report sets forth each component of the amortization, the outstanding balance and the number of years remaining.

Deductible Contributions

Following IRS Announcement 96-25, Section 360, if the anticipated contributions for the year do not exceed the deductible limit, then the actual amounts contributed are deemed to be deductible. For this purpose, anticipated employer contributions are determined in a manner consistent with the manner in which actual contributions are determined. For 2023, the anticipated contributions are $8,710,568 and the deductible limit is $426,644,157. Therefore, anticipated contributions do not exceed the deductible limit.

Since the anticipated contributions for 2022 did not exceed the deductible limit of $455,563,281, the actual contribution total of $8,710,568 is deductible.

Risk Assessment

This valuation report includes information intended to assist plan sponsors and the readers of this report in understanding the most significant risks that affect the plan's future financial position. This report includes commentary about risks to be considered when developing the plan's investment and funding policies and why it is important that these two policies are connected. Preparing a full risk assessment for the plan is beyond the scope of this engagement.

We encourage plan sponsors and plan administrators to consider this information carefully, view the results of the annual valuation in the context of the risks to plan costs and member benefit security, and determine whether it is an appropriate time to consider a more in-depth, comprehensive risk assessment.

Actuarial Certification

This actuarial valuation sets forth our calculation of an estimate of the liabilities of the pension plan, together with a comparison of these liabilities with the value of the plan assets, as reported by the plan's auditor. This liability calculation and comparison with assets are applicable for the valuation date only. The future is uncertain, and the plan may become better funded or more poorly funded in the future. This valuation does not provide any guarantee that the plan will be able to provide the promised benefits in the future.

This is a deterministic valuation in that it is based on a single set of assumptions. This set of assumptions is one possible basis for our calculations. Other assumptions may be equally valid. We may consider that some factors are not material to the valuation of the plan and may not provide a specific assumption for those factors. We may have used other assumptions in the past. We will likely consider changes in assumptions at a future date.

A change in assumptions does not indicate that the prior assumptions were invalid. At the time the prior assumptions were chosen, they represented our best estimate of the future experience of the plan. If we change assumptions in the future, it would be to align the assumptions with our then-current best estimate.

The trustees could reasonably ask how the valuation would change if we used a different assumption set or if plan experience exhibited variations from our assumptions. This report does not contain such an analysis. This type of analysis would be a separate assignment.

In addition, decisions regarding benefit improvements, benefit changes, the trust's investment policy, and similar issues should not be based on this valuation. These are complex issues and other factors should be considered when making such decisions. These other factors might include the anticipated vitality of the local economy and the growth expectation for the industry within which the contributing employers work, as well as other economic and financial factors.

The cost of this plan is determined by the benefits promised by the plan, the plan's participant population, the investment experience of the plan and many other factors. An actuarial valuation is a budgeting tool for the trustees. It does not affect the cost of the plan. Different funding methods provide for different timing of contributions to the plan. As the experience of the plan evolves, it is normal for the level of contributions to the plan to change. If a contribution is not made for a particular year, either by deliberate choice or because of an error in a calculation, that contribution can be made in later years. We will not be responsible for contributions that are made at a future time rather than an earlier time. The contributing employers are responsible for funding the cost of the plan.

We make every effort to ensure that our calculations are accurately performed. These calculations are complex. We reserve the right to correct any potential errors by amending the results of this report or by including the corrections in a future valuation report.

The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information. The plan sponsor is solely responsible for the validity and completeness of this information.

The information in this report was prepared for the internal use of the Board of Trustees and its auditors in connection with our actuarial valuations of the pension plan. It is neither intended nor necessarily suitable for other purposes. We are not responsible for the consequences of any other use.

This report provides certain financial calculations for use by the auditor. These values have been computed in accordance with our understanding of generally accepted actuarial principles and practices and fairly reflect the actuarial position of the Plan. The various actuarial assumptions and methods which have been used are, in our opinion, appropriate for the purposes of this report.

This report is conditioned on the assumption of an ongoing plan and is not meant to present the actuarial position of the Plan in the case of Plan termination. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status), and changes in plan provisions or applicable law.

The valuation was completed using both proprietary and third-party models (including software and tools). We have tested these models to ensure they are used for their intended purposes, within their known limitations, and without any known material inconsistencies unless otherwise stated.

Bolton Partners, Inc. ("Bolton") does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretation on which this report is based reflects Bolton's understanding as an actuarial firm. Bolton recommends that recipients of this report consult with legal counsel when making any decisions regarding compliance with ERISA, the Internal Revenue Code, or any other statute or regulation.

The undersigned credentialed actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein and is currently compliant with the continuing professional education requirements developed by the Joint Board for the Enrollment of Actuaries. We are not aware of any direct or material indirect financial interest or relationship, including investments or other services that could create a conflict of interest that would impair the objectivity of our work.

The remaining sections of this report set forth details of the valuation as well as the information required for the auditors in accordance with FASB Accounting Standards Codification No. 960.

Respectfully Submitted,

Timothy D. Boles

Timothy D. Boles, ASA, EA
Consulting Actuary
Enrolled Actuary Number 23-08131

Section I. Summary of Assets

Income Statement for the Plan Year Ended December 31, 2022

Beginning of the year		
Market Value of Assets for Valuation as of January 1, 2022	$	215,711,548
Plus: Auditor’s Adjustments		0
Market Value of Assets Reflecting Auditor's Adjustments	**$**	**215,711,548**

Receipts		
Employer Contribution for the Plan Year	$	8,710,568
Interest and Dividends		1,450,658
Net Appreciation		(23,270,693)
Investment Expenses		(997,959)
Other Income		10,737
Total Receipts	**$**	**(14,096,689)**

Disbursements		
Distributions to Participants/Beneficiaries	$	15,220,241
Administrative Expenses		452,246
Total Disbursements	**$**	**15,672,487**

End of the year		
Net Increase/(Decrease) in Assets	$	(29,769,176)
Market Value of Assets as of January 1, 2023	**$**	**185,942,372**

Section I. Summary of Assets (cont.)

Determination of Investment Gain/(Loss) for Assets

Market Value of Assets		
As of January 1, 2022	$	215,711,548

Item (1)		Amount (2)	Weight for Timing (3)		Weighted Amount (2) x (3)
Contributions	$	8,710,568	50%	$	4,355,284
Benefits Paid		(15,220,241)	50%		(7,610,121)
Expenses		(452,246)	50%		(226,123)
Total					**(3,480,960)**
Market Value plus Total Weighted Amount					212,230,588
Assumed Rate of Return for the Year					7.00%
Expected Return				**$**	**14,856,141**

Actual Return		
1. Market Value as of January 1, 2022	$	215,711,548
2. Contributions		8,710,568
3. Benefits and Administrative Expenses Paid		(15,672,487)
4. Market Value as of January 1, 2023		185,942,372
Actual Return [(4) - (1) - (2) - (3)]	**$**	**(22,807,257)**
Calculation Base (1) + 50% x [(2) + (3)]		212,230,589
Market Value Return as a Percentage		**-10.7%**

Investment Gain/(Loss)		
Actual Return minus Expected Return	**$**	**(37,663,398)**

Section I. Summary of Assets (cont.)

Development of Actuarial Value of Assets

Market Value of Assets		
As of January 1, 2023	$	185,942,372

Plan Year End (1)		Investment Gain/(Loss) (2)	Percent Recognized (3)	Percent Deferred (4)		Deferred Gain/(Loss) (2) x (4)
12/31/2022	$	(37,663,398)	20%	80%	$	(30,130,718)
12/31/2021		13,524,306	40%	60%		8,114,584
12/31/2020		9,819,046	60%	40%		3,927,618
12/31/2019		14,477,523	80%	20%		2,895,505
Total					**$**	**(15,193,011)**

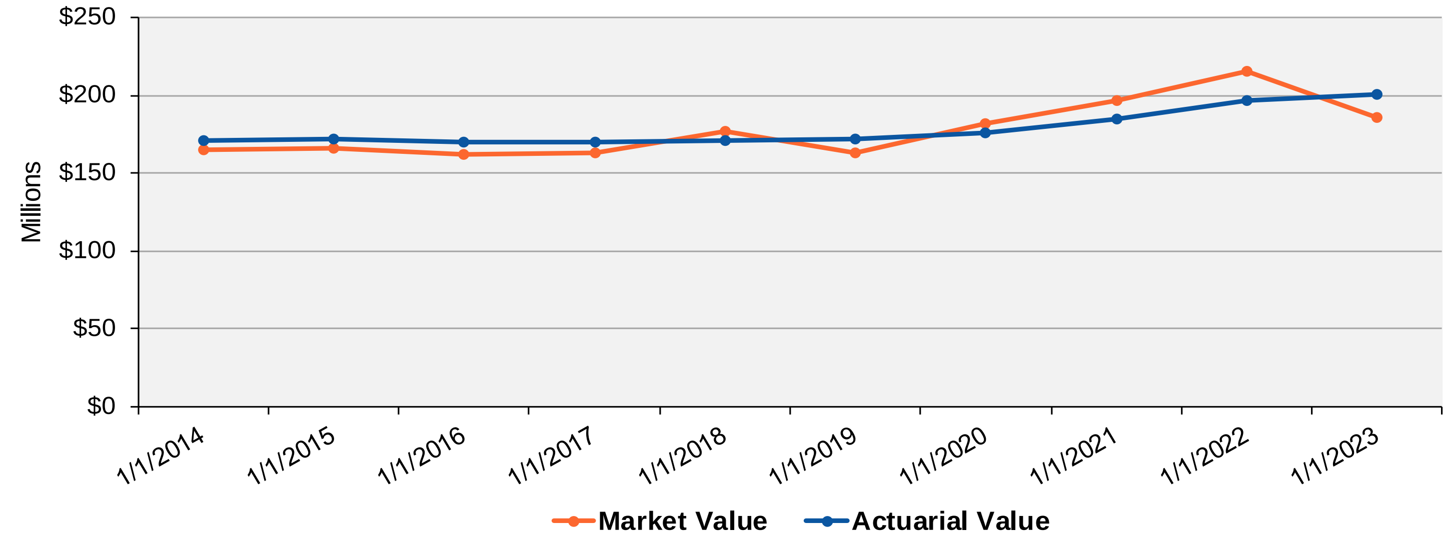
Preliminary Actuarial Value of Assets		
As of January 1, 2023 (Market Value of Assets less total Deferred Gain/(Loss))	$	201,135,383

Final Actuarial Value of Assets		
Minimum actuarial value of assets (80% of MVA)		148,753,898
Maximum actuarial value of assets (120% of MVA)		223,130,846
As a Percentage of Market Value		108.2%
Actuarial Value of Assets as of January 1, 2023	**$**	**201,135,383**

Calculation of Actuarial Return		
1. Actuarial Value as of January 1, 2022	$	196,699,420
2. Contributions		8,710,568
3. Benefits and Administrative Expenses Paid		(15,672,487)
4. Actuarial Value as of January 1, 2023		201,135,383
5. Actuarial Return [(4) - (1) - (2) - (3)]		11,397,882
6. Calculation Base (1) + 50% x [(2) + (3)]		193,218,461
Actuarial Return as a Percentage [(5) / (6)]		**5.9%**

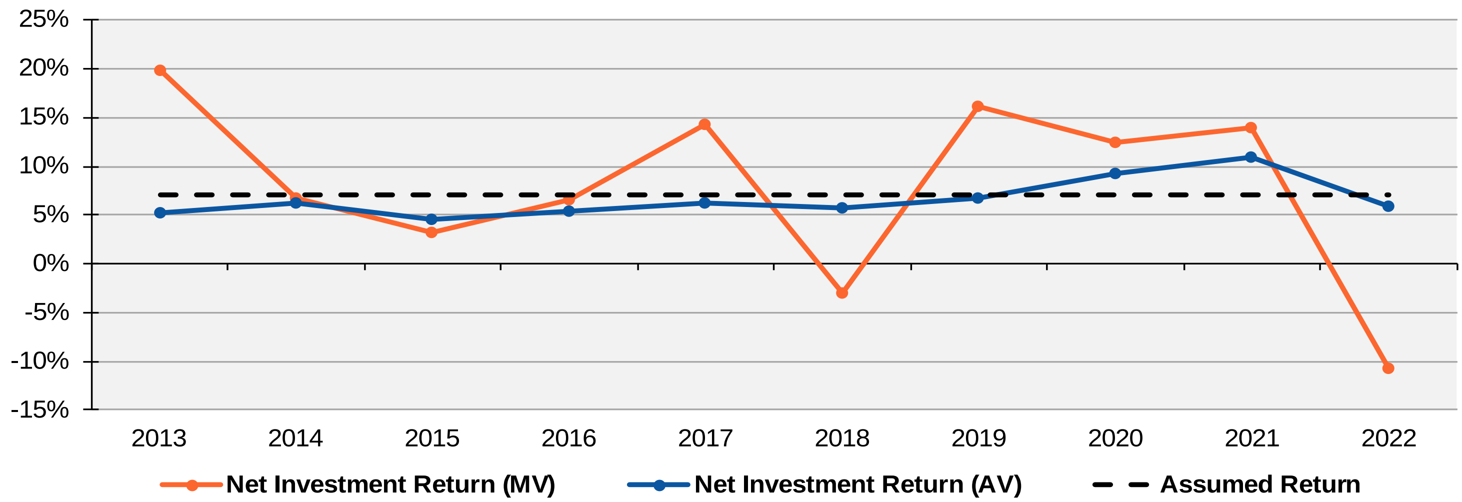
Section I. Summary of Assets (cont.)

10-Year: Market Value vs. Actuarial Value of Assets



10-Year: Market Value vs. Actuarial Value Rates of Return

The assumed long-term rate of return is 7.00%. This rate considers past experience, the Trustees' asset allocation policy, and future expectations.



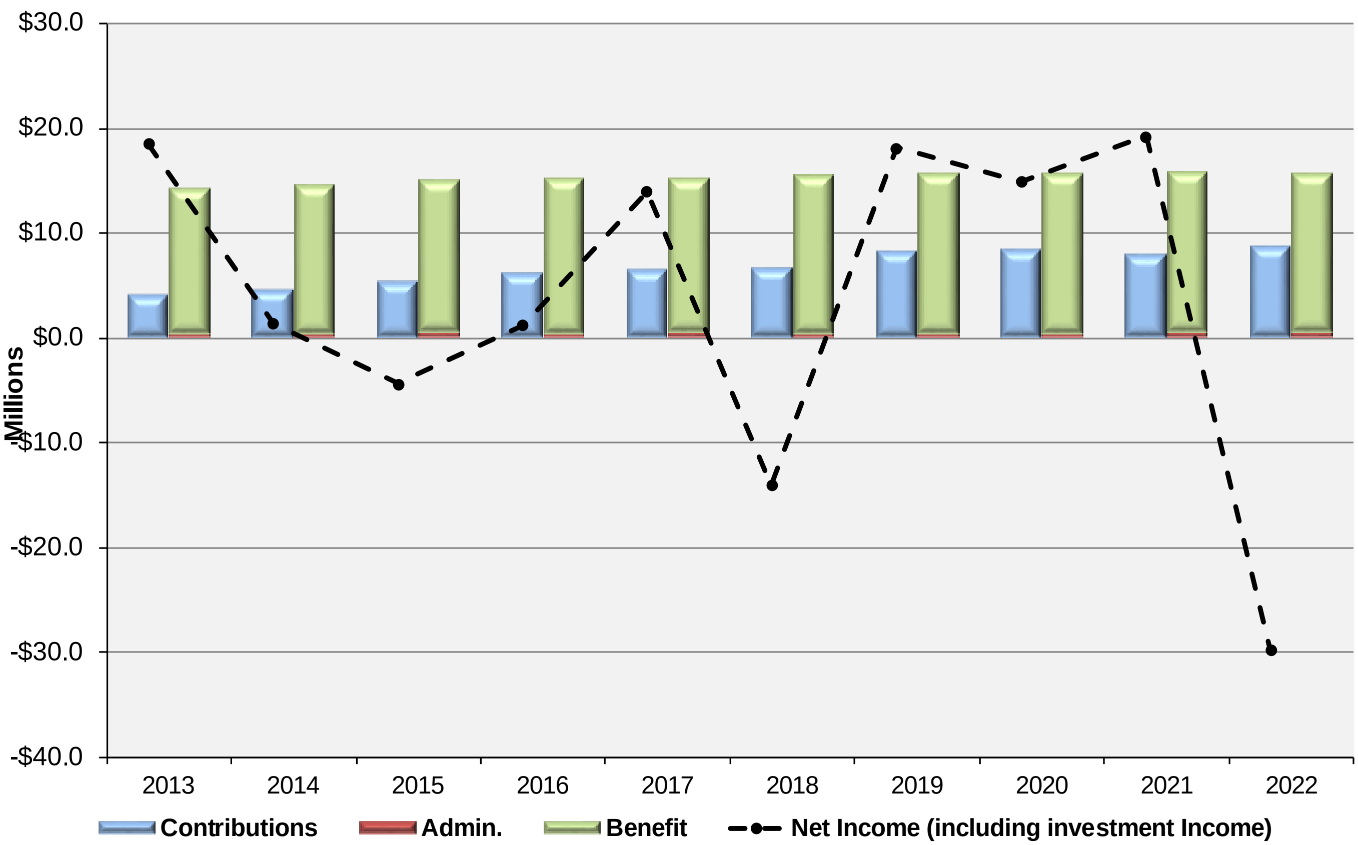
Average Rates of Return	Market Value	Actuarial Value
Most recent year return	-10.7%	5.9%
Most recent five-year average return	5.2%	7.7%
Most recent ten-year average return	7.6%	6.6%

Section I. Summary of Assets (cont.)

Summary of Investment Returns & Historical Cash Flows

Plan Year Ending	Market Value Net Investment Return Amount	Market Value Net Investment Return Percent	Total Contributions	Benefit Payments	Admin. Expenses
2013	$ 28,596,626	19.9%	$ 4,154,304	$ 13,869,083	$ 345,898
2014	11,322,507	6.8%	4,561,780	14,179,513	345,587
2015	5,125,198	3.2%	5,429,032	14,488,151	405,567
2016	10,204,231	6.5%	6,102,973	14,726,856	377,701
2017	22,796,936	14.3%	6,398,313	14,757,794	417,218
2018	(5,336,482)	-3.1%	6,623,512	14,986,927	376,867
2019	25,648,821	16.1%	8,130,240	15,208,434	394,051
2020	22,268,501	12.5%	8,328,546	15,237,053	398,116
2021	27,005,284	14.0%	7,952,202	15,280,210	430,272
2022	(22,807,257)	-10.7%	8,710,568	15,220,241	452,246
Total	**$ 124,824,365**		**$ 66,391,470**	**$ 147,954,262**	**$ 3,943,523**

Comparison of Net Income versus Historical Cash Flows



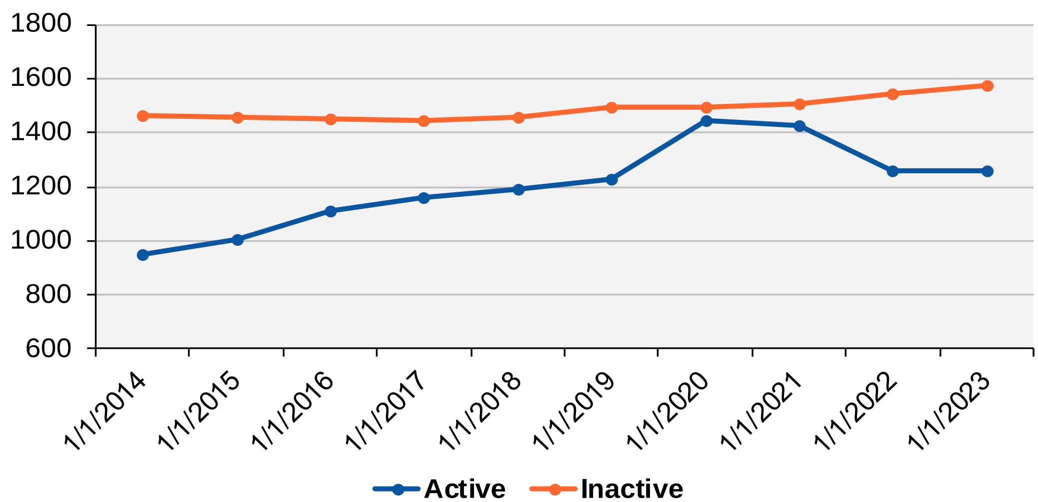
Section II. Summary of Data

Participant Reconciliation

The accuracy of an actuarial valuation depends on the accuracy of the participant data used to generate the liability and future income estimates. In an effort to ensure reliability and consistency between valuations, we have performed a reconciliation consisting of an accounting for all the exits from, and entries into, each of the three participant groups (actives, deferred vesteds, and retireds) as well as for the participant group as a whole.

