

Petition Exhibit F

May 28, 2024 Matczak Consulting L.L.C. Review Of Statutory Reserves And Other Actuarial Analyses Proposed Sponsored Demutualization Of Columbian Mutual Life Insurance Company

New York State Department of Financial Services

**Review of Statutory Reserves
and Other Actuarial Analyses**

**Proposed Sponsored Demutualization of
Columbian Mutual Life Insurance Company
(NAIC Code 62104)**

May 28, 2024

MATCZAK CONSULTING L.L.C.

FILED: BROOME COUNTY CLERK 12/12/2025 05:13 PM

NYSCEF DOC. NO. 53

INDEX NO. EFCA2024001871
RECEIVED NYSCEF: 12/12/2025

(This page intentionally left blank)



MATCZAK CONSULTING L.L.C.

May 28, 2024

William B, Carmello, Jr., F.S.A., M.A.A.A.
Chief Life Actuary
New York State Department of Financial Services
One Commerce Plaza
Albany, NY 12257

Dear Bill:

This report documents the review by Matczak Consulting L.L.C. ("MCLLC") of reserves and other actuarial analyses of Columbian Mutual Life Insurance Company ("CML") as of December 31, 2023. Our review was completed in conjunction with the proposed demutualization of CML sponsored by Constellation Insurance Holdings, Inc.

The results of our review and other actuarial analyses documented herein were completed pursuant to the terms and conditions defined in the Engagement Letter dated December 21, 2021 between MCLLC, the New York State Department of Financial Services ("NYSDFS"), and CML.

Section 1 of our report provides an overview of the nature and scope of our analyses, as well as our conclusion as the amount of Asset Adequacy Reserves required to be established by CML as of December 31, 2023. Section 2 documents in detail the results of our review and analyses.

This report has been prepared solely for the NYSDFS and, except as defined in Section 1 under "Limitations on Use and Distribution of this Report", may not be distributed, disclosed, copied, or otherwise provided in whole or in part to any other party without the prior written consent of MCLLC unless such distribution or disclosure is required or authorized by law. The report cannot be used in any filings with any other public body including, but not limited to, the Securities and Exchange Commission, the Internal Revenue Service, and state insurance departments (other than those of New York) without the written consent of MCLLC.

Questions regarding our report posed by any authorized recipient must be directed to MCLLC for review and response.

MCLLC also requests that this report be treated as trade secret confidential information not subject to any Freedom of Information Act or similar laws.



MATCZAK CONSULTING L.L.C.

This report is considered a statement of actuarial opinion under the guidelines promulgated by the American Academy of Actuaries. The MCLLC principals that authored this report are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained herein.

Yours truly,

Robert J. Matczak, F.S.A., M.A.A.A.
Principal

2434 Haven Avenue
Ocean City, NJ 08226-2459

Phone: 484-477-7362

Email: robert.matczak@matczakconsulting.com

Elizabeth A. Todaro, F.S.A., M.A.A.A.
Principal

116 Drakes Drum Drive
Bryn Mawr, PA 19010

Phone: 484-885-3865

Email: liz.todaro@matczakconsulting.com

FILED: BROOME COUNTY CLERK 12/12/2025 05:13 PM

NYSCEF DOC. NO. 53

INDEX NO. EFCA2024001871

RECEIVED NYSCEF: 12/12/2025

(This page intentionally left blank)

Table of Contents

Section 1: Introduction..... 1
Section 2: Results of Our Review of Year-end 2023 Cash Flow Testing 4

FILED: BROOME COUNTY CLERK 12/12/2025 05:13 PM

NYSCEF DOC. NO. 53

INDEX NO. EFCA2024001871
RECEIVED NYSCEF: 12/12/2025

(This page intentionally left blank)

Section 1: Introduction

The Superintendent of the New York State Department of Financial Services (“NYSDFS”, or “the Department”) appointed Matczak Consulting LLC (“MCLLC”, “we”, or “us”) as actuarial consultants to advise and assist the Department in its review of the proposed sponsored demutualization of Columbian Mutual Life Insurance Company (“Insurer”, or “CML”), pursuant to Section 7312 of the New York State Insurance Law. Our work was completed pursuant to the terms and conditions defined in the Engagement Letter dated December 21, 2021 between MCLLC, the Department, and CML.

