

# MICHIGAN REGIONAL COUNCIL OF CARPENTERS' FRINGE BENEFIT FUNDS

P.O. Box 4540 • Troy, MI 48099-4540 • Telephone: (248) 641-4950 (800) 572-2525

# **CARPENTERS PENSION TRUST FUND, DETROIT & VICINITY**

# PENALTY OF PERJURY STATEMENT/PUBLIC DISCLOSURE STATEMENT

Pursuant to Sections 2.03 and 2.04 of IRS Revenue Procedure 2017-43, each of the undersigned authorized Trustees makes the following two statements:

Under penalties of perjury I declare that I have examined this application, including the accompanying documents, and, to the best of my knowledge and belief, the application contains all of the relevant facts relating to this request, and such facts are true, correct and complete.

I acknowledge that, pursuant to Section 432(e)(9)(G)(ii) of the Internal Revenue Code, the application for approval of the proposed suspension of benefits, and the application's supporting material, will be publicly disclosed through publication to the Treasury Department's website.

Tom Lutz, Ch	airman	

Signed: September 20, 2019



July 29, 2019

Board of Trustees Carpenters Pension Trust Fund - Detroit and Vicinity Pension Plan 700 Tower Drive, Suite 300 Troy, MI 48098-2808

# Re: 2019 Actuarial Certification Under the Pension Protection Act

Dear Trustees:

The following information is intended to comply with the annual certification requirements of IRC section 432, with respect to the funded status of the Carpenters Pension Trust Fund - Detroit and Vicinity Pension Plan.

### **Identifying Information**

Plan Name: Carpenters Pension Trust Fund - Detroit and Vicinity Pension Plan
EIN/Plan #: 38-6242188/001
Plan year of Certification: year beginning May 1, 2019
Plan Sponsor: Board of Trustees of Carpenters Pension Trust Fund – Detroit and Vicinity Pension
Plan
Sponsor Address: 700 Tower Drive, Suite 300, Troy, MI 48098-2808
Sponsor Telephone: 1-800-572-2525
Enrolled Actuary Name: Angela L. Jeffries
Enrollment Number: 17-08511
Actuary Address: 11590 N. Meridian St., Suite 610, Carmel, IN 46032
Actuary Telephone: (317) 580-8668

### **Certification of Plan Status**

I certify that the above-named Plan is in the following status as of May 1, 2019 (all that apply are checked):

SafeNeither Endangered nor Critical Status	
SafeNeither Endangered nor Critical Status Due to Special Rule	
Endangered Status	
Seriously Endangered Status	
Projected to be in Critical Status within 5 years	
Critical Status	
Critical and Declining Status	X

This certification is based on the following results:

•	Projected funded ratio as of May 1, 2019:	34.5%
•	Previously emerged from critical status using IRC Section 432(e)(4)(B)(ii)(I) special emergence rule?:	No
•	First projected deficiency (with extension):	Existing deficiency, FSA projected to remain negative as of April 30, 2019
•	At least 8 years of benefit payments in plan assets?:	Yes
•	Plan year of projected insolvency:	2034-35 plan year
•	Ratio of inactive to active participants:	2.38

### **Certification of Scheduled Progress**

I certify that <u>the above-named Plan has made scheduled progress as of May 1, 2019 as outlined in</u> <u>the 2014 updated rehabilitation plan</u>. The Plan is not projected to emerge from Critical status by the end of the rehabilitation plan period as specified in the updated rehabilitation plan. This rehabilitation plan, however, includes the use of the "exhaustion of all reasonable measures" clause of IRC 432(e)(3)(A)(ii). Therefore, we interpret scheduled progress for this Plan to mean continued use of all reasonable measures to emerge at the earliest date possible or to forestall insolvency.

### **Basis for Result**

The certifications utilize the assumptions, methods, plan provisions and demographic data as disclosed in the May 1, 2018 actuarial valuation report with the following exceptions:

- Based on the April 30, 2019 unaudited financial statements provided by the plan administrator, the asset return for the 2018-19 plan year is assumed to be 6.26%. We also updated the contributions, benefit payments, and expenses for the 2018-19 plan year based on these financial statements.
- For the period May 1, 2019 through April 30, 2028, plan assets were assumed to return 6.40% per year, with 7.50% per year assumed thereafter.
- No adjustments were made to the contribution rate assumption.

### Board of Trustees

• Based on information provided by the Trustees regarding projection of future industry activity, the following hours were assumed: 8,200,000 for the plan year beginning in 2019; 8,000,000 for the plan year beginning in 2020; 7,800,000 for the plan year beginning in 2021, and 7,000,000 for each plan year thereafter. For the 2018-2019 plan year, our projections used actual hours of 7,953,779.

I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. These certifications are intended to be in good faith compliance with the necessary disclosures for certification and represent my best estimate of the Plan's funded position. We are available to answer questions regarding these certifications.

Angela L. Jeffries, EA, MAAA **Consulting Actuary** Enrollment Number: 17-08511

Date of Signature: 07-29-2019

cc: Secretary of the Treasury Mr. Andrew Smith, UAS Ms. Joan Janks, Plan Manager Ms. Linda Olsson, Plan Associate Mr. John Tesija, Fund Counsel Mr. Christopher Scott, Auditor

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# Document 5.2

### Supplemental Reports

### **Exhibit I – Solvency Projection**

The projected Market Value of Assets and Solvency Ratio for the Plan Years ending April 30, 2019 through April 30, 2035

Plan Year						6.		8. Resources	Solvency
Ending	1. Beginning	2. Employer	3. EWL	4. Benefit	5.	Investment	7. Ending	(1)+(2)+(3)-	Ratio
J J	Assets	Contributions	Payments	Payments	Expenses	Income	Assets	(5)+(6)	(8)/(4)
4/30/2019	\$761,729,009	\$114,263,735	\$0	\$151,030,775	\$4,950,677	\$46,364,177	\$766,375,469	\$824,677,890	5.4603
4/30/2020	\$766,375,469	\$120,791,093	\$0	\$160,110,511	\$4,000,000	\$47,666,435	\$770,722,486	\$835,500,126	5.2183
4/30/2021	\$770,722,486	\$117,844,968	\$0	\$163,592,005	\$4,000,000	\$47,738,960	\$768,714,409	\$836,828,494	5.1153
4/30/2022	\$768,714,409	\$114,898,844	\$0	\$167,704,323	\$4,000,000	\$47,384,573	\$759,293,504	\$832,228,680	4.9625
4/30/2023	\$759,293,504	\$103,114,347	\$0	\$172,117,418	\$4,000,000	\$46,263,312	\$732,553,746	\$812,144,539	4.7185
4/30/2024	\$732,553,746	\$103,114,347	\$0	\$176,470,780	\$4,000,000	\$44,412,660	\$699,609,974	\$787,255,433	4.4611
4/30/2025	\$699,609,974	\$103,114,347	\$0	\$180,688,928	\$4,000,000	\$42,169,278	\$660,204,672	\$756,555,043	4.1871
4/30/2026	\$660,204,672	\$103,114,347	\$0	\$184,753,441	\$4,000,000	\$39,517,274	\$614,082,852	\$719,801,744	3.8960
4/30/2027	\$614,082,852	\$103,114,347	\$0	\$188,594,635	\$4,000,000	\$36,442,560	\$561,045,125	\$676,754,640	3.5884
4/30/2028	\$561,045,125	\$103,114,347	\$0	\$191,598,542	\$4,000,000	\$32,952,020	\$501,512,951	\$627,207,452	3.2736
4/30/2029	\$501,512,951	\$103,114,347	\$0	\$194,424,269	\$4,000,000	\$34,044,771	\$440,247,800	\$566,582,527	2.9142
4/30/2030	\$440,247,800	\$103,114,347	\$0	\$197,031,148	\$4,000,000	\$29,352,127	\$371,683,126	\$510,010,021	2.5885
4/30/2031	\$371,683,126	\$103,114,347	\$0	\$198,902,781	\$4,000,000	\$24,139,590	\$296,034,282	\$446,657 <i>,</i> 884	2.2456
4/30/2032	\$296,034,282	\$103,114,347	\$0	\$200,262,076	\$4,000,000	\$18,414,953	\$213,301,507	\$376,733,677	1.8812
4/30/2033	\$213,301,507	\$103,114,347	\$0	\$200,854,975	\$4,000,000	\$12,187,761	\$123,748,640	\$300,228,093	1.4948
4/30/2034	\$123,748,640	\$103,114,347	\$0	\$201,292,863	\$4,000,000	\$5,454,875	\$27,024,999	\$217,408,112	1.0801
4/30/2035	\$27,024,999	\$103,114,347	\$0	\$201,008,163	\$4,000,000	-\$1,788,721	insolvent	\$127,928,068	0.6364

