Sheet Metal Workers' National Pension Fund

Actuarial Certification of Plan Status under IRC Section 432

As of January 1, 2020

Segal

101 North Wacker Drive, Suite 500
Chicago, IL 60606
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T 312.984.8500

March 30, 2020

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, 2020 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, 2019 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, 2020, the Plan is in endangered status. In addition, the Plan is not projected to be in critical status for any of the succeeding five plan years.

This certification notifies the IRS that the Plan is making the scheduled progress in meeting the requirements of its funding improvement plan, based on a projection of the Plan's funding metrics. 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:

		2020
Certified Zone Status		***Endangered***
Scheduled Progress of Funding Improvement Plan		Meeting
Funded Percentage:	• Actuarial value of assets (AVA)	$5,639,065,135
	• Unit credit accrued liability	8,028,733,861
	• Funded percentage	**70.2%**
Funding Standard Account Projections:	• Credit balance with extension as of the end of prior year	$599,641,028
	• Years to projected funding deficiency (15-year projection)	N/A

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 reviewing the Funding Improvement Plan as required.

Sincerely,
Segal

By:

David A. Dean, MAAA, EA
Senior Vice President

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

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

Segal

March 30, 2020

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, 2020 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 Blvd., Suite 300 Fairfax, Virginia, 22031
Phone number:	703.739.7000

As of January 1, 2020, the Plan is in endangered status. In addition, the Plan is not projected to be in critical status for any of the succeeding five plan years. This certification also notifies the IRS that the Plan is making the scheduled progress in meeting the requirements of its funding improvement plan, based on a projection of the Plan's funding metrics.

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
Phone number: 312.984.8500

Sincerely,

Daniel V. Ciner, MAAA
Senior Vice President and Actuary
Enrolled Actuary No. 17-05773

Actuarial status certification as of January 1, 2020 under IRC Section 432

March 30, 2020

Illustration Supporting Actuarial Certification of Status (Schedule MB, line 4b)

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, 2020 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, 2019 actuarial valuation, dated October 22, 2019. This certification reflects the changes in the law made by the Multiemployer Pension Reform Act of 2014 (MPRA). Additional assumptions required for the projections (including those under MPRA), and sources of financial information used are summarized in Exhibit VII.

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. 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
EA#	17-05773
Title	Senior Vice President and Actuary
Email	**dciner@segalco.com**

Certificate Contents

Actuarial Status Certification under IRC Section 432

Exhibit I

Status Determination as of January 1, 2020

Status	Condition	Component Result	Final Result
Critical Status:			
	I. Initial critical status tests (not applicable since Plan previously met special emergence under IRC Section 432(e)(4)(B)(ii)(I)):		
	C1. A funding deficiency is projected in four years (ignoring any amortization extensions)?	No	N/A
	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	N/A
	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	N/A
	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	N/A
	C5. The present value of assets plus contributions is less than the present value of benefit payments and administrative expenses over five years?	No	N/A
	II. Test special emergence rules for reentry 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
	(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	

Actuarial Status Certification under IRC Section 432

Status	Condition	Component Result	Final Result
	(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**
	III. 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
	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%?	Yes	Yes
	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)		**Yes**
	In Seriously Endangered Status? (Yes when BOTH (E1) and (E2) are Yes)		**No**
Neither Critical Status Nor Endangered Status			
	Neither Critical nor Endangered Status?		**No**

Actuarial Status Certification under IRC Section 432

Exhibit II
Summary of Actuarial Valuation Projections

The actuarial factors as of January 1, 2020 (based on projections from the January 1, 2019 valuation certificate):

I. Financial Information			
1. Market value of assets*			$5,802,500,938
2. Actuarial value of assets*			5,639,065,135
3. Reasonably anticipated contributions			
a. Upcoming year			483,617,031
b. Present value for the next five years			2,030,033,551
c. Present value for the next seven years			2,657,583,853
4. Projected benefit payments			543,184,637
5. Projected administrative expenses (beginning of year)			14,364,360
II. Liabilities			
1. Present value of vested benefits for active participants			2,219,319,402
2. Present value of vested benefits for non-active participants			5,416,848,016
3. Total unit credit accrued liability			8,028,733,861
4. Present value of payments	**Benefit Payments**	**Administrative Expenses**	**Total**
a. Next five years	$2,429,653,435	$66,055,297	$2,495,708,732
b. Next seven years	3,271,447,082	88,768,257	3,360,215,339
5. Unit credit normal cost plus expenses			86,575,576
III. Funded Percentage (I.2)/(II.3)			70.2%
IV. Funding Standard Account		**Without amortization extension**	**With amortization extension**
1. Credit Balance as of the end of prior year		($164,856,595)	$599,641,028
2. Years to projected funding deficiency		N/A	N/A
V. Years to Projected Insolvency			N/A
VI. Year Projected to be in Critical Status, if within next five years			N/A

*Excluding receivable withdrawal liability payments of $13,834,374.