	Actives	Deferred Vested Participants	Pensioners & Beneficiaries	Total
Participants as of January 1, 2022	1,261	533	1,012	2,806
Change During Year				
a. deaths with beneficiary	(2)	(1)	(16)	(19)
b. deaths without beneficiary		(5)	(52)	(57)
c. deaths with deferred beneficiary		(2)		(2)
d. retirements	(25)	(16)	41	0
e. disabled retirements	(3)		3	0
f. reciprocal pensions				0
g. vested terminations	(82)	82		0
h. non-vested terminations	(115)			(115)
i. new alternate payee				0
j. returns to active employment	23	(23)		0
k new entrants[1]	200	2	23	225
l. payments ceased				0
m. lump sum payout		(1)		(1)
n. deferred beneficiary commencement		(2)	2	0
o. data adjustments[2]		(4)		(4)
p. total increase (decrease)	(4)	30	1	27
Participants as of January 1, 2023	**1,257**	**563**	**1,013**	**2,833**

Plan Participation: Ten Years



[1] 1 deceased active participant has 2 beneficiaries in the data; 3 new beneficiaries for participants who died prior to 2022

[2] 4 deferred vested participants were determined to not be vested; therefore, they were removed from the valuation.

Section II. Summary of Data (cont.)

Schedule of Active Participant Data as of January 1, 2023

Years of Credited Service

Attained Age	Under 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 & Up	Total
Under 25	6	39	2	0	0	0	0	0	0	0	**47**
25 - 29	13	49	26	1	0	0	0	0	0	0	**89**
30 - 34	9	80	48	14	0	0	0	0	0	0	**151**
35 - 39	11	46	49	23	13	2	0	0	0	0	**144**
40 - 44	13	64	53	21	22	5	0	0	0	0	**178**
45 - 49	6	46	42	20	21	16	11	0	0	0	**162**
50 - 54	12	55	37	17	24	21	10	6	0	0	**182**
55 - 59	2	32	24	28	26	21	11	4	5	1	**154**
60 - 64	2	21	21	18	14	16	11	4	3	1	**111**
65 - 69	0	4	8	5	4	7	3	2	1	2	**36**
70 & Over	0	2	0	1	0	0	0	0	0	0	**3**
Total	**74**	**438**	**310**	**148**	**124**	**88**	**46**	**16**	**9**	**4**	**1257**

10-Year Historical Active Participant Data

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Average Age	46.0	45.5	45.0	45.0	45.2	45.1	44.6	44.9	45.5	45.4
Average Vesting Service	10.2	9.8	9.0	8.9	9.1	8.7	7.9	8.3	9.2	9.0

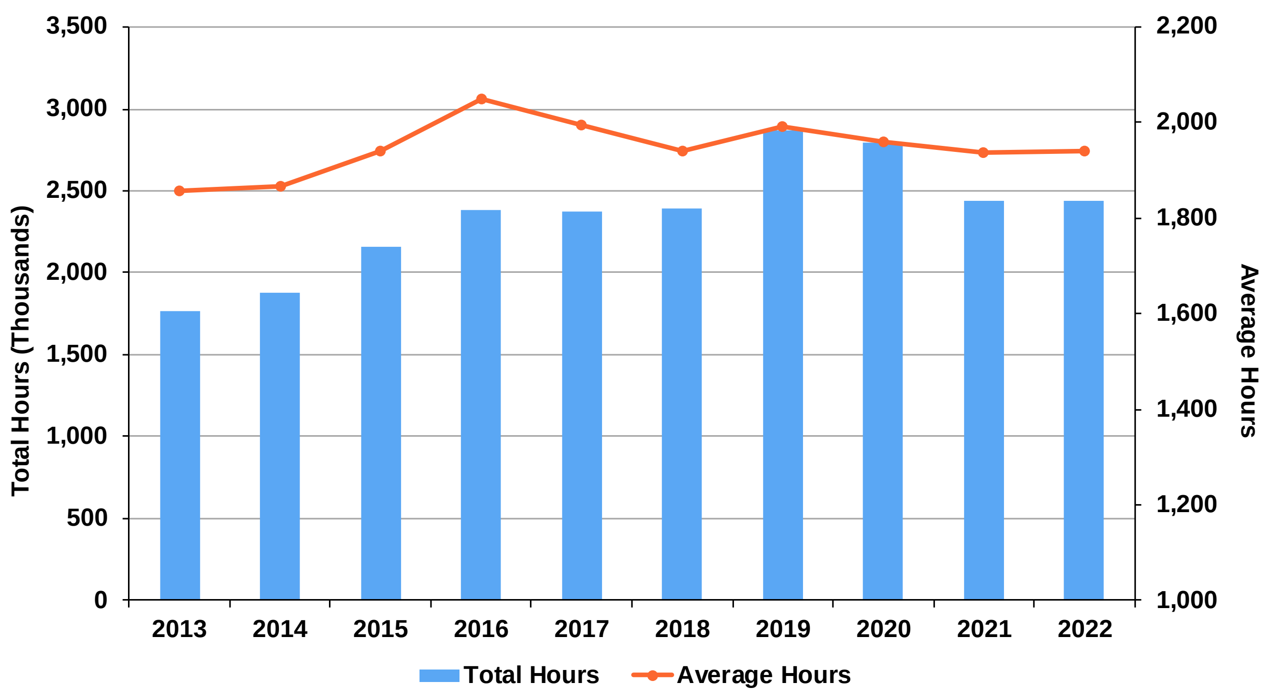
Section II. Summary of Data (cont.)

Employment History

Year Ended December 31	Total Pension Hours[3]		Active Participants		Average Pension Hours	
	Number	% Change	Number	% Change	Number	% Change
2013	1,761,821	-9.7%	948	-8.6%	1,858	-1.3%
2014	1,875,048	6.4%	1,004	5.9%	1,868	0.5%
2015	2,156,969	15.0%	1,111	10.7%	1,941	4.0%
2016	2,383,072	10.5%	1,163	4.7%	2,049	5.5%
2017	2,378,242	-0.2%	1,192	2.5%	1,995	-2.6%
2018	2,389,665	0.5%	1,231	3.3%	1,941	-2.7%
2019	2,874,174	20.3%	1,443	17.2%	1,992	2.6%
2020	2,796,253	-2.7%	1,426	-1.2%	1,961	-1.6%
2021	2,441,531	-12.7%	1,261	-11.6%	1,936	-1.3%
2022	2,440,447	0.0%	1,257	-0.3%	1,941	0.3%

Five-year average hours:	**1,954**
Ten-year average hours:	**1,948**

Total Pension Hours versus Average Hours



[3] The total pension hours are based on the sum of the pension hours reported in the valuation data collection, which may differ from the hours reported to the Fund Office.

Section II. Summary of Data (cont.)

Pensioner Benefit Data as of January 1, 2023

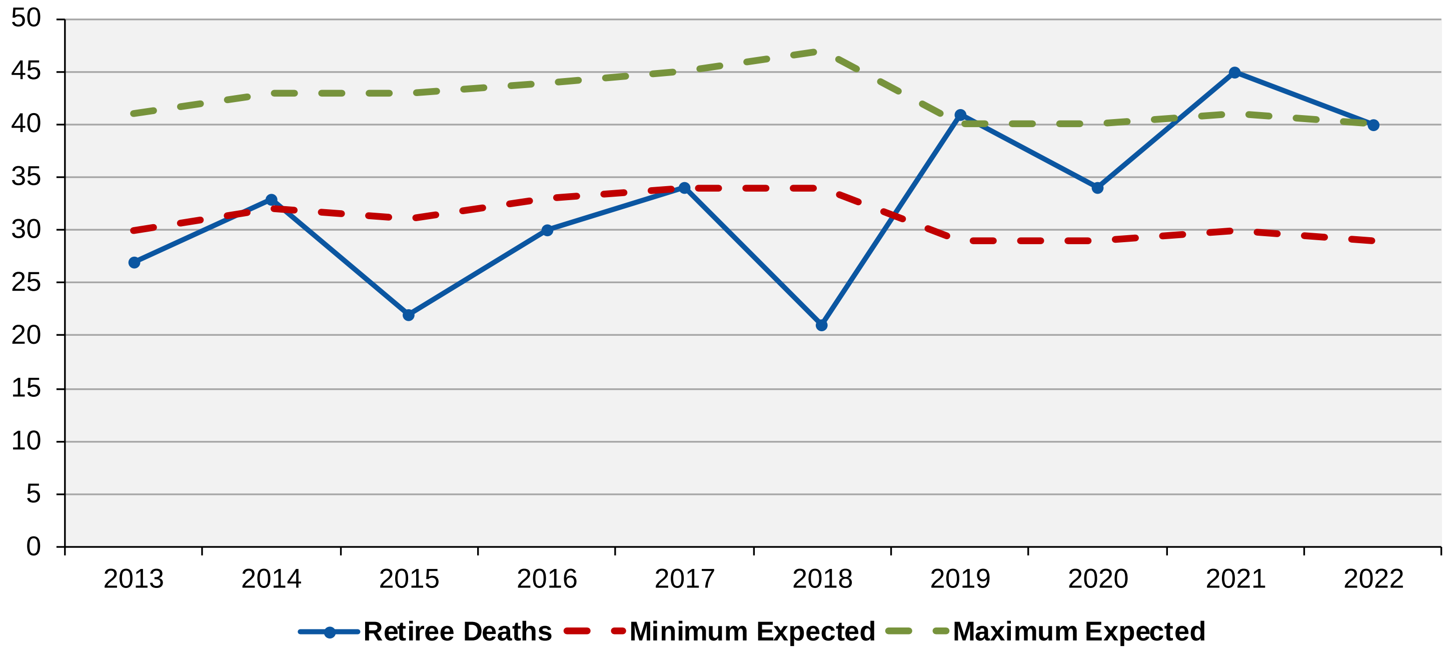
Age	Retired Count	Retired Average Monthly Benefit	Disabled Count	Disabled Average Monthly Benefit	Beneficiaries Count	Beneficiaries Average Monthly Benefit	Alternate Payee Count	Alternate Payee Average Monthly Benefit	Total Count	Total Average Monthly Benefit
Under 55	0	$ 0	2	$ 1,637	11	$ 644	0	$ 0	13	$ 796
55 - 59	5	430	2	3,061	14	579	1	813	22	781
60 - 64	54	1,190	15	1,939	14	538	1	310	84	1,204
65 - 69	110	1,559	7	2,446	37	760	0	0	154	1,407
70 - 74	171	1,403	13	2,215	51	744	1	681	236	1,302
75 - 79	135	1,516	13	2,401	74	680	1	1,005	223	1,288
80 - 84	101	1,437	3	1,628	50	610	0	0	154	1,172
85 - 89	38	1,509	1	1,532	35	653	0	0	74	1,105
90 & Over	23	1,419	0	0	30	618	0	0	53	965
Total	**637**	**$ 1,441**	**56**	**$ 2,179**	**316**	**$ 668**	**4**	**$ 702**	**1,013**	**$ 1,237**
Average Age	**74.9**		**70.0**		**76.4**		**67.7**		**75.1**	

New Entrants as of January 1, 2023										
Total	**41**	**$ 1,462**	**3**	**$ 2,435**	**25**	**$ 990**	**N/A**	**$ N/A**	**69**	**$ 1,333**
Average Age	**65.4**		**62.4**		**67.0**		**N/A**		**65.9**	

Section II. Summary of Data (cont.)

Expected Deaths vs. Actual Deaths

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Retiree Deaths	27	33	22	30	34	21	41	34	45	40



Section III. Valuation Results

Summary of Valuation Results

		1/1/2022		1/1/2023
Interest Rate		7.00%		7.00%

Unfunded Actuarial Accrued Liability				
Actuarial Accrued Liability				
Active	$	70,565,418	$	71,055,775
Retired		115,332,361		115,839,774
Terminated Vested		27,037,407		28,264,461
Total Actuarial Accrued Liability		**212,935,186**		**215,160,010**
Actuarial Value of Assets		196,699,420		201,135,383
Funded Percentage		92.4%		93.5%
Unfunded Actuarial Accrued Liability	**$**	**16,235,766**	**$**	**14,024,627**

Total Normal Cost				
Pension service & auxiliary benefits	$	5,277,158	$	5,693,081
Administration expense		424,522		446,202
Total Normal Cost	**$**	**5,701,680**	**$**	**6,139,283**

Components of Minimum Funding				
Total Normal Cost	$	5,701,680	$	6,139,283
Net Amortization Charges		9,595,830		9,551,398
Interest		1,070,826		1,098,348
Minimum Funding Before Credit Balance		**16,368,336**		**16,789,029**
Credit Balance		54,027,380		50,456,399
Minimum Funding After Credit Balance		**0**		**0**

Maximum Deductible Limit				
Maximum Deductible Limit	$	455,563,281	$	426,644,157

Unfunded Vested Benefits for EWL				
Vested Benefits for EWL	$	334,951,071	$	295,799,996
Market Value of Assets		215,711,548		185,942,372
Unfunded Vested Benefits for EWL	**$**	**119,239,523**	**$**	**109,857,624**

Section III. Valuation Results (cont.)

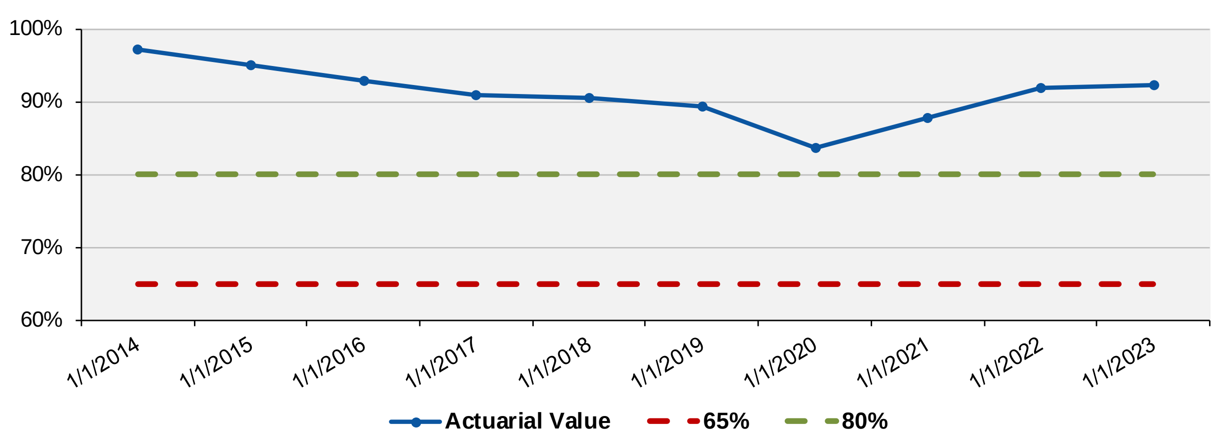
Pension Protection Act of 2006 (PPA)

For plan years beginning after December 31, 2007, a multiemployer defined benefit pension plan's actuary must certify the plan's funding status pursuant to the Pension Protection Act of 2006 (PPA). PPA originally established three categories (or "zones") of plans: (1) "Green Zone" for healthy; (2) "Yellow Zone" for endangered; and (3) "Red Zone" for critical. These zones were expanded upon under the Multiemployer Pension Reform Act of 2014 (MPRA). There are multiple tests that must be evaluated for the actuary to determine a plan's Zone Status. One criterion is to measure the funded percentage based on the Actuarial Value of Assets as of the beginning of the plan year. In general, Green Zone plans have a funding percentage greater than 80%, Yellow Zone plans have a funding ratio between 65% and 79%, and Red Zone plans are less than 65% funded. Healthy plans must also avoid a Funding Standard Account (FSA) accumulated funding deficiency. Each plan's actuary must certify the plan status within 90 days of the start of the plan year.

10-Year History of Funded Percentage and Zone Status

Valuation Date	Market Value	Actuarial Value	Projected FSA Deficiency	Zone Status
1/1/2014	93.2%	97.2%	No	Green
1/1/2015	91.5%	95.1%	No	Green
1/1/2016	87.9%	92.8%	No	Green
1/1/2017	86.6%	90.9%	No	Green
1/1/2018	93.9%	90.6%	No	Green
1/1/2019	84.9%	89.4%	No	Green
1/1/2020	86.3%	83.6%	No	Green
1/1/2021	92.9%	87.7%	No	Green
1/1/2022	100.8%	91.9%	No	Green
1/1/2023	85.7%	92.3%	No	Green

10-Year Funded Percentage versus PPA zone benchmarks



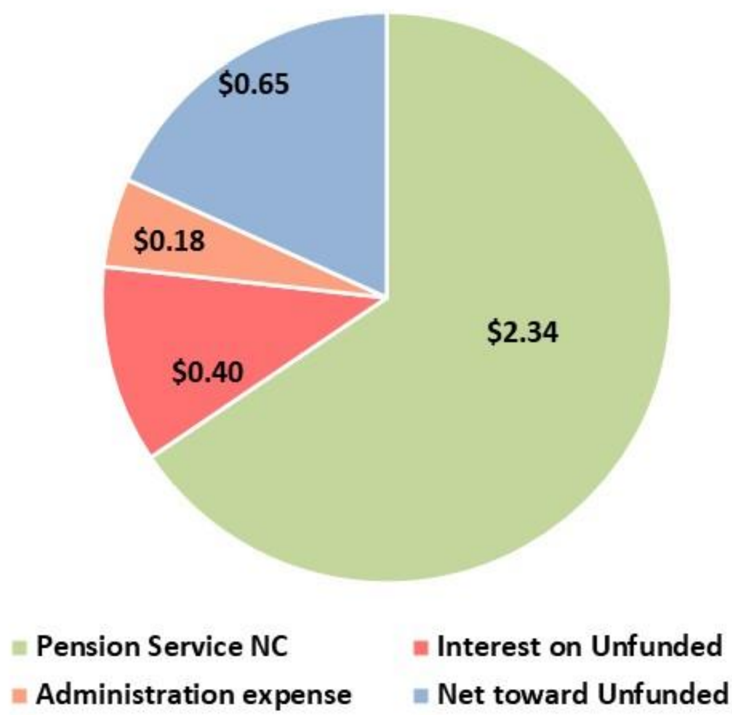
Section III. Valuation Results (cont.)

Projected Cost vs. Contribution

The following is an estimate of the annual fiscal activity for the plan year beginning January 1, 2023:

		Amount		Dollars Per-Hour
1. Employer contributions	$	8,710,568	$	3.57
2. Total Normal Cost				
a. Pension service & auxiliary benefits		5,693,081		2.34
b. Administration expense		446,202		0.18
c. Total (a) + (b)		6,139,283		2.52
3. Annual amount toward UAAL (1) - (2c)	**$**	**2,571,285**	**$**	**1.05**
4. Interest on unfunded		981,724		0.40
5. Net annual amount toward UAAL (3) - (4)	**$**	**1,589,561**	**$**	**0.65**

Breakdown of Projected Contributions



Section III. Valuation Results (cont.)

