Sheet Metal Workers' National Pension Fund

Actuarial Certification of Plan Status under IRC Section 432

As of January 1, 2023

Segal

101 North Wacker Drive, Suite 500
Chicago, IL 60606-1724
segalco.com T:312.984.8500

March 8, 2023

Board of Trustees
Sheet Metal Workers' National Pension Fund
3180 Fairview Park Drive, Suite 400
Falls Church, Virginia 22042

Dear Trustees:

As required by ERISA Section 305 and Internal Revenue Code (IRC) Section 432, we have completed the Plan's actuarial status certification as of January 1, 2023 in accordance with the Multiemployer Pension Reform Act of 2014 (MPRA). The attached exhibits outline the projections performed and the results of the various tests required by the statute. These projections have been prepared based on the Actuarial Valuation as of January 1, 2022 and in accordance with generally accepted actuarial principles and practices and a current understanding of the law. The actuarial calculations were completed under the supervision of Daniel V. Ciner, MAAA, Enrolled Actuary.

As of January 1, 2023, the Plan is in neither critical status nor endangered status. In addition, the Plan is not projected to be in critical status for any of the succeeding five plan years. This certification is being filed with the Internal Revenue Service, pursuant to ERISA section 305(b)(3) and IRC section 432(b)(3).

Segal does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretation on which the certification is based reflects Segal's understanding as an actuarial firm. Due to the complexity of the statute and the significance of its ramifications, Segal recommends that the Board of Trustees consult with legal counsel when making any decisions regarding compliance with ERISA and the Internal Revenue Code.

A summary of the key results of this certification are as follows:

Actuarial Status Certification as of January 1, 2023: Key Results

		2023
Certified Zone Status		Green
Funded Percentage	Actuarial value of assets (AVA)	$7,255,281,345
	Unit credit accrued liability	8,584,800,289
	Funded percentage	84.5%
Funding Standard Account	Credit balance with amortization extension as of the end of the prior year	$1,110,508,771
	Years to projected funding deficiency	No deficiency projected

We look forward to reviewing this certification with you at your next meeting and to answering any questions you may have. We are available to assist the Trustees in developing a plan management and funding policy to help guide future planning and oversight.

Sincerely,

Segal

By:

Ryan S. Carney, FSA, MAAA, EA
Vice President & Benefits Consultant

David A. Dean, EA
Consultant

Daniel V. Ciner, MAAA, EA
Senior Vice President and Actuary

cc: Ms. Lori Wood
Tearyn Loving, Esq.
Ms. Debbie Elkins
Mr. Tim Myers

101 North Wacker Drive, Suite 500
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March 8, 2023

Internal Revenue Service
Employee Plans Compliance Unit
Group 7602 (TEGE:EP:EPCU)
230 S. Dearborn Street
Room 1700 - 17th Floor
Chicago, IL 60604

To Whom It May Concern:

As required by ERISA Section 305 and the Internal Revenue Code (IRC) Section 432, we have completed the actuarial status certification as of January 1, 2023 for the following plan:

Name of Plan:	Sheet Metal Workers' National Pension Fund
Plan number:	EIN 52-6112463 / PN 001
Plan sponsor:	Board of Trustees, Sheet Metal Workers' National Pension Fund
Address:	3180 Fairview Park Drive, Suite 400, Falls Church, Virginia 22042
Phone number:	703.739.7000

As of January 1, 2023, the Plan is in neither critical status nor endangered status. In addition, the Plan is not projected to be in critical status for any of the succeeding five plan years.

If you have any questions on the attached certification, you may contact me at the following:

Segal
101 North Wacker Drive, Suite 500
Chicago, IL 60606-1724
Phone number: 312.984.8500

Sincerely,

Daniel V. Ciner, MAAA
Senior Vice President and Actuary
Enrolled Actuary No. 20-05773

Actuarial Status Certification as of January 1, 2023 under IRC Section 432
March 8, 2023

This is to certify that Segal has prepared an actuarial status certification under Internal Revenue Code Section 432 for the Sheet Metal Workers' National Pension Fund as of January 1, 2023 in accordance with generally accepted actuarial principles and practices. It has been prepared at the request of the Board of Trustees to assist in administering the Fund and meeting filing and compliance requirements under federal law. This certification may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety.

