

**Sheet Metal Workers' National Pension Fund**

*Actuarial Certification of Plan Status as of  
January 1, 2014 under IRC Section 432*



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*January 15, 2014*

*Board of Trustees  
Sheet Metal Workers' National Pension Fund  
8403 Arlington Blvd., Suite 300  
Fairfax, Virginia, 22031*

*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, 2014. 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, 2013 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, EA.*

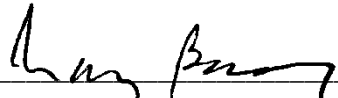
*As of January 1, 2014, the Plan has passed the critical status emergence test under IRC Section 432(e)(4)(B) and is in endangered status (Yellow Zone). This certification is being filed with the Internal Revenue Service, pursuant to ERISA section 305(b)(3) and IRC section 432(b)(3).*

*Segal Consulting ("Segal") does not practice law and, therefore, cannot and does not provide legal advice. This certification relies upon the statutory interpretation of the Sheet Metal Workers' National Pension Fund ("Fund"), as presented in the Fund's June 18, 2008 letter to the Internal Revenue Service.*

*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 communicating this information to plan stakeholders as well as in developing the Funding Improvement Plan required.*

*Sincerely,*

*Segal Consulting, a Member of the Segal Group*

By:   
\_\_\_\_\_  
*Lall Bachan, ASA, MAAA, FCA, EA*  
*Senior Vice President and Actuary*

cc: *Marc LeBlanc, Esq.*  
*Stephen M. Rosenblatt, Esq.*



*January 15, 2014*

*Internal Revenue Service  
Employee Plans Compliance Unit  
Group 7602 (SE:TEGE:EP)  
Room 1700 - 17th Floor  
230 South Dearborn Street  
Chicago, Illinois 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, 2014 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: 8403 Arlington Boulevard, Suite 300, Fairfax, Virginia 22031  
Phone number: 703.739.7000*

*As of January 1, 2014, the Plan has passed the critical status emergence test under IRC Section 432(e)(4)(B) and is in endangered status.*

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

*Segal Consulting  
101 North Wacker Drive, Suite 500  
Chicago, Illinois 60606  
Phone number: 312.984.8500*

*Sincerely,*

*Daniel V. Ciner, MAAA  
Senior Vice President and Actuary  
Enrolled Actuary No. 11-05773*

**January 15, 2014**

**ACTUARIAL STATUS CERTIFICATION AS OF JANUARY 1, 2014 UNDER IRC SECTION 432**

This is to certify that Segal Consulting, a Member of The Segal Group, Inc. (“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, 2014 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, 2013 actuarial valuation, dated October 2, 2013. Additional assumptions required for the projections and sources of financial information used are summarized in Exhibit V.

Segal Consulting does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretations on which this certification is based reflect 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. As required by IRC Section 432(b)(3)(B)(iii), the projected industry activity is based on information provided by the plan sponsor. In my opinion, the projections are based on reasonable actuarial estimates, assumptions and methods that (other than projected industry activity) offer my best estimate of anticipated experience under the Plan.



Daniel V. Ciner, MAAA  
Senior Vice President and Actuary  
Enrolled Actuary No. 11-05773

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**Actuarial Status Certification as of January 1, 2014 under IRC Section 432 for the Sheet Metal Workers' National Pension Fund**

EIN 52-6112463/ PN 001

**EXHIBIT I**

**Status Determination as of January 1, 2014**

<b>Status</b>	<b>Condition</b>	<b>Test Component Result</b>	<b>Final Result</b>
<b>Critical Status</b>			
1.	Funding deficiency projected in four years (ignoring any amortization extensions)?		Yes
2.	Funding deficiency projected in five years (ignoring any amortization extensions)	Yes	
	AND present value of vested benefits for non-actives more than present value of vested benefits for actives	Yes	
	AND normal cost plus interest on unfunded actuarial accrued liability (unit credit basis) greater than contributions for current year?	No	No
3.	Funding deficiency projected in five years (ignoring any amortization extensions)	Yes	
	AND funded percentage less than 65%?	Yes	Yes
4.	Funded percentage less than 65%	Yes	
	AND assets plus contributions less than benefit payments and administrative expenses over seven years?	No	No
5.	Assets plus contributions less than benefit payments and administrative expenses over five years?		No
6.	Funding deficiency projected within ten years (taking into consideration any amortization extensions)?		<b>No</b>
	<b>In Critical Status?</b>		<b>No</b>
<b>Endangered Status</b>			
1.	Funded percentage less than 80%	Yes	
	AND not in Critical Status?	Yes	Yes
2.	Funding deficiency projected in seven years	No	
	AND not in Critical Status?	Yes	No
	<b>In Endangered Status?</b>		<b>Yes</b>
	<b>In Seriously Endangered Status?</b>		<b>No</b>
<b>Neither Critical Status Nor Endangered Status</b>			
	<b>Neither Critical nor Endangered Status?</b>		<b>No</b>