Funding Standard Account (FSA)

ERISA established a minimum funding standard for defined benefit pension plans, including multiemployer plans. The concept of a Funding Standard Account (FSA) is used to keep track of actual employer contributions as compared to minimum required contributions on a cumulative basis. To the extent that actual contributions exceed minimum required contributions on a cumulative basis, an FSA credit balance is developed. On the contrary, to the extent that actual contributions fall short of minimum required contributions on a cumulative basis, an FSA funding deficiency is developed. A plan satisfies the minimum funding standard if employers make contributions sufficient to ensure that the plan does not develop a funding deficiency as of the end of any plan year. The minimum funding standard does not apply to multiemployer plans in Critical Status after the Trustees have adopted a Rehabilitation Plan and that Rehabilitation Plan is reflected in bargaining agreements.

Each year the plan's normal cost and amortization charges for past increases in the unfunded actuarial accrued liability are charged against the FSA. Similarly, employer contributions and amortization credits for past decreases in the unfunded actuarial accrued liability are credited to the FSA. All charges and credits, including any credit balance or funding deficiency, are adjusted to the end of the applicable plan year by interest at the plan's assumed interest rate for funding purposes.

Below is a table showing the charges against and the credit to the FSA for the latest plan year.

FSA for the Plan Year Ended December 31, 2022

Charges		
Prior Year Funding Deficiency	$	0
Normal Cost plus Administration Expense		5,701,680
Amortization Charges		16,009,365
Interest		1,519,773
Total Charges	**$**	**23,230,818**

Credits		
Prior Year Credit Balance	$	54,027,380
Employer Contribution		8,710,568
Amortization Credits		6,413,535
Interest		4,535,734
Full Funding Credit		0
Total Credits	**$**	**73,687,217**

Credit Balance, End of Year	**$**	**50,456,399**

Section III. Valuation Results (cont.)

Development of Actuarial (Gain)/Loss for January 1, 2022 to December 31, 2022

		Liability		Asset		UAAL
Beginning of year total	$	212,935,186	$	196,699,420	$	16,235,766
Normal cost (net of admin exp)		5,277,158				5,277,158
Administration Expense				(424,522)		424,522
Benefit payments		(15,220,241)		(15,220,241)		
Contributions				8,710,569		(8,710,569)
Interest		14,742,156		13,511,404		1,230,752
Expected end of year total		**217,734,259**		**203,276,630**		**14,457,629**
Actual end of year (before changes)		215,160,010		201,135,383		14,024,627
(Gain) / Loss	**$**	**(2,574,249)**	**$**	**2,141,247**	**$**	**(433,002)**

Development of Actuarial Unfunded Accrued Liability as of December 31, 2022

Development of Actual Unfunded Actuarial Accrued Liability		
1. Expected UAAL as of December 31, 2022	$	14,457,629
2. Changes in UAAL due to:		
a. Actuarial (Gain)/Loss		(433,002)
b. Plan Change		0
c. Assumption Change		0
d. Method Change		0
e. Other		0
3. Total of all changes in UAAL		(433,002)
Actual UAAL as of December 31, 2022 [(1) + (3)]	**$**	**14,024,627**

Historical Actuarial (Gains) and Losses

	Actuarial (Gain)/Loss					
Plan Year Ended		Non-Asset		Asset		Total
12/31/2018	$	1,549,486	$	2,130,059	$	3,679,545
12/31/2019		1,884,740		224,883		2,109,623
12/31/2020		(257,557)		(3,933,227)		(4,190,784)
12/31/2021		(1,367,488)		(7,215,546)		(8,583,034)
12/31/2022		(2,574,249)		2,141,247		(433,002)

Section III. Valuation Results (cont.)

Schedule of Amortization Bases as of January 1, 2023

Charges		Date Established	Years Remaining	Outstanding Balance	Amortization Amount
(1)	Combined Charges	01/01/09	3.371	25,205,572	8,085,876
(2)	Recognized Investment Loss (2008)	01/01/09	15	13,900,869	1,426,392
(3)	Recognized Investment Loss (2008)	01/01/10	15	5,977,184	613,331
(4)	Recognized Investment Loss (2009)	01/01/10	16	921,959	91,212
(5)	Recognized Investment Loss (2008)	01/01/11	15	10,686,149	1,096,526
(6)	Recognized Investment Loss (2008)	01/01/12	15	10,752,694	1,103,352
(7)	Change in Assumptions	01/01/12	4	60,170	16,601
(8)	Actuarial Loss	01/01/13	5	207,602	47,319
(9)	Actuarial Loss	01/01/14	6	1,235,055	242,157
(10)	Change in Assumptions	01/01/14	6	1,456,802	285,635
(11)	Actuarial Loss	01/01/15	7	1,166,610	202,307
(12)	Actuarial Loss	01/01/16	8	3,596,650	562,918
(13)	Actuarial Loss	01/01/17	9	2,097,181	300,831
(14)	Actuarial Loss	01/01/18	10	1,421,369	189,131
(15)	Actuarial Loss	01/01/19	11	3,029,420	377,565
(16)	Assumption Change	01/01/19	11	9,241,074	1,151,740
(17)	Actuarial Loss	01/01/20	12	1,839,728	216,472
	Total Charges			**$ 92,796,088**	**$ 16,009,365**

Credits		Date Established	Years Remaining	Outstanding Balance	Amortization Amount
(1)	Actuarial Gain (Net of Investment Loss)	01/01/09	1	868,165	868,165
(2)	Actuarial Gain (Net of Investment Loss)	01/01/10	2	2,038,278	1,053,603
(3)	Actuarial Gain (Net of Investment Loss)	01/01/11	3	4,015,925	1,430,166
(4)	Actuarial Gain (Net of Investment Loss)	01/01/12	4	4,466,709	1,232,430
(5)	Assumption Change	01/01/20	12	4,405,940	518,427
(6)	Actuarial Gain	01/01/21	13	3,845,568	430,024
(7)	Actuarial Gain	01/01/22	14	8,241,475	880,721
(8)	Actuarial Gain	01/01/23	15	433,002	44,431
	Total Credits			**$ 28,315,062**	**$ 6,457,967**

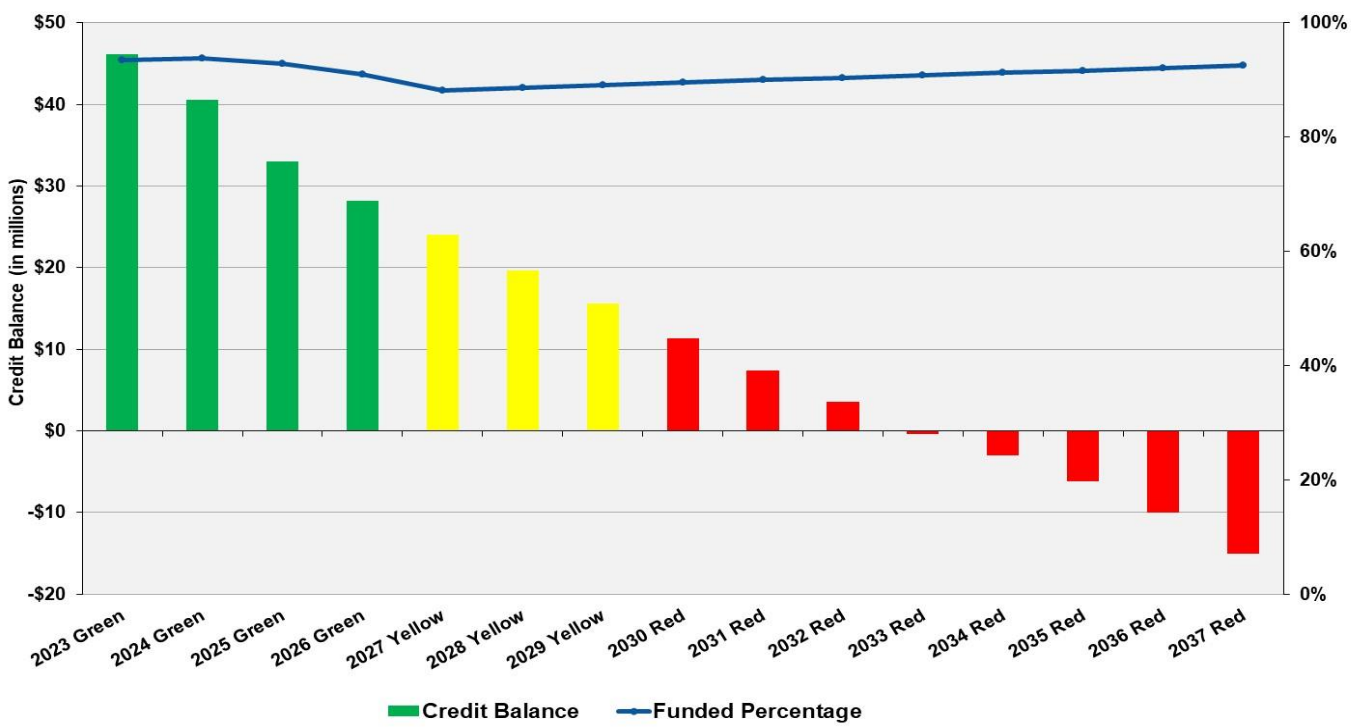
Section III. Valuation Results (cont.)

15-Year Projection of the Credit Balance and Funded Percentage

Plan Year	PPA Funded %	Beginning Credit Balance	Total Normal Cost	Net Amort. Charge	Anticipated Contribution	Interest	Ending Credit Balance
2023	93.5%	$ 50,456,399	$ 6,139,283	$ 9,551,398	$ 8,710,568	$ 2,738,471	$ 46,214,757
2024	93.8%	46,214,757	6,148,207	10,525,461	8,710,568	2,372,746	40,624,403
2025	92.8%	40,624,403	6,157,310	11,982,307	8,710,568	1,878,804	33,074,158
2026	91.1%	33,074,158	6,166,595	8,973,731	8,710,568	1,560,238	28,204,638
2027	88.2%	28,204,638	6,176,065	7,953,646	8,710,568	1,290,115	24,075,610
2028	88.7%	24,075,610	6,185,725	7,906,340	8,710,568	1,003,718	19,697,831
2029	89.1%	19,697,831	6,195,578	7,378,528	8,710,568	733,530	15,567,823
2030	89.6%	15,567,823	6,205,628	7,176,228	8,710,568	457,888	11,354,423
2031	90.0%	11,354,423	6,215,879	6,613,299	8,710,568	201,637	7,437,450
2032	90.4%	7,437,450	6,226,335	6,312,483	8,710,568	(52,225)	3,556,975
2033	90.9%	3,556,975	6,237,000	6,123,321	8,710,568	(311,365)	(404,143)
2034	91.3%	(404,143)	6,247,878	4,594,047	8,710,568	(482,355)	(3,017,855)
2035	91.7%	(3,017,855)	6,258,974	4,895,996	8,710,568	(687,228)	(6,149,485)
2036	92.1%	(6,149,485)	6,270,292	5,326,024	8,710,568	(937,336)	(9,972,569)
2037	92.5%	(9,972,569)	6,281,836	6,206,736	8,710,568	(1,267,410)	(15,017,983)

The Ending Credit Balance is equal to the Beginning Credit Balance, less Normal Cost and Net Amortization Charges (Credits), plus Anticipated Contribution and Interest.

Projection of the Credit Balance and Funding Percentage (Graph)

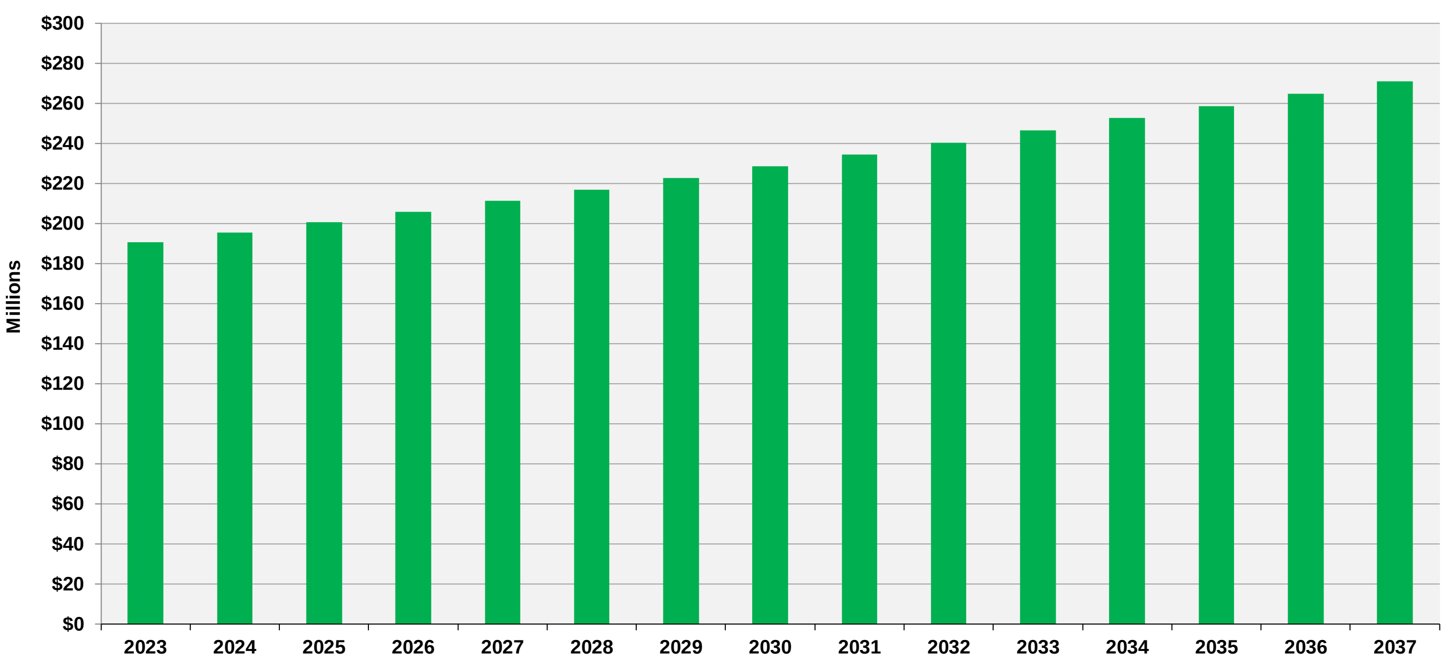


Section III. Valuation Results (cont.)

15-Year Projection of the Market Value of Assets

Plan Year	Market Value BOY	Anticipated Contributions	Estimated Benefit Payments	Estimated Admin. Expenses	Estimated Invest. Return	Market Value EOY
2023	$ 185,942,372	$ 8,710,568	$ 16,243,119	$ 446,202	$ 12,721,093	$ 190,684,712
2024	190,684,712	8,710,568	16,382,068	455,126	13,047,568	195,605,654
2025	195,605,654	8,710,568	16,496,226	464,229	13,387,402	200,743,169
2026	200,743,169	8,710,568	16,655,207	473,514	13,740,813	206,065,829
2027	206,065,829	8,710,568	16,924,140	482,984	14,103,324	211,472,597
2028	211,472,597	8,710,568	17,038,956	492,644	14,477,103	217,128,668
2029	217,128,668	8,710,568	17,360,640	502,497	14,861,080	222,837,179
2030	222,837,179	8,710,568	17,622,440	512,547	15,250,809	228,663,569
2031	228,663,569	8,710,568	17,873,151	522,798	15,649,164	234,627,352
2032	234,627,352	8,710,568	18,210,162	533,254	16,054,101	240,648,605
2033	240,648,605	8,710,568	18,617,865	543,919	16,460,572	246,657,961
2034	246,657,961	8,710,568	18,921,267	554,797	16,869,847	252,762,312
2035	252,762,312	8,710,568	19,355,981	565,893	17,281,160	258,832,166
2036	258,832,166	8,710,568	19,699,098	577,211	17,693,249	264,959,674
2037	264,959,674	8,710,568	20,089,400	588,755	18,107,706	271,099,793

Projection of the Market Value of Assets as of December 31 (Graph)



Section IV. ASOP 51 Disclosure

Assessment and Disclosure of Risk

Actuarial Standard of Practice No. 51 *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions* which is effective for actuarial valuations after November 2018. The standard requires actuaries to provide information so that users of an actuarial report can better understand the potential for future results to vary from the results presented in the report and identify risks related to estimating the plan's future financial condition. This standard does not require the assessment to be based on numerical calculations.

Examples of risk common to most multiemployer plans include the following (generally listed from greatest to least risk)

- Investment risk: The potential that investment returns will be different than expected.
- Contribution risk: Most commonly, this is associated with the potential that actual future contributions are less due to a reduction in hours worked. When this occurs, it can create negative, long-term problems.
- Asset/liability mismatch risk: The potential that changes in asset values are not matched by changes in the value of liabilities.
- Cash flow risks: The potential that contributions coming into the plan will not cover benefit payments. While common in well-funded plans, this still requires the use of interest, dividends or principal to cover benefit payments. When assets need to be sold (or more cash held) it can be an issue.
- Longevity risk: The risk that the life expectancy of participants will be different than assumed.
- Demographic risk: The risk that assumptions will differ from what is expected (e.g. termination of employment, retirement, and disability).

One item left off this list is "interest rate risk," i.e., the potential that interest rates will be different than expected. This risk is common in corporate single employer ERISA plans where funding is based on bond rates. Interest rates on bonds are still an important consideration when setting an expected return assumption and can change over time. Some recent legislative proposals contemplate extending these rules to multiemployer plans. If those were enacted this could become a greater risk for the plan.

There are some plan maturity measures that are significant to understanding the risks associated with the plan. The following table shows two commonly used measures of the relative riskiness of a pension plan, relative to the plan sponsors and the employee group covered by the plan. The Conservative Measures column provides a rough guideline of what these values often look like for plans with lower risk profiles. These are not hard and fast rules.

.

Section IV. ASOP 51 Disclosure (cont.)

Assessment and Disclosure of Risk (cont.)

Risk Measures	12/31/20	12/31/21	12/31/22	Conservative Measures
Inactive Vested Liability as a % of Total Liability	67%	67%	67%	< 50%
Benefit Payments to Contributions[4]	1.83	1.92	1.75	< 2

Often, adverse experience can be dealt with through changes in contribution rates and/or benefit accrual rates. For mature plans, however, the ability to adapt to adverse experience using these levers becomes increasingly limited as the plan continues to mature.

If the Trustees are interested in doing more quantitative assessments of risks, the following are examples of tests that we could perform:

Scenario Test – A process for assessing the impact of one possible event, or several simultaneously or sequentially occurring possible events, on a plan's financial condition.

Sensitivity Test – A process for assessing the impact of a change in an actuarial assumption on an actuarial measurement.

Stochastic Modeling – A process for generating numerous potential outcomes by allowing for random variations in one or more inputs over time for the purpose of assessing the distribution of those outcomes.

Stress Test – A process for assessing the impact of adverse changes in one or relatively few factors affecting a plan's financial condition.

[4] For the year ending on the date shown.

Section V. History of Unfunded Vested Benefits for Withdrawal Liability Purposes

History of Unfunded Vested Benefits

For purposes of employer withdrawal liability under the Multiemployer Pension Plan Amendments Act of 1980 we have calculated the value of unfunded vested benefits as of the end of each plan year.