# Carpenters Pension Trust Fund – Detroit and Vicinity EIN/Plan #: 38-6242188/001 Checklist Item #5 – 3.01 Plan Actuary's Certification of Critical and Declining Status as of May 1, 2019

# EXHIBIT II - Breakdown of Benefit Payouts for Exhibit I

Plan Year		Vested		New
Ending	Actives	Terminations	Retired	Entrants
4/30/2019	\$1,580,345	\$6,306,580	\$143,143,850	\$0
4/30/2020	\$5,221,031	\$8,156,094	\$146,733,386	\$0
4/30/2021	\$9,240,875	\$9,875,835	\$144,475,295	\$0
4/30/2022	\$13,667,341	\$11,849,054	\$142,187,928	\$0
4/30/2023	\$18,333,818	\$13,926,032	\$139,857,568	\$0
4/30/2024	\$23,139,968	\$16,019,098	\$137,311,049	\$665
4/30/2025	\$27,966,861	\$18,042,537	\$134,677,864	\$1,666
4/30/2026	\$32,851,575	\$20,165,607	\$131,733,038	\$3,221
4/30/2027	\$37,714,057	\$22,264,505	\$128,606,706	\$9,367
4/30/2028	\$42,502,830	\$23,740,901	\$125,333,008	\$21,803
4/30/2029	\$47,072,856	\$25,242,121	\$122,070,780	\$38,512
4/30/2030	\$51,514,128	\$26,929,517	\$118,509,311	\$78,192
4/30/2031	\$55,668,747	\$28,274,352	\$114,837,825	\$121,857
4/30/2032	\$59,503,514	\$29,529,440	\$111,045,679	\$183,443
4/30/2033	\$63,003,159	\$30,508,404	\$107,089,786	\$253,626
4/30/2034	\$66,113,384	\$31,808,214	\$103,030,170	\$341,095
4/30/2035	\$68,884,771	\$32,802,047	\$98,867,094	\$454,251

# Carpenters Pension Trust Fund – Detroit and Vicinity EIN/Plan #: 38-6242188/001 Checklist Item #5 – 3.01 Plan Actuary's Certification of Critical and Declining Status as of May 1, 2019

	Total			
Plan Year	Contribution	Contribution		
Ending	Base Units	Rate		
4/30/2019	7,953,779	\$13.98		
4/30/2020	8,200,000	\$14.73		
4/30/2021	8,000,000	\$14.73		
4/30/2022	7,800,000	\$14.73		
4/30/2023	7,000,000	\$14.73		
4/30/2024	7,000,000	\$14.73		
4/30/2025	7,000,000	\$14.73		
4/30/2026	7,000,000	\$14.73		
4/30/2027	7,000,000	\$14.73		

Exhibit III – Projected Total Contribution Base Units and Average Contribution Rates

	Total			
Plan Year	Contribution	Contribution		
Ending	Base Units	Rate		
4/30/2028	7,000,000	\$14.73		
4/30/2029	7,000,000	\$14.73		
4/30/2030	7,000,000	\$14.73		
4/30/2031	7,000,000	\$14.73		
4/30/2032	7,000,000	\$14.73		
4/30/2033	7,000,000	\$14.73		
4/30/2034	7,000,000	\$14.73		
4/30/2035	7,000,000	\$14.73		

# Plan Actuary's Certification that the Plan Is Projected to Avoid Insolvency

This letter and the attached exhibits have been prepared by United Actuarial Services, Inc. at the request of the Board of Trustees of the Carpenters Pension Trust Fund – Detroit and Vicinity. United Actuarial Services, Inc. certifies under IRC §432(e)(9)(C)(i) that the Plan is projected to avoid insolvency within the meaning of IRC §418E, taking into account the proposed benefit suspension effective July 1, 2020 and assuming such suspension continues indefinitely. This certification is also intended to comply with regulation §1.432(e)(9)-1 and Revenue Procedure 2017-43. A summary of the proposed benefit suspension can be found in Document 2.1. Checklist Item #25 describes the actuarial assumptions and methodology used in the reports filed with this application, as required under Revenue Procedure 2017-43, Section 4.02(3).

This certification is based on the May 1, 2018 actuarial valuation report dated February 4, 2019 (see Document 41.1) and the May 1, 2019 actuarial certification dated July 29, 2019 (see Document 5.1). The Market Value of assets as of June 30, 2019 (the start of the "initial period" as defined in Revenue Procedure 2017-43, Section 3.02, as required under regulation §1.432(e)(9)-1(d)(5)(iv)(C)(1)) was furnished by BeneSys, Inc. and certified by Bultynck and Co., PLLC.

This certification is intended to demonstrate, as required under IRC §432(e)(9) and regulation §1.432(e)(9)-1, that the proposed benefit suspensions are reasonably projected to avoid insolvency as described in IRC §418E. The results may not be appropriate for any other purpose.

Future actuarial measurements may differ significantly from the current measurements presented in this certification due to factors such as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, or changes in plan provisions.

The results are based on my best interpretation of existing laws and regulations and are subject to revision based on future regulatory or other guidance.

United Actuarial Services, Inc. does not provide, nor charge for, investment, tax or legal advice. None of the comments made herein should be construed as constituting such advice. We are not aware of any direct or material indirect financial interest or relationship that could create a conflict of interest that would impair the objectivity of our work.

I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. To the best of my knowledge, the information supplied is complete and accurate. As required by IRC §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.

Certified by:

Andrew T. Smith, ASA, EA, MAAA Enrollment Number: 17-05374 11590 N. Meridian St., Suite 610 Carmel, IN 46032 Phone: 317-580-8675

# Actuarial Solvency Certification Supporting Exhibits

EXHIBIT I	Value of Plan Assets at Beginning and End of the "Initial Period"
EXHIBIT II	Deterministic Projection of Current Plan without Proposed Suspension
EXHIBIT III	Deterministic Projection with Proposed Suspension
EXHIBIT IV	Breakdown of Benefit Payouts for Exhibit II
EXHIBIT V	Breakdown of Benefit Payouts for Exhibit III

# Exhibit I – Value of Plan Assets at Beginning and End of the "Initial Period"

The projected change in Market Value of Assets from July 1, 2019 through April 30, 2020 (the "initial period" as defined in Revenue Procedure 2017-43, Section 3.02) is shown below. The Market Value of assets as of July 1, 2019 was furnished by BeneSys, Inc. and certified by Bultynck and Co., PLLC. The actuarial assumptions used are described in Checklist Item #25.

	From July 1, 2019 through April 30, 2020				
1. Market Value at beginning of period	\$ 768,948,402				
2. Employer contributions	102,500,000				
3. Withdrawal liability payments	1,333,196				
4. Other income	-				
5. Benefit payments	129,272,109				
6. Administrative expenses	5,000,000				
7. Investment earnings/(loss)	40,852,109				
8. Projected Market Value at end of period = $(1)+(2)+(3)+(4)-(5)-(6)+(7)$	\$ 779,361,598				

# Exhibit II – Deterministic Projection of Current Plan without Proposed Suspension

The projected Market Value of Assets and Solvency Ratio for Plan Years ending April 30, 2020 through April 30, 2036 are shown below:

			3. EWL	4. EWL			-		0. December	Columna
	1 Decimping	2 Employer	Payments	Payments	C Donofit	6	7.	9 Ending	9. Resources $(1)$ , $(2)$ , $(3)$ , $(4)$	Solvency
Plan Year	1. Beginning	2. Employer	Prior	Future	5. Benefit	6.	Investment	8. Ending	(1)+(2)+(3)+(4)-	Ratio
Ending	Assets	Contributions	Wthdrwls	Wthdrwls	Payments	Expenses	Income	Assets	(6)+(7)	(9)/(5)
4/30/2020	\$770,972,113	\$120,850,224	\$1,333,196	\$0	\$154,780,950	\$6,101,734	\$47,088,749	\$779,361,598	\$934,142,548	6.04
4/30/2021	\$779,361,598	\$120,000,000	\$36,159	\$963,841	\$158,222,727	\$4,090,000	\$49,315,840	\$787,364,711	\$945,587,438	5.98
4/30/2022	\$787,364,711	\$117,000,000	\$36,159	\$963,841	\$162,095,202	\$4,182,025	\$49,609,696	\$788,697,180	\$950,792,382	5.87
4/30/2023	\$788,697,180	\$105,000,000	\$36,159	\$963,841	\$166,315,986	\$4,276,121	\$49,166,073	\$773,271,146	\$939,587,132	5.65
4/30/2024	\$773,271,146	\$105,000,000	\$36,159	\$763,841	\$170,859,355	\$4,372,334	\$48,006,095	\$751,845,552	\$922,704,907	5.40
4/30/2025	\$751,845,552	\$105,000,000	\$36,159	\$613,841	\$175,602,267	\$4,470,712	\$46,451,214	\$723,873,787	\$899,476,054	5.12
4/30/2026	\$723,873,787	\$105,000,000	\$36,159	\$613,841	\$180,090,672	\$4,571,303	\$44,483,907	\$689,345,719	\$869,436,391	4.83
4/30/2027	\$689,345,719	\$105,000,000	\$36,159	\$613 <i>,</i> 841	\$184,273,315	\$4,674,157	\$42,100,304	\$648,148,551	\$832,421,866	4.52
4/30/2028	\$648,148,551	\$105,000,000	\$36,159	\$613,841	\$188,448,362	\$4,779,326	\$39,283,381	\$599,854,244	\$788,302,606	4.18
4/30/2029	\$599,854,244	\$105,000,000	\$36,159	\$613,841	\$192,381,485	\$4,886,861	\$36,012,930	\$544,248,828	\$736,630,313	3.83
4/30/2030	\$544,248,828	\$105,000,000	\$36,159	\$613 <i>,</i> 841	\$195,860,615	\$4,996,815	\$37,248,383	\$486,289,781	\$682,150,396	3.48
4/30/2031	\$486,289,781	\$105,000,000	\$36,159	\$613,841	\$198,809,966	\$5,109,243	\$32,786,638	\$420,807,210	\$619,617,176	3.12
4/30/2032	\$420,807,210	\$105,000,000	\$36,159	\$613,841	\$201,150,335	\$5,224,201	\$27,783,371	\$347,866,045	\$549,016,380	2.73
4/30/2033	\$347,866,045	\$105,000,000	\$36,159	\$613,841	\$202,890,339	\$5,341,746	\$22,243,125	\$267,527,085	\$470,417,424	2.32
4/30/2034	\$267,527,085	\$105,000,000	\$12,056	\$637,944	\$204,157,674	\$5,461,935	\$16,165,671	\$179,723,147	\$383,880,821	1.88
4/30/2035	\$179,723,147	\$105,000,000	\$7,236	\$642,764	\$204,727,442	\$5,584,829	\$9,554,401	\$84,615,277	\$289,342,719	1.41
4/30/2036	\$84,615,277	\$105,000,000	\$7,236	\$642,764	\$204,747,870	\$5,710,488	\$2,415,832	Insolvent	\$186,970,621	0.91

# Exhibit III – Deterministic Projection with Proposed Suspension

The projected Market Value of Assets and Solvency Ratio for Plan Years ending April 30, 2020 through April 30, 2065 are shown below:

			3. EWL	4. EWL			_			
	1. De sinuin s	2 Frankright	Payments	Payments	E Dawafit	c c	7.	0 Fuelling	9. Resources	Solvency
Plan Year	1. Beginning	2. Employer	Prior	Future	5. Benefit	6.	Investment	8. Ending	(1)+(2)+(3)+(4)	Ratio
Ending	Assets	Contributions	Wthdrwls	Wthdrwls	Payments	Expenses	Income	Assets	-(6)+(7)	(9)/(5)
4/30/2020	\$770,972,113	\$120,850,224	\$1,333,196	\$0	\$154,780,950	\$6,101,734	\$47,088,749	\$779,361,598	\$934,142,548	6.04
4/30/2021	\$779,361,598	\$120,000,000	\$36,159	\$963,841	\$143,894,673	\$4,090,000	\$49,781,502	\$802,158,427	\$946,053,100	6.57
4/30/2022	\$802,158,427	\$117,000,000	\$36,159	\$963 <i>,</i> 841	\$143,994,631	\$4,182,025	\$51,159,556	\$823,141,327	\$967,135,958	6.72
4/30/2023	\$823,141,327	\$105,000,000	\$36,159	\$963 <i>,</i> 841	\$147,266,205	\$4,276,121	\$52,024,061	\$829,623,062	\$976,889,267	6.63
4/30/2024	\$829,623,062	\$105,000,000	\$36,159	\$763,841	\$150,817,500	\$4,372,334	\$52,320,329	\$832,553,557	\$983,371,057	6.52
4/30/2025	\$832,553,557	\$105,000,000	\$36,159	\$613,841	\$154,549,465	\$4,470,712	\$52,381,450	\$831,564,830	\$986,114,295	6.38
4/30/2026	\$831,564,830	\$105,000,000	\$36,159	\$613,841	\$158,109,270	\$4,571,303	\$52,198,220	\$826,732,477	\$984,841,747	6.23
4/30/2027	\$826,732,477	\$105,000,000	\$36,159	\$613,841	\$161,466,157	\$4,674,157	\$51,771,676	\$818,013,839	\$979,479,996	6.07
4/30/2028	\$818,013,839	\$105,000,000	\$36,159	\$613,841	\$164,796,000	\$4,779,326	\$51,093,326	\$805,181,839	\$969,977,839	5.89
4/30/2029	\$805,181,839	\$105,000,000	\$36,159	\$613,841	\$167,932,887	\$4,886,861	\$50,153,803	\$788,165,894	\$956,098,781	5.69
4/30/2030	\$788,165,894	\$105,000,000	\$36,159	\$613,841	\$170,726,967	\$4,996,815	\$56,484,675	\$774,576,787	\$945,303,754	5.54
4/30/2031	\$774,576,787	\$105,000,000	\$36,159	\$613,841	\$173,081,923	\$5,109,243	\$55,372,965	\$757,408,586	\$930,490,509	5.38
4/30/2032	\$757,408,586	\$105,000,000	\$36,159	\$613,841	\$174,950,557	\$5,224,201	\$54,010,966	\$736,894,794	\$911,845,351	5.21
4/30/2033	\$736,894,794	\$105,000,000	\$36,159	\$613,841	\$176,333,890	\$5,341,746	\$52,416,148	\$713,285,306	\$889,619,196	5.05
4/30/2034	\$713,285,306	\$105,000,000	\$12,056	\$637,944	\$177,313,332	\$5,461,935	\$50,604,200	\$686,764,239	\$864,077,571	4.87
4/30/2035	\$686,764,239	\$105,000,000	\$7,236	\$642,764	\$177,725,931	\$5,584,829	\$48,595,039	\$657,698,518	\$835,424,449	4.70
4/30/2036	\$657,698,518	\$105,000,000	\$7,236	\$642,764	\$177,706,404	\$5,710,488	\$46,411,130	\$626,342,756	\$804,049,160	4.52
4/30/2037	\$626,342,756	\$105,000,000	\$7,236	\$642,764	\$177,204,527	\$5,838,974	\$44,073,450	\$593,022,705	\$770,227,232	4.35
4/30/2038	\$593,022,705	\$105,000,000	\$3,618	\$646,382	\$176,248,098	\$5,970,351	\$41,605,386	\$558,059,642	\$734,307,740	4.17
4/30/2039	\$558,059,642	\$105,000,000	\$0	\$650,000	\$174,668,716	\$6,104,684	\$39,037,346	\$521,973,588	\$696,642,304	3.99
4/30/2040	\$521,973,588	\$105,000,000	\$0	\$650,000	\$172,948,591	\$6,242,039	\$36,390,245	\$484,823,203	\$657,771,794	3.80
4/30/2041	\$484,823,203	\$105,000,000	\$0	\$650,000	\$170,586,543	\$6,382,485	\$33,687,277	\$447,191,452	\$617,777,995	3.62

