

Sheet Metal Workers' National Pension Fund

*Actuarial Certification of Plan Status as of
January 1, 2018 under IRC Section 432*



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March 30, 2018

*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, 2018 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, 2017 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, 2018, 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).

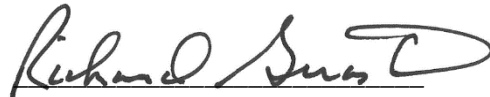
Segal Consulting ("Segal") does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretation on which the certification is based reflects Segal's understanding as an actuarial firm. Due to the complexity of the statute and the significance of its ramifications,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

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 Consulting, a Member of the Segal Group

By:



*Richard G. Gerasta
Senior Vice President*



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

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



March 30, 2018

*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, 2018 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, 2018, 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 Consulting
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*

March 30, 2018

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

ACTUARIAL STATUS CERTIFICATION AS OF JANUARY 1, 2018 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, 2018 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, 2017 actuarial valuation, dated September 21, 2017. 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 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. 17-05773

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Actuarial Status Certification as of January 1, 2018 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, 2018

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)?	Yes	N/A
C2.	(a) A funding deficiency is projected in five years (ignoring any amortization extensions),.....	Yes	
	(b) AND the present value of vested benefits for non-actives is more than present value of vested benefits for actives,.....	Yes	
	(c) AND the normal cost plus interest on unfunded actuarial accrued liability (unit credit basis) is greater than contributions for current year?	No	N/A
C3.	(a) A funding deficiency is projected in five years (ignoring any amortization extensions),.....	Yes	
	(b) AND the funded percentage is less than 65%?.....	Yes	N/A
C4.	(a) The funded percentage is less than 65%,	Yes	
	(b) AND the present value of assets plus contributions is less than the present value of benefit payments and administrative expenses over seven years?	No	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	
	(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

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EXHIBIT I (continued)
Status Determination as of January 1, 2018

Status	Condition	Component Result	Final Result
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

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**EXHIBIT II
Summary of Actuarial Valuation Projections**

The actuarial factors as of January 1, 2018 (based on projections from the January 1, 2017 valuation certificate):

I. Financial Information

1. Market value of assets*				\$4,935,726,151
2. Actuarial value of assets*				4,871,204,011
3. Reasonably anticipated contributions				
a. Upcoming year				\$483,939,229
b. Present value for the next five years				2,031,386,011
c. Present value for the next seven years				2,659,354,403
4. Projected benefit payments				519,497,095
5. Projected administrative expenses (beginning of year)				14,463,425

II. Liabilities

1. Present value of vested benefits for active participants				\$2,132,633,543
2. Present value of vested benefits for non-active participants				5,245,558,979
3. Total unit credit accrued liability				7,751,885,860
4. Present value of payments	Benefit Payments	Administrative Expenses		Total
a. Next five years	\$2,264,201,397	\$66,510,851		\$2,330,712,248
b. Next seven years	3,026,575,065	89,380,451		3,115,955,516
5. Unit credit normal cost plus expenses				86,158,002

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

62.8%

IV. Funding Standard Account

		Without amortization extension	With amortization extension
1. Credit Balance as of the end of prior year		(\$600,500,301)	\$257,074,098
2. Years to projected funding deficiency			N/A

V. Years to Projected Insolvency

N/A

VI. Year Projected to be in Critical Status (based on test C7. in Exhibit I), if within next five years

N/A

*Excluding receivable withdrawal liability payments of \$13,684,884.

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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.
With Amortization Extension under IRC Section 431(d)