*This certification relies upon the interpretation that a plan which was in critical status and is not projected to have a funding deficiency within ten years, taking into account amortization extensions, has passed the emergence test (IRC Section 432(e)(4)(B)) and, therefore, is no longer in critical status, even if the plan is described by one or more of the subparagraphs under IRC Section 432(b)(2).*

**Actuarial Status Certification as of January 1, 2014 under IRC Section 432 for the Sheet Metal Workers' National Pension Fund**

EIN 52-6112463/ PN 001

**EXHIBIT II  
Summary of Actuarial Valuation Projections**

The actuarial factors as of January 1, 2014 (based on projections from the January 1, 2013 valuation certificate):

**I. Asset and Contribution Information**

1. Market value of assets				\$3,788,873,736
2. Actuarial value of assets				3,919,146,109
3. Reasonably anticipated contributions				
a. Upcoming year				392,614,279
b. Present value for the next five years				1,648,271,712
c. Present value for the next seven years				2,157,828,239

**II. Liabilities**

1. Present value of vested benefits for active participants				1,744,186,634
2. Present value of vested benefits for non-active participants				4,542,994,334
3. Total unit credit accrued liability				6,631,347,925
4. Present value of payments				
a. Next five years	<b>Benefit Payments</b>		<b>Administrative Expenses</b>	<b>Total</b>
b. Next seven years	\$1,987,654,048		\$56,838,136	\$2,044,492,184
	2,666,015,787		76,381,797	2,742,397,584
5. Unit credit normal cost plus expenses				98,251,539

**III. Funded Percentage (I.2)/(II.3)**

59.1%

**IV. Funding Standard Account**

		<b>Without amortization extension</b>	<b>With amortization extension</b>
1. Credit balance/(funding deficiency) as of the end of prior year		-\$549,648,189	\$100,943,740
2. Years to projected funding deficiency, if within seven years (ten years if reflecting amortization extension)		0	N/A



**Actuarial Status Certification as of January 1, 2014 under IRC Section 432 for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT III  
Funding Standard Account Projections**

The tables below present the Funding Standard Account Projections for the Plan Years beginning January 1, 2013 through 2023.

With Amortization Extension

	Year Beginning January 1							
	2013	2014	2015	2016	2017	2018	2019	2020
1. Credit balance/(funding deficiency) at beginning of year	\$140,635,133	\$100,943,740	\$136,830,604	\$117,243,751	\$135,267,108	\$105,783,954	\$120,876,908	\$144,227,174
2. Interest on (1)	10,547,635	7,570,781	10,262,295	8,793,281	10,145,033	7,933,797	9,065,768	10,817,038
3. Normal cost	133,868,887	85,891,539	137,360,170	93,874,360	92,718,935	91,294,023	89,538,277	87,624,648
4. Administrative expenses	12,000,000	12,360,000	12,730,800	13,112,724	13,506,106	13,911,289	14,328,628	14,758,487
5. Net amortization charges	259,002,988	254,326,350	256,663,326	263,414,445	309,626,035	267,122,654	261,832,836	262,021,368
6. Interest on (3), (4) and (5)	30,365,391	26,443,342	30,506,572	27,780,115	31,188,831	27,924,597	27,427,481	27,330,338
7. Expected contributions	371,082,639	392,614,279	392,685,995	392,685,995	392,685,995	392,685,995	392,685,995	392,685,995
8. Interest on (7)	<u>13,915,599</u>	<u>14,723,035</u>	<u>14,725,725</u>	<u>14,725,725</u>	<u>14,725,725</u>	<u>14,725,725</u>	<u>14,725,725</u>	<u>14,725,725</u>
9. Credit balance/(funding deficiency) at end of year: (1) + (2) - (3) - (4) - (5) - (6) + (7) + (8)	\$100,943,740	\$136,830,604	\$117,243,751	\$135,267,108	\$105,783,954	\$120,876,908	\$144,227,174	\$170,721,091