The measurements shown in this actuarial certification may not be applicable for other purposes. 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); differences in statutory interpretation and changes in plan provisions or applicable law.

This certification is based on the January 1, 2022 actuarial valuation, dated September 28, 2022. This certification reflects the changes in the law made by the Multiemployer Pension Reform Act of 2014 (MPRA) and the American Rescue Plan Act of 2021 (ARPA). Additional assumptions required for the projections (including those under MPRA and ARPA), and sources of financial information used are summarized in Exhibit 6.

Segal does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretation on which this certification is based reflects Segal's understanding as an actuarial firm.

This certification was based on the assumption that the Plan was qualified as a multiemployer plan for the year.

I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in this actuarial certification is complete and accurate. In my opinion, the projections are based on reasonable actuarial estimates, assumptions and methods that offer my best estimate of anticipated experience under the Plan Furthermore, as required by IRC Section 432(b)(3)(B)(iii), the projected industry activity) takes into account information provided by the plan sponsor.

Daniel V. Ciner, MAAA	
EA#	20-05773
Title	Senior Vice President and Actuary
Email	**dciner@segalco.com**

Certificate Contents

Actuarial Status Certification under IRC Section 432

Exhibit 1: Status Determination as of January 1, 2023

Status	Condition	Component Result	Final Result
Critical Status:			
	1. Initial critical status tests:		
	C1. A funding deficiency is projected in four years (ignoring any amortization extensions)?	No	No
	C2. a. A funding deficiency is projected in five years (ignoring any amortization extensions),	No	
	b. **and** the present value of vested benefits for non-actives is more than present value of vested benefits for actives,	N/A	
	c. **and** the normal cost plus interest on unfunded actuarial accrued liability (unit credit basis) is greater than contributions for current year?	N/A	No
	C3. a. A funding deficiency is projected in five years (ignoring any amortization extensions),	No	
	b. **and** the funded percentage is less than 65%?	N/A	No
	C4. a. The funded percentage is less than 65%,	No	
	b. **and** the present value of assets plus contributions is less than the present value of benefit payments and administrative expenses over seven years	N/A	No
	C5. The present value of assets plus contributions is less than the present value of benefit payments and administrative expenses over five years?	No	No
	2. Test special emergence rules into critical status:		
	C6 Override condition: If satisfies (C6.a.) and (C6.b.), then ignore tests (C1) – (C5) and only apply test (C6.c.)		
	a. Had elected an amortization extension under the provisions of IRC Section 431(d)(1),	Yes	Yes

Status	Condition	Component Result	Final Result
	b. Previously emerged from critical status because:		
	(i) there was not projected to be an accumulated funding deficiency for the plan year or any of the nine succeeding plan years, without regard to the use of the shortfall method but taking into account any automatic extension of amortization periods up to five years under IRC Section 431(d)(1),	Yes	
	(ii) AND was not projected to become insolvent for the current year or any of the 30 succeeding plan years,	Yes	**Yes**
	c. HOWEVER		
	(i) EITHER there is a projected funding deficiency for the plan year or any of the nine succeeding plan years, without regard to the use of the shortfall method but taking into account any extension of amortization periods under IRC Section 431(d),	No	
	(ii) OR the Plan is projected to become insolvent for the current or any of the 30 succeeding plan years?	No	**No**
	In Critical Status? (If any of (C1) through (C5) is Yes then Yes, unless (C6.a.) and (C6.b.) are Yes, then only if (C6.c.) is Yes)		**No**
	3. Determination whether plan is projected to be in critical status in any of the succeeding five plan years:		
	C7. a. Is not in critical status,	Yes	
	b. **and** is projected to be in critical status in any of the next five years?	No	No
	4. In Critical Status in any of the five succeeding plan years?		**No**
Endangered Status:			
	E1. a. Is not in critical status,	Yes	
	b. **and** the funded percentage is less than 80%?	No	No
	E2. a. Is not in critical status,	Yes	
	b. **and** a funding deficiency is projected in seven years?	No	No
	In Endangered Status? (Yes when either (E1) or (E2) is Yes)		**No**
	In Seriously Endangered Status? (Yes when BOTH (E1) and (E2) are Yes)		**No**
Neither Critical Status Nor Endangered Status:			
	Neither Critical nor Endangered Status?		**Yes**