# Exhibit III – Deterministic Projection with Proposed Suspension (Cont.)

			3. EWL	4. EWL						
			Payments	Payments			7.		9. Resources	Solvency
Plan Year	1. Beginning	2. Employer	Prior	Future	5. Benefit		Investment	8. Ending	(1)+(2)+(3)+(4)-	Ratio
Ending	Assets	Contributions	Wthdrwls	Wthdrwls	Payments	6. Expenses	Income	Assets	(6)+(7)	(9)/(5)
4/30/2042	\$447,191,452	\$105,000,000	\$0	\$650,000	\$167,975,233	\$6,526,091	\$30,957,434	\$409,297,562	\$577,272,795	3.44
4/30/2043	\$409,297,562	\$105,000,000	\$0	\$650,000	\$164,888,742	\$6,672,928	\$28,225,630	\$371,611,522	\$536,500,264	3.25
4/30/2044	\$371,611,522	\$105,000,000	\$0	\$650,000	\$161,317,987	\$6,823,069	\$24,846,718	\$333,967,184	\$495,285,171	3.07
4/30/2045	\$333,967,184	\$105,000,000	\$0	\$650,000	\$157,557,857	\$6,976,588	\$22,230,322	\$297,313,061	\$454,870,918	2.89
4/30/2046	\$297,313,061	\$105,000,000	\$0	\$650,000	\$153,578,849	\$7,133,561	\$19,694,075	\$261,944,726	\$415,523,575	2.71
4/30/2047	\$261,944,726	\$105,000,000	\$0	\$650,000	\$149,245,028	\$7,294,066	\$17,264,513	\$228,320,145	\$377,565,173	2.53
4/30/2048	\$228,320,145	\$105,000,000	\$0	\$650,000	\$144,625,327	\$7,458,182	\$14,972,548	\$196,859,184	\$341,484,511	2.36
4/30/2049	\$196,859,184	\$105,000,000	\$0	\$650,000	\$140,052,802	\$7,625,991	\$12,660,825	\$167,491,216	\$307,544,018	2.20
4/30/2050	\$167,491,216	\$105,000,000	\$0	\$650,000	\$135,240,426	\$7,797,576	\$10,713,399	\$140,816,613	\$276,057,039	2.04
4/30/2051	\$140,816,613	\$105,000,000	\$0	\$650,000	\$130,385,529	\$7,973,021	\$8,961,288	\$117,069,351	\$247,454,880	1.90
4/30/2052	\$117,069,351	\$105,000,000	\$0	\$650,000	\$125,394,762	\$8,152,414	\$7,424,695	\$96,596,870	\$221,991,632	1.77
4/30/2053	\$96,596,870	\$105,000,000	\$0	\$650,000	\$120,379,652	\$8,335,843	\$6,124,617	\$79,655,992	\$200,035,644	1.66
4/30/2054	\$79,655,992	\$105,000,000	\$0	\$650,000	\$115,646,780	\$8,523,399	\$5,279,693	\$66,415,506	\$182,062,286	1.54
4/30/2055	\$66,415,506	\$105,000,000	\$0	\$650 <i>,</i> 000	\$110,813,023	\$8,715,175	\$4,460,731	\$56,998,039	\$167,811,062	1.51
4/30/2056	\$56,998,039	\$105,000,000	\$0	\$650,000	\$106,208,722	\$8,911,266	\$3,919,728	\$51,447,779	\$157,656,501	1.48
4/30/2057	\$51,447,779	\$105,000,000	\$0	\$650,000	\$101,730,529	\$9,111,769	\$3,663,872	\$49,919,353	\$151,649,882	1.49
4/30/2058	\$49,919,353	\$105,000,000	\$0	\$650,000	\$97,396,864	\$9,316,784	\$3,704,065	\$52,559,770	\$149,956,634	1.54
4/30/2059	\$52,559,770	\$105,000,000	\$0	\$650,000	\$93,640,369	\$9,526,412	\$4,035,103	\$59,078,092	\$152,718,461	1.63
4/30/2060	\$59,078,092	\$105,000,000	\$0	\$650,000	\$89,908,710	\$9,740,756	\$4,655,877	\$69,734,503	\$159,643,213	1.78
4/30/2061	\$69,734,503	\$105,000,000	\$0	\$650,000	\$86,530,378	\$9,959,923	\$5,573,576	\$84,467,778	\$170,998,156	1.98
4/30/2062	\$84,467,778	\$105,000,000	\$0	\$650,000	\$83,328,377	\$10,184,021	\$6,790,243	\$103,395,623	\$186,724,000	2.24
4/30/2063	\$103,395,623	\$105,000,000	\$0	\$650,000	\$80,396,100	\$10,413,161	\$8,311,199	\$126,547,561	\$206,943,661	2.57
4/30/2064	\$126,547,561	\$105,000,000	\$0	\$650,000	\$77,681,306	\$10,647,457	\$10,140,613	\$154,009,411	\$231,690,717	2.98
4/30/2065	\$154,009,411	\$105,000,000	\$0	\$650,000	\$75,204,190	\$10,887,025	\$12,284,160	\$185,852,356	\$261,056,546	3.47

# EXHIBIT IV – Breakdown of Benefit Payouts for Exhibit II

Plan Year		Vested		New
Ending	Actives	Terminations	Retired	Entrants
4/30/2020	\$5,257,832	\$2,555,487	\$146,967,631	\$0
4/30/2021	\$9,321,879	\$4,106,716	\$144,794,132	\$0
4/30/2022	\$13,826,369	\$5,767,133	\$142,501,700	\$0
4/30/2023	\$18,567,951	\$7,631,574	\$140,116,461	\$0
4/30/2024	\$23,459,170	\$9,835,688	\$137,563,843	\$654
4/30/2025	\$28,376,851	\$12,255,774	\$134,968,003	\$1,639
4/30/2026	\$33,359,802	\$14,716,308	\$132,011,394	\$3,168
4/30/2027	\$38,323,875	\$17,079,870	\$128,860,360	\$9,210
4/30/2028	\$43,205,066	\$19,613,518	\$125,608,342	\$21,436
4/30/2029	\$47,819,224	\$22,174,062	\$122,350,339	\$37,860
4/30/2030	\$52,262,617	\$24,734,618	\$118,786,519	\$76,861
4/30/2031	\$56,379,550	\$27,196,829	\$115,113,812	\$119,775
4/30/2032	\$60,144,194	\$29,494,488	\$111,331,354	\$180,299
4/30/2033	\$63,576,184	\$31,690,557	\$107,374,326	\$249,272
4/30/2034	\$66,627,897	\$33,880,037	\$103,314,507	\$335,233
4/30/2035	\$69,346,310	\$35,782,787	\$99,151,900	\$446,445
4/30/2036	\$71,806,771	\$37,513,797	\$94,858,576	\$568,726

# EXHIBIT V – Breakdown of Benefit Payouts for Exhibit III

Plan Year		Vested		New
Ending	Actives	Terminations	Retired	Entrants
4/30/2020	\$5,257,832	\$2,555,487	\$146,967,631	\$0
4/30/2021	\$8,451,914	\$3,418,201	\$132,024,558	\$0
4/30/2022	\$12,297,541	\$4,572,742	\$127,124,348	\$0
4/30/2023	\$16,548,110	\$6,018,951	\$124,699,144	\$0
4/30/2024	\$20,949,414	\$7,738,359	\$122,129,073	\$654
4/30/2025	\$25,394,686	\$9,612,735	\$119,540,405	\$1,639
4/30/2026	\$29,921,078	\$11,496,217	\$116,688,807	\$3,168
4/30/2027	\$34,445,957	\$13,309,856	\$113,701,134	\$9,210
4/30/2028	\$38,916,599	\$15,250,121	\$110,607,844	\$21,436
4/30/2029	\$43,161,754	\$17,209,981	\$107,523,292	\$37,860
4/30/2030	\$47,271,598	\$19,164,836	\$104,213,672	\$76,861
4/30/2031	\$51,097,595	\$21,045,418	\$100,819,135	\$119,775
4/30/2032	\$54,614,296	\$22,805,449	\$97,350,513	\$180,299
4/30/2033	\$57,835,958	\$24,487,407	\$93,761,253	\$249,272
4/30/2034	\$60,721,780	\$26,167,498	\$90,088,821	\$335,233
4/30/2035	\$63,302,717	\$27,630,757	\$86,346,012	\$446,445
4/30/2036	\$65,657,725	\$28,963,139	\$82,516,814	\$568,726
4/30/2037	\$67,702,702	\$30,164,979	\$78,623,199	\$713,647
4/30/2038	\$69,386,973	\$31,338,799	\$74,650,395	\$871,931
4/30/2039	\$70,740,628	\$32,217,287	\$70,638,693	\$1,072,108
4/30/2040	\$72,019,527	\$33,031,166	\$66,600,379	\$1,297,519
4/30/2041	\$72,862,540	\$33,663,064	\$62,510,290	\$1,550,649

Plan Year		Vested		New
Ending	Actives	Terminations	Retired	Entrants
4/30/2042	\$73,451,244	\$34,261,761	\$58,426,815	\$1,835,413
4/30/2043	\$73,731,597	\$34,675,719	\$54,335,654	\$2,145,772
4/30/2044	\$73,683,498	\$34,791,598	\$50,272,473	\$2,570,418
4/30/2045	\$73,429,176	\$34,858,925	\$46,263,070	\$3,006,686
4/30/2046	\$73,010,475	\$34,747,630	\$42,317,893	\$3,502,851
4/30/2047	\$72,288,107	\$34,453,988	\$38,469,386	\$4,033,547
4/30/2048	\$71,357,308	\$33,913,812	\$34,734,894	\$4,619,313
4/30/2049	\$70,208,173	\$33,289,704	\$31,140,104	\$5,414,821
4/30/2050	\$68,823,871	\$32,500,596	\$27,709,363	\$6,206,596
4/30/2051	\$67,244,886	\$31,573,059	\$24,464,424	\$7,103,160
4/30/2052	\$65,483,533	\$30,452,788	\$21,424,539	\$8,033,902
4/30/2053	\$63,492,934	\$29,259,752	\$18,605,227	\$9,021,739
4/30/2054	\$61,362,488	\$27,936,908	\$16,017,676	\$10,329,708
4/30/2055	\$59,061,398	\$26,523,242	\$13,668,054	\$11,560,329
4/30/2056	\$56,632,253	\$25,090,759	\$11,557,494	\$12,928,216
4/30/2057	\$54,104,059	\$23,645,721	\$9,682,865	\$14,297,884
4/30/2058	\$51,463,424	\$22,172,858	\$8,035,876	\$15,724,706
4/30/2059	\$48,769,627	\$20,695,396	\$6,605,985	\$17,569,361
4/30/2060	\$46,038,910	\$19,241,500	\$5,379,336	\$19,248,964
4/30/2061	\$43,306,477	\$17,809,990	\$4,339,905	\$21,074,006
4/30/2062	\$40,592,204	\$16,411,963	\$3,469,975	\$22,854,235
4/30/2063	\$37,914,299	\$15,055,610	\$2,750,823	\$24,675,368
4/30/2064	\$35,288,019	\$13,746,285	\$2,163,500	\$26,483,502
4/30/2065	\$32,729,083	\$12,491,189	\$1,689,507	\$28,294,411

# EXHIBIT V – Breakdown of Benefit Payouts for Exhibit III (Cont.)

# Demonstration that the Limitations on Individual Suspensions Are Satisfied

This document illustrates how the proposed suspension satisfies the guarantee-based limitation, the age-based limitation, and the disability-based limitation, as established under IRC Section 432(e)(9)(D)(i), (ii), and (iii), respectively.