The following table shows the results of those calculations:

Plan Year Ending	Present Value of Vested Benefits[5]	Market Value of Assets	Unfunded Vested Benefits
12/31/2004	$ 131,505,152	$ 160,900,939	$ (29,395,787)
12/31/2005	142,006,595	169,328,900	(27,322,305)
12/31/2006	150,284,973	183,682,940	(33,397,967)
12/31/2007	152,640,381	191,576,306	(38,935,925)
12/31/2008	157,236,644	140,337,036	16,899,608
12/31/2009	179,815,256	139,125,095	40,690,161
12/31/2010	187,684,509	148,710,282	38,974,227
12/31/2011	204,957,742	141,002,112	63,955,630
12/31/2012	226,288,865	146,624,322	79,664,543
12/31/2013	212,279,866	165,160,271	47,119,595
12/31/2014	233,067,039	166,519,458	66,547,581
12/31/2015	227,327,214	162,179,970	65,147,244
12/31/2016	232,750,580	163,382,617	69,367,963
12/31/2017	252,483,608	177,402,854	75,080,754
12/31/2018	253,765,243	163,326,090	90,439,153
12/31/2019	300,097,283	181,502,666	118,594,617
12/31/2020	339,121,460	196,464,544	142,656,916
12/31/2021	334,951,071	215,711,548	119,239,523
12/31/2022	295,799,996	185,942,372	109,857,624

[5] Effective for the Plan Year Ending December 31, 2022, the interest rate assumption for withdrawals is PBGC interest rates as of December each year. For this valuation, 3.90% in the first 20 years, then 3.65% thereafter.

Section VI. Statement of Accounting Standards Codification No. 960

Statement of Accumulated Plan Benefits as of January 1, 2023

Present Value of Accumulated Plan Benefits (PVAB)		1/1/2022		1/1/2023
Vested Benefits				
Participants Currently Receiving Payments	$	115,332,361	$	115,839,774
Deferred Vested Participants		27,037,407		28,264,461
Active Participants		58,431,880		58,875,730
Total Vested Benefits		**200,801,648**		**202,979,965**
Non-Vested Benefits		12,133,538		12,180,045
Total (PVAB)	**$**	**212,935,186**	**$**	**215,160,010**

The interest rate used in determining the present value of accumulated plan benefits was 7.00% for 2022 and 7.00% for 2023.

Statement of Changes in Accumulated Plan Benefits				
Actuarial Present Value of Accumulated Plan Benefits as of January 1, 2022			$	212,935,186
Increase (Decrease) during the year attributable to:				
Interest	$	14,372,755		
Plan Experience		3,072,310		
Benefits Paid		(15,220,241)		
Assumption Change		0		
Plan Amendment		0		
Net Increase				2,224,824
Actuarial Present Value of Accumulated Plan Benefits as of January 1, 2023			$	215,160,010

Section VII. Summary of Plan Provisions

Effective Date	November 30, 1961
Plan Year	January 1 through December 31
Hour of Service	A participant is credited with one hour of service for each hour for which he is paid for the performance of duties in covered employment. A participant is also credited with one hour of service for each hour for which he is paid for non-work, such as vacation, holiday, etc.
Pension Service	**Past Service:** A participant who is not an employee of a paving contractor receives one Past Benefit Unit for each calendar year prior to 1960, any part of which he worked under a collective bargaining agreement with the Union. **Future Service:** A participant receives Future Benefit Units based upon service after December 31, 1959 (December 31, 1969 for employees of paving contractors) equal to the lesser of: i) Years and completed quarters of a year measured from the beginning of the first year with any hours to the end of the last year with at least 400 hours, or to the end of the last month with any hours, if later, or ii) Years and completed quarters of a year determined by dividing the participant's number of hours by 1,600.
Vesting Service	5 years required for vesting. A participant receives Years of Vesting Service based on his hours during the plan year, in accordance with the following table:

Hours	Years of Vesting Service
0 – 499	0.00
500 – 749	0.50
750 – 999	0.75
1,000 or more	1.00

Participation

- **Age Requirement:** none
- **Service Requirement:** Any employee covered by a collective bargaining agreement with the International Union of Operating Engineers, Local No. 77, is a participant in this plan.

Section VII. Summary of Plan Provisions (cont.)

Normal Pension	• **Age Requirement:** 65 • **Service Requirement:** Fifth anniversary of participation. **Amount:** The monthly normal retirement benefit paid to a participant is the sum of: i) Benefit earned for service before 1/1/2008 a. All Past and Future Benefit Units for Participants with one or more breaks in service prior to 2008, and who have been credited with 25 years of Vesting Service, will be valued using the benefit unit rates in effect at the time their application for benefit is approved. ii) Plus, for years from 2008 to 2010, 3.0% of employer contributions on behalf of that participant for the year iii) Plus, for years from 2011 to 2014, 2.5% of employer contributions on behalf of that participant for the year iv) Plus, for years from 2015 to 2019, 2.1% of employer contributions on behalf of that participant for the year. v) Plus, for years after 12/31/2019, 1.75% of employer contributions on behalf of that participant for the year.
Deferred Vested Pension	• **Age Requirement:** 65 • **Service Requirement:** 5 years of vesting service • **Amount:** same as normal
Early Pension	• **Age Requirement:** 55 • **Service Requirement: 5** years of vesting service • **Amount (less than 35 years of Vesting Service):** same as normal but reduced ½ of 1% for each month prior to normal retirement eligibility • **Amount (more than 35 years of Vesting Service):** same as normal but reduced ¼ of 1% for each month prior to age 60

Section VII. Summary of Plan Provisions (cont.)

Disability Benefit	• **Age Requirement:** none • **Service Requirement:** 15 years of vesting service upon total and permanent disability • **Amount:** same as normal with no reduction for early commencement
Pre-Retirement Death Benefit	• **Age Requirement:** none • **Service Requirement:** vested • **Amount:** $5,000
Post-Retirement Death Benefit	• In addition to any survivor benefit payable under the annuity option elected by the participant, the beneficiary of a deceased retiree will receive a lump sum benefit of $5,000.
Pre-Pension Surviving Spouse Pension	• **Age Requirement:** none • **Service Requirement:** vested • **Amount:** 50% of the normal or early retirement benefit the participant would have received had he retired on the first day of the month in which he died but elected an actuarially reduced joint & 50% spouse annuity. The actuarial reduction cannot exceed 10%. • **Duration:** life of spouse
Vesting	• **Age Requirement:** none • **Service Requirement:** 5 years of vesting service
Normal Form of Benefit	• **Unmarried Participant:** Three-year certain and continuous annuity. • **Married Participant:** Actuarially reduced 50% Joint & Survivor Pop-up Annuity.
Optional Forms of Benefit	• Three-year certain and continuous annuity • 75% Joint & Survivor Pop-up Annuity

Changes to Prior Year's Plan Provisions

None.

Section VIII. Actuarial Methods and Assumptions

Actuarial Funding Method

The Traditional Unit Credit (accrued benefit) cost method has been used to develop the funding requirements presented in this report. Under this method, the normal cost is equal to the actuarial present value of benefits accrued during the plan year. The actuarial liability represents the actuarial present value of benefits which have been accrued in all prior plan years. Actuarial gains or losses resulting from plan experience which differs from the actuarial assumptions, plan amendments or changes in the actuarial assumptions are considered new pieces of actuarial liability and must be funded over no more than fifteen years.

Asset Valuation Method

The actuarial value of assets is a calculated value determined by adjusting the market value of assets to reflect the investment gains and losses (the difference between the actual investment return and the expected investment return based on the prior year market value) during each of the last five years at the rate of 20% per year. The actuarial value is subject to a restriction that it cannot be less than 80% nor more than 120% of market value.

Mortality

Funding

Healthy: 130% of the RP-2014 Blue Collar Mortality, projected generationally using scale MP-2018.
Disabled: 140% of the RP-2014 Disabled Retiree Mortality, projected generationally using scale MP-2018.

The mortality assumption was selected based on a mortality experience study conducted in 2018.

Current Liability:

2023 IRS Static Mortality Table.

Interest Rate

Valuation:

7.00% annual compound interest in the future, based on expected earnings from portfolio analysis.

Withdrawal Liability:

Starting with this valuation, PBGC interest rates as of December of the prior year for withdrawals after December 31, 2022. For this valuation, 3.90% for the first 20 years, then 3.65% thereafter. For prior valuations, the PPA corporate bond spot-rate yield curve for December prior to the valuation date.

Section VIII. Actuarial Methods and Assumptions (cont.)

Interest Rate (cont.)

Current Liability:

2.55% per year compounded annually. The current liability interest rate is chosen from a specified range that is set by law.

Termination & Disability

Termination

We have assumed that terminations of employment, other than death, disability, or pension will occur in the future at a moderate rate.

Age	Rate
25	4.93%
30	3.41%
35	2.37%
40	1.31%
45	0.67%

Disability

Based on 1965 to 1982 Social Security experience with adjustment for occupational class.

Age	Rate
25	0.20%
30	0.30%
35	0.42%
40	0.59%
45	0.82%
50	1.22%
55	2.09%

Section VIII. Actuarial Methods and Assumptions (cont.)

Age at Pension

Active participants are assumed to retire at the following sample rates:

	Service	
Age	5-34	35+
<55	0.0%	0.0%
55	2.5%	2.5%
60	2.5%	20.0%
64	10.0%	100.0%
65	40.0%	100.0%
70	100.0%	100.0%

Terminated vested participants are assumed to retire at age 65.

The weighted average retirement age as of the valuation date is 63.5. The overall weighted retirement age is the average of the individual retirement ages based on all the active participants included in the January 1, 2023 actuarial valuation.

The retirement age assumption used was reviewed and determined to be reasonable taking into account the following factors:

- The Plan's early retirement provisions,
- The actuary's experience with other plans of a similar size, demographic composition, and plan design.

Administration Expenses

The prior year's administrative expenses increased 2% are assumed as a mid-year number for the current year. That mid-year number is then discounted to the beginning of the year and included in the normal cost. For projections, administrative expenses are assumed to increase 2% annually.

The annual administrative expenses were based on historical and current data, adjusted to reflect estimated future experience and professional judgment.

Assumed Hours Worked

Each active participant will work the same hours in each year in the future that were worked in the Plan Year ended immediately prior to the valuation date.

The future hours assumption is based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the assumed and the actual hours over the past several years.

Section VIII. Actuarial Methods and Assumptions (cont.)

Active Participants

For the purpose of projecting future contributions only, we have assumed that the number of active participants will remain constant with replacements being made immediately upon pension, death, or disability. Participants who worked zero hours in the prior plan year are assumed to be separated participants.

Marital Status

85% of all participants are assumed to be married. Wives are assumed to be 3 years younger than husbands.

Forms of Benefit

Single participants are assumed to elect a three-year certain and continuous annuity at retirement. Married participants are assumed to elect a 50% Joint and Survivor pop-up annuity at retirement. Because all optional forms of benefit are actuarially equivalent, the net impact on the valuation results is immaterial.

Assumptions reflected in the determination of plan assets and liabilities that are not specifically discussed are not considered significant relative to the measurement.

Changes to Prior Year’s Valuation

The interest rate used to calculate the Unfunded Vested Benefits for withdrawal liability purposes as of December 31, 2022 has been updated to use PBGC interest rates. In the prior year, the PPA corporate bond spot-rate yield curve was used. All other methods and assumptions remain the same as those used in the prior valuation.

All other methods and assumptions remain the same as those used in the prior valuation.

Section IX. Contribution Rate History

The following table shows the Fund's historical contribution rates, including those rates as set by the current Collective Bargaining Agreement.

Effective Date		Contribution History[6]
01/01/06	$	1.50
01/01/07		1.61
01/01/08		1.66
01/01/09		1.76
01/01/10		1.80
01/01/11		1.93
01/01/12		2.01
01/01/13		2.13
01/01/14		2.20
01/01/15		2.36
01/01/16		2.40
01/01/17		2.50
01/01/18		2.69
01/01/19		2.78
01/01/20		2.83
01/01/21		2.90
01/01/22		3.26
01/01/23		3.57

[6] Contribution rate varies by contract. Rates listed are the average at the valuation date.

Section X. Full Funding Limitation

Determination of Current Liability as of January 1, 2023

	Number of Participants		RPA '94 Current Liability
Retired Participants and Beneficiaries	1,013	$	182,632,507
Terminated Vested Participants	563		69,537,893
Active Participants			
Non-Vested			28,131,872
Vested			153,670,246
Total Active Participants	1,257		181,802,118
Total	**2,833**	**$**	**433,972,518**

RPA '94 Information		
Value of Benefits Accruing During the Year	$	17,099,103
Expected Benefit Payments During the Year		16,251,655
Interest Rate		2.55%
Mortality Table		2023 IRS Static Mortality

Full Funding Limitation for Minimum Funding As of December 31, 2023

The Full Funding Limitation for Minimum Funding establishes the maximum net charge to the Funding Standard Account calculated without regard for contributions or credit balance. If the net charge exceeds this limit, then a special credit is taken on the Schedule MB of Form 5500. The net charge for the Fund does not exceed this limitation.

Full Funding Limitation for Minimum Funding		ERISA		RPA
Expected Liability	$	236,312,807	$	446,115,084
Liability Percentage		100%		90%
Funding Limit Liability		236,312,807		401,503,576
Expected Assets for Minimum Funding		(144,492,555)		(197,916,961)
Preliminary Full Funding Limitation (not less than 0)		91,820,252		203,586,615
Full Funding Limitation (greater of ERISA and RPA)	**$**	**203,586,615**		

Section X. Full Funding Limitation (cont.)

Full Funding Limitation for Maximum Deductible as of December 31, 2023

The Full Funding Limitation for Maximum Funding provides one of several components in the calculation of the limit for deductible contributions for the plan.

The maximum Deductible Limitation is the greater of:

(1) 140% of current Liability Deductible Limit on RPA basis less actuarial value of assets, and
(2) The lesser of:
   (a) Normal Cost plus Ten Year Amortization of the UAAL, or
   (b) Full Funding Limitation for Maximum Funding.

Full Funding Limitation for Maximum Funding	ERISA	RPA
Expected Liability	$ 236,312,807	$ 446,115,084
Liability Percentage	100%	90%
Funding Limit Liability	236,312,807	401,503,576
Expected Assets for Maximum Funding	(198,480,902)	(197,916,961)
Preliminary Full Funding Limitation (not less than 0)	37,831,905	203,586,615
Full Funding Limitation (greater of ERISA and RPA)	**$ 203,586,615**	

Current Liability Deductible Limit	
140% of RPA Expected Liability – RPA Expected Assets	**$ 426,644,157**

For the current year, the 140% Current Liability deductible Limit is $426,644,157, the Normal Cost plus Ten Year Amortization is $8,565,824 and the Full Funding Limitation is $203,586,615. Therefore, the Maximum Deductible Limit is $426,644,157.

Section XI. Glossary

Actuarial Accrued Liability:

In general, this term means the present value, expressed in a single sum, of the benefits yet to be paid. It is computed differently under different Actuarial Funding Methods.

Actuarial Assumptions:

Estimates or projections of future plan experience such as investment return, expected lifetimes and the likelihood of receiving a pension from the pension plan. Demographic, or "people" assumptions include rates of mortality, retirement and separation. Economic, or "money" assumptions, include expected investment return, inflation and salary increases. Assumptions of a long-term nature are representative of average expectations (i.e., they will not be exactly realized in every year, however over an extended period are a reasonable projection of future outcomes).

Actuarial Funding Methods:

An actuarial method that defines the allocation of pension costs over a member's working career. All standard actuarial cost methods are comprised of two components: Normal Cost and the Actuarial Accrued Liability. An Actuarial Funding Method determines the timing of pension costs, not the ultimate cost of a pension plan; that cost is determined by the actual benefits paid less the actual investment income.

Actuarial or Experience Gain or Loss

Actuarial Assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used. Such gains or losses are not actual economic gains or losses immediately incurred by a plan, as experience in future years could offset the effect of experience in a single year due to the typically long-term average nature of actuarial assumptions.

Actuarial Gain or Loss:

A pension plan incurs actuarial gains or losses when the actual experience of the pension plan does not exactly match assumptions.

Actuarial Value of Assets (AVA):

The value of the pension plan's investments and other property used by the actuary for the purpose of an actuarial valuation (sometimes referred to as valuation assets). This may be the market or fair value of plan assets or a smoothed value to reduce the year-to-year volatility.

Funded Percentage:

The ratio of a plan's assets compared to the liabilities. There are several acceptable methods of measuring a plan's assets and liabilities for this purpose.

Market Value of Assets (MVA):

The value of the pension plan's assets based on the value they would trade at on an open market, including accrued income and expenses (sometimes referred to as fair value). This is typically provided by the plan's auditor.

Normal Cost:

Computed differently under different funding methods. The Normal Cost generally represents the value of benefits being earned that are allocated to the current plan year.

Unfunded Actuarial Accrued Liability (UAAL):

The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.

Bolton
Employee Benefits, Actuarial & Investment Consulting

November 10, 2023

Mr. David Jensen
Operating Engineers Local 77 Pension Fund
c/o Associated Administrators, LLC
911 Ridgebrook Road
Sparks, MD 21152-9451

Re: Operating Engineers Local 77 Pension Fund - Mortality Study Update

Dear Dave:

At the August 2022 Board meeting, I presented to the Trustees the results of a mortality study we performed for the Pension Fund. The indicated mortality assumption would increase the Fund's actuarial accrued liabilities once implemented. As a result of poor investment performance for 2022, I told the Trustees that I would delay implementing the new mortality assumption, and that I would also consider mortality experience for 2022 to see if it would impact the indicated assumption. This letter is an update to the one presented to the Trustees at the August 2022 Board meeting. It adds additional mortality experience for 2011 thru 2016 as well as for 2022. In addition, it reflects preliminary unaudited financials through September 30, 2023. Specifically, the preliminary financial values shown below were used for the study.

Preliminary Financials Through September 30, 2023	YTD	Annualized
Contributions	$7,065,362	$9,420,483
Benefit Payments	$11,620,515	$15,494,020
Administrative Expenses	$275,694	$367,592
	As of 9/30/2023	Projected to 12/31/2023
Market Value of Assets	$186,211,369	$187,845,696

Current Assumption

Our current assumption uses 130% of the sex-distinct RP-2014 Amounts-Weighted Blue Collar Mortality Tables projected generationally using mortality improvement scale MP-2018 for healthy participants. For disabled participants our assumption uses 140% of the sex-distinct RP-2014 Disabled Retiree Amounts-Weighted Mortality Table projected generationally using mortality improvement scale MP-2018.

Experience Used and Assumptions Considered

For the updated study we looked at sex-distinct non-disabled pensioner mortality experience under the plan for the 12-year period of 2011-2022. There are not enough pre-retirement deaths to be able to effectively study pre-retirement mortality. The same is the case for disabled pensioner mortality. For this reason, we will develop a modification to the standard mortality tables for non-disabled pensioners and use that same modification for employee mortality tables and disabled pensioner tables.

We compared experience under the Plan to the following mortality table.

- Sex-distinct PRI-2012 Blue Collar Retiree Amounts-Weighted Table ("PRI-2012 Blue Collar Retiree Table")

The mortality table above uses mortality improvement scale MP-2021 to project mortality improvements into the future.

Comparison of Actual to Expected Experience

The tables below show a comparison of actual experience under the plan versus experience that would have been expected based on current and revised mortality assumptions. For amounts-weighted mortality assumptions, we looked at monthly benefit amounts for participants who died compared to monthly benefits based on expected deaths. We then calculated actual to expected (A/E) ratios to help with our analysis. A/E ratios less than 1.000 indicate that benefit payments ceasing due to pensioner deaths are less than expected. On the contrary, A/E ratios greater than 1.000 indicate that benefit payments ceasing due to pensioner deaths are greater than expected. An A/E ratio of 1.000 indicates that actual experience matches expected.