Exhibit 2: Summary of Actuarial Valuation Projections

The actuarial factors as of January 1, 2023 (based on projections from the January 1, 2022 valuation certificate):

1. Financial Information			
a. Market value of assets*			$6,600,514,913
b. Actuarial value of assets*			7,255,281,345
c. Reasonably anticipated contributions			
1) Upcoming year			484,247,034
2) Present value for the next five years			2,047,111,581
3) Present value for the next seven years			2,683,257,343
d. Projected benefit payments			597,504,211
e. Projected administrative expenses (beginning of year)			14,787,549
2. Liabilities			
a. Present value of vested benefits for active participants			2,187,961,009
b. Present value of vested benefits for non-active participants			6,029,368,137
c. Total unit credit accrued liability			8,584,800,289
d. Present value of payments	**Benefit Payments**	**Administrative Expenses**	**Total**
1) Next five years	$2,662,308,471	$67,372,349	$2,729,680,820
2) Next seven years	3,572,877,175	90,138,207	3,663,015,382
e. Unit credit normal cost plus expenses			192,340,243
3. Funded Percentage (1.b)/(2.c)			84.5%
4. Funding Standard Account		**Without Amortization Extension**	**With Amortization Extension**
a. Credit Balance as of the end of prior year		$583,343,534	$1,110,508,771
b. Years to projected funding deficiency		N/A	N/A
5. Years to Projected Insolvency			N/A
6. Year Projected to be in Critical Status (based on test C7. in Exhibit 1), if within next five years			N/A

* Excluding receivable withdrawal liability payments of $22,731,107.

Exhibit 3: Funding Standard Account Projections

The table below presents the Funding Standard Account Projections for the Plan Years beginning January 1.

With Amortization Extension under IRC Section 431(d)

	Year Beginning January 1,							
	2022	2023	2024	2025	2026	2027	2028	2029
1. Credit balance beginning of year	$873,462,169	$1,110,508,771	$1,189,550,776	$1,373,764,505	$1,503,109,696	$1,593,829,872	$1,700,498,615	$1,825,987,049
2. Interest on (1)	65,509,663	83,288,158	89,216,308	103,032,338	112,733,227	119,537,240	127,537,396	136,949,029
3. Normal cost	126,590,368	177,552,694	71,435,795	115,865,254	115,940,193	115,740,805	115,431,717	115,118,471
4. Administrative expenses	14,426,877	14,787,549	15,157,238	15,536,169	15,924,573	16,322,687	16,730,754	17,149,023
5. Net amortization charges	272,039,384	278,964,362	294,858,817	315,515,228	361,404,674	352,959,970	342,883,167	352,387,472
6. Interest on (3), (4) and (5)	30,979,246	35,347,844	28,608,890	33,518,749	36,995,208	36,376,761	35,628,423	36,349,122
7. Expected contributions	593,323,196	484,247,034	486,803,045	488,432,051	489,881,057	490,151,059	490,241,059	490,241,059
8. Interest on (7)	22,249,620	18,159,264	18,255,114	18,316,202	18,370,540	18,380,665	18,384,040	18,384,040
9. Credit balance at end of year: (1) + (2) – (3) – (4) – (5) – (6) + (7) + (8)	**$1,110,508,771**	**$1,189,550,776**	**$1,373,764,505**	**$1,503,109,696**	**$1,593,829,872**	**$1,700,498,615**	**$1,825,987,049**	**$1,950,557,089**