### **Guarantee-based Limitation**

The proposed suspension does not reduce the benefit of any participant or beneficiary to an amount that is less than 110% of the PBGC guarantee.

If a participant's benefit is split with an alternate payee under the terms of a qualified domestic relations order (QDRO), then the determination of the guaranteed level for both parties is based on the terms of the QDRO. Generally, if the QDRO provides the alternate payee a shared interest with the participant, then the participant's total benefit is used for purposes of determining the guaranteed amount for both parties. If the QDRO provides a separate interest for the alternate payee, then the alternate payee's separate benefit level is used to determine the guaranteed amount. If there are multiple QDROs with multiple alternate payees, this determination is made separately with respect to each applicable QDRO.

### Age-Based Limitation

The proposed suspension does not affect any participant or beneficiary who will be age 80 or older as of July 31, 2020 (the end of the month in which the July 1, 2020 effective date of the proposed suspension occurs). The proposed suspension only partially affects any participant or beneficiary who will be age 75-79 as of July 31, 2020 (with proportionally more of the current benefit being protected the closer the participant or beneficiary is to age 80).

In the event that the age-based limitation applies to a participant that has a QDRO, then the type of QDRO will determine whether the Pension Plan uses the participant's or alternate payee's age. If the QDRO provides the alternate payee a shared interest with the participant, then the participant's age is used for purposes of applying the age-based limitation as of the proposed suspension's effective date. Alternatively, if the QDRO provides a separate interest for the alternate payee, then the alternate payee's age is used to determine the application of the age-based limitation. If there are multiple QDROs with multiple alternate payees, the determination of whose age to use is determined separately for each applicable QDRO.

The application of the age-based limitation for a participant who elected a joint and survivor benefit is based on the age of the participant as of July 31, 2020, unless he or she is deceased, in which case the surviving spouse's age is used to determine the application of the age-based limitation.

Section 4.01(3) of revenue procedure 2017-43 requires submission of sample calculations for each group defined in Checklist Item #2 that includes an individual who is over age 75 (as of July

31, 2020). Note that <u>no</u> calculations are included for groups that have a sub-group designation of "2" as these the individuals in these groups have only post-5/1/2007 accruals and will not be affected by the suspension.

Section 4.01(3)(c) of revenue procedure 2017-43 requests submission of sample calculations on individuals who are between age 75 and 79 but have not commenced benefits. However, all plan participants satisfying the preceding criteria are past their IRC section 401(a)(9) required beginning date and ARE treated as being in pay status retroactive to such date. Therefore, no such calculations are included for the "A" and "B" groups.

The "C groups" and "D groups" do not contain anyone over the age of 75, so no calculations are included for these groups.

Based on the preceding, sample age-based limitation calculations are submitted on the following groups:

- E1
- E3

# **Disability-based Limitation**

The proposed suspension does not affect any disability benefit that is in pay status as of July 1, 2020. Furthermore, if a disabled participant has converted to a retirement benefit on or prior to July 1, 2020, such participant's benefit will not be reduced below the amount of his or her disability benefit.

There are currently 3 types of disability benefits paid to an individual under the plan.

 <u>Basic Disability Benefit</u> – In order to be eligible for this benefit, the participant must be under age 62, have at least 5 credit years, and have a disability award from the Social Security Administration (SSA). The benefit is paid in the form of a temporary life annuity generally ending at age 62. The benefit amount is equal to the greater of: (a) 75% of the vested accrued benefit, or (b) \$280, but is subject to a cap pursuant to the following table:

Number of	Cap on Disability
Credit Years	Benefit
5-9	\$525
10-15	\$625
16-19	\$725
20-24	\$1,050
25+	\$1,350

- Lump Sum Disability Benefit If a participant is disabled with an SSA award but has less than 5 credit years (the plan uses 3-7 year graded vesting), then he or she is eligible for a lump sum cash-out equal to the actuarial present value of his or her vested accrued benefit.
- 3. <u>Lawsuit-related Disability Benefit</u> As the result of a settlement of a class action lawsuit in October 2016, most disabled participants who were in pay status as of 8/1/2013 and had taken a cut due to the 2013 rule change implementing the service-based cap described above, were restored to 95% of their pre-amendment disability benefit amount. After these people retire, the disability-based limitation will be applied based on the 95% of pre-amendment disability amount.

The following special rules apply to the application of the disability-based limitation:

- When the disability rules were changed in 2013 to require a disability award from the SSA, disabled retirees without such an award were allowed one year to obtain one. As a result of this change, some previously disabled participants ceased to qualify under the plan rules. These people will <u>not</u> receive any special protection under the disabilitybased limitation.
- As the result of the 2016 class action settlement, affected disabled participants who were:
  - a. In pay status on 8/1/2013, and
  - b. Converted to early retirement prior to October 2016, and
  - c. Had an early retirement benefit that was less than 95% of their prior disability benefit,

were granted a benefit increase to 95% of their pre-amendment disability amounts payable until age 62, at which time their benefit will increase to an unreduced, early retirement benefit. For purposes of the disability-based limitation, the benefit payable until normal retirement age for these participants will be treated as a disability benefit.

If a participant's benefit is split with an alternate payee under the terms of a QDRO, then the determination of the amount of the disability-based limitation for both parties is based on the terms of the QDRO. In the case of a separate interest QDRO, the alternate payee will generally <u>not</u> receive any portion of the disability-based limitation. The exception to this is in the case of an alternate payee who was assigned a portion of the participant's disability benefit. In this case, such alternate payee will receive a disability-based limitation based on the portion of disability benefit assigned and the participant will <u>not</u> receive a disability-based limitation based on such portion.

In the case of a shared interest QDRO, any disability-based limitation will be shared in the same manner as the benefit itself.

Surviving spouses and beneficiaries will <u>not</u> receive any disability-based limitation.

### Sample Calculations

The sample calculations required by Section 4.01 of revenue procedure 2017-43 are attached to this the document as exhibits. Note that:

- There are <u>no</u> ERISA 4022A(a) forfeitable benefits,
- There are <u>no</u> ERISA 4022A(b)(1)(A) benefit increases that have been in effect for less than 60 months,
- The limitations contained in ERISA 4022A(c)(2) <u>have</u> been reflected in the guaranteebased calculations,
- There have been <u>no</u> ERISA 4022A(d) benefit reductions made pursuant to IRC section 411(a)(3)(E) (related to service with an employer rendered prior to such employer's obligation to contribute to the plan where such employer subsequently ceases to have an obligation to contribute), and
- The ERISA 4022A(e) exclusion does not apply as the Secretary of the Treasury has <u>not</u> determined that the plan fails to satisfy the requirements of IRC sections 401(a) or 404(a)(2).