Exhibit III
Funding Standard Account Projections

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

With Amortization Extension under IRC Section 431(d)

Year Beginning January 1,

	2019	2020	2021	2022	2023	2024	2025	2026
1. Credit balance at beginning of year	$435,552,310	$599,641,028	$699,882,314	$742,265,288	$843,047,220	$956,385,130	$1,083,920,990	$1,220,223,374
2. Interest on (1)	32,666,423	44,973,077	52,491,174	55,669,897	63,228,541	71,728,885	81,294,074	91,516,753
3. Normal cost	126,729,102	72,211,216	144,275,843	116,573,191	116,162,900	115,804,630	115,169,870	114,597,752
4. Administrative expenses	13,945,981	14,364,360	14,795,291	15,239,150	15,696,325	16,167,215	16,652,231	17,151,798
5. Net amortization charges	322,974,733	328,758,806	317,078,512	292,969,644	288,274,079	282,861,359	283,754,048	306,002,594
6. Interest on (3), (4) and (5)	34,773,736	31,150,079	35,711,223	31,858,649	31,509,998	31,112,490	31,168,211	32,831,411
7. Expected contributions	607,080,334	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031
8. Interest on (7)	22,765,513	18,135,639	18,135,639	18,135,639	18,135,639	18,135,639	18,135,639	18,135,639
9. Credit balance at end of year: (1) + (2) – (3) – (4) – (5) – (6) + (7) + (8)	$599,641,028	$699,882,314	$742,265,288	$843,047,220	$956,385,130	$1,083,920,990	$1,220,223,374	$1,342,909,242

	2027	2028	2029	2030	2031	2032	2033	2034
1. Credit balance at beginning of year	$1,342,909,242	$1,517,663,232	$1,716,456,581	$1,919,580,225	$2,166,253,462	$2,469,053,586	$2,818,649,119	$3,198,925,600
2. Interest on (1)	100,718,193	113,824,742	128,734,244	143,968,517	162,469,010	185,179,019	211,398,684	239,919,420
3. Normal cost	113,951,318	113,328,061	113,118,993	112,782,939	112,443,440	112,101,443	111,804,307	111,722,466
4. Administrative expenses	17,666,352	18,196,343	18,742,233	19,304,500	19,883,635	20,480,144	21,094,548	21,727,384
5. Net amortization charges	266,258,491	256,181,701	265,686,001	239,119,956	203,879,024	181,219,488	176,752,190	184,418,928
6. Interest on (3), (4) and (5)	29,840,712	29,077,958	29,816,042	27,840,555	25,215,457	23,535,081	23,223,828	23,840,158
7. Expected contributions	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031
8. Interest on (7)	18,135,639	18,135,639	18,135,639	18,135,639	18,135,639	18,135,639	18,135,639	18,135,639
9. Credit balance at end of year: (1) + (2) – (3) – (4) – (5) – (6) + (7) + (8)	$1,517,663,232	$1,716,456,581	$1,919,580,225	$2,166,253,462	$2,469,053,586	$2,818,649,119	$3,198,925,600	$3,598,888,753

Exhibit III (continued)
Funding Standard Account Projections

Without Amortization Extension under IRC Section 431(d)

	Year Beginning January 1, 2019	2020	2021	2022	2023	2024
1. Credit balance at beginning of year	($387,226,342)	($164,856,595)	$9,784,969	$136,729,423	$315,881,991	$460,610,928
2. Interest on (1)	(29,041,976)	(12,364,245)	733,873	10,254,707	23,691,149	34,545,820
3. Normal cost	126,729,102	72,211,216	144,275,843	116,573,191	116,162,900	115,804,630
4. Administrative expenses	13,945,981	14,364,360	14,795,291	15,239,150	15,696,325	16,167,215
5. Net amortization charges	211,356,661	206,212,202	190,270,344	177,820,040	222,294,154	226,480,741
6. Interest on (3), (4) and (5)	26,402,381	21,959,083	26,200,611	23,222,429	26,561,503	26,883,944
7. Expected contributions	607,080,334	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031
8. Interest on (7)	22,765,513	18,135,639	18,135,639	18,135,639	18,135,639	18,135,639
9. Credit balance at end of year: (1) + (2) – (3) – (4) – (5) – (6) + (7) + (8)	($164,856,595)	$9,784,969	$136,729,423	$315,881,991	$460,610,928	$611,572,888