Healthy Pensioners

Current Assumption				
Year	Actual ($)	Expected ($)	A/E Ratio	Deaths
2011	52,139	44,803	1.164	50
2012	30,112	45,510	0.662	32
2013	34,712	48,210	0.720	39
2014	38,628	51,076	0.756	45
2015	31,743	51,898	0.612	34
2016	26,284	54,166	0.485	25
2017	45,277	57,367	0.789	39
2018	43,593	59,740	0.730	51
2019	63,191	62,802	1.006	51
2020	50,831	63,578	0.800	51
2021	65,767	65,086	1.010	59
2022	78,589	65,791	1.195	66
All Years	**560,866**	**670,027**	**0.837**	**542**
10-yr	**478,615**	**579,714**	**0.826**	**460**
6-yr	**347,248**	**374,364**	**0.928**	**317**
5-yr	**301,971**	**316,997**	**0.953**	**278**

PRI-2012 Blue Collar Retiree, MP-2021				
Year	Actual ($)	Expected ($)	A/E Ratio	Deaths
2011	52,139	34,408	1.515	50
2012	30,112	34,976	0.861	32
2013	34,712	37,055	0.937	39
2014	38,628	39,215	0.985	45
2015	31,743	39,807	0.797	34
2016	26,284	41,584	0.632	25
2017	45,277	44,094	1.027	39
2018	43,593	46,030	0.947	51
2019	63,191	48,466	1.304	51
2020	50,831	49,167	1.034	51
2021	65,767	50,421	1.304	59
2022	78,589	51,105	1.538	66
All Years	**560,866**	**516,329**	**1.086**	**542**
10-yr	**478,615**	**446,945**	**1.071**	**460**
6-yr	**347,248**	**289,283**	**1.200**	**317**
5-yr	**301,971**	**245,189**	**1.232**	**278**

The first table above shows results for the current assumption by year as well as in total and for various multi-year averages. In general, the A/E ratios for the current assumption are below 1.000, indicating that benefit payments are not ceasing to the extent expected, which also indicates that liabilities may be understated.

The second table shows results for the unmodified PRI-2012 Blue Collar Retiree Table with mortality improvements being projected by MP-2021. In general, the A/E ratios for this table are greater than 1.000, indicating that benefit payments are ceasing more than expected. If the Plan's experience was fully credible, then this would indicate that liabilities may be overstated with this assumption. Credibility is discussed in the next section.

Credibility

Credibility is a measure of how reliable data is. All else being equal, more data makes results more reliable while less data makes results less reliable. For this study, we looked at the number of deaths during the experience period to measure credibility. We assumed that 1,082 deaths would indicate full credibility[1], meaning that with 1,082 or more deaths the Plan's experience can be used without modification. For less than 1,082 deaths, we assigned partial credibility to the Plan's experience. Where the Plan's experience is only partially credible, we weighted the Plan's A/E ratio against a factor of 1.000, which represents the unmodified PRI-2012 Blue Collar Retiree Table. For example, if the Plan's A/E ratio is 1.100 and it is assigned 60% credibility, then the remaining 40% credibility would be assigned to a factor of 1.000. The result would be a credibility-weighted factor of 1.06 (60% x 1.100 + 40% x 1.000).

The table below shows Plan A/E ratios for four different multi-year periods, along with the credibility assigned to each A/E ratio and the resulting credibility-weighted factor.

Experience Period	Plan A/E Ratio	Credibility Assigned	Credibility-Weighted Factor
All Years	1.086	70.8%	1.061
10-yr	1.071	65.2%	1.046
6-yr	1.200	54.1%	1.108
5-yr	1.232	50.7%	1.117

As can be seen in the above table, the credibility-weighted factors range from 1.046 to 1.117, with the higher factors resulting from more recent experience. Based on this, I believe that a reasonable mortality assumption for the Plan is 110% of the sex-distinct PRI-2012 Blue Collar Tables for employees, terminated vested participants and healthy pensioners, and 110% of the sex-distinct PRI-2012 Disabled Table for disabled pensioners (collectively referred to as the "PRI-2012 Amounts-Weighted Tables").

[1] A full credibility standard of 1,082 indicates that there is a 90% probability of the number of deaths being within 5% of the expected number of deaths.

Further Analysis

We estimated the impact that the revised assumption set would have on the Plan's actuarial accrued liability (AAL) and its normal cost (NC). The table below shows these impacts.

Assumption	AAL	Increase	NC	Increase
Current Mortality Assumption	215,160,010	N/A	5,693,081	N/A
PRI-2012 Blue Collar Amts-Wtd	229,655,058	6.7%	6,069,424	6.6%
110% PRI-2012 Blue Collar Amts-Wtd	224,500,154	4.3%	5,968,384	4.8%

Using the unmodified PRI-2012 Amounts-Weighted Tables would increase liabilities 6.7% and normal cost 6.6%. Alternatively, using 110% of the PRI-2012 Amounts-Weighted Tables would only increase liabilities 4.3% and normal cost 4.8%. Thus, using the Plan's experience to appropriately adjust the standard table reduces our estimate of benefit costs under the Plan while also providing for a more accurate measure of liabilities.

Projections of Future Funded Status

We looked at projections of the Plan's future funded status under each of the mortality assumptions considered. For projection purposes, we used the Plan's preliminary financials for the first nine months of 2023 and assumed that the Plan's assets would return an annualized 7.0% return for the remainder of 2023 as well as for all future plan years.

Without updating the mortality assumption, we project a funding deficiency to occur in 2036. When using the unmodified PRI-2012 Amounts-Weighted Tables, we project a funding deficiency to occur in 2030. Applying the results of the mortality experience study and using 110% of the PRI-2012 Amounts-Weighted Tables we project a funding deficiency to occur in 2031. Attached to this letter are graphs showing projections of both the funded percentage and the credit balance under each of the mortality assumptions considered. The projections using updated mortality assumptions reflect an effective date of January 1, 2024, for the assumption change.

Given that all 3 mortality assumptions lead to a projected funding deficiency in the future, the Trustees should consider lowering the benefit accrual rate below the current rate of 1.75% of contributions. The earlier that corrective action is taken, the less severe that action has to be. If all other assumptions are met, the following are accrual rates, effective January 1, 2024, that will eliminate projected funding deficiencies for each of the mortality assumptions studied.

- **Current Assumption** – if no change in the mortality assumption is made, an accrual rate of 1.65% of contributions would eliminate the projected funding deficiency.
- **110% PRI-2012** – this mortality assumption would require the accrual rate to be reduced to 1.30% of contributions in order to eliminate the projected funding deficiency.
- **PRI-2012** – this mortality assumption would require the accrual rate to be reduced to 1.15% of contributions in order to eliminate the projected funding deficiency.

While the mortality assumptions vary within these projections, all other actuarial assumptions and methods are the same as those used in the January 1, 2023 actuarial valuation, including assumptions for work levels, contribution rates, and investment returns, among others.

Conclusion

Based on our analysis, I intend to update our mortality assumption to use the 110% PRI-2012 Amounts-Weighted Tables. As mentioned previously, this load of 110% will also apply to disabled pensioners and participants not yet in pay status. This should distribute actuarial gains and losses more evenly in the future and result in a more accurate measurement of liabilities under the Plan.

While we project that lowering the accrual rate to 1.30% of contributions for accruals on and after January 1, 2024 would eliminate projected funding deficiencies in the projection period, we also project that lowering the accrual rate to 1.50% of contributions for accruals on and after January 1, 2024, would be sufficient to keep the plan projected to remain in the Green Zone for 2024 and 2025 without qualifications, assuming all other assumptions are met. Further, lowering the accrual rate to 1.50% of contributions would be sufficient to keep the plan projected to be in Green Zone for 2026 through 2030, but with the qualification that the plan would be projected to be in Critical Status within the next 5 plan years. Lowering the accrual rate to 1.50% of contributions for accruals on and after January 1, 2024 would allow some time to negotiate contribution rate increases as well as to see how the Plan's assets perform before making further adjustments to the accrual rate.

Finally, we looked at the investment return for 2024 that would be needed to allow the Plan to be reasonably expected to avoid a future funding deficiency under the new mortality assumption. An investment return of 16.5% in 2024 eliminates future funding deficiencies from our projections. The future is uncertain and adverse experience related to other actuarial assumptions could result in this expectation not being met.

The analysis in this report is based on the January 1, 2023 Actuarial Valuation. All methods, assumptions and data are the same as for that valuation except for the mortality assumption as described above, and the inclusion of the Plan's year-to-date unaudited preliminary financials through September 30, 2023. The attached exhibits show projections of the funded percentage and credit balance for the current mortality assumption as well as for the updated mortality assumptions considered in this study.

I am an Associate of the Society of Actuaries and I meet the qualification standards of the American Academy of Actuaries to express the actuarial opinions contained herein.