	2030	2031	2032	2033	2034	2035	2036	2037
1. Credit balance beginning of year	$1,950,557,089	$2,112,896,539	$2,323,653,790	$2,574,232,744	$2,848,172,595	$3,134,007,745	$3,466,051,318	$3,808,200,656
2. Interest on (1)	146,291,782	158,467,240	174,274,034	193,067,456	213,612,945	235,050,581	259,953,849	285,615,049
3. Normal cost	114,812,387	114,405,962	114,238,258	113,956,779	113,824,246	113,667,880	113,626,322	113,583,106
4. Administrative expenses	17,577,749	19,511,301	19,999,084	20,499,061	21,011,538	21,536,826	22,075,247	22,627,128
5. Net amortization charges	325,821,427	290,580,494	267,920,964	263,453,652	271,120,396	247,708,882	260,977,137	271,095,396
6. Interest on (3), (4) and (5)	34,365,866	31,837,333	30,161,873	29,843,212	30,446,712	28,718,519	29,750,902	30,547,922
7. Expected contributions	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059
8. Interest on (7)	18,384,040	18,384,040	18,384,040	18,384,040	18,384,040	18,384,040	18,384,040	18,384,040
9. Credit balance at end of year: (1) + (2) – (3) – (4) – (5) – (6) + (7) + (8)	**$2,112,896,539**	**$2,323,653,790**	**$2,574,232,744**	**$2,848,172,595**	**$3,134,007,745**	**$3,466,051,318**	**$3,808,200,656**	**$4,164,587,252**

Without Amortization Extension under IRC Section 431(d)

		Year Beginning January 1,					
		2022	**2023**	**2024**	**2025**	**2026**	**2027**
1.	Credit balance beginning of year	$267,926,300	$583,343,534	$693,776,569	$901,416,400	$1,044,441,035	$1,160,787,831
2.	Interest on (1)	20,094,472	43,750,765	52,033,243	67,606,230	78,333,078	87,059,087
3.	Normal cost	126,590,368	177,552,694	71,435,795	115,865,254	115,940,193	115,740,805
4.	Administrative expenses	14,426,877	14,787,549	15,157,238	15,536,169	15,924,573	16,322,687
5.	Net amortization charges	156,889,782	212,984,434	238,478,195	269,835,645	305,565,818	316,188,379
6.	Interest on (3), (4) and (5)	22,343,027	30,399,351	24,380,341	30,092,780	32,807,293	33,618,890
7.	Expected contributions	593,323,196	484,247,034	486,803,045	488,432,051	489,881,057	490,151,059
8.	Interest on (7)	22,249,620	18,159,264	18,255,114	18,316,202	18,370,540	18,380,665
9.	**Credit balance at end of year: (1) + (2) – (3) – (4) – (5) – (6) + (7) + (8)**	**$583,343,534**	**$693,776,569**	**$901,416,400**	**$1,044,441,035**	**$1,160,787,831**	**$1,274,507,881**

Exhibit 4: Funding Standard Account — Projected Bases Assumed Established after January 1, 2022

Schedule of Funding Standard Account Bases

Type of Base	Date Established	Base Established	Amortization Period	Amortization Payment
Experience Loss	01/01/2023	$122,429,111	15	$12,902,005
Experience Loss	01/01/2024	96,218,188	15	10,139,807
Experience Loss	01/01/2025	187,540,939	15	19,763,716
Experience Loss	01/01/2026	224,332,228	15	23,640,910
Experience Loss	01/01/2027	297,004,664	15	31,299,384

Exhibit 5: Solvency Projections

The table below presents the projected Market Value of Assets for the Plan Years beginning January 1, 2022 through 2052.