	Year Beginning January 1,								
	2017	2018	2019	2020	2021	2022	2023	2024	
1. Credit balance at beginning of year	\$214,313,331	\$257,074,098	\$336,404,904	\$387,785,098	\$425,945,349	\$480,892,243	\$567,514,552	\$668,972,662	
2. Interest on (1)	16,073,501	19,280,557	25,230,368	29,083,882	31,945,901	36,066,918	42,563,591	50,172,950	
3. Normal cost	142,348,492	71,694,577	106,204,259	120,844,445	119,407,004	117,644,763	115,376,106	112,882,521	
4. Administrative expenses	14,042,160	14,463,425	14,897,328	15,344,248	15,804,575	16,278,712	16,767,073	17,270,085	
5. Net amortization charges	359,097,449	325,038,929	321,630,621	322,425,801	310,449,776	286,105,882	280,128,850	285,883,500	
6. Interest on (3), (4) and (5)	38,661,608	30,839,770	33,204,916	34,396,087	33,424,602	31,502,202	30,920,402	31,202,708	
7. Expected contributions	559,842,869	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	
8. Interest on (7)	20,994,106	18,147,721	18,147,721	18,147,721	18,147,721	18,147,721	18,147,721	18,147,721	
9. Credit balance at end of year: (1) + (2) - (3) - (4) - (5) - (6) + (7) + (8)	\$257,074,098	\$336,404,904	\$387,785,098	\$425,945,349	\$480,892,243	\$567,514,552	\$668,972,662	\$773,993,748	
	2025	2026	2027	2028	2029	2030	2031	2032	
1. Credit balance at beginning of year	\$773,993,748	\$888,441,014	\$990,010,295	\$1,144,190,530	\$1,322,769,507	\$1,506,222,962	\$1,733,361,715	\$2,016,590,267	
2. Interest on (1)	58,049,531	66,633,076	74,250,772	85,814,290	99,207,713	112,966,722	130,002,129	151,244,270	
3. Normal cost	110,030,233	107,212,256	104,552,512	102,123,414	99,960,580	98,087,594	96,380,219	94,893,078	
4. Administrative expenses	17,788,188	18,321,834	18,871,489	19,437,634	20,020,763	20,621,386	21,240,028	21,877,229	
5. Net amortization charges	286,776,198	309,024,743	269,280,638	259,203,848	268,708,153	242,142,107	206,901,173	184,241,642	
6. Interest on (3), (4) and (5)	31,094,596	32,591,912	29,452,848	28,557,367	29,151,712	27,063,832	24,339,107	22,575,896	
7. Expected contributions	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	
8. Interest on (7)	18,147,721	18,147,721	18,147,721	18,147,721	18,147,721	18,147,721	18,147,721	18,147,721	
9. Credit balance at end of year: (1) + (2) - (3) - (4) - (5) - (6) + (7) + (8)	\$888,441,014	\$990,010,295	\$1,144,190,530	\$1,322,769,507	\$1,506,222,962	\$1,733,361,715	\$2,016,590,267	\$2,346,333,642	

Actuarial Status Certification as of January 1, 2018 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 under IRC Section 431(d)

	Year Beginning January 1,					
	2017	2018	2019	2020	2021	2022
1. Credit balance/(funding deficiency) at beginning of year	(\$641,325,488)	(\$600,500,301)	(\$486,373,747)	(\$376,712,525)	(\$264,151,994)	(\$124,643,620)
2. Interest on (1)	(48,099,412)	(45,037,523)	(36,478,031)	(28,253,439)	(19,811,400)	(9,348,272)
3. Normal cost	142,348,492	71,694,577	106,204,259	120,844,445	119,407,004	117,644,763
4. Administrative expenses	14,042,160	14,463,425	14,897,328	15,344,248	15,804,575	16,278,712
5. Net amortization charges	301,202,258	232,840,020	210,012,550	199,879,195	183,641,609	170,956,283
6. Interest on (3), (4) and (5)	34,319,468	23,924,851	24,833,560	25,205,092	23,913,988	22,865,981
7. Expected contributions	559,842,869	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229
8. Interest on (7)	20,994,108	18,147,721	18,147,721	18,147,721	18,147,721	18,147,721
9. Credit balance/(funding deficiency) at end of year (1) + (2) – (3) – (4) – (5) – (6) + (7) + (8)	(\$600,500,301)	(\$486,373,747)	(\$376,712,525)	(\$264,151,994)	(\$124,643,620)	\$40,349,319

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EXHIBIT IV

Funding Standard Account – Projected Bases Assumed Established After January 1, 2017

Schedule of Funding Standard Account Bases

Type of Base	Date Established	Base Established	Amortization Period	Amortization Payment
Actuarial loss	01/01/2018	\$115,758,968	15	\$12,199,082
Actuarial loss	01/01/2019	17,332,169	15	1,826,524
Actuarial loss	01/01/2020	5,219,377	15	550,036
Actuarial gain	01/01/2021	(58,893,256)	15	(6,206,376)
Actuarial gain	01/01/2022	(50,420,426)	15	(5,313,480)

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**EXHIBIT V
Solvency Projection**

The table below presents the projected Market Value of Assets for the Plan Years beginning January 1, 2017 through 2047.