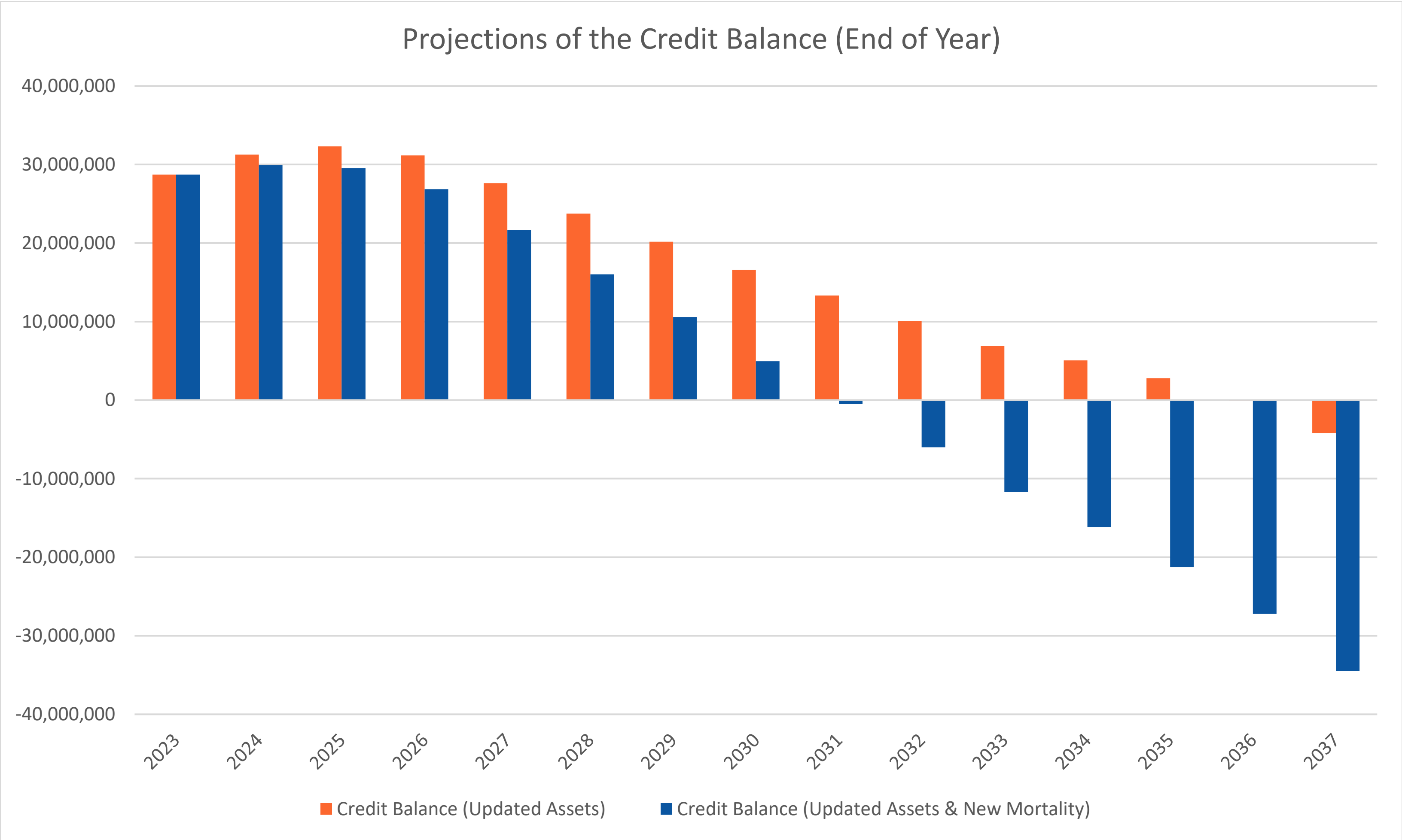
Sincerely,

Timothy D. Boles

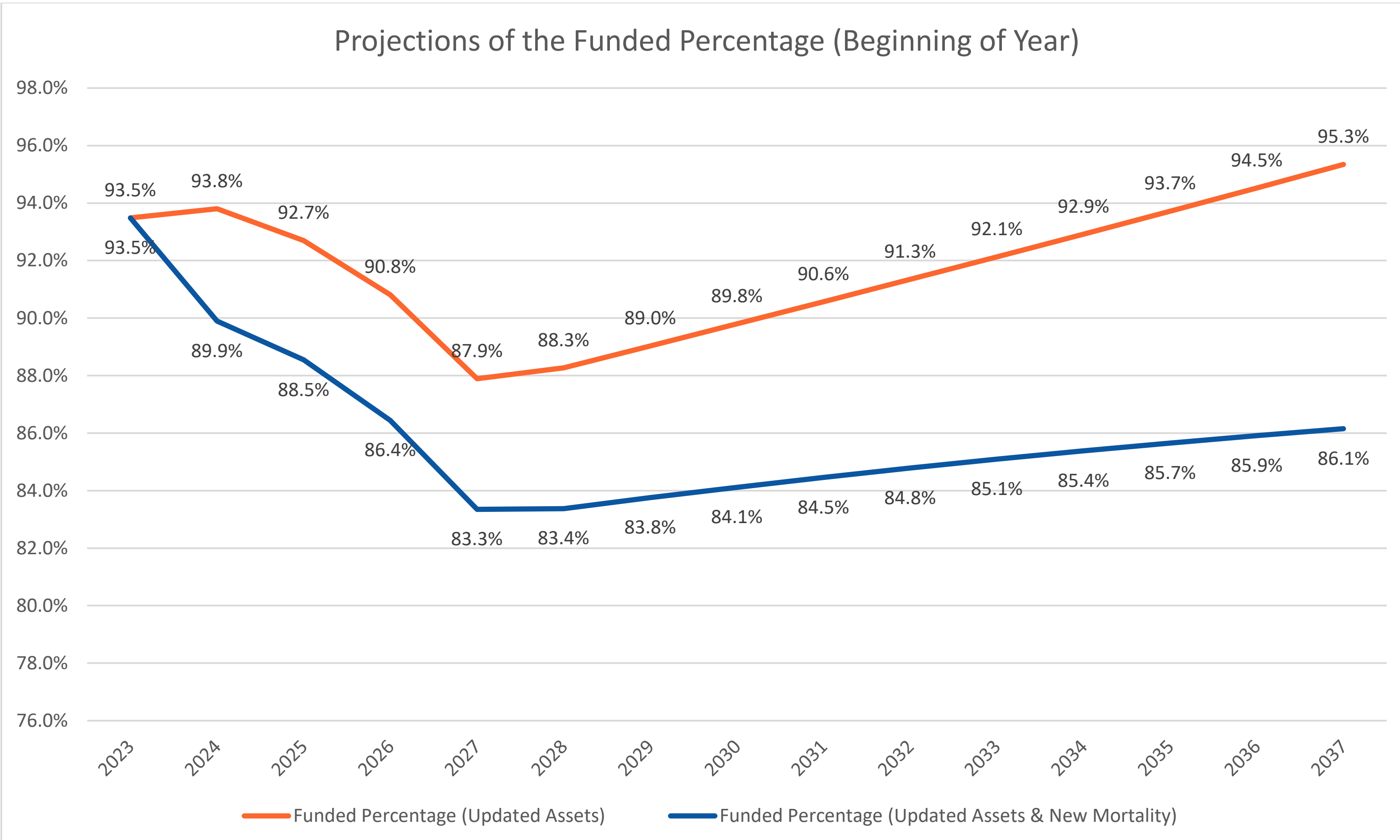
Timothy D. Boles, ASA, EA

Projections of the Credit Balance

Excludes 5-Year Amortization Extension



Projections of the Funded Percentage



ADMINISTRATIVE MANAGER'S REPORT

OPERATING ENGINEERS PENSION TRUST FUND
STATEMENT OF GAIN OR LOSS

2023	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	AVERAGE
INCOME														
EMPLOYER CONTRIBUTIONS	654,914	676,337.08	1,023,699	698,061	858,607	805,743	823,277	626,443	909,017				7,076,097	786,233
RECIPROCITY INCOME	9,657	80,481.27	5,018	13,872	17,904	31,084	11,460	2,454	37,114				209,043	23,227
RECIPROCITY PAYMENTS	(30,593)	(22,944)	(20,046)	(31,798)	(27,778)	(20,915)	(25,562)	(29,509)	(22,334)				(231,478)	(25,720)
LIQUIDATED DAMAGES	240	2,655	333	191	487	307	0	0	0				4,214	468
INT ON DELINQUENCY	2,363	55	275	7	16	4,764	0	0	5				7,486	832
CLASS ACTION SETTL.	42	0	1,318	0	333	786	1,808	247	8,470				13,006	1,445
INTEREST INCOME	66,917	68,463	151,135	23,538	149,195	174,253	139,261	65,247	187,050				1,025,059	113,895
DIVIDENDS	31,321	35,613	65,349	23,378	25,756	42,308	15,224	23,149	34,807				296,905	32,989
GAIN/LOSS INV - ULLICO	9,482	(36,433)	13,087	(5,055)	(18,530)	(12,267)	(13,922)	(9,923)	(17,741)				(91,302)	(10,145)
GAIN/LOSS INV - WEDGE	1,062,386	(447,993)	(402,566)	(76,777)	(235,991)	1,123,864	536,103	(446,053)	(561,550)				551,423	61,269
COMISSION RECAPTURE	1,040	0	0	1,918	0	0	379	0	0				3,337	371
G/L INV - PRINC.REAL ESTATE	(76,050)	5,852	(178,194)	18,668	(16,267)	(146,160)	(11,668)	(86,394)	(188,959)				(679,171)	(75,463)
GAIN/LOSS WEDGE CORE FXD	156,821	(152,948)	145,775	15,517	(111,651)	(112,148)	(1,715)	(817)	(198,730)				(259,896)	(28,877)
GAIN/LOSS WASH. CAP. MNGMNT	31,732	14,478	32,908	34,203	(2,007)	(6,756)	13,150	18,865	12,098				148,671	16,519
GAIN/LOSS - NEW TOWER	0	0	(188,832)	0	0	(320,936)	0	0	(230,666)				(740,434)	(82,270)
GAIN/LOSS TS CAP MGMT	546,658	(52,034)	134,419	(168,669)	159,567	623,136	220,279	(251,697)	(353,862)				857,796	95,311
GAIN/LOSS JOHNSTON ASSET	1,097,198	(471,216)	405,671	(174,620)	(443,013)	455,931	495,316	(607,176)	(459,519)				298,571	33,175
GAIN/LOSS GROSVENOR	168,927	571,210	88,928	61,215	161,289	128,311	(194,671)	72,457	31,090				1,088,756	120,973
GAIN/LOSS CHART	90,258	(87,983)	15,620	36,733	(122,847)	54,107	47,898	(17,978)	(145,824)				(130,016)	(14,446)
GAIN/LOSS LAZARD/WILMINGTON	229,408	(136,933)	88,918	37,345	(80,026)	144,047	108,480	0	0				391,238	43,471
GAIN/LOSS ALGER	1,437,421	(312,127)	912,697	(117,223)	0	0	0	0	0				1,920,769	213,419
GAIN/LOSS BOYD WATTERSON GOV	0	0	(9,072)	0	0	26,097	0	0	(113,258.00)				(96,233)	(10,693)
GAIN/LOSS BOYD WATTERSON	0	0	(40,563)	0	0	33,256	0	0	(56,481.00)				(63,788)	(7,088)
GAIN/LOSS VICTORY CAP MNGMNT	704,156	(171,725)	60,712	140,433	(295,489)	434,636	416,270	(335,438)	(456,277)				497,278	55,253
GAIN/LOSS NORTHERN TRUST	0	0	0	0	0	1,639,688	527,089	(145,057)	(868,537)				1,153,183	128,131
GAIN/LOSS - CORBIN	(26,327)	175,660	0	(157,406)	17,348		157,467	43,270	0				210,013	26,252
GAIN/LOSS WACAP-SP	0	(616)	0	48,858	0	0	45,771	0	0				94,013	10,446
GAIN/LOSS EATON VANCE	0	0	0	0	0	0	800,522	0	(734,586)				65,936	7,326
LITIGATION PROCEEDS	0	0	0	0	0	0	0	0	0				0	0
WITHDRAWAL LIABILITY FEE	1,000	0	0	0	0	0	0	0	0				1,000	111
TOTAL INCOME	**6,168,971**	**(262,148)**	**2,306,588**	**422,393**	**36,904**	**5,103,136**	**4,112,216**	**(1,077,910)**	**(3,188,673)**	**0**	**0**	**0**	**13,621,476**	**1,135,123**
EXPENSES														
ADMIN.FEE	15,451	15,451	15,451	15,451	15,451	15,451	15,451	15,915	15,915				139,987	15,554
ACTUARIAL FEES	0	0	15,030	824	0	11,528	0	0	10,965				38,347	4,261
AUDITING	0	0	0	0	5,200	0	0	14,809	6,050				26,059	2,895
BANK CHARGES	310	253	288	303	208	259	179	141	239				2,181	242
BENEFITS PAID	1,292,462	1,260,897	1,276,939	1,317,024	1,287,494	1,295,533	1,321,458	1,281,627	1,287,080				11,620,515	1,291,168
DISABILITY EXAM FEE	0	265	0	3,255	0	1,259	0	0	0				4,779	531
DUES & SUBSCRIPTIONS	800	0	0	0	0	0	0	0	0				800	89
FIDUC.RESPONSIB.INSUR.	4,812	0	0	14,435	0	0	0	0	0				19,247	2,139
INVEST COUNSEL FEE	62,501	95,984	63,309	73,988	24,612	65,141	133,287	36,990	35,221				591,033	65,670
INVEST CUSTODIAN EXP	0	0	0	3,200	231	0	2,586	0	0				6,018	669
INVEST PERF FEE	0	0	22,917	0	0	23,472	0	0	23,735				70,124	7,792
***LEGAL FEES**	(1,400)	0	0	0	4,587	7,284	0	10,291	9,596				30,358	3,373
MEETING EXPENSE	140	0	122	(18)	106	0	0	0	73				424	47
OFFICE SUPPLIES & EXP.	9	16	0	16	0	0	34	0	40				115	13
PAYROLL AUDIT FEE	0	0	0	0	0	0	0	0	2,205				2,205	245
PBGC	0	0	0	0	0	0	0	0	0				0	0
PRINTING & STATIONARY	0	335	0	1,892	599	0	507	2,783	223				6,339	704
POSTAGE	0	0	0	1,454	2,030	144	83	0	385				4,097	455
REGISTRATION FEE	0	0	0	0	0	0	0	0	0				0	0
TELEPHONE EXP	52	112	0	198	0	0	196	0	0				558	62
CONFERENCE EXPENSE	0	0	0	0	0	0	0	0	0				0	0
TRAVEL EXPENSES	0	0	0	0	0	0	0	0	0				0	0
SSA EXPENSES	0	0	0	100	100	0	0	0	0				200	22
COMMERCIAL CRIME INSURANCE	0	0	0	0	0	0	0	0	0				0	0
MISC EXPENSES	0	0	0	0	0	0	0	0	0				0	0
TOTAL EXPENSES	**1,375,137**	**1,373,314**	**1,394,057**	**1,432,123**	**1,340,618**	**1,420,071**	**1,473,781**	**1,362,555**	**1,391,727**	**0**	**0**	**0**	**12,563,384**	**1,046,949**
GAIN/LOSS	**4,793,834**	**(1,635,462)**	**912,530**	**(1,009,730)**	**(1,303,715)**	**3,683,065**	**2,638,435**	**(2,440,466)**	**(4,580,399)**	**0**	**0**	**0**	**1,058,092**	**88,174**

***LEGAL FEES** Employer Payment for Legal Fee

OE Loc 77 Pension Trust Fund
Balance Sheet
September 30, 2023

ASSETS

Current Assets		
Cash Basis Accounts Receivable	$ 682.88	
PNC - Cash General 5501371427	391,708.42	
Pen Fd Cash 20-46-002-6809072	591,183.74	
Due from IRS	(1,110.00)	
PNC -5501371435 Benefit Acct.	1,276,139.29	
Interest Receivable	157,289.07	
Dividend Receivable	19,185.80	
Due from Broker	6,270.57	
Prepaid Expenses	5,654.17	
Wacap- SP Infrastructure	2,492,455.41	
Total Current Assets		4,939,459.35
Property and Equipment		
Property & Equipment	1,558.33	
Accum.Depr.Expense	(1,558.33)	
Total Property and Equipment		0.00
Other Assets		
Hardman Johnston	4,194,946.14	
Market Value Hardman Johnston	4,877,070.17	
CHART-MM 4767472	479,962.73	
CHART - Corp.Bonds - 4767472	20,474,897.36	
CHART - Corp.Bonds- Mark.Val.	(690,603.86)	
Lazard/Wilmington - Mark.Val.	(2,868,761.26)	
Lazard/Wilmington - Cost	2,980,524.20	
Northen Trust - Equities	13,935,692.88	
Northen Trust - Market Value	1,142,620.81	
Northen Trust - Cash Equivalen	1,984.78	
Wedge Core FXD Money Market	62,452.80	
Wedge Core Fxd Gov.Bonds	10,609,055.67	
Wedge Core Fxd Corp.Bonds	5,881,314.88	
Wedge Core Gov.Bonds-Mark.Val.	(270,140.29)	
Wedge Core Corp.Bond-Mark.Val.	(612,201.38)	
Wedge - Stocks	12,897,885.41	
Wedge - Stocks MV	1,517,498.56	
Wedge - MM	234,915.57	
WASHINGTON CAPITAL MANAGEMI	2,070,419.13	
Wash.Cap.Mngmnt Market Value	3,142,626.82	
EATON VANCE	6,361,634.27	
EATON VANCE Market Value	2,076,282.55	
CORBIN	10,074,505.49	
TS CAP MGMT- MM	303,404.36	
TS CAP MGMT - EQUITIES	7,424,715.13	
Market Value TS CAP MGMT	1,443,482.23	
NewTower	2,054,522.85	

NewTower Market Value	3,615,235.93	
Principal Real Eastate 4-46661	7,212,571.86	
Principal - Adj to Market	(328,528.52)	
Boyd Watterson GSA Fund, LP	6,483,002.00	
Boyd Watterson State Governmen	18,832,660.00	
Ullico	6,646,550.03	
ULLICO Adj.Market	(1,975,318.01)	
Victory Capital Mngmnt	9,215,731.56	
GROSVENOR - OCFIII	113,673.00	
Grosvenor - OCFIV	349,881.00	
Grosvenor V	10,304,161.00	
GCM GROSVENOR II	7,445,024.00	
GCM GROSVENOR III	3,556,557.90	
Total Other Assets		181,271,909.75
Total Assets		$ 186,211,369.10

LIABILITIES AND CAPITAL

Current Liabilities		
Total Current Liabilities		0.00
Long-Term Liabilities		
Total Long-Term Liabilities		0.00
Total Liabilities		0.00
Capital		
Retained Earnings	($ 29,741,144.43)	
Fund Balance-002	215,714,065.21	
Net Income	238,448.32	
Total Capital		186,211,369.10
Total Liabilities & Capital		$ 186,211,369.10

OE Loc 77 Pension Trust Fund
Income Statement
For the Nine Months Ending September 30, 2023

	Current Month		Year to Date	
Revenues				
Contributions-Paving	$ 228,602.68	7.17	$ 1,029,545.88	8.15
Employer Contributions	680,414.56	21.34	5,096,222.05	40.34
Withdrawal Liability	0.00	0.00	1,000.00	0.01
Reciprocity Income	37,114.19	1.16	120,239.09	0.95
Reciprocity Payments	(22,334.32)	(0.70)	(175,287.30)	(1.39)
Liquidated Damages	0.00	0.00	985.38	0.01
Interest Income	187,049.78	5.87	1,025,058.72	8.11
Stock Dividends	34,807.22	1.09	296,904.72	2.35
Int on Del	5.02	0.00	4,791.88	0.04
Commission Recapture	0.00	0.00	3,337.19	0.03
G/L - New Tower	(230,665.69)	(7.23)	(740,433.72)	(5.86)
Wacap-SP - Gain/Loss	0.00	0.00	94,012.67	0.74
Class action Settl.	8,470.46	0.27	13,005.91	0.10
Realized Gain - GCM Grosv.II	0.00	0.00	81,788.00	0.65
Unrealized Gain - GCM Grosv.II	0.00	0.00	(106,461.00)	(0.84)
Unrealized Gain - GCM GrosvIII	0.00	0.00	642,249.41	5.08
Realized Gain - GCM Grosv.III	0.00	0.00	812.00	0.01
Unrealized Gain/Loss Wedge	(527,534.84)	(16.54)	(136,891.12)	(1.08)
Realized Gain/Loss Wedge	(34,015.63)	(1.07)	688,314.57	5.45
Unrealized G/L -GIPPF Grosveno	0.00	0.00	(78,156.40)	(0.62)
Unrealiz G/L on Inv-ULLICO	(24,538.61)	(0.77)	(104,624.45)	(0.83)
Realiz.Gain/Loss on Inv-ULLICO	6,797.75	0.21	13,322.56	0.11
Unrealized Gain/Loss ALGER	0.00	0.00	(393,728.81)	(3.12)
Realized Gain/Loss ALGER	0.00	0.00	2,314,497.92	18.32
Unrealized Gain/Loss Wash.Cap.	12,098.09	0.38	148,670.87	1.18
Unreal.Gain/Loss TS CAP MGMT	(368,538.20)	(11.56)	625,809.28	4.95
Realized Gain/Loss TS CAP MGMT	14,675.75	0.46	231,986.58	1.84
Realized Gain/Loss - CHART	(5,663.00)	(0.18)	(116,454.43)	(0.92)
Unrealized Gain/Loss - CHART	(140,160.83)	(4.40)	(13,561.43)	(0.11)
Unreal.Gain/Loss Johnston Asse	(459,519.40)	(14.41)	(1,162,512.56)	(9.20)
Real.Gain/Loss Johnston Asset	0.00	0.00	1,461,083.56	11.57
Gain/Loss Princip.Real Estate	(188,958.52)	(5.93)	(679,170.98)	(5.38)
Unreal. Gain/Loss Wedge Core	(207,964.06)	(6.52)	(159,587.78)	(1.26)
Realiz.Gain/Loss Wedge Core	9,233.60	0.29	(100,308.69)	(0.79)
Unreal. Gain/Loss Eaton Vance	(734,585.89)	(23.04)	65,936.11	0.52
Gain/Loss Inv.-Boyd Watterson	(56,481.00)	(1.77)	(63,788.00)	(0.50)
Gain/Loss-CORBIN	0.00	0.00	210,013.18	1.66
Gain/Loss Inv.-Boyd Watter.Gov	(113,258.00)	(3.55)	(96,233.00)	(0.76)
Gain/Loss on Inv-Northern Trus	(868,536.69)	(27.24)	1,145,931.99	9.07
Real.Gain/Loss on Inv-North.Tr	0.00	0.00	7,251.36	0.06
Gain/Loss on Inv.- Victory Cap	(456,277.03)	(14.31)	497,278.21	3.94
Unrealized G/L - Grosvenor III	(457.00)	(0.01)	8,522.75	0.07
Unreal. G/L - Grosvenor OCFIV	(7,182.00)	(0.23)	18,742.00	0.15
Unrealized G/L - Grosvenor V	38,729.00	1.21	521,259.00	4.13
Gain/Loss on Inv.-Lazard/Wilmi	0.00	0.00	391,238.10	3.10
Total Revenues	(3,188,672.61)	(100.00)	12,632,611.27	100.00

	Current Month		Year to Date	
Cost of Sales				
Total Cost of Sales	0.00	0.00	0.00	0.00
Gross Profit	(3,188,672.61)	(100.00)	12,632,611.27	100.00
Expenses				
Actuarial Fee	10,965.28	0.34	38,347.25	0.30
Administration Fee	15,915.00	0.50	139,987.00	1.11
Audit Fee	6,050.00	0.19	26,058.75	0.21
Bank Charges	238.95	0.01	2,180.62	0.02
Benefits Paid	1,287,079.78	40.36	11,620,514.97	91.99
Dues & Subscriptions	0.00	0.00	800.00	0.01
Invest Perform.Fee	23,735.13	0.74	70,124.37	0.56
Invest Manager Fee	35,220.66	1.10	427,122.07	3.38
Legal Fees	9,595.50	0.30	30,357.81	0.24
Disability Exam Fee	0.00	0.00	4,778.75	0.04
Invest.Custodian Exp.	0.00	0.00	6,017.66	0.05
Office Expense	39.59	0.00	89.99	0.00
Meeting Expense	73.46	0.00	283.94	0.00
Postage Expense	384.89	0.01	4,096.80	0.03
Printing & Stationary Expense	223.31	0.01	6,169.04	0.05
Payroll Audit	2,205.00	0.07	2,205.00	0.02
Fiduciary Resp Insurance	0.00	0.00	14,435.33	0.11
Telephone Expense	0.00	0.00	393.60	0.00
SSA Exp.	0.00	0.00	200.00	0.00
Total Expenses	1,391,726.55	43.65	12,394,162.95	98.11
Net Income	($ 4,580,399.16)	(143.65)	$ 238,448.32	1.89

OE Loc 77 Pension Trust Fund
GENERAL JOURNAL
For the Period From Sep 1, 2023 to Sep 30, 2023

Date	Account ID	Reference	Trans Description	Debit Amt	Credit Amt
9/1/23	2050	945 WH Tax Paid	945 Annual W/H Federal Income Tax	117,414.00	
9/1/23	1251	945 WH Tax Paid	945 Annual W/H Federal Income Tax		117,414.00
9/1/23	1730	FROM lAZARD	Transferred from Lazard to Chart	4,812,502.11	
9/1/23	1740	FROM lAZARD	Transferred from Lazard to Chart		4,812,502.11
9/1/23	5150	PEN	Pension Benefit	1,287,434.76	
9/1/23	2050	PEN	Fed tax		117,414.00
9/1/23	1251	PEN	Pension Benefit		1,170,020.76
9/6/23	1131	TRANSFDDA1	Transferred from Cash General to Pen Fd Cash for dep.08/31/23;	222,948.63	
9/6/23	1110	TRANSFDDA1	Transferred from Cash General to Pen Fd Cash for dep.08/31/23;09/1/23; checks issued 8/		222,948.63
9/12/23	1131	TRANSFDDA2	Transferred from Cash General to Pen Fd Cash for dep.09/05/23;	41,575.82	
9/12/23	1110	TRANSFDDA2	Transferred from Cash General to Pen Fd Cash for dep.09/05/23;09/08/23; checks issued (		41,575.82
9/15/23	1131	TRANSFDDA3	Transferred from Cash General to Pen Fd Cash for dep.09/11/23-	88,164.34	
9/15/23	1110	TRANSFDDA3	Transferred from Cash General to Pen Fd Cash for dep.09/11/23-09/13/23		88,164.34
9/18/23	1131	TRANSF1	Transferred from Cash General to Pen Fd Cash for checks issued 09/15/23		65,935.71
9/18/23	1110	TRANSF1	Transferred from Cash General to Pen Fd Cash for checks issuec	65,935.71	
9/21/23	1852	CLASS ACT.SETTL	Wedge - Proceeds due on Class Action Settl.- Scana Corporation	8,495.46	
9/21/23	4870	CLASS ACT.SETTL	Wedge - Proceeds due on Class Action Settl.- Scana Corporation		8,495.46
9/21/23	1852	CLASS ACT.SETTL	Wedge - Proceeds due on Class Action Filling Fee.- Scana Corporation		25.00
9/21/23	4870	CLASS ACT.SETTL	Wedge - Proceeds due on Class Action Filling Fee.- Scana Corpc	25.00	
9/22/23	2001	TO GROV.GCM III	Transferred from Pen Fd Cash to Gosvenor GCMIII	481,388.90	
9/22/23	1131	TO GROV.GCM III	Transferred from Pen Fd Cash to Gosvenor GCMIII		481,388.90
9/26/23	1131	FROM BROKER	Transferred from Broker	327,201.35	
9/26/23	1405	FROM BROKER	Transferred from Broker		327,201.35
9/26/23	1131	FROM CHART1	Transferred from Chart to Pen Cash	24,000.00	
9/26/23	1730	FROM CHART1	Transferred from Chart to Pen Cash		24,000.00
9/26/23	1131	FROM CHART2	Transferred from Chart to Pen Cash	421,400.00	
9/26/23	1730	FROM CHART2	Transferred from Chart to Pen Cash		421,400.00
9/26/23	1131	FROM NORTHERN TRUST1	Transferred from Northern Trust to Pen Fd Cash	40,000.00	
9/26/23	1767	FROM NORTHERN TRUST1	Transferred from Northern Trust to Pen Fd Cash		40,000.00
9/26/23	1131	FROM TS CAP MNGMNT	Transferred from Ts Cap Mngmnt to Pen Fd Cash	16,000.00	
9/26/23	1930	FROM TS CAP MNGMNT	Transferred from Ts Cap Mngmnt to Pen Fd Cash		16,000.00
9/26/23	1131	FROM WEDGE	Transferred from Wedge to Pen Fd Cash	40,000.00	
9/26/23	1852	FROM WEDGE	Transferred from Wedge to Pen Fd Cash		40,000.00
9/26/23	1131	TRANSFDDA4	Transferred to Cover October Benefits	100,000.00	
9/26/23	1110	TRANSFDDA4	Transferred to Cover October Benefits		100,000.00
9/26/23	1251	Trans for Oct 23	Transfer for Oct 2023	1,278,975.51	
9/26/23	1131	Trans for Oct 23	Transfer for Oct 2023		1,278,975.51
9/27/23	1131	FROM EATON	Transferred from Eaton to Pen Fd Cash	24,000.00	
9/27/23	1924	FROM EATON	Transferred from Eaton to Pen Fd Cash		24,000.00
9/27/23	1131	FROM THE PRINCIPAL	Transferred from The Principal to Pen Fd cash	103,377.94	
9/27/23	1960	FROM THE PRINCIPAL	Transferred from The Principal to Pen Fd cash		103,377.94
9/27/23	1131	Transfer Expense	Expense Checks Issued 9/18-9/25/23		22,440.36
9/27/23	1110	Transfer Expense	Expense Checks Issued 9/18-9/25/23	22,440.36	
9/29/23	1131	RETURN CK	PNC- Cash Fd Cash - Return ck#1068 Southern Renovation ER#77-5048		769.38
9/29/23	4510	RETURN CK	PNC- Cash Fd Cash - Return ck#1068 Southern Renovation ER#	761.60	
9/29/23	4660	RETURN CK	PNC- Cash Fd Cash - Return ck#1068 Southern Renovation ER#	7.78	
9/29/23	1131	TRANSFDDA5	Transferred from Cash General to Pen Fd Cash for dep.09/15/23-	294,168.83	
9/29/23	1110	TRANSFDDA5	Transferred from Cash General to Pen Fd Cash for dep.09/15/23-09/27/23; checks issued (		294,168.83
9/30/23	1110	BANK CHARGES	Service Charge		238.95
9/30/23	5130	BANK CHARGES	Service Charge	238.95	
9/30/23	1981	BOYD WATTERSON	Boyd Watterson GSA - Loss on Investment 09/23		56,481.00
9/30/23	4971	BOYD WATTERSON	Boyd Watterson GSA - Loss on Investment 09/23	56,481.00	
9/30/23	1982	BOYD WATTERSON GOVER	Boyd Watterson Government - Loss on Investment 09/23		113,258.00
9/30/23	4977	BOYD WATTERSON GOVER	Boyd Watterson Government - Loss on Investment 09/23	113,258.00	
9/30/23	1735	CHART	Chart - Corp.Bonds - Purchases 09/23	4,628,164.34	
9/30/23	1730	CHART	Chart - Corp.Bonds - Purchases 09/23		4,628,164.34
9/30/23	1730	CHART	Chart - Corp.Bonds - Sales Proceeds 09/23	104,000.00	
9/30/23	1735	CHART	Chart - Corp.Bonds - Sales at Cost 09/23		109,663.00
9/30/23	4920	CHART	Chart - Corp.Bonds - Realized Loss 09/23	5,663.00	
9/30/23	1736	CHART	Chart - Corp.Bonds - MV - Unrealized Loss 09/23		140,160.83
9/30/23	4921	CHART	Chart - Corp.Bonds - MV - Unrealized Loss 09/23	140,160.83	
9/30/23	1730	CHART	Chart - MM - Interest Income 09/23	64,168.48	
9/30/23	4630	CHART	Chart - MM - Interest Income 09/23		3,846.16
9/30/23	4630	CHART	Chart - Corp.Bonds - MM - Interest Income 09/23		60,322.32
9/30/23	1925	EATON VANCE7/23	Eaton Vance - Adj.06/23	0.28	