In conjunction with the proposed demutualization, CML will be acquired by Constellation Insurance Holdings, Inc. (“Constellation”). Upon completion, the transaction will result in the conversion of CML from a mutual insurance company that is owned and operated for the benefit of policyholders into a stock insurance company that is indirectly owned by Constellation. This process is known as a sponsored demutualization.

MCLLC also was asked by the Department to act as examiner, pursuant to §310 of the Insurance Law, to assist the Superintendent of the NYSDFS (the “Superintendent”) and other NYSDFS personnel in conducting a review of reserves CML as of December 31, 2023, pursuant to §§309 and 4217(a)(1) of the Insurance Law and N.Y. Compilation of Codes Rules and Regulations, Title 11, §92 (1997) (Regulation 11). The primary objective of our examination was to determine if Asset Adequacy Reserves (“AAR”) need to be established by CML as of December 31, 2023.

Professional Qualifications

This report is considered a statement of actuarial opinion under the guidelines promulgated by the American Academy of Actuaries. The principals of MCLLC who developed this report, whose names are listed in the transmittal letter for this report, are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render this statement of actuarial opinion.

Conclusion

As a part of our review of CML's year-end 2023 Cash Flow Testing ("CFT") models, assumptions, and projections, MCLLC developed adjusted CFT results (i.e., adjusted present values of ending market values of surplus) so as to eliminate overstatements of results caused by faulty methodology or insufficiently conservative assumptions.

The worst-case adjusted CFT result under the NY7 interest rate scenarios leads MCLLC to conclude that Asset Adequacy Reserves equal to **\$104 million** need to be established by CML as of December 31, 2023.

CML's statutory surplus as of December 31, 2023 was **\$29.2 million**.

Reliances

In preparing our actuarial analysis as reported in this presentation, MCLLC relied upon information supplied by CML as well as upon published financial information. We performed no audits or independent verification of the information furnished.

The principal materials relied upon include, but are not necessarily limited to, the following:

- The 12/31/2023 statutory statement of CML.
- The year-end 2023 Regulation 126 Actuarial Memorandum of CML, including reporting of Cash Flow Testing results under various sensitivity scenarios.
- CML's detailed base case Cash Flow Testing projections of income statements and balances sheets under each of the NY7 interest rate scenarios.
- Cash Flow Testing projections under sensitivity analyses requested by MCLLC:
 1. Borrowing rates assumed equal to new money reinvestment rates
 2. Use of alternative mortality scaling factors and removal of assumed mortality improvement
 3. Combined impact of sensitivity scenarios #1 and #2
- Details underlying CML's most recent updated mortality experience study.
- Net yield pick-up calculations for assets in force on 9/30/2023, as derived for CML's base case CFT projections.

- Option Adjusted Spreads and Weighted Average Life as calculated by CML's Axis projection system on a seriatim basis for CML's 9/30/2023 modeled assets.
- Responses provided by Simone Davis (SVP, Chief Actuary and CRO of Columbian Financial Group) to various inquiries posed by MCLLC during the course of our review.

Limitations on Use and Distribution

This report has been prepared solely for the NYSDFS, and may not be distributed, disclosed, copied, or otherwise provided, in whole or in part, to any other party unless such distribution or disclosure is required or authorized by law.

We do consent, however, to the distribution of this report to Foley & Lardner LLP, the Department's outside legal counsel on the review of the proposed sponsored demutualization of CML. Distribution of the report to Foley & Lardner LLP must be in its entirety.