	Relevant Section of Rev.	
Exhibit #	Proc. 2017-43	Description
I	4.01(1)	Guarantee-based limitation for an individual currently receiving benefits
II	4.01(1)	Guarantee-based limitation for the contingent beneficiary of an individual currently receiving benefits
III	4.01(1)	Guarantee-based limitation for a future retiree
IV	4.01(2)	Disability-based limitation for an individual currently receiving retirement benefits (who previously received a disability benefit)
v	4.01(2)	Disability-based limitation for the contingent beneficiary of an individual currently receiving retirement benefits (who previously received a disability benefit)
VI	4.01(2)	Disability-based limitation for a future retiree who is currently receiving a temporary annuity disability benefit
VII	4.01(2)	Disability-based limitation for an individual currently receiving retirement benefits (who previously received a disability benefit that was equal to 95% of his or her pre-8/1/2013 disability benefit due to the October 2016 settlement)

A listing of the attached exhibits appears below:

	Relevant Section of Rev.	
Exhibit #	Proc. 2017-43	Description
VIII	4.01(2)	Disability-based limitation for the contingent beneficiary of an individual currently receiving retirement benefits (who previously received a disability benefit that was equal to 95% of his or her pre-8/1/2013 disability benefit due to the October 2016 settlement)
іх	4.01(2)	Disability-based limitation for a future retiree who is currently receiving a disability benefit equal to 95% of his or her pre- 8/1/2013 disability benefit due to the October 2016 settlement
x	4.01(2)	Disability-based limitation for an individual who had previously received a retirement benefit that is treated like a disability benefit due to the October 2016 settlement
хі	4.01(2)	Disability-based limitation for the contingent beneficiary of an individual who had previously received a retirement benefit that is treated like a disability benefit due to the October 2016 settlement
ХІІ	4.01(2)	Disability-based limitation for an individual who is currently receiving a retirement benefit that is treated like a disability benefit due to the October 2016 settlement
XIII	4.01(3)	Group E1 retiree who is between age 75 and 79 as of 7/31/2020
XIV	4.01(3)	Beneficiary of a group E1 retiree who is between age 75 and 79 as of 7/31/2020
XV	4.01(3)	Group E3 retiree who is between age 75 and 79 as of 7/31/2020
XVI	4.01(3)	Beneficiary of a group E3 retiree who is between age 75 and 79 as of 7/31/2020

# Exhibit I - Guarantee-based limitation for an individual currently receiving benefits

# Suspension Limitation: 110% of PBGC Guarantee Benefit

Date of birth Date of retirement (DOR) Age at retirement date Age at suspension date Disabled? Current monthly benefit Amount of current monthly benefit earned prior to 5/1/2007 Amount of current monthly benefit earned on and after 5/1/2007 Late retirement factor (LRD) applied to current benefit Total years of service as of April 30, 2019 Form of pension	65 y 67 y No \$ \$ \$	12/4/1952 1/1/2018 rears, ears, 117.35 117.35 - 1.0000 5 le Life	0 months 7 months
Calculation of 110% of PBGC Guarantee			
Current monthly benefit, without regard to LRF PBGC accrual rate PBGC guaranteed accrual rate PBGC guaranteed benefit (no greater than current benefit) 110% of PBGC guaranteed benefit (no greater than current benefit)	\$ \$ \$ \$	117.35 23.47 20.35 101.76 111.94	
Calculation of Monthly Benefit under Proposed Suspension			
Current monthly benefit MPRA Reduction for benefit earned prior to 5/1/2007 Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA) Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2) Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater Months from age 80 (at suspension date, max 60 mos) Monthly benefit after age-based limitation	\$ \$ \$ \$ \$	117.35 18.78 98.57 - 98.57 111.94 60 111.94	
Final Monthly Benefit under Proposed Suspension	\$	111.94	
Summary of Applicable Federal Limitations 110% of PBGC guaranteed limit? Disability limit? Age-based limit?		Yes No No	

# Exhibit II - Guarantee-based limitation for the contingent beneficiary of an individual currently receiving benefits

### Suspension Limitation: 110% of PBGC Guarantee Benefit

Date of birth	8/2/1945		
Date of retirement (DOR)	9/1/2000		
Age at retirement date	55 years, 0 mont		0 months
Age at suspension date	74 years, 11		11 months
Disabled?	No		
Current monthly benefit	\$	502.25	
Amount of current monthly benefit earned prior to 5/1/2007	\$	502.25	
Amount of current monthly benefit earned on and after 5/1/2007	\$	-	
Late retirement factor (LRD) applied to current benefit	1	L.0000	
Total years of service as of April 30, 2019		17	
Form of pension	Joint	and 100%	% Survivor

### Calculation of 110% of PBGC Guarantee

		ent Benefit	Survivor Benefit		
Current monthly benefit, without regard to LRF	\$	502.25	\$	502.25	
PBGC accrual rate	\$	29.54	\$	29.54	
PBGC guaranteed accrual rate	\$	24.91	\$	24.91	
PBGC guaranteed benefit (no greater than current benefit)	\$	423.44	\$	423.44	
110% of PBGC guaranteed benefit (no greater than current benefit)	\$	465.78	\$	465.78	

### Calculation of Monthly Benefit under Proposed Suspension

	Cur	rent Benefit	Surv	vivor Benefit
Current monthly benefit	\$	502.25	\$	502.25
MPRA Reduction for benefit earned prior to 5/1/2007	\$	80.36	\$	80.36
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	421.89	\$	421.89
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	-	\$	-
Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	421.89	\$	421.89
Step 3 or 110% of PBGC guaranteed benefit if greater	\$	465.78	\$	465.78
Months from age 80 (at suspension date, max 60 mos)		60		60
Monthly benefit after age-based limitation	\$	465.78	\$	465.78
Final Monthly Benefit under Proposed Suspension	\$	465.78	\$	465.78
Summary of Applicable Federal Limitation	s			
110% of PBGC guaranteed limit	?	Yes		
Disability limit	?	No		

Age-based limit? No

# Exhibit III - Guarantee-based limitation for a future retiree

## Suspension Limitation: 110% of PBGC Guarantee Benefit

Date of birth		8/9/1977	
Age at suspension date	42 y	ears,	11 months
Disabled?	No		
Accrued monthly benefit	\$	132.00	
Amount of accrued monthly benefit earned prior to 5/1/2007	\$	63.27	
Amount of accrued monthly benefit earned on and after 5/1/2007	\$	68.73	
Late retirement factor (LRD) applied to current benefit		1.0000	
Total years of service as of April 30, 2019		7	
Form of pension	Sing	le Life	
Calculation of 110% of PBGC Guarantee			
Accrued monthly benefit, without regard to LRF	\$	132.00	
PBGC accrual rate	\$ \$ \$	18.86	
PBGC guaranteed accrual rate	\$	16.89	
PBGC guaranteed benefit (no greater than current benefit)	\$	118.25	
110% of PBGC guaranteed benefit (no greater than current benefit)	\$	130.08	
Calculation of Monthly Benefit under Proposed Suspension			
Accrued monthly benefit	\$	132.00	
MPRA Reduction for benefit earned prior to 5/1/2007	\$	115.55	
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	46.82	
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	68.73	
Step 3: Accrued monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	115.55	
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	130.08	
Months from age 80 (at suspension date, max 60 mos)		60	
Monthly benefit after age-based limitation	\$	130.08	
Final Monthly Benefit under Proposed Suspension	\$	130.08	
Summary of Applicable Federal Limitations			
110% of PBGC guaranteed limit?		Yes	
Disability limit?		No	
Age-based limit?		No	

# Exhibit IV - Disability-based limitation for an individual currently receiving retirement benefits (who previously received a disability benefit)

Suspension Limitation: Disability Benefit

Date of birth Date of retirement (DOR) Age at retirement date Age at suspension date Disabled? Current monthly benefit Protected disability benefit Amount of current monthly benefit earned prior to 5/1/2007 Amount of current monthly benefit earned on and after 5/1/2007 Late retirement factor (LRD) applied to current benefit Total years of service as of April 30, 2019 Form of pension	73 \$ \$ \$ \$	3/2/1947 4/1/2009 years, years, Yes 1,937.06 1,652.81 1,937.06 - 1.0000 15 gle Life	0 months 4 months
Calculation of 110% of PBGC Guarantee			
Current monthly benefit, without regard to LRF PBGC accrual rate PBGC guaranteed accrual rate PBGC guaranteed benefit (no greater than current benefit) 110% of PBGC guaranteed benefit (no greater than current benefit)	\$ \$ \$ \$	1,937.06 129.14 35.75 536.25 589.88	
Calculation of Monthly Benefit under Proposed Suspension			
Current monthly benefit MPRA Reduction for benefit earned prior to 5/1/2007 Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA) Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2) Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater Step 5: Step 4 or disability benefit if greater Months from age 80 (at suspension date, max 60 mos) Monthly benefit after age-based limitation	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,937.06 309.93 1,627.13 - 1,627.13 1,627.13 1,652.81 60 1,652.81	
Final Monthly Benefit under Proposed Suspension	\$	1,652.81	
Summary of Applicable Federal Limitations			
110% of PBGC guaranteed limit? Disability limit?		No Yes	

Age-based limit? No

# Exhibit V - Disability-based limitation for the contingent beneficiary of an individual currently receiving retirement benefits (who previously received a disability benefit)

### Suspension Limitation: Disability Benefit

Date of birth Date of retirement (DOR)		5/31/1950 6/1/2005	
Age at retirement date	55 y	ears,	0 months
Age at suspension date	70 y	ears,	2 months
Disabled?	Yes		
Current monthly benefit	\$	1,440.59	
Protected disability benefit	\$	1,399.38	
Amount of current monthly benefit earned prior to 5/1/2007	\$	1,440.59	
Amount of current monthly benefit earned on and after 5/1/2007	\$	-	
Late retirement factor (LRD) applied to current benefit		1.0000	
Total years of service as of April 30, 2019		25	
Form of pension	Join	t and 50% Sເ	urvivor