Exhibit IV
Funding Standard Account – Projected Bases Assumed Established after January 1, 2019

Schedule of Funding Standard Account Bases

Type of Base	Date Established	Base Established	Amortization Period	Amortization Payment
Experience loss	01/01/2020	$52,463,364	15	$5,528,772
Plan amendment	01/01/2020	96,368	15	10,156
Experience gain	01/01/2021	(56,086,949)	15	(5,910,638)
Experience gain	01/01/2022	(48,190,335)	15	(5,078,465)
Experience loss	01/01/2023	12,160,100	15	1,281,474
Experience gain	01/01/2024	(105,968,977)	15	(11,167,379)

Exhibit V
Solvency Projections

The table below presents the projected Market Value of Assets for the Plan Years beginning January 1, 2020 through 2055.

	Year Beginning January 1,						
	2020	2021	2022	2023	2024	2025	2026
1. Market Value at beginning of year	$5,802,500,938	$6,160,445,429	$6,525,101,651	$6,896,553,415	$7,275,040,133	$7,661,703,559	$8,056,554,292
2. Contributions	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031
3. Benefit payments	543,184,637	562,144,497	581,495,366	601,092,923	620,084,334	639,641,980	658,483,210
4. Administrative expenses	14,935,000	15,383,050	15,844,542	16,319,878	16,809,474	17,313,758	17,833,171
5. Interest earnings	432,447,097	458,566,738	485,174,641	512,282,488	539,940,203	568,189,440	597,079,077
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	$6,160,445,429	$6,525,101,651	$6,896,553,415	$7,275,040,133	$7,661,703,559	$8,056,554,292	$8,460,934,019
	2027	2028	2029	2030	2031	2032	2033
1. Market Value at beginning of year	$8,460,934,019	$8,875,809,229	$9,302,681,914	$9,744,161,099	$10,202,024,681	$10,677,957,178	$11,174,209,119
2. Contributions	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031
3. Benefit payments	677,066,199	694,944,200	711,158,291	726,697,669	741,780,352	755,982,034	769,563,251
4. Administrative expenses	18,368,166	18,919,211	19,486,787	20,071,391	20,673,533	21,293,739	21,932,551
5. Interest earnings	626,692,544	657,119,065	688,507,232	721,015,611	754,769,351	789,910,683	826,598,610
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	$8,875,809,229	$9,302,681,914	$9,744,161,099	$10,202,024,681	$10,677,957,178	$11,174,209,119	$11,692,928,958

Exhibit V (continued)
Solvency Projections

	Year Beginning January 1,						
	2034	2035	2036	2037	2038	2039	2040
1. Market Value at beginning of year	$11,692,928,958	$12,237,021,487	$12,808,953,964	$13,411,540,229	$14,047,702,448	$14,720,777,537	$15,434,306,753
2. Contributions	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031
3. Benefit payments	781,949,756	793,772,680	804,875,734	815,357,309	825,028,262	833,932,215	842,454,502
4. Administrative expenses	22,590,528	23,268,244	23,966,291	24,685,280	25,425,838	26,188,613	26,974,271
5. Interest earnings	865,015,782	905,356,370	947,811,259	992,587,777	1,039,912,158	1,090,033,013	1,143,201,463
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	$12,237,021,487	$12,808,953,964	$13,411,540,229	$14,047,702,448	$14,720,777,537	$15,434,306,753	$16,191,696,474
	2041	2042	2043	2044	2045	2046	2047
1. Market Value at beginning of year	$16,191,696,474	$16,996,948,796	$17,854,246,792	$18,768,032,496	$19,743,627,705	$20,786,115,148	$21,901,368,178
2. Contributions	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031
3. Benefit payments	850,266,498	857,482,370	864,154,183	869,754,334	874,897,191	879,187,337	882,994,658
4. Administrative expenses	27,783,499	28,617,004	29,475,514	30,359,779	31,270,572	32,208,689	33,174,950
5. Interest earnings	1,199,685,288	1,259,780,339	1,323,798,370	1,392,092,291	1,465,038,175	1,543,032,025	1,626,500,447
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	$16,996,948,796	$17,854,246,792	$18,768,032,496	$19,743,627,705	$20,786,115,148	$21,901,368,178	$23,095,316,048