This report, or any other documents or work papers related to MCLLC's actuarial analyses developed herein, may not be used in any filings with the Securities and Exchange Commission, Internal Revenue Service, or any other public bodies without the prior written consent of one of the principals of MCLLC.

MCLLC requests that this report be treated as trade secret confidential information not subject to any Freedom of Information Act or similar laws.

Questions regarding our report posed by any authorized recipient must be directed to MCLLC for review and response.

* * * *

Section 2: Results of Our Review of Year-end 2023 Cash Flow Testing

MCLLC's observations, recommendations, and conclusions resulting from the examination of CML are presented below.

CML prepared asset adequacy analysis as of December 31, 2023 in compliance with the requirement of New York Regulation 126, applicable Actuarial Standards of Practice, as well as the applicable letter of the Department documenting special considerations relating to year-end 2023 reserves ("Special Considerations Letter", or "SCL")

- Aggregation of Cash Flow Testing ("CFT") Results
 - Ms. Simone Davis (CML's appointed actuary) in accordance with Section 95.10(a)(2) of Regulation 126, aggregated the results of asset adequacy analysis across the Life and Annuity lines of business in formulating her year-end 2023 opinion. Ms. Davis received permission to aggregate these lines of business in an e-mail dated February 6, 2024 from Seth Bieler-Snow, Principal Actuary – Life, New York State Department of Financial Services.
 - Columbian Mutual is domiciled in the state of New York and is subject to the requirements of the SCL.

- CFT Results
 - CFT results (i.e., present values of ending market values of surplus, or "PVMVS") reported by CML in its year-end Regulation 126 Actuarial Memorandum, and as shown in the table on the next page of this report, were positive in the aggregate across the Life and Annuity lines of business under the "NY7" interest rate scenarios specified in Sections 95.10(d)(1) (i), (ii), (iii), (iv), (v), (vi), and (vii) of Regulation 126.

CFT Results as of 9/30/2023
PVMVS (in millions)

Scenario	As Reported in YE23 Regulation 126 Actuarial Memorandum
1 Level	54
2 Rising	110
3 Up/Down	13
4 Pop-Up	62
5 Falling	8
6 Down/Up	52
7 Pop-Down	16

- **Borrowing Rate Assumed in CFT Projections**
 - CML made a significant change in the borrowing rate assumed in year-end 2023 (“YE23”) CFT (i.e., the rate assumed when invested assets are projected to be extinguished, resulting in the need to borrow).
 - Rather than appropriately assuming, as had been done in prior years, that the borrowing rate would be the negative new money reinvestment rate appropriately calculated for each of the NY7 interest rate scenarios, CML inappropriately assumed that the borrowing rate would be the overall initial asset portfolio yield of 4.05%:
 - In each projection year; and
 - In each of the NY7 interest rate scenarios.
 - This resulted in an overstatement of reported CFT results, as the use of this inappropriately assumed borrowing rate creates “leverage” in the CFT projections under increasing interest rate scenarios.
 - For example, under the Pop-up interest rate scenario – model segments that were reinvesting would be reinvesting at 8.80% (the new money rate under the Pop-up scenario) while model segments that would be borrowing would be doing so at 4.05%.