**Actuarial Status Certification as of January 1, 2014 under IRC Section 432 for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT III  
Funding Standard Account Projections (continued)**

With Amortization Extension

	<b>Year Beginning January 1</b>		
	<b>2021</b>	<b>2022</b>	<b>2023</b>
1. Credit balance/(funding deficiency) at beginning of year	\$170,721,091	\$207,271,713	\$268,932,233
2. Interest on (1)	12,804,082	15,545,378	20,169,917
3. Normal cost	85,503,220	83,329,651	81,210,078
4. Administrative expenses	15,201,242	15,657,279	16,126,997
5. Net amortization charges	256,193,380	237,102,910	231,063,986
6. Interest on (3), (4) and (5)	26,767,338	25,206,738	24,630,080
7. Expected contributions	392,685,995	392,685,995	392,685,995
8. Interest on (7)	<u>14,725,725</u>	<u>14,725,725</u>	<u>14,725,725</u>
9. Credit balance/(funding deficiency) at end of year: (1) + (2) – (3) – (4) – (5) – (6) + (7) + (8)	\$207,271,713	\$268,932,233	\$343,482,729

**Actuarial Status Certification as of January 1, 2014 under IRC Section 432 for the Sheet Metal Workers' National Pension Fund**

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**EXHIBIT III (continued)  
Funding Standard Account Projections**

Without Amortization Extension

	Year Beginning January 1							
	2013	2014	2015	2016	2017	2018	2019	2020
1. Credit balance/(funding deficiency) at beginning of year	-\$435,813,945	-\$549,648,189	-\$583,844,126	-\$672,466,833	-\$720,371,704	-\$751,790,448	-\$701,901,742	-\$620,270,454
2. Interest on (1)	-32,686,046	-41,223,614	-43,788,309	-50,435,012	-54,027,878	-56,384,284	-52,642,631	-46,520,284
3. Normal cost	133,868,887	85,891,539	137,360,170	93,874,360	92,718,935	91,294,023	89,538,277	87,624,648
4. Administrative expenses	12,000,000	12,360,000	12,730,800	13,112,724	13,506,106	13,911,289	14,328,628	14,758,487
5. Net amortization charges	287,755,705	274,129,519	270,603,093	269,646,943	251,730,853	174,923,739	150,214,770	139,474,761
6. Interest on (3), (4) and (5)	32,521,844	27,928,579	31,552,055	28,247,552	26,846,692	21,009,679	19,056,126	18,139,342
7. Expected contributions	371,082,639	392,614,279	392,685,995	392,685,995	392,685,995	392,685,995	392,685,995	392,685,995
8. Interest on (7)	<u>13,915,599</u>	<u>14,723,035</u>	<u>14,725,725</u>	<u>14,725,725</u>	<u>14,725,725</u>	<u>14,725,725</u>	<u>14,725,725</u>	<u>14,725,725</u>
9. Credit balance/(funding deficiency) at end of year: (1) + (2) - (3) - (4) - (5) - (6) + (7) + (8)	-\$549,648,189	-\$583,844,126	-\$672,466,833	-\$720,371,704	-\$751,790,448	-\$701,901,742	-\$620,270,454	-\$519,376,256

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**EXHIBIT IV**

**Funding Standard Account – Projected Bases Assumed Established After January 1, 2013**

**Schedule of Funding Standard Account Bases**

Type of Base	Date Established	Base Established	Amortization Period	Amortization Payment
Extended Recognition of 2008 Investment Loss	01/01/2014	\$189,429,760	24	\$16,044,274
Other Actuarial Gain	01/01/2014	-206,555,231	15	-21,767,509
Actuarial Loss	01/01/2015	34,660,214	15	3,652,614
Actuarial Loss	01/01/2016	71,194,422	15	7,502,716
Actuarial Loss	01/01/2017	10,098,154	15	1,064,179
Actuarial Loss	01/01/2018	35,624,300	15	3,754,213