### Calculation of 110% of PBGC Guarantee

	Current Benefit		Survivor Benefit
Current monthly benefit, without regard to LRF	\$	1,440.59	\$ 720.30
PBGC accrual rate	\$	57.62	\$ 28.81
PBGC guaranteed accrual rate	\$	35.75	\$ 24.36
PBGC guaranteed benefit (no greater than current benefit)	\$	893.75	\$ 608.98
110% of PBGC guaranteed benefit (no greater than current benefit)	\$	983.13	\$ 669.88

### Calculation of Monthly Benefit under Proposed Suspension

	Cu	rrent Benefit	Sur	vivor Benefit
Current monthly benefit	\$	1,440.59	\$	720.30
MPRA Reduction for benefit earned prior to 5/1/2007	\$	230.49	\$	115.25
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	1,210.10	\$	605.05
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	-	\$	-
Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	1,210.10	\$	605.05
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	1,210.10	\$	669.88
Step 5: Step 4 or disability benefit if greater	\$	1,399.38	\$	669.88
Months from age 80 (at suspension date, max 60 mos)		60		60
Monthly benefit after age-based limitation	\$	1,399.38	\$	669.88
Final Monthly Benefit under Proposed Suspension	\$	1,399.38	\$	669.88
Summary of Applicable Federal Limitations				
110% of PBGC guaranteed limit?		No		
Disability limit?		Yes		
,				

Disability limit? Yes Age-based limit? No

# Exhibit VI - Disability-based limitation for a future retiree who is currently receiving a temporary annuity disability benefit

## Suspension Limitation: Disability Benefit

Date of birth Date of Disability retirement (DOR) Age at Disability retirement date Age at suspension date Disabled?	48 y	5/5/1961 10/1/2009 rears, rears, Yes	4 months 2 months
Current monthly disability benefit	\$	423.65	
Accrued monthly benefit	\$	564.86	
Amount of accrued benefit earned prior to 5/1/2007	\$	564.86	
Amount of accrued benefit earned on and after 5/1/2007	\$	-	
Late retirement factor (LRD) applied to current benefit		1.0000	
Total years of service as of April 30, 2019		9	
Form of pension	Disa	bility	
Calculation of 110% of PBGC Guarantee			
Accrued benefit, without regard to LRF	\$	564.86	
PBGC accrual rate	\$	62.76	
PBGC guaranteed accrual rate	\$	35.75	
PBGC guaranteed benefit (no greater than current benefit)	\$	321.75	
110% of PBGC guaranteed benefit (no greater than current benefit)	\$	353.93	
Calculation of Monthly Benefit under Proposed Suspension			
Accrued Monthly benefit	\$	564.86	
MPRA Reduction for benefit earned prior to 5/1/2007	\$	90.38	
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	474.48	
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$ \$	-	
Step 3: Accrued monthly benefit reduced for MPRA (Step 1 + Step 2)		474.48	
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	474.48	
Step 5: Step 4 or disability benefit if greater	\$	474.48	
Months from age 80 (at suspension date, max 60 mos)		60	
Monthly benefit after age-based limitation	\$	474.48	
Final Monthly Benefit under Proposed Suspension	\$	474.48	
Summary of Applicable Federal Limitations			
110% of PBGC guaranteed limit?		No	
Disability limit?		No	
Age-based limit?		No	

# Exhibit VII - Disability-based limitation for an individual currently receiving retirement benefits (who previously received a disability benefit that was equal to 95% of his or her pre-8/1/2013 disability benefit due to the October 2016 settlement)

### Suspension Limitation: Disability Benefit

Date of birth		3/16/1953	
Date of retirement (DOR)		4/1/2011	
Age at retirement date	58	years,	0 months
Age at suspension date	67	years,	4 months
Disabled?		Yes	
Current monthly benefit	\$	2,996.70	
Protected disability benefit	\$	2,694.55	
Amount of current monthly benefit earned prior to 5/1/2007	\$	2,996.70	
Amount of current monthly benefit earned on and after 5/1/2007	\$	-	
Late retirement factor (LRD) applied to current benefit		1.0000	
Total years of service as of April 30, 2019		22	
Form of pension	Joi	nt and 75% S	urvivor
Calculation of 110% of PBGC Guarantee			
Current monthly benefit, without regard to LRF	\$	2,996.70	
PBGC accrual rate	\$	136.21	
PBGC guaranteed accrual rate	\$	35.75	
PBGC guaranteed benefit (no greater than current benefit)	\$	786.50	
110% of PBGC guaranteed benefit (no greater than current benefit)	\$	865.15	
Calculation of Monthly Benefit under Proposed Suspension			
Current monthly benefit	\$	2,996.70	
MPRA Reduction for benefit earned prior to 5/1/2007	\$	346.99	
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	2,649.71	
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	-	
Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	2,649.71	
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	2,649.71	
Step 5: Step 4 or disability benefit if greater	\$	2,694.55	
Months from age 80 (at suspension date, max 60 mos)		60	
Monthly benefit after age-based limitation	\$	2,694.55	
Final Monthly Benefit under Proposed Suspension	\$	2,694.55	
Summary of Applicable Federal Limitations			
4400/ [DDCC     : 12		NI -	

110% of PBGC guaranteed limit?	No
Disability limit?	Yes
Age-based limit?	No

# Exhibit VIII - Disability-based limitation for the contingent beneficiary of an individual currently receiving retirement benefits (who previously received a disability benefit that was equal to 95% of his or her pre-8/1/2013 disability benefit due to the October 2016 settlement)

### Suspension Limitation: Disability Benefit

Date of birth	1/14/1949	
Date of retirement (DOR)	2/1/2010	
Age at retirement date	61 years, 0 r	nonths
Age at suspension date	71 years, 6 r	nonths
Disabled?	Yes	
Current monthly benefit	\$ 4,367.07	
Protected disability benefit	\$ 4,078.36	
Amount of current monthly benefit earned prior to 5/1/2007	\$ 4,367.07	
Amount of current monthly benefit earned on and after 5/1/2007	\$-	
Late retirement factor (LRD) applied to current benefit	1.0000	
Total years of service as of April 30, 2019	19	
Form of pension	Joint and 75% Surviv	or

### Calculation of 110% of PBGC Guarantee

	Current Benefit	Survivor Benefit
Current monthly benefit, without regard to LRF	\$ 4,367.07	\$ 3,275.30
PBGC accrual rate	\$ 229.85	\$ 172.38
PBGC guaranteed accrual rate	\$ 35.75	\$ 35.75
PBGC guaranteed benefit (no greater than current benefit)	\$ 679.25	\$ 679.25
110% of PBGC guaranteed benefit (no greater than current benefit)	\$ 747.18	\$ 747.18

### Calculation of Monthly Benefit under Proposed Suspension

	Cu	rrent Benefit	Survivor Benefit
Current monthly benefit	\$	4,367.07	\$ 3,275.30
MPRA Reduction for benefit earned prior to 5/1/2007	\$	585.28	\$ 438.96
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	3,781.79	\$ 2,836.34
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	-	\$-
Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	3,781.79	\$ 2,836.34
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	3,781.79	\$ 2,836.34
Step 5: Step 4 or disability benefit if greater	\$	4,078.36	\$ 2,836.34
Months from age 80 (at suspension date, max 60 mos)		60	60
Monthly benefit after age-based limitation	\$	4,078.36	\$ 2,836.34
Final Monthly Benefit under Proposed Suspension	\$	4,078.36	\$ 2,836.34
Summary of Applicable Federal Limitations			
110% of PBGC guaranteed limit?		No	
Disability limit?		Yes	

Disability limit?

Age-based limit?