- To illustrate the leveraging effect – if \$800 million of assets were reinvested in LOB1 while \$200 million of assets were borrowed in LOB2, the aggregate investment earnings rate would be 10.38%.
 - $(\$800M \times 8.80\% = \$70.4M)$ plus $(-\$200M \times 4.05\% = -\$8.1M) = \$70.4M - \$8.1M = \$62.3M$
 - $\$62.3M$ divided by $(\$800M - \$200M) = \$62.3M$ divided by $\$600M = 10.38\%$
- The appropriate assumption would be that model segments that were reinvesting under the Pop-up scenario would be reinvesting at 8.80% while model segments that would be doing so at 8.80%, resulting in net reinvestments at 8.80%.
- CML's year-end 2019, 2020, 2021 and 2022 AOMs stated "*Borrowing is assumed where assets are completely liquidated by negative cash flows. If that is the case, the rate on loans is set to approximately equal the reinvestment rate, so that borrowing is effectively assumed from other lines.*"
 - This statement was misleading in 2019 and 2020 in that the CFT models assumed borrowing at a short-term new money rate and not at the long-term new money rate assumed for reinvestments.
 - CML changed the borrowing new money rate to match the long-term new money reinvestment rate starting in 2021 as a result of Liz Todaro's company examination and subsequent required "fix" of the NYSDFS.
 - Nonetheless, CML apparently had no issue with assuming borrowing rates equal to new money reinvestment rates at the previous 2 years-end.
- CML's year-end 2023 change in the assumed borrowing rates had the impact of dramatically improving CFT results under the increasing interest rate scenarios, which produce the worst CFT results for CML.
- It should also be noted that the view of both the NYSDFS and MCLLC that the borrowing rate should be equal to the new money reinvestment rate is consistent with the view presented to other companies examined by the NYSDFS and MCLLC.
- The impact of assuming borrowing rates equal to new money reinvestment rates, rather than the initial asset portfolio earnings rate, is shown in the table found at the top of the next page.

Columbian Mutual

Cash Flow Testing Results as of 9/30/2023
Present Value of Ending Market Value of Surplus (in millions)

Scenario	As Reported in YE23 AOM	Set Borrowing Rates = New Money Rates ¹	SUBTOTAL - MCLLC Baseline
1 Level	54	(25)	29
2 Rising	110	(110)	(0)
3 Up/Down	13	(27)	(14)
4 Pop-Up	62	(86)	(25)
5 Falling	8	17	24
6 Down/Up	52	(22)	30
7 Pop-Down	16	14	30

¹ Derived from CML sensitivity requested by MCLLC

- The revised baseline results make more intuitive sense than those reported in the YE23 Regulation 126 Actuarial Memorandum, as the increasing interest rate scenarios consistently show worse results than the level and decreasing scenarios.
- The lower PVMVS under rising interest rate scenarios arise due to the amount of asset sales projected in the early projection years.
- As shown in the table at the top of the following page, projected capital losses realized upon asset sales of are of a higher magnitude under the increasing interest rate scenarios as the increased interest rates reduce the projected market values of invested assets relative to the market values projected under the level and decreasing interest rate scenarios.

Cash Flow Testing Results as of 9/30/2023
PVMVS (in millions)

Scenario	Excluding impact of realized CG/L	PV of realized CG/L	SUBTOTAL - MCLLC Baseline
1 Level	78	(49)	29
2 Rising	94	(94)	(0)
3 Up/Down	83	(97)	(14)
4 Pop-Up	87	(112)	(25)
5 Falling	44	(20)	24
6 Down/Up	55	(25)	30
7 Pop-Down	36	(6)	30

- Mortality Assumptions

- CML's mortality assumption for YE23 CFT was developed as follows:
 - 2019 and prior issues – CML developed trended experience-based mortality scaling factors using the 2015 VBT 150% Relative Risk tables as the base mortality tables. Experience for all policy years was combined in the development of the scaling factors.
 - 2020 and later issues – Swiss Re had developed base mortality pricing assumptions for 2016 and later issues, onto which CML then added mortality improvement factors. CML used these pricing assumptions (including mortality improvement) for 2020 and later issues.
- MCLLC requested a mortality sensitivity for the Final Expense business using revised mortality scaling factors which were derived based on CML's historical experience excluding experience from the first 3 policy years where mortality is lower primarily due to contested claims.
 - MCLLC's derivation of the revised mortality scaling factors was based on CML's experience from 2015 to 2019 and 2022 to 2023 (i.e., experience from the COVID years of 2020 and 2021 was excluded).
 - After excluding experience from the first 3 policy years there was not sufficient experience to develop scalars for 2016 to 2019 issues, so pricing assumptions were used in these instances.