**EXHIBIT V**

**Actuarial Assumptions and Methodology**

The actuarial assumptions and plan of benefits are as used in the January 1, 2013 actuarial valuation certificate, dated October 2, 2013, 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:**

Effective January 1, 2014, the formula for future benefit accruals for contributions made on or after January 1, 2014 changed to the participant's Benefit Rate (contribution rate subject to benefit accruals) multiplied by the participant's contribution hours for a Plan Year multiplied by a benefit accrual percentage for the Plan Year. The benefit accrual percentage is based on the average of the Plan's rate of market value investment return for each of the three most recent Plan Years reported in the Actuarial Valuation and Review as of January 1 of the immediately preceding Plan Year and is defined below:

<b>3-Year Average Rate of Market Return</b>	<b>Benefit Accrual Percentage for Plan Year</b>
0% or less	0.00%
Greater than 0% but less than 6.5%	0.50%
6.5% or more but less than 8.5%	0.75%
8.5% or more but less than 10.0%	1.00%
10.0% or more	1.25%

The above formula applies unless otherwise stated in a Rehabilitation Plan Schedule or Funding Improvement Plan Schedule.

The benefit accrual percentage for 2014 is 0.75%. Based on the preliminary rate of market return for 2013, as used for this certification, the benefit accrual percentage for 2015 will be 1.25%.

**Contribution Rates:**

Contributions for employers that adopted an Alternative Schedule under the Rehabilitation Plan that was in effect during the 2013 Plan Year are assumed to increase based on terms of the collective bargaining agreement in effect, according to the following schedule. This schedule is estimated based on 2013 data from the Fund Office that included the timing of the expiration of collective bargaining agreements.

<b>Year</b>	<b>Percent of Participants Covered by an Alternative Schedule That Have a Collective Bargaining Agreement Providing for Contribution Increases in This Year</b>
2014	0.27%
2015	0.03%
2016	0.03%

**Asset Information:**

The market value of assets as of January 1, 2014 was estimated using the preliminary value of investment income provided by the Investment Consultant. Other income and expense items were estimated based on the January 1, 2013 actuarial valuation.

For projections after that date, the assumed administrative expenses were increased by 3% per year and the benefit payments were projected based on the January 1, 2013 actuarial valuation. The projected net investment return was assumed to be 7.5% of the average market value of assets for the 2014 - 2023 Plan Years. Any resulting investment gains or losses, other than those attributable to the market value investment losses for 2008 (due to funding relief elected under PRA 2010), due to the operation of the asset valuation method are amortized over 15 years in the Funding Standard Account.

**Projected Industry Activity:**

As required by Internal Revenue Code Section 432, assumptions with respect to projected industry activity are based on information provided by the plan sponsor. Based on this information, the number of active participants is assumed to decrease by 2% during 2013 (as compared to the 55,440 active participants valued in the January 1, 2013 actuarial valuation) and remain level thereafter and, on the average, contributions will be made for each active for 1,650 hours each year.

**Future Normal Costs:**

Based on the assumed industry activity, 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. Normal Costs for the 2014 and 2015 Plan Years recognize the benefit accrual percentage applicable to eligible participants in those years (i.e., 0.75% and 1.25%, respectively). Normal Costs for 2016 and thereafter were adjusted to reflect the long-term average expected benefit accrual percentage of 0.84% based on stochastic projections of the Plan's investment returns using the Plan's target investment allocation and capital market assumptions provided by the Investment Consultant.

**Elections under the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010:**

This status certification reflects the following 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 has certified to the Plan Sponsor that the Plan is 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(b)(8)(A)):**

Determined in accordance with the prospective method described in IRS Notice 2010-83.

**Expanded Smoothing Period (IRC Section 431(b)(8)(B)):**

The asset valuation method was changed effective January 1, 2009 as follows: the difference between expected and actual returns for the Plan Year ended December 31, 2008 is recognized over a period of 10 years and the upper limit on the actuarial value of assets for the Plan Years beginning January 1, 2009 and 2010 has been increased to 130% of market value.

**Amortization Extension:**

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).

**Technical Issues:**

Segal Consulting ("Segal") does not practice law and, therefore, cannot and does not provide legal advice. This certification relies upon the statutory interpretation of the Sheet Metal Workers' National Pension Fund ("Fund"), as presented in the Fund's June 18, 2008 letter to the Internal Revenue Service.