Date	Account ID	Reference	Trans Description	Debit Amt	Credit Amt
9/30/23	4967	EATON VANCE7/23	Eaton Vance - Adj.06/23		0.28
9/30/23	1924	EATON VANCE7/23	Eaton Vance - Realized Gain 07/23	10,590.06	
9/30/23	4966	EATON VANCE7/23	Eaton Vance - MV Unrealized Gain 07/23		10,590.06
9/30/23	1925	EATON VANCE7/23	Eaton Vance - MV Unrealized Gain 07/23	239,939.90	
9/30/23	4967	EATON VANCE7/23	Eaton Vance - MV Unrealized Gain 07/23		239,939.90
9/30/23	1925	EATON VANCE8/23	Eaton Vance - MV Unrealized Loss 08/23		344,830.68
9/30/23	4967	EATON VANCE8/23	Eaton Vance - MV Unrealized Loss 08/23	344,830.68	
9/30/23	1924	EATON VANCE9/23	Eaton Vance - Realized Gain 09/23	5,626.65	
9/30/23	4966	EATON VANCE9/23	Eaton Vance - Realized Gain 09/23		5,626.65
9/30/23	1925	EATON VANCE9/23	Eaton Vance - MV Unrealized Loss 09/23		629,695.39
9/30/23	4967	EATON VANCE9/23	Eaton Vance - MV Unrealized Loss 09/23	629,695.39	
9/30/23	1982	FROM BOYD WAT GOVER	Transferred from Boyd Watterson Gov. to Pen Fd Cash		244,589.53
9/30/23	1405	FROM BOYD WAT GOVER	Transferred from Boyd Watterson Gov. to Broker	244,589.53	
9/30/23	1981	FROM BOYD WATTERSON	Transferred from Boyd Watterson to Broker		88,882.39
9/30/23	1405	FROM BOYD WATTERSON	Transferred from Boyd Watterson to Broker	88,882.39	
9/30/23	1131	FROM WEDGE CORE FXD1	Transferred from Wedge Core FXD to Pen Fd Cash	16,000.00	
9/30/23	1835	FROM WEDGE CORE FXD1	Transferred from Wedge Core FXD to Pen Fd Cash		16,000.00
9/30/23	1996	GROSVENOR III	Grosvenor III - Adj.08/23		306.00
9/30/23	4986	GROSVENOR III	Grosvenor III - Adj. 08/23	306.00	
9/30/23	1996	GROSVENOR III	Grosvenor III - Loss on Investmnt. 09/23		151.00
9/30/23	4986	GROSVENOR III	Grosvenor III - Loss on Investmnt. 09/23	151.00	
9/30/23	1997	GROSVENOR IV	Grosvenor OCFIV - Adj.08/23	65.00	
9/30/23	4987	GROSVENOR IV	Grosvenor OCFIV - Adj.08/23		65.00
9/30/23	1997	GROSVENOR IV	Grosvenor OCF IV - Loss on Investmnt. 09/23		7,247.00
9/30/23	4987	GROSVENOR IV	Grosvenor OCF IV - Loss on Investmnt. 09/23	7,247.00	
9/30/23	1998	GROSVENOR V	Grosvenor V - Adj.08/23		10,098.00
9/30/23	4988	GROSVENOR V	Grosvenor V - Adj.087/23	10,098.00	
9/30/23	1998	GROSVENOR V	Grosvenor V - Unrealized Gain 09/23	48,827.00	
9/30/23	4988	GROSVENOR V	Grosvenor V - Unrealized Gain 09/23		48,827.00
9/30/23	1711	HARDMAN JOHNSTON	Hardman Johnston - MV - Unrealized Loss 09/23		459,519.40
9/30/23	4940	HARDMAN JOHNSTON	Hardman Johnston - MV - Unrealized Loss 09/23	459,519.40	
9/30/23	1710	HARDMAN JOHNSTON	Hardman Johnston - Investment Mngmnt Fee 09/23		17,723.41
9/30/23	5370	HARDMAN JOHNSTON	Hardman Johnston - Investment Mngmnt Fee 09/23	17,723.41	
9/30/23	1131	INTEREST INCOME	Interest Income	18,589.51	
9/30/23	4630	INTEREST INCOME	Interest Income		18,589.51
9/30/23	1951	NEW TOWER	New Tower - Interest Income 09/23	39,833.95	
9/30/23	4630	NEW TOWER	New Tower - Interest Income 06/23		39,833.95
9/30/23	1951	NEW TOWER	New Tower - Investment Mngmnt Fee 09/23		12,456.81
9/30/23	5370	NEW TOWER	New Tower - Investment Mngmnt Fee 09/23	12,456.81	
9/30/23	1952	NEW TOWER	New Tower - Apppreciation on Investmnt 09/23		230,665.69
9/30/23	4836	NEW TOWER	New Tower - Appreciation on Investmnt 09/23	230,665.69	
9/30/23	1767	NORTHERN TRUST	Northern Trust -Short Term -Interest Income 09/23	9.30	
9/30/23	4630	NORTHERN TRUST	Northern Trust -Short Term -Interest Income 09/23		9.30
9/30/23	1767	NORTHERN TRUST	Northern Trust - Sales Proceeds 09/23	40,000.00	
9/30/23	1765	NORTHERN TRUST	Northern Trust - Sales at Cost 09/23		36,688.82
9/30/23	4978	NORTHERN TRUST	Northern Trust -Realized Loss 09/23		3,311.18
9/30/23	1766	NORTHERN TRUST	Northern Trust - MV - Unrealized Loss 09/23		871,847.87
9/30/23	4978	NORTHERN TRUST	Northern Trust - MV - Unrealized Gain 09/23	871,847.87	
9/30/23	1962	THE PRINCIPAL	Principal - Loss on Investment 08/23		188,958.52
9/30/23	4950	THE PRINCIPAL	Principal - Loss on Investment 08/23	188,958.52	
9/30/23	1931	TS CAP MNGMNT	TS Cap Mngmnt - Corp.Bonds - Purchases 09/23	347,679.70	
9/30/23	1930	TS CAP MNGMNT	TS Cap Mngmnt - Corp.Bonds - Purchases 09/23		347,679.70
9/30/23	1930	TS CAP MNGMNT	TS Cap Mngmnt - Corp.Bonds - Sales Proceeds 0*/23	209,722.34	
9/30/23	1931	TS CAP MNGMNT	TS Cap Mngmnt - Corp.Bonds - Sales at Cost 09/23		195,046.59
9/30/23	4916	TS CAP MNGMNT	TS Cap Mngmnt - Corp.Bonds - Realized Gain 09/23		14,675.75
9/30/23	1932	TS CAP MNGMNT	TS Cap Mngmnt - Corp.Bonds - MV - Unrealized Gain 09/23		368,538.20
9/30/23	4915	TS CAP MNGMNT	TS Cap Mngmnt - Corp.Bonds - MV - Unrealized Loss 09/23	368,538.20	
9/30/23	1930	TS CAP MNGMNT	TS Cap Mngmnt - Corp.Bonds - MM - Interest Income 09/23	1,971.40	
9/30/23	4630	TS CAP MNGMNT	TS Cap Mngmnt - Corp 09/23		1,971.40
9/30/23	1930	TS CAP MNGMNT	TS Cap Mngmnt - Corp.Bonds - MM - Dividend Income 09/23	8,052.98	
9/30/23	4650	TS CAP MNGMNT	TS Cap Mngmnt - Corp.Bonds - MM - Dividend Income 09/23		8,052.98
9/30/23	1990	ULLICO	Ullico - Interest Income 09/23	24,934.96	
9/30/23	4630	ULLICO	Ullico - Interest Income 09/23		24,934.96
9/30/23	1990	ULLICO	Ullico - Investment Mngmnt Fee 09/23		2,138.66
9/30/23	5370	ULLICO	Ullico - Investment Mngmnt Fee 09/23	2,138.66	
9/30/23	1990	ULLICO	Ullico - Realized Gain 09/23	6,797.75	
9/30/23	4891	ULLICO	Ullico - Realized Gain 09/23		6,797.75
9/30/23	1992	ULLICO	Ullico - MV Unrealized Loss 09/23		24,538.61
9/30/23	4890	ULLICO	Ullico - MV Unrealized Loss 09/23	24,538.61	
9/30/23	1993	VICTORY CPAITAL	Victory Capital Mngmnt - Loss on Investment 9/23		456,277.03

Date	Account ID	Reference	Trans Description	Debit Amt	Credit Amt
9/30/23	4984	VICTORY CPAITAL	Victory Capital Mngmnt - Loss on Investment 9/23	456,277.03	
9/30/23	1921	WASH.CAP.MNGMNT	Wash.Cap.Mngmnt - MV - Unrealized Gain 09/23	12,098.09	
9/30/23	4910	WASH.CAP.MNGMNT	Wash.Cap.Mngmnt - MV - Unrealized Gain 09/23		12,098.09
9/30/23	1850	WEDGE	Wedge - Corp.Bonds - Purchases 09/23	602,637.55	
9/30/23	1852	WEDGE	Wedge - Corp.Bonds - Purchases 09/23		602,637.55
9/30/23	1852	WEDGE	Wedge - Corp.Bonds - Sales Proceeds 09/23	551,724.58	
9/30/23	1850	WEDGE	Wedge - Corp.Bonds - Sales at Cost 09/23		585,740.21
9/30/23	4885	WEDGE	Wedge - Corp.Bonds - Realized Loss 09/23	34,015.63	
9/30/23	1851	WEDGE	Wedge - Corp.Bonds - MV - Unrealized Loss 09/23		527,534.84
9/30/23	4880	WEDGE	Wedge - Corp.Bonds - MV - Unrealized Loss 08/23	527,534.84	
9/30/23	1852	WEDGE	Wedge - Corp.Bonds - MM - Interest Income 09/23	1,377.61	
9/30/23	4630	WEDGE	Wedge - Corp.Bonds - MM - Interest Income 09/23		1,377.61
9/30/23	1852	WEDGE	Wedge - Corp.Bonds - MM - Dividend Income 09/23	26,754.24	
9/30/23	4650	WEDGE	Wedge - Corp.Bonds - MM - Dividend Income 09/23		26,754.24
9/30/23	1836	WEDGE CORE FXD	Wedge Core FXD - Gov.Bonds - Purchases 09/23	443,020.13	
9/30/23	1835	WEDGE CORE FXD	Wedge Core FXD - Gov.Bonds - Purchases 09/23		443,020.13
9/30/23	1835	WEDGE CORE FXD	Wedge Core FXD - Gov.Bonds - Sales Proceeds 09/23	323,480.46	
9/30/23	1836	WEDGE CORE FXD	Wedge Core FXD - Gov.Bonds - Sales at Cost 09/23		326,495.29
9/30/23	4966	WEDGE CORE FXD	Wedge Core FXD - Gov.Bonds - Realized Loss 09/23	3,014.83	
9/30/23	1835	WEDGE CORE FXD	Wedge Core FXD - Gov.Bonds - Return of Principal 09/23	108,102.96	
9/30/23	1836	WEDGE CORE FXD	Wedge Core FXD - Gov.Bonds - Return of Principal 08/23		110,595.04
9/30/23	4966	WEDGE CORE FXD	Wedge Core FXD - Gov.Bonds - Return of Principal - Realized Ga	2,492.08	
9/30/23	1838	WEDGE CORE FXD	Wedge Core FXD - Gov.Bonds - MV - Unrealized Loss 08/23		124,762.01
9/30/23	4965	WEDGE CORE FXD	Wedge Core FXD - Gov.Bonds - MV - Unrealized Loss 07/23	124,762.01	
9/30/23	1837	WEDGE CORE FXD	Wedge Core FXD - Corp.Bonds - Purchases 09/23	8,808.20	
9/30/23	1835	WEDGE CORE FXD	Wedge Core FXD - Corp.Bonds - Purchases 09/23		8,808.20
9/30/23	1835	WEDGE CORE FXD	Wedge Core FXD - Corp.Bonds - Sales Proceeds 09/23	40,000.00	
9/30/23	1837	WEDGE CORE FXD	Wedge Core FXD - Corp.Bonds - Sales at Cost 09/23		41,476.20
9/30/23	4966	WEDGE CORE FXD	Wedge Core FXD - Corp.Bonds - Realized Loss 09/23	1,476.20	
9/30/23	1839	WEDGE CORE FXD	Wedge Core FXD - Corp.Bonds - MV - Unrealized Loss 08/23		83,202.05
9/30/23	4965	WEDGE CORE FXD	Wedge Core FXD - Corp.Bonds - MV - Unrealized Loss 09/23	83,202.05	
9/30/23	1835	WEDGE CORE FXD	Wedge Core FXD - MM - Interest Income 09/23	36,164.57	
9/30/23	4630	WEDGE CORE FXD	Wedge Core FXD - MM - Interest Income 09/23		2,252.48
9/30/23	4630	WEDGE CORE FXD	Wedge Core FXD - MM - Gov.Bonds - Interest Income 09/23		12,242.90
9/30/23	4630	WEDGE CORE FXD	Wedge Core FXD - MM - Corp.Bonds - Interest Income 09/23		21,669.19
		Total		**22,838,123.70**	**22,838,123.70**

OE Loc 77 Pension Trust Fund
NON-PAVERS CONTRIBUTIONS
For the Period From Sep 1, 2023 to Sep 30, 2023

Account ID	Account Description	Date	Reference	Customer Name	Debit Amt	Credit Amt	Balance
4510	Employer Contributions	9/1/23					-4,415,807.49
4510	Employer Contributions	9/1/23	8/23SPLIT	PETILLO INC		2,832.20	
4510	Employer Contributions	9/1/23	7/23	DIGMASTER		6,881.60	
4510	Employer Contributions	9/1/23	7/23	LANE CONSTRUCTION		2,368.10	
4510	Employer Contributions	9/1/23	07/23	CLARK CONSTRUCTION GRP		38,436.00	
4510	Employer Contributions	9/1/23	07/23	CLARK CONSTRUCTION GRP		2,196.00	
4510	Employer Contributions	9/1/23	07/23	CLARK CONCRETE CONTRACTORS		2,972.00	
4510	Employer Contributions	9/1/23	07/23	CLARK CONCRETE CONTRACTORS		128.00	
4510	Employer Contributions	9/1/23	07/23	FT Myer construction		304.00	
4510	Employer Contributions	9/1/23	07/23	SIN NEBT-JV		19,664.00	
4510	Employer Contributions	9/1/23	07/23SPLIT	MIGHTY FOUR ENTERPRISE		3,430.35	
4510	Employer Contributions	9/5/23	07/23	Casper Colosimo & Son, Inc.		1,808.80	
4510	Employer Contributions	9/5/23	07/23	S & J SERVICE, INC.		2,917.20	
4510	Employer Contributions	9/5/23	07/23	PAUL MERRIT EXCAVATING		1,368.50	
4510	Employer Contributions	9/5/23	06/23SPLIT	KIRILA EARTHWORKS,INC		1,094.80	
4510	Employer Contributions	9/5/23	07/23SPLIT	METRO CRANE &RIGGING LLC		5,866.00	
4510	Employer Contributions	9/5/23	07/23SPLIT	MCVAC		14,858.85	
4510	Employer Contributions	9/5/23	08/23SPLIT	MICHELS CONSTRUCTION INC		3,498.00	
4510	Employer Contributions	9/6/23	8/23	KELLER NORTH AMERICA		6,532.00	
4510	Employer Contributions	9/7/23	7/23SPLIT	CONSRUCTION SUPPORT SERVI		1,613.30	
4510	Employer Contributions	9/7/23	7/23SPLIT	BELTWAY PAVING OF SOUTNER		4,798.35	
4510	Employer Contributions	9/8/23	05/22SPLIT	DYNAMIC CONCEPTS, INC		15,614.24	
4510	Employer Contributions	9/8/23	7/23	WILLIAMS EQUIPMENT CO		8,655.00	
4510	Employer Contributions	9/8/23	08/23	OPER ENGS APPR FUND		4,000.00	
4510	Employer Contributions	9/8/23	08/23	ALL CRANE RENTAL OF PA		294.00	
4510	Employer Contributions	9/8/23	08/23	ALL CRANE RENTAL OF PA		878.90	
4510	Employer Contributions	9/8/23	07/23	JOHN DRIGGS CO		533.80	
4510	Employer Contributions	9/8/23	08/23	AMERICAN COMBUSTION INDUSTRIES		1,584.00	
4510	Employer Contributions	9/8/23	08/23	CLARK CONSTRUCTION GRP		32.00	
4510	Employer Contributions	9/8/23	08/23	CLARK CONSTRUCTION GRP		40,762.00	
4510	Employer Contributions	9/8/23	08/23	CLARK CONCRETE CONTRACTORS		3,438.00	
4510	Employer Contributions	9/11/23	08/23	SCHNABEL FOUDATION CORP		7,464.00	
4510	Employer Contributions	9/11/23	08/23	Norair Engineering Associates		1,592.00	
4510	Employer Contributions	9/11/23	07/23	NEW YORK GEOMATICS INC		1,644.00	
4510	Employer Contributions	9/11/23	07/23	CS SERVICES, LLC		1,264.30	
4510	Employer Contributions	9/11/23	8/23	BOWEN ENGINEERING CO		1,250.00	
4510	Employer Contributions	9/11/23	08/23SPLIT	PETILLO INC		2,512.60	
4510	Employer Contributions	9/11/23	08/23SPLIT	MIDWEST MOLE,INC		2,354.00	
4510	Employer Contributions	9/11/23	07/23SPLIT	KIRILA EARTHWORKS,INC		1,013.20	
4510	Employer Contributions	9/11/23	08/23SPLIT	BARNHART CRANE AND RIGGIN		235.50	
4510	Employer Contributions	9/11/23	08/23SPLIT	BARNHART CRANE AND RIGGIN		1,034.00	
4510	Employer Contributions	9/12/23	08/23	ANCHOR CONSTUCTION CORP.		31,131.97	
4510	Employer Contributions	9/13/23	07/23	WILLIAMS EQUIPMENT CO		8,655.00	
4510	Employer Contributions	9/13/23	08/23	HUTCHINSON INTERNATIONAL		631.80	
4510	Employer Contributions	9/13/23	08/23	PRICE GREGORY INTERNATION		400.00	
4510	Employer Contributions	9/14/23	08/23S	CLEARSITE INDUSTRIAL		4,850.10	
4510	Employer Contributions	9/14/23	08/23SPLIT	DELTA RAILROAD CONSTRUCTION		2,358.00	
4510	Employer Contributions	9/14/23	06/23&3/23 In	SOUTHERN RENOVATION LLC		761.60	
4510	Employer Contributions	9/14/23	07/23	A&F SITEWORKS LLC		544.00	
4510	Employer Contributions	9/15/23	08/23	AIW, INC		1,053.00	
4510	Employer Contributions	9/15/23	08/23	INTER UNION LOCALL 77		4,860.00	
4510	Employer Contributions	9/15/23	08/23	INTER UNION LOCALL 77		560.00	
4510	Employer Contributions	9/18/23	08/23	EXTREME STEEL INC		38,626.95	
4510	Employer Contributions	9/18/23	08/23	EXTREME STEEL INC		3,454.50	