	Year Beginning January 1,						
	2018	2019	2020	2021	2022	2023	2024
1. Market Value at beginning of year	\$4,935,726,151	\$5,253,466,147	\$5,584,883,032	\$5,929,317,712	\$6,286,514,310	\$6,656,151,689	\$7,037,530,885
2. Contributions	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229
3. Benefit payments	519,497,095	528,834,120	539,781,621	551,902,903	565,241,955	580,139,302	595,449,410
4. Administrative expenses	15,038,000	15,489,140	15,953,814	16,432,428	16,925,401	17,433,163	17,956,158
5. Interest earnings	<u>368,335,862</u>	<u>391,800,916</u>	<u>416,230,886</u>	<u>441,592,700</u>	<u>467,865,506</u>	<u>495,012,432</u>	<u>523,024,000</u>
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	\$5,253,466,147	\$5,584,883,032	\$5,929,317,712	\$6,286,514,310	\$6,656,151,689	\$7,037,530,885	\$7,431,088,546
	2025	2026	2027	2028	2029	2030	2031
1. Market Value at beginning of year	\$7,431,088,546	\$7,837,068,381	\$8,256,624,337	\$8,690,900,425	\$9,141,533,643	\$9,610,597,488	\$10,100,551,641
2. Contributions	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229
3. Benefit payments	611,389,353	627,098,941	642,670,686	657,711,622	671,918,851	685,069,512	697,682,738
4. Administrative expenses	18,494,843	19,049,688	19,621,179	20,209,814	20,816,108	21,440,591	22,083,809
5. Interest earnings	<u>551,924,802</u>	<u>581,765,356</u>	<u>612,628,724</u>	<u>644,615,425</u>	<u>677,859,575</u>	<u>712,525,027</u>	<u>748,776,771</u>
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	\$7,837,068,381	\$8,256,624,337	\$8,690,900,425	\$9,141,533,643	\$9,610,597,488	\$10,100,551,641	\$10,613,501,094

Actuarial Status Certification as of January 1, 2018 under IRC Section 432 for the Sheet Metal Workers' National Pension Fund

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**EXHIBIT V (continued)
Solvency Projection**

	Year Beginning January 1,						
	2032	2033	2034	2035	2036	2037	2038
1. Market Value at beginning of year	\$10,613,501,094	\$11,152,149,699	\$11,718,983,699	\$12,317,402,548	\$12,950,754,185	\$13,622,784,086	\$14,337,321,243
2. Contributions	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229
3. Benefit payments	709,332,923	720,424,691	730,256,975	739,124,558	746,885,662	753,729,898	759,371,114
4. Administrative expenses	22,746,323	23,428,713	24,131,574	24,855,521	25,601,187	26,369,223	27,160,300
5. Interest earnings	<u>786,788,622</u>	<u>826,748,175</u>	<u>868,868,169</u>	<u>913,392,487</u>	<u>960,577,521</u>	<u>1,010,697,049</u>	<u>1,064,048,952</u>
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	\$11,152,149,699	\$11,718,983,699	\$12,317,402,548	\$12,950,754,185	\$13,622,784,086	\$14,337,321,243	\$15,098,778,010
	2039	2040	2041	2042	2043	2044	2045
1. Market Value at beginning of year	\$15,098,778,010	\$15,911,556,657	\$16,780,284,350	\$17,709,934,984	\$18,706,132,397	\$19,774,811,260	\$20,922,395,609
2. Contributions	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229
3. Benefit payments	764,137,307	768,129,237	771,346,469	773,521,358	774,760,075	775,019,155	774,808,970
4. Administrative expenses	27,975,109	28,814,362	29,678,793	30,569,157	31,486,232	32,430,819	33,403,744
5. Interest earnings	<u>1,120,951,834</u>	<u>1,181,732,063</u>	<u>1,246,736,667</u>	<u>1,316,348,699</u>	<u>1,390,985,941</u>	<u>1,471,095,094</u>	<u>1,557,138,795</u>
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	\$15,911,556,657	\$16,780,284,350	\$17,709,934,984	\$18,706,132,397	\$19,774,811,260	\$20,922,395,609	\$22,155,260,919

Actuarial Status Certification as of January 1, 2018 under IRC Section 432 for the Sheet Metal Workers' National Pension Fund

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EXHIBIT V (continued)
Solvency Projection