		Year Beginning January 1,							
		2022	2023	2024	2025	2026	2027	2028	2029
1.	Market Value at beginning of year	$7,406,740,540	$6,600,514,913	$6,962,152,596	$7,332,339,276	$7,710,771,630	$8,098,485,300	$8,495,976,365	$8,904,134,570
2.	Contributions	593,323,196	484,247,034	486,803,045	488,432,051	489,881,057	490,151,059	490,241,059	490,241,059
3.	Benefit payments	558,666,422	597,504,211	617,579,657	637,628,881	657,086,153	675,547,150	693,667,046	710,383,324
4.	Administrative expenses	15,682,438	15,375,000	15,759,375	16,153,359	16,557,193	16,971,123	17,395,401	17,830,286
5.	Interest earnings	-825,199,963	490,269,860	516,722,667	543,782,543	571,475,959	599,858,279	628,979,593	658,949,844
6.	Market Value at end of year: (1)+(2)-(3)-(4)+(5)	$6,600,514,913	$6,962,152,596	$7,332,339,276	$7,710,771,630	$8,098,485,300	$8,495,976,365	$8,904,134,570	$9,325,111,863

		2030	2031	2032	2033	2034	2035	2036	2037
7.	Market Value at beginning of year	$9,325,111,863	$9,760,666,634	$10,210,993,637	$10,680,082,909	$11,170,106,267	$11,683,947,221	$12,224,213,410	$12,793,612,246
8.	Contributions	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059
9.	Benefit payments	726,320,615	741,564,766	755,528,997	768,743,584	780,679,240	791,809,988	802,227,834	811,969,153
10.	Administrative expenses	18,276,043	20,286,408	20,793,568	21,313,407	21,846,242	22,392,398	22,952,208	23,526,013
11.	Interest earnings	689,910,370	721,937,118	755,170,778	789,839,290	826,125,377	864,227,516	904,337,819	946,657,964
12.	Market Value at end of year: (1)+(2)-(3)-(4)+(5)	$9,760,666,634	$10,210,993,637	$10,680,082,909	$11,170,106,267	$11,683,947,221	$12,224,213,410	$12,793,612,246	$13,395,016,103

	Year Beginning January 1,							
	2038	2039	2040	2041	2042	2043	2044	2045
13. Market Value at beginning of year	$13,395,016,103	$14,031,293,708	$14,705,547,348	$15,421,024,841	$16,181,469,227	$16,990,997,624	$17,853,365,343	$18,773,292,257
14. Contributions	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059
15. Benefit payments	821,244,756	830,036,542	838,428,138	846,176,627	853,191,648	860,119,160	866,300,528	872,055,366
16. Administrative expenses	24,114,163	24,717,017	25,334,942	25,968,316	26,617,524	27,282,962	27,965,036	28,664,162
17. Interest earnings	991,395,465	1,038,766,140	1,088,999,514	1,142,348,270	1,199,096,510	1,259,528,782	1,323,951,419	1,392,706,412
18. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	$14,031,293,708	$14,705,547,348	$15,421,024,841	$16,181,469,227	$16,990,997,624	$17,853,365,343	$18,773,292,257	$19,755,520,200

	2046	2047	2048	2049	2050	2051	2052
19. Market Value at beginning of year	$19,755,520,200	$20,805,263,367	$21,928,358,690	$23,130,441,216	$24,418,039,698	$25,797,781,027	$27,277,376,656
20. Contributions	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059	490,241,059
21. Benefit payments	877,270,745	881,722,931	886,028,012	889,731,480	893,210,234	895,897,483	897,302,787
22. Administrative expenses	29,380,766	30,115,285	30,868,167	31,639,871	32,430,868	33,241,640	34,072,681
23. Interest earnings	1,466,153,619	1,544,692,480	1,628,737,646	1,718,728,774	1,815,141,372	1,918,493,693	2,029,382,472
24. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	$20,805,263,367	$21,928,358,690	$23,130,441,216	$24,418,039,698	$25,797,781,027	$27,277,376,656	$28,865,624,719

Exhibit 6: Actuarial Assumptions and Methodology

The actuarial assumptions and plan of benefits are as used in the January 1, 2022 actuarial valuation certificate, dated September 28, 2022 except as specifically described below. We also assumed that experience would emerge as projected, except as described below. The calculations are based on a current understanding of the requirements of ERISA Section 305 and IRC Section 432.