- The future mortality improvement factors built into CML's pricing mortality tables for 2016 and later issues were eliminated.
 - MCLLC also had CML assign all graded benefit policies to the "uni-smoke" underwriting class in partial recognition that graded benefit policies have materially higher mortality than full benefit policies.
- The alternative mortality scaling factors developed by MCLLC for use in the requested sensitivity projection, as compared to the mortality scaling factors assumed by CML in YE23 CFT, are as follows:

	ALTERNATE				CML		
	Gender/Tob	Post Drug Database	FE2014		Gender/Tob	Post Drug Database	FE14-16
2015-2023*, Excl.20&21	FNS	164%	154%	2023CFT	FNS	169%	109%
	FS	181%	124%		FS	186%	101%
	MNS	168%	159%		MNS	171%	126%
	MS	194%	176%		MS	199%	140%
	FUN	272%	492%		FUN	211%	n/a
	MUN	329%	547%		MUN	243%	n/a

- The impact of using MCLLC's alternative mortality assumptions was to reduce PVMVS across all NY7 interest rate scenarios, as shown in the following table.

Adjusted CFT Results as of 9/30/2023
 PVMVS (in millions)

Scenario	SUBTOTAL - MCLLC Baseline	Mortality Adjustments	PRELIMINARY TOTAL ADJUSTED PVMVS
1 Level	29	(35)	(6)
2 Rising	(0)	(40)	(40)
3 Up/Down	(14)	(41)	(55)
4 Pop-Up	(25)	(42)	(66)
5 Falling	24	(31)	(6)
6 Down/Up	30	(31)	(1)
7 Pop-Down	30	(29)	1

- Please note that while MCLLC considers the alternative mortality scaling factors used in the mortality sensitivity projection to be more appropriate for use in CFT than CML's mortality scaling factors, MCLLC nonetheless believes that the general

approach of applying flat mortality scaling factors, varying only by gender, smoker class, and issue era, to base tables developed from fully underwritten experience does not appropriately capture all of the material mortality risk characteristics of its simplified and guaranteed issue products.

- For example:
 - In general, the slope of mortality rates by attained age would be expected to differ between guaranteed issue, simplified issue, and fully underwritten business.
 - CML's mortality study showed anti-selection at younger issues ages and experience varying by duration for both Final Expense and Preneed policies.
 - The graded benefit Final Expense products do not have a contestable period and show significantly higher mortality than the full benefit version.
- Bulk Treaty Expense Allowances
 - As of March 31, 2024, the intercompany reinsurance treaty between CML and its subsidiary Columbian Life (referred to as the "Bulk Treaty") was amended to reflect a change to Final Expense reinsurance allowances for policies issued after June 30, 2023.
 - The NYSDFS requested that CML's YE23 CFT projections reflect this change in allowances. However, the change in allowances was not finalized in time for CML to reflect this change in its baseline YE23 CFT projections.
 - In its YE23 Regulation 126 Actuarial Memorandum, CML did report results under a sensitivity projection developed to assess the impact of the change in allowances.
 - MCLLC and the NYSDFS believe this assumption to be more appropriate than CML's base case assumption of ignoring the change in reinsurance allowances.
- Preneed Growth Rates
 - The Preneed policies of CML are mostly assumed from CML's directly owned subsidiary Columbian Life Insurance Company ("CLIC"). The benefit growth rates are determined by CLIC.

- It was reported in CML’s Regulation 126 Actuarial Memorandum that the Preneed growth rates assumed in YE23 CFT were:
 - Zero in all projection years under the Level and all Increasing Interest Rate Scenarios
 - 0.07% in all projection years under Scenario 5 (Falling)
 - 0.10% in all projection years under Scenario 6 (Down/Up) and Scenario 7 (Pop-down)
- However, historical Preneed growth rates have been higher and have moved upward in both 2023 and 2024:

Historical Preneed Growth Rates (as of December 31)						
	12/31/19	12/31/20	12/31/21	12/31/22	12/31/23	03/31/24
Wt Avg Growth Rate	1.35%	1.23%	0.89%	0.15%	0.26%	0.46%
NII Rate	4.63%	4.42%	4.03%	3.94%	3.93%	--

- In its YE23 Reg. 126 Actuarial Memorandum, CML included the results of a sensitivity scenario in which growth rates were assumed equal to 0.50% in all projection years under all NY7 interest rate scenarios. MCLLC believes this assumption to be more appropriate for use in YE23 CFT than CML’s base case assumption.