	Year Beginning January 1,						
	2046	2047	2048	2049	2050	2051	2052
1. Market Value at beginning of year	\$22,155,260,919	\$23,480,311,132	\$24,904,998,769	\$26,435,385,611	\$28,078,896,163	\$29,842,705,208	\$31,733,124,786
2. Contributions	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229	483,939,229
3. Benefit payments	774,080,185	772,802,256	772,853,493	773,357,703	775,091,339	779,403,637	785,007,315
4. Administrative expenses	34,405,856	35,438,032	36,501,173	37,596,208	38,724,094	39,885,817	41,082,392
5. Interest earnings	<u>1,649,597,025</u>	<u>1,748,988,696</u>	<u>1,928,553,155</u>	<u>2,045,458,636</u>	<u>2,170,866,653</u>	<u>2,305,266,649</u>	<u>2,449,182,291</u>
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	\$23,480,311,132	\$24,904,998,769	\$28,053,843,473	\$29,700,544,971	\$31,470,069,290	\$33,371,428,906	\$35,410,171,229
	2053						
1. Market Value at beginning of year	\$33,758,274,847						
2. Contributions	483,939,229						
3. Benefit payments	791,486,451						
4. Administrative expenses	42,314,864						
5. Interest earnings	<u>2,603,240,217</u>						
6. Market Value at end of year: (1)+(2)-(3)-(4)+(5)	\$37,594,625,880						

Actuarial Status Certification as of January 1, 2018 under IRC Section 432 for the Sheet Metal Workers' National Pension Fund

EIN 52-6112463 / PN 001

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,				
	2018	2019	2020	2021	2022
1. Credit balance/(funding deficiency) at end of year	\$336,404,904	\$387,785,098	\$425,945,349	\$480,892,243	\$567,514,552
2. Actuarial value of assets at end of year	\$5,166,772,674	\$5,486,468,170	\$5,882,414,990	\$6,286,514,310	\$6,656,151,689
3. Present value of accumulated benefit at end of year	\$7,871,370,733	\$8,027,227,716	\$8,199,154,141	\$8,369,853,969	\$8,537,622,608
4. Funded percentage at end of year	65.6%	68.4%	71.7%	75.1%	78.0%
	2023	2024	2025	2026	
1. Credit balance/(funding deficiency) at end of year	\$668,972,662	\$773,993,748	\$888,441,014	\$990,010,295	
2. Actuarial value of assets at end of year	\$7,037,530,885	\$7,431,088,546	\$7,837,068,381	\$8,256,624,337	
3. Present value of accumulated benefit at end of year	\$8,700,079,092	\$8,856,154,972	\$9,004,332,642	\$9,144,295,614	
4. Funded percentage at end of year	80.9%	83.9%	87.0%	90.3%	

EXHIBIT VII

Actuarial Assumptions and Methodology

The actuarial assumptions and plan of benefits are as used in the January 1, 2017 actuarial valuation certificate, dated September 21, 2017, 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 2018, and is projected to be 0.75% for 2019, based on the preliminary investment return for the 2017 Plan Year.
- Contribution Rates:** Contributions for employers that adopted an Alternative Option under the Funding Improvement Plan are assumed to increase in 2017 based on terms of the collective bargaining agreement in effect.
- Asset Information:** The financial information as of December 31, 2017, including contribution income, benefit payments and administrative expenses for the Plan Year ended December 31, 2017, was based on an unaudited financial statement provided by the Fund Office as of March 9, 2018.
- For projections after that date, the assumed administrative expenses were increased by 3% per year thereafter from the assumption used for the January 1, 2017 actuarial valuation. The benefit payments were projected based on the January 1, 2017 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 2018 and all future years, the number of active participants is assumed to remain at the December 31, 2013 level of 54,282 and, on the average, contributions will be made for each active for 1,650 hours each year (approximately 90 million hours).

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 2018 Plan Year recognizes the Applicable Percentage (benefit accrual multiplier) of 0.50%. The Normal Cost for the 2019 Plan Year recognizes an Applicable Percentage (benefit accrual multiplier) of 0.75%, based on the preliminary rate of return for the 2017 Plan Year. Normal Costs for 2020 and thereafter were adjusted to reflect the long-term average expected Applicable Percentage of 0.86%. 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 2017 were based upon stochastic projections using the Plan's target investment allocation and capital market assumptions provided by the Plan's Investment Manager in 2017.

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).

Technical Issues

Segal Consulting ("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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