Plan of Benefits:	The Applicable Percentage under the Plan's benefit formula is 1.25% for 2023, and is projected to be 0.50% for 2024, based on the preliminary investment return for the 2022 Plan Year.
Contribution Rates:	Employers that adopted an Alternative Option under the prior Funding Improvement Plan are assumed to have had contribution rate increases in 2022 (2% for the First Alternative, 1% for the Second Alternative), based on the required increases in contribution rates under the Funding Improvement Plan. In addition, any future bargained contribution rate increases provided in census data used for January 1, 2022 actuarial valuation are recognized.
Asset Information:	The financial information as of December 31, 2022, including contribution income, benefit payments and administrative expenses for the Plan Year ended December 31, 2022, was based on an unaudited financial statement provided by the Fund Office on February 15, 2023. For projections after that date, the assumed administrative expenses were increased by 2.5% per year thereafter from the assumption used for the January 1, 2022 actuarial valuation, with the exception of a one-time increase of 11.0% for anticipated increase to PBGC premium expenses in 2031. The benefit payments were projected based on the January 1, 2021 actuarial valuation. The projected net investment return was assumed to be 7.50% of the average market value of assets for future years. Any resulting investment gains or losses due to the operation of the asset valuation method are amortized over 15 years in the Funding Standard Account.
Projected Industry Activity:	The projected industry activity assumption takes into account information provided by the plan sponsor as required by Internal Revenue Code Section 432, historical and current contribution levels and projections in employment levels and professional judgment. Based on this information, for 2023 and all future years, total contribution hours of 90 million are assumed (approximately the number of active participants as of December 31 2013, 54,282, and 1,650 hours per active participant per year).
Future Normal Costs:	Based on the assumed industry activity and the unit credit cost method, we have determined the Normal Cost based on an open group forecast assuming new entrants have a similar demographic mix to recent entrants to the Plan. The Normal Cost for the 2023 Plan Year recognizes an Applicable Percentage (benefit accrual multiplier) of 1.25%. The Normal Cost for the 2024 Plan Year recognizes an Applicable Percentage (benefit accrual multiplier) of 0.50%, based on the preliminary rate of return for the 2022 Plan Year. Normal Costs for 2025 and thereafter were adjusted to reflect the long-term average expected Applicable Percentage of 0.81%. This average is based on the assumed probability of three-year average market investment returns corresponding to the ranges in the Plan's variable benefit accrual formula. For this purpose, market investment returns after 2022 were based upon stochastic projections using the Plan's target investment allocation and capital market assumptions provided by the Plan's Investment Manager in 2022.

Elections under the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010:	This status certification reflects the elections made by the Board of Trustees as permitted under the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010. The Plan Actuary certified to the Plan Sponsor that the Plan was projected to have sufficient assets to timely pay expected benefits and anticipated expenditures over the amortization period, taking into account the changes in the funding standard account elected.
Extended Amortization of Net Investment Losses (IRC Section 431(d)(1):	This status certification recognizes an extension of the amortization charge bases as of January 1, 2009, as permitted under Internal Revenue Code Section 431(d)(1).

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Technical issues

Segal does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretation on which the certification is based reflects Segal's understanding as an actuarial firm. Due to the complexity of the statute and the significance of its ramifications, Segal recommends that the Board of Trustees consult with legal counsel when making any decisions regarding compliance with ERISA and the Internal Revenue Code.

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