- Net Yield Pick-up

- CML’s derivation of total default costs reflecting the fixed income asset spread cap, or Net Yield Pick-up (“NYPU”), limitations of the NYSDFS resulted in an understatement of current market spreads and resultant total default costs assumed for commercial mortgages, resulting in an overstatement of PVMVS.
- CML used an indexed approach to implement the NYPU limitation at year-end 2023.
 - CML created a table of default costs by quality rating and years to maturity (“YTM”) using NAIC non-callable bond spreads (minimum of current and long-term spreads) as a proxy for gross market spreads.
 - CML’s base default costs by quality rating were subtracted from the NAIC spreads and compared to the NYSDFS’s spread caps (referenced by YTM) to determine the NYPU adjustment (i.e., additional default costs).

- In order to check the reasonableness of CML's indexed approach, MCLLC developed NYPU adjustments using Option Adjusted Spreads ("OAS") calculated by AXIS (CML's actuarial projection software) on a seriatim asset basis.
- The OAS were used as proxies for gross market spreads.
- Axis also calculated weighted average life ("WAL") for each in-force asset which was used to reference the appropriate SCL asset spread cap.
- As is shown in the following table, the OAS spreads differ from CML's indexed spreads most dramatically for mortgages:

	Quality	BV	MV	MV/BV	YTM	WAL	Book Yield	Gross Market Spread		
								CML	OAS	DIFF
BOND	1 AAA	127	105	83%	19	15	3.85%	1.19%	1.20%	0.02%
	2 AA+	65	51	77%	18	17	3.64%	1.19%	1.25%	0.06%
	3 AA	118	88	75%	19	18	3.56%	1.21%	1.30%	0.09%
	4 AA-	69	53	77%	20	18	3.71%	1.25%	1.36%	0.11%
	5 A+	92	71	77%	20	19	3.90%	1.26%	1.30%	0.04%
	6 A	117	89	76%	23	22	3.94%	1.26%	1.37%	0.11%
	7 A-	157	121	77%	20	20	4.16%	1.35%	1.43%	0.09%
	8 BBB+	172	129	75%	21	21	4.11%	1.51%	1.53%	0.02%
	9 BBB	139	103	74%	22	22	4.01%	1.69%	1.53%	-0.16%
	10 BBB-	4	3	64%	25	25	3.72%	2.00%	2.09%	0.08%
TOTAL		1,061	812	77%	20	20	3.92%	1.35%	1.39%	0.03%
COMM MTG	7 A-	175	157	90%	8	6	4.49%	1.31%	2.06%	0.76%
	10 BBB-	34	30	89%	7	6	4.38%	1.94%	2.07%	0.13%
	TOTAL	209	187	90%	8	6	4.47%	1.41%	2.06%	0.65%
TOTAL		1,270	1,000	79%	18	17	4.01%	1.36%	1.50%	0.14%

- The OAS for commercial mortgages is approximately 200 bp, which is consistent with CML's current view on spreads-to-Treasuries for Commercial Mortgages
- The increased gross market spread under the OAS approach results in increases to total default costs of like amounts (i.e., 3 bp for Bonds, and 65 bp for mortgages)
- The YE23 CFT results adjusted for more appropriate assumptions for: (1) bulk treaty reinsurance allowances; (2) Preneed growth rates; and (3) additional default costs due to SCL net yield pick-up limitations can be seen in the table at the top of the following page.