Exhibit V (continued)
Solvency Projections

	Year Beginning January 1,						
	2048	2049	2050	2051	2052	2053	2054
1. Market Value at beginning of year	$23,095,316,048	$24,374,734,115	$25,747,555,855	$27,220,752,323	$28,801,816,444	$30,498,802,127	$32,320,366,308
2. Contributions	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031	483,617,031
3. Benefit payments	885,931,410	887,370,251	888,811,429	890,254,948	891,700,811	893,149,022	894,599,585
4. Administrative expenses	34,170,199	35,195,305	36,251,164	37,338,699	38,458,860	39,612,626	40,801,005
5. Interest earnings	1,715,902,645	1,811,770,265	1,914,642,030	2,025,040,737	2,143,528,323	2,270,708,798	2,407,231,399
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	$24,374,734,115	$25,747,555,855	$27,220,752,323	$28,801,816,444	$30,498,802,127	$32,320,366,308	$34,275,814,148
	2055						
1. Market Value at beginning of year	$34,275,814,148						
2. Contributions	483,617,031						
3. Benefit payments	896,052,504						
4. Administrative expenses	42,025,035						
5. Interest earnings	2,553,793,975						
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	$36,375,147,615						

Exhibit VI

Scheduled Progress of the Funding Improvement Plan - Projections of Benchmarks

The Funding Improvement Plan indicates that scheduled progress is met if a projection of the funding metrics used for the benchmarks demonstrates that they are projected to be met. The benchmarks as stated in the Funding Improvement Plan are that (A) the funded percentage as of the close of the funding improvement period equals or exceeds the sum of (i) the funded percentage as of the beginning of the Plan Year beginning 2015, plus (ii) 33 percent of the difference between 100 percent and that percentage, and (B) avoiding an accumulated funding deficiency for the last year of the funding improvement period (taking into account the Plan's extension of its amortization periods under ERISA Section 304(d)).

A projection based on the actuarial assumptions and methods described in Exhibit VII of this certification indicates that the Plan is meeting scheduled progress.

		Year Beginning January 1,				
		2020	**2021**	**2022**	**2023**	**2024**
1.	Credit balance with extension at end of year	$699,882,314	$745,561,859	$853,799,616	$981,557,416	$1,124,608,571
2.	Actuarial value of assets at end of year	$6,040,838,891	$6,449,486,441	$6,812,715,293	$7,309,007,293	$7,716,342,420
3.	Present value of accumulated benefit at end of year	$8,144,961,897	$8,329,180,566	$8,478,283,593	$8,619,906,775	$8,752,049,055
4.	Funded percentage at end of year	74.1%	77.4%	80.3%	84.7%	88.1%
		2025	**2026**	**2027**		
1.	Credit balance/ with extension at end of year	$1,277,614,544	$1,418,278,986	$1,612,385,046		
2.	Actuarial value of assets at end of year	$8,133,415,232	$8,561,683,694	9,002,239,294		
3.	Present value of accumulated benefit at end of year	$8,873,103,933	$8,983,052,909	9,081,248,187		
4.	Funded percentage at end of year	91.6%	95.3%	99.1%		

Exhibit VII

Actuarial Assumptions and Methodology

The actuarial assumptions and plan of benefits are as used in the January 1, 2019 actuarial valuation certificate, dated October 22, 2019, 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 0.50% for 2020, and is projected to be 1.00% for 2021, based on the preliminary investment return for the 2019 Plan Year. • The active service requirement for the Full Disability Benefit was changed to require 435 hours of work in the 24-month period immediately preceding the date of SSA application for disability.
Contribution Rates:	For purposes of the scheduled progress projections, contributions for employers that adopted an Alternative Option under the Funding Improvement Plan are assumed to increase in 2021 and 2022 (2% for the First Alternative, 1% for the Second Alternative), based on the required increases in contribution rates under the Funding Improvement Plan.
Asset Information:	The financial information as of December 31, 2019, including contribution income, benefit payments and administrative expenses for the Plan Year ended December 31, 2019, was based on an unaudited financial statement provided by the Fund Office on February 14, 2020. For projections after that date, the assumed administrative expenses were increased by 3% per year thereafter from the assumption used for the January 1, 2019 actuarial valuation. The benefit payments were projected based on the January 1, 2019 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:	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, for 2020 an 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).

Actuarial Status Certification under IRC Section 432

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. The Normal Cost for the 2020 Plan Year recognizes an Applicable Percentage (benefit accrual multiplier) of 0.50%. The Normal Cost for the 2021 Plan Year recognizes an Applicable Percentage (benefit accrual multiplier) of 1.0%, based on the preliminary rate of return for the 2019 Plan Year. Normal Costs for 2022 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 2019 were based upon stochastic projections using the Plan's target investment allocation and capital market assumptions provided by the Plan's Investment Manager in 2019.
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.
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)(1).
Demographic Loss:	A demographic loss was created to account for greater than expected benefit accruals in 2019 due to the greater than expected contributions received.

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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