Account ID	Account Description	Date	Reference	Customer Name	Debit Amt	Credit Amt	Balance
4510	Employer Contributions	9/18/23	08/23	SKODA CONTRACTING CO		3,762.10	
4510	Employer Contributions	9/18/23	08/23	LANE CONSTRUCTION		592.00	
4510	Employer Contributions	9/18/23	08/23	CRANE RENTAL CO, INC		29,151.75	
4510	Employer Contributions	9/18/23	08/23	CRANE RENTAL CO, INC		1,394.25	
4510	Employer Contributions	9/18/23	08/23	GOETTLE EQUIPMENT CO		3,582.00	
4510	Employer Contributions	9/18/23	08/23	MIDLANTIC PILING, INC		720.00	
4510	Employer Contributions	9/19/23	08/23	UNITED CRANE & RIGGING		4,057.79	
4510	Employer Contributions	9/19/23	08/23	TRAYLOR SHEA JV		29,482.24	
4510	Employer Contributions	9/19/23	08/23	NICHOLSON CONSTRUCTION		1,872.00	
4510	Employer Contributions	9/19/23	08/23	EAST WEST ERECTION SERVIC		2,912.00	
4510	Employer Contributions	9/19/23	08/23SPLIT	BADGER DAYLIGHTING CORP.		13,960.37	
4510	Employer Contributions	9/19/23	08/23SPLIT	CELTIC DEMOLITION		17,994.50	
4510	Employer Contributions	9/19/23	08/23SPLIT	SOUTHERN MD CRANE RENTAL		4,683.55	
4510	Employer Contributions	9/19/23	09/23SPLIT	PETILLO INC		2,983.50	
4510	Employer Contributions	9/19/23	08/23	MAXIM CRANE WORKS		2,089.15	
4510	Employer Contributions	9/19/23	08/23	MILLER PIPELINE CORP.		30,032.20	
4510	Employer Contributions	9/19/23	08/23	RYAN INCORPORATED CENTRAL		1,591.20	
4510	Employer Contributions	9/19/23	08/23SPLIT	KELLER NORTH AMERICA		12,922.00	
4510	Employer Contributions	9/19/23	08/23SPLIT	KELLER NORTH AMERICA		3,566.00	
4510	Employer Contributions	9/20/23	08/23SPLIT	MICHELS TRENCHLESS CROSSI		5,052.00	
4510	Employer Contributions	9/20/23	08/23SPLIT	MICHELS CORP		2,104.60	
4510	Employer Contributions	9/20/23	08/23SPLIT	INDEPENDENCE EXCAVATING INC		43,449.45	
4510	Employer Contributions	9/20/23	08/23	KIEWIT INRESTRUCTURE 16TH ST BRIDGE		468.00	
4510	Employer Contributions	9/20/23	08/23	WMATA 6-KIEWIT INFRASTRUC		1,415.64	
4510	Employer Contributions	9/20/23	08/23	DJB CONTRACTING,INC.		646.48	
4510	Employer Contributions	9/22/23	08/23SPLIT	JOSEPH B FAY		387.60	
4510	Employer Contributions	9/22/23	08/23SPLIT	MIGHTY FOUR ENTERPRISE		2,149.88	
4510	Employer Contributions	9/22/23	08/23SPLIT	CONSRUCTION SUPPORT SERVI		1,315.80	
4510	Employer Contributions	9/22/23	08/23	ACCURATE CRANE RENTAL		752.00	
4510	Employer Contributions	9/25/23	09/23SPLIT	PETILLO INC		2,691.95	
4510	Employer Contributions	9/25/23	08/23	W O GRUBB EQUIPMENT RENTAL		57,350.30	
4510	Employer Contributions	9/25/23	08/23SPLIT	SOUTH CAPITAL BRIDGE BUIL		228.00	
4510	Employer Contributions	9/25/23	08/23	LEONARDO'S GRADAL RENTAL, LLC		1,086.30	
4510	Employer Contributions	9/25/23	08/23	MALCOM DRILLING		8,710.00	
4510	Employer Contributions	9/25/23	08/23	POTOMAC YARD CONTRACTORS		844.00	
4510	Employer Contributions	9/25/23	08/23SPLIT	BALTIMORE PILE DRIVING &		1,094.00	
4510	Employer Contributions	9/26/23	08/23	GRUMPY'S CONCRETE PUMPING		3,347.50	
4510	Employer Contributions	9/26/23	08/23	LANE CONSTRUCTION		3,842.00	
4510	Employer Contributions	9/26/23	08/23	Lane Construction		15,833.80	
4510	Employer Contributions	9/27/23	08/23	SIN NEBT-JV		28,642.00	
4510	Employer Contributions	9/28/23	09/23SPLIT	PETILLO INC		2,277.15	
4510	Employer Contributions	9/29/23	7/23 & 8/23SF	SOUTHERN MD HYDRAULICS		2,112.00	
4510	Employer Contributions	9/29/23	7/23 & 8/23SF	SOUTHERN MD HYDRAULICS		2,090.00	
4510	Employer Contributions	9/29/23	08/23	DIGMASTER		8,326.60	
4510	Employer Contributions	9/29/23	RETURN CK		761.60		
4510	Employer Contributions				761.60	681,176.16	-680,414.56
		9/30/23					**-5,096,222.05**

OE Loc 77 Pension Trust Fund
PAVERS CONTRIBUTIONS
For the Period From Sep 1, 2023 to Sep 30, 2023

Account ID	Account Description	Date	Reference	Customer Name	Credit Amt	Balance
4500	Contributions-Paving	9/1/23				-800,943.20
4500	Contributions-Paving	9/1/23	7/23	CAPITAL PAVING OF DC	7,200.20	
4500	Contributions-Paving	9/1/23	7/23	CAPITAL PAVING OF DC	40,508.73	
4500	Contributions-Paving	9/1/23	07/23	FORT MYER	57,407.25	
4500	Contributions-Paving	9/1/23	07/23	FORT MYER	14,401.10	
4500	Contributions-Paving	9/15/23	08/23	EUROVIA ATLANTIC COAST	607.60	
4500	Contributions-Paving	9/15/23	08/23	EUROVIA ATLANTIC COAST	2,640.00	
4500	Contributions-Paving	9/18/23	08/23	RUSSELL PAVING CO., INC.	1,440.00	
4500	Contributions-Paving	9/21/23	08/23	CIVIL CONSTRUCTION, LLC	724.50	
4500	Contributions-Paving	9/26/23	08/23SPLIT	BELTWAY PAVING OF SOUTNER	6,723.00	
4500	Contributions-Paving	9/28/23	08/23	FORT MYER	2,400.00	
4500	Contributions-Paving	9/28/23	08/23	FORT MYER	17,061.80	
4500	Contributions-Paving	9/28/23	08/26	FORT MYER	77,488.50	
4500	Contributions-Paving				228,602.68	-228,602.68
		9/30/23				**-1,029,545.88**

OE Loc 77 Pension Trust Fund
RECIPROCITY INCOME
For the Period From Sep 1, 2023 to Sep 30, 2023

Account ID	Account Description	Date	Reference	Customer Name	Credit Amt	Balance
4550	Reciprocity Income	9/1/23				
4550	Reciprocity Income	9/5/23	04/23-06/23	OE Pension Fund Loc 542	1,637.71	
4550	Reciprocity Income	9/18/23	07/23	OE Loc.37	1,209.10	
4550	Reciprocity Income	9/25/23	08/23	MIDWEST OPERATING ENGINE	2,373.20	
4550	Reciprocity Income	9/25/23	07/23	LOC.18 - OHIO OPERATING E	321.88	
4550	Reciprocity Income	9/25/23	3/23-7/23	Central Pension Fund	31,572.30	
4550	Reciprocity Income				37,114.19	
		9/30/23				**74,228.38**

OE Loc 77 Pension Trust Fund
RECIPROCITY PAYMENTS
For the Period From Sep 1, 2023 to Sep 30, 2023

Account ID	Account Description	Date	Reference	Vendor Name	Debit Amt	Balance
4560	Reciprocity Payments	9/1/23				
4560	Reciprocity Payments	9/18/23	5171	IUOE Local 132 Pension Fund	550.80	
4560	Reciprocity Payments	9/18/23	5172	Central Pension Fund of UOEPE	953.60	
4560	Reciprocity Payments	9/18/23	5172	Central Pension Fund of UOEPE	2,872.30	
4560	Reciprocity Payments	9/18/23	5172	Central Pension Fund of UOEPE	1,527.13	
4560	Reciprocity Payments	9/18/23	5172	Central Pension Fund of UOEPE	3,148.00	
4560	Reciprocity Payments	9/18/23	5173	Loc.18 - Ohio Operat.Engineers	195.00	
4560	Reciprocity Payments	9/18/23	5174	O.E.Local 37 Benefit Funds	9,240.49	
4560	Reciprocity Payments	9/18/23	5175	OE Local 66 Pension Fund	3,847.00	
4560	Reciprocity Payments					
		9/30/23				**22,334.32**

OE Loc 77 Pension Trust Fund
INTEREST ON DELINQUENCY
For the Period From Sep 1, 2023 to Sep 30, 2023

Account ID	Account Des	Date	Reference	Trans Description	Debit Amt	Credit Amt	Balance
4660	Int on Del	9/1/23		Beginning Balance			-4,786.86
4660	Int on Del	9/11/23	Interest 04/23\	NEW YORK GEOMATICS INC - Interest 04/23 ck#3561		5.02	
4660	Int on Del	9/14/23	06/23&3/23 Int	SOUTHERN RENOVATION LLC - Interest for delinquency 03/23 ck#1068		7.78	
4660	Int on Del	9/29/23	RETURN CK	PNC- Cash Fd Cash - Return ck#1068 Southern Renovati	7.78		
4660	Int on Del			Current Period Change	7.78	12.80	-5.02
		9/30/23		**Ending Balance**			**-4,791.88**

OE Loc 77 Pension Trust Fund
LIQUIDATED DAMAGES
For the Period From Sep 1, 2023 to Sep 30, 2023

Account ID	Account Description	Date	Reference	Jrnl	Trans Description	Debit Amt	Credit Amt	Balance
4620	Liquidated Damages	9/1/23			Beginning Balance			-985.38
		9/30/23			**Ending Balance**			**-985.38**

OE Loc 77 Pension Trust Fund
CHECK REGISTER
For the Period From Sep 1, 2023 to Sep 30, 2023

Check #	Date	Payee	Amount
5167	9/8/23	Washington Capital Mngmnt, Inc.	2,901.78
5168	9/8/23	Calibre CPA Group, PLLC	6,927.50
5169	9/8/23	AA, LLC	16,504.81
5170	9/15/23	McChesney & Dale, P.C.	9,595.50
5171	9/18/23	IUOE Local 132 Pension Fund	550.80
5172	9/18/23	Central Pension Fund of UOEPE	8,501.03
5173	9/18/23	Loc.18 - Ohio Operat.Engineers	195.00
5174	9/18/23	O.E.Local 37 Benefit Funds	9,240.49
5175	9/18/23	OE Local 66 Pension Fund	3,847.00
5176	9/22/23	Visionmark	87.50
Qtr End 9/30/23	9/22/23	Investment Performance Services, LLC	23,735.13
5177	9/25/23	AA, LLC	18.54
5178	9/29/23	Calibre CPA Group, PLLC	1,327.50
5179	9/29/23	AA, LLC	25.40
Qtrly Retainer Aug.	9/29/23	Bolton Partners, Inc.	10,965.28
Total			**94,423.26**

OTHER FUND BUSINESS

TD COWEN

Plan Sponsor Services

IUOE Local #77 Pension Fund

Ref#: 24074

Plan Trading Summary (US Dollars)

January 01, 2023 - September 30, 2023

Manager		Current Month Commissions Gross	Current Month Executing Broker's Keep	Currrent Month Net Received From Broker	Current Month Credits Accrued	Year-To-Date Commissions Gross	Year-To-Date Credits Accrued
Revenue Type: Cowen Trading							
DePrince Race & Zollo		0.00	0.00	0.00	0.00	0.00	0.00
Enhanced Investment Technologies, Inc.		0.00	0.00	0.00	0.00	0.00	0.00
First Eagle Investment Management LLC		0.00	0.00	0.00	0.00	0.00	0.00
Fred Alger Management, Inc	CXL	0.00	0.00	0.00	0.00	1,936.72	1,398.75
Grosvenor Capital Management, L.P		0.00	0.00	0.00	0.00	0.00	0.00
Mercantile Trust Company - Comm Rec		0.00	0.00	0.00	0.00	0.00	0.00
Principal Financial Group		0.00	0.00	0.00	0.00	0.00	0.00
TimesSquare Capital Management, Inc.		14.58	0.00	14.58	7.98	190.42	130.61
Union Labor Life Insurance Co.		0.00	0.00	0.00	0.00	0.00	0.00
Totals for Cowen Trading		**14.58**	**0.00**	**14.58**	**7.98**	**2,127.14**	**1,529.36**
Revenue Type: Broker Network Trading – US Equities							
Thompson, Siegel & Walmsley, Inc.		0.00	0.00	0.00	0.00	0.00	0.00
TimesSquare Capital Management, Inc.		45.56	11.65	33.91	30.52	243.13	148.74
Wedge Capital Management		96.07	55.28	(0.25)	36.71	2,543.83	843.52
Totals for Broker Network Trading – US Equities		**141.63**	**66.93**	**33.66**	**67.23**	**2,786.96**	**992.26**
Revenue Type: Comingled Funds							
Hardman Johnston Global Advisors		0.00	0.00	0.00	0.00	0.00	0.00
Totals for Comingled Funds		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Revenue Type: Liquidation Equity/Fixed							
IUOE Local #77 Pension Fund		0.00	0.00	0.00	0.00	0.00	0.00
Totals for Liquidation Equity/Fixed		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Grand Totals		**156.21**	**66.93**	**48.24**	**75.21**	**4,914.10**	**2,521.62**

Plan Sponsor Sales : Tim Conway, (212) 237-0416, Tim.Conway@cowen.com

Plan Sponsor Client Services : 800-992-7526, plansponsorservices@cowen.com

This statement represents trades through Posted Date Sep 30, 2023 for all US transactions executed through Cowen and upon information provided to us to date from our Global Correspondent network for all US and Non-US transactions
PLEASE CHECK YOUR STATEMENTS FOR ACCURACY AND REPORT ANY INACCURACIES TO PLAN SPONSOR SERVICES.

Notice: Please be advised that Cowen Plan Sponsor Services (Cowen) will not pay interest on any commission balances held in your account. If commissions are credited to your account in error, Cowen has the right to reverse those transactions without notice to you. If a deficit balance in your account results from a reversal of commissions credited to your account in error or results from the payment of invoices or expenses on your behalf in an amount that exceeds the available balance in your account, Cowen will satisfy or offset the deficit balance against any and all available commissions credited or to be credited to your account. If there are no commissions available to satisfy the deficit balance or your relationship with Cowen has terminated, you agree that you will reimburse Cowen in the full amount of any deficit balance within 30 days of receiving notice of such deficit balance and demand for payment from Cowen.

TD COWEN

Plan Sponsor Services

IUOE Local #77 Pension Fund

Plan Activity Summary and Balance

January 01, 2023 - September 30, 2023

Ref#: 24074

Summary by Revenue Type

Revenue Type	Month to Date		Year to Date	
	Gross Commissions	Credits	Gross Commissions	Credits
Cowen Trading – US Equities	14.58	7.98	2,127.14	1,529.36
Broker Network Trading – US Equities	74.70	67.23	1,102.39	992.26
Broker Network – Non US Equities (Includes Cowen Ltd.)	0.00	0.00	0.00	0.00
Executing Broker Keep	66.93	0.00	1,684.57	0.00
Fixed Income	0.00	0.00	0.00	0.00
Adjustments	0.00	0.00	0.00	0.00
No Credit	0.00	0.00	0.00	0.00
Options	0.00	0.00	0.00	0.00
12B-1 fees	0.00	0.00	0.00	0.00
12B Finder's Fees	0.00	0.00	0.00	0.00
TOTAL	**156.21**	**75.21**	**4,914.10**	**2,521.62**

Account Balance

Month	Gross Commissions	Adjustments	Credits Accrued	Rebate Payment Applied	Month Ending Balance
Prior Year CR or DB	0.00		0.00		1,040.18
January 2023	575.98	0.00	337.71	1,040.18	337.71
February 2023	485.21	0.00	263.16	0.00	600.87
March 2023	2,480.52	0.00	1,317.36	0.00	1,918.23
April 2023	353.66	0.00	205.93	1,918.23	205.93
May 2023	321.91	0.00	105.41	0.00	311.34
June 2023	159.42	0.00	67.44	0.00	378.78
July 2023	210.91	0.00	81.16	378.78	81.16
August 2023	170.28	0.00	68.24	0.00	149.40
September 2023	156.21	0.00	75.21	0.00	224.61
October 2023	0.00		0.00		
November 2023	0.00		0.00		
December 2023	0.00		0.00		
TOTAL	**4,914.10**	**0.00**	**2,521.62**	**3,337.19**	

Current Balance	**224.61**

Plan Sponsor Sales : Tim Conway, (212) 237-0416, Tim.Conway@cowen.com

Plan Sponsor Client Services : 800-992-7526, plansponsorservices@cowen.com

This statement represents trades through Posted Date Sep 30, 2023 for all US transactions executed through Cowen and upon information provided to us to date from our Global Correspondent network for all US and Non-US transactions
PLEASE CHECK YOUR STATEMENTS FOR ACCURACY AND REPORT ANY INACCURACIES TO PLAN SPONSOR SERVICES.

Notice: Please be advised that Cowen Plan Sponsor Services (Cowen) will not pay interest on any commission balances held in your account. If commissions are credited to your account in error, Cowen has the right to reverse those transactions without notice to you. If a deficit balance in your account results from a reversal of commissions credited to your account in error or results from the payment of invoices or expenses on your behalf in an amount that exceeds the available balance in your account, Cowen will satisfy or offset the deficit balance against any and all available commissions credited or to be credited to your account. If there are no commissions available to satisfy the deficit balance or your relationship with Cowen has terminated, you agree that you will reimburse Cowen in the full amount of any deficit balance within 30 days of receiving notice of such deficit balance and demand for payment from Cowen.