Adjusted CFT Results as of 9/30/2023
 PVMVS (in millions)

Scenario	SUBTOTAL - MCLLC Baseline	Mortality Adjustments	PRELIMINARY TOTAL ADJUSTED PVMVS	Bulk Treaty Expense Allowances Corrected	Preneed Growth Rates Set Equal to 0.50%	Revised Net Yield Pickup Methodology	TOTAL ADJUSTED PVMVS (After-tax Discount Rates)
1 Level	29	(35)	(6)	(4)	(5)	(8)	(23)
2 Rising	(0)	(40)	(40)	(5)	(5)	(8)	(58)
3 Up/Down	(14)	(41)	(55)	(5)	(4)	(8)	(73)
4 Pop-Up	(25)	(42)	(66)	(5)	(4)	(8)	(84)
5 Falling	24	(31)	(6)	(3)	(5)	(8)	(23)
6 Down/Up	30	(31)	(1)	(3)	(4)	(8)	(17)
7 Pop-Down	30	(29)	1	(3)	(5)	(8)	(15)

- Other Considerations
 - *9/30/2023 CFT Models and Treasury Yield Curve*
 - CML's YE23 CFT projections were developed using 9/30/2023 asset and liability models, and the 9/30/2023 Treasury yield curve.
 - Treasury yields declined between 9/30/2023 and 12/31/2023:

	9/30/2023	12/29/2023	12/29/2023 vs. 9/30/2023
3-month	5.55	5.40	(0.15)
6-month	5.53	5.26	(0.27)
1-year	5.46	4.79	(0.67)
2-year	5.03	4.23	(0.80)
3-year	4.80	4.01	(0.79)
5-year	4.60	3.84	(0.76)
7-year	4.61	3.88	(0.73)
10-year	4.59	3.88	(0.71)
20-year	4.92	4.20	(0.72)
30-year	4.73	4.03	(0.70)

- Use of the 12/31/2023 Treasury yield curve in place of the 9/30/2023 yield curve will have two somewhat offsetting impacts on CFT results:
 - Projected new money reinvestment rates will be lower, which will have the impact of decreasing PVMVS.
 - The market value of invested assets will increase, which will have the impact of reducing projected capital losses realized upon the sale of invested assets, which will increase PVMVS.

- o The "12/31/2023 Treasury Yield Curve" sensitivity presented in CML's YE23 Regulation 126 Actuarial Memorandum only accounts for the first of these two impacts. MCLLC therefore did not utilize the results of this sensitivity analysis in its review of CML's YE23 CFT results.
- Projected Negative Federal Income Tax
 - o CML's YE23 CFT projections included significant negative income tax values.
 - o CML did not provide evidence to demonstrate that there were other sources of positive income tax to offset the negative tax values inherent in the YE23 CFT projections.
 - Including negative income tax values is essentially equivalent to assuming future cash payments from the Federal government into CML.
 - Such an assumption is inappropriate.
 - o The impact on PVMVS of excluding projected negative income taxes is shown in the following table:

Adjusted CFT Results as of 9/30/2023
PVMVS (in millions)

Scenario	TOTAL ADJUSTED PVMVS (After-tax Discount Rates)	----->	TOTAL ADJUSTED PVMVS (Pre-tax Discount Rates)	PV of Projected Negative F.I.T. (Pre-tax Discount Rates)	PVMVS Excluding Negative Federal Income Tax
1 Level	(23)		(18)	19	(37)
2 Rising	(58)	----->	(24)	49	(74)
3 Up/Down	(73)		(42)	43	(85)
4 Pop-Up	(84)	----->	(40)	64	(104)
5 Falling	(23)		(16)	14	(30)
6 Down/Up	(17)	----->	(14)	16	(29)
7 Pop-Down	(15)		(11)	12	(23)

- **CONCLUSION:** The worst-case results shown in the last column indicate that Asset Adequacy Reserves of \$104 million should be established by CML as of 12/31/2023.

* * * *