No

Exhibit IX - Disability-based limitation for a future retiree who is currently receiving a disability benefit equal to 95% of his or her pre-8/1/2013 disability benefit due to the October 2016 settlement

### Suspension Limitation: Disability Benefit

Date of birth	11/23/1960		
Date of Disability retirement (DOR)		6/1/2012	2
Age at Disability retirement date	51	years,	6 months
Age at suspension date	59	years,	8 months
Disabled?		Yes	
Current monthly disability benefit	\$	1,959.60	
Accrued monthly benefit	\$	2,750.32	
Amount of accrued benefit earned prior to 5/1/2007	\$	2,750.32	
Amount of accrued benefit earned on and after 5/1/2007	\$	-	
Late retirement factor (LRD) applied to current benefit		1.0000	
Total years of service as of April 30, 2019		18	
Form of pension	Dis	ability	
		·	
Calculation of 110% of PBGC Guarantee			
Accrued benefit, without regard to LRF	\$	2,750.32	
PBGC accrual rate	\$	152.80	
PBGC guaranteed accrual rate	\$	35.75	
PBGC guaranteed benefit (no greater than current benefit)	\$	643.50	
110% of PBGC guaranteed benefit (no greater than current benefit)	\$	707.85	
	•		
Calculation of Monthly Benefit under Proposed Suspension			
·····			
Accrued Monthly benefit	\$	2,750.32	
MPRA Reduction for benefit earned prior to 5/1/2007	\$	440.05	
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	2,310.27	
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	-	
Step 3: Accrued monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	2,310.27	
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	2,310.27	
Step 5: Step 4 or disability benefit if greater	\$	2,310.27	
Months from age 80 (at suspension date, max 60 mos)	Ŷ	60	
Monthly benefit after age-based limitation	\$	2,310.27	
Monthly benefit after age-based initiation	Ļ	2,310.27	
Final Monthly Benefit under Proposed Suspension	\$	2,310.27	
	Ş	2,510.27	

### Summary of Applicable Federal Limitations

110% of PBGC guaranteed limit?	No
Disability limit?	No
Age-based limit?	No
	-

Exhibit X - Disability-based limitation for an individual who had previously received a retirement benefit that is treated like a disability benefit due to the October 2016 settlement

Suspension Limitation: Disability Benefit

Date of birth	9/11/1959		
Date of retirement (DOR)	6/1/2009		
Age at retirement date	52	years,	8 months
Age at suspension date	63	years,	10 months
Disabled?		Yes	
Current monthly benefit	\$	1,061.76	
Protected disability benefit	\$	917.18	
Amount of current monthly benefit earned prior to 5/1/2007	\$	1,005.80	
Amount of current monthly benefit earned on and after 5/1/2007	\$	55.96	
Late retirement factor (LRD) applied to current benefit		1.0000	
Total years of service as of April 30, 2019		14	
Form of pension	Sin	gle Life	

### Calculation of 110% of PBGC Guarantee

Current monthly benefit, without regard to LRF	\$ 1,061.76
PBGC accrual rate	\$ 75.84
PBGC guaranteed accrual rate	\$ 35.75
PBGC guaranteed benefit (no greater than current benefit)	\$ 500.50
110% of PBGC guaranteed benefit (no greater than current benefit)	\$ 550.55

### Calculation of Monthly Benefit under Proposed Suspension

Current monthly benefit MPRA Reduction for benefit earned prior to 5/1/2007	\$ \$	1,061.76 160.93
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	844.87
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	55.96
Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	900.83
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	900.83
Step 5: Step 4 or disability benefit if greater	\$	917.18
Months from age 80 (at suspension date, max 60 mos)		60
Monthly benefit after age-based limitation	\$	917.18
Final Monthly Benefit under Proposed Suspension	\$	917.18

### Summary of Applicable Federal Limitations

	••	•
No	110% of PBGC guaranteed limit?	
Yes	Disability limit?	
No	Age-based limit?	

# Exhibit XI - Disability-based limitation for the contingent beneficiary of an individual who had previously received a retirement benefit that is treated like a disability benefit due to the **October 2016 settlement**

### Suspension Limitation: Disability Benefit

Date of birth	8/30/1957		
Date of retirement (DOR)	8/1/2013		
Age at retirement date	55 years, 11 month		
Age at suspension date	62 years,	11 months	
Disabled?	Yes		
Current monthly benefit	\$ 4,487	.78	
Protected disability benefit	\$ 3,890	.44	
Amount of current monthly benefit earned prior to 5/1/2007	\$ 4,032	2.42	
Amount of current monthly benefit earned on and after 5/1/2007	\$ 455	.36	
Late retirement factor (LRD) applied to current benefit	1.0000		
Total years of service as of April 30, 2019	23		
Form of pension	Joint and 5	0% Survivor	

### Calculation of 110% of PBGC Guarantee

	Current Benefit		Survivor Benefit	
Current monthly benefit, without regard to LRF	\$	4,487.78	\$ 2,243.89	
PBGC accrual rate	\$	195.12	\$ 97.56	
PBGC guaranteed accrual rate	\$	35.75	\$ 35.75	
PBGC guaranteed benefit (no greater than current benefit)	\$	822.25	\$ 822.25	
110% of PBGC guaranteed benefit (no greater than current benefit)	\$	904.48	\$ 904.48	

Current Benefit

Survivor Benefit

### **Calculation of Monthly Benefit under Proposed Suspension**

Current monthly benefit	\$	4,487.78	\$ 2,243.89
MPRA Reduction for benefit earned prior to 5/1/2007	\$	645.19	\$ 322.59
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	3,387.23	\$ 1,693.62
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	455.36	\$ 227.68
Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	3,842.59	\$ 1,921.30
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	3,842.59	\$ 1,921.30
Step 5: Step 4 or disability benefit if greater	\$	3,890.44	\$ 1,921.30
Months from age 80 (at suspension date, max 60 mos)		60	60
Monthly benefit after age-based limitation	\$	3,890.44	\$ 1,921.30
Final Monthly Benefit under Proposed Suspension	\$	3,890.44	\$ 1,921.30
Summary of Applicable Federal Limitatio		No	
110% of PBGC guaranteed lim	1115	No	

Disability limit? Yes No

Age-based limit?

Exhibit XII - Disability-based limitation for an individual is currently receiving a retirement benefit that is treated like a disability benefit due to the October 2016 settlement

### Suspension Limitation: Disability Benefit

Date of birth Date of retirement (DOR)	2/14/1958 9/1/2013		
Age at retirement date	55	years,	6 months
Age at suspension date		years,	
Disabled?	02	Yes	Smonths
Current monthly benefit	\$	2,720.67	
Protected disability benefit	\$	2,720.67	
Amount of current monthly benefit earned prior to 5/1/2007	\$	2,720.67	
Amount of current monthly benefit earned on and after 5/1/2007	\$	-	
Late retirement factor (LRD) applied to current benefit		1.0000	
Total years of service as of April 30, 2019		19	
Form of pension	Sin	gle Life	
Calculation of 110% of PBGC Guarantee			
Current monthly benefit, without regard to LRF	\$	2,720.67	
PBGC accrual rate	\$	143.19	
PBGC guaranteed accrual rate	\$	35.75	
PBGC guaranteed benefit (no greater than current benefit)	\$	679.25	
110% of PBGC guaranteed benefit (no greater than current benefit)	\$	747.18	
Calculation of Monthly Benefit under Proposed Suspension			
Current monthly benefit	\$	2,720.67	
MPRA Reduction for benefit earned prior to 5/1/2007	\$	435.31	
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	2,285.36	
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	-	
Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	2,285.36	
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	2,285.36	
Step 5: Step 4 or disability benefit if greater	\$	2,720.67	
Months from age 80 (at suspension date, max 60 mos)		60	
Monthly benefit after age-based limitation	\$	2,720.67	
Final Monthly Benefit under Proposed Suspension	\$	2,720.67	

### Summary of Applicable Federal Limitations

- 110% of PBGC guaranteed limit? No
  - Disability limit? Yes
  - Age-based limit? No

# Exhibit XIII - Group E1 retiree who is between age 75 and 79 as of 7/31/2020

Suspension Limitation: Age-based Limitation

Date of birth	5/31/1944		
Date of retirement (DOR)	8/1/2012		2
Age at retirement date	68 y	ears	2 months
Age at suspension date	76 y	ears	2 months
Disabled?		No	
Current monthly benefit	\$	672.42	
Amount of current monthly benefit earned prior to 5/1/2007	\$	672.42	
Amount of current monthly benefit earned on and after 5/1/2007	\$	-	
Late retirement factor (LRD) applied to current benefit		1.4464	
Total years of service as of April 30, 2019		10	
Form of pension	Sing	le Life	

### Calculation of 110% of PBGC Guarantee

Current monthly benefit, without regard to LRF	\$ 464.89
PBGC accrual rate	\$ 46.49
PBGC guaranteed accrual rate	\$ 35.75
PBGC guaranteed benefit (no greater than current benefit)	\$ 357.50
110% of PBGC guaranteed benefit (no greater than current benefit)	\$ 393.25

# Calculation of Monthly Benefit under Proposed Suspension

Current monthly benefit	\$ 672.42
MPRA Reduction for benefit earned prior to 5/1/2007	\$ 107.59
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$ 564.83
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$ -
Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2)	\$ 564.83
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$ 564.83
Months from age 80 (at suspension date, max 60 mos)	46
Monthly benefit after age-based limitation	\$ 589.93
Final Monthly Benefit under Proposed Suspension	\$ 589.93

# Summary of Applicable Federal Limitations

iry of Applicable Federal Limitations	
110% of PBGC guaranteed limit?	No

Disability limit? No

Age-based limit? Yes

# Exhibit XIV - Beneficiary of a group E1 retiree who is between age 75 and 79 as of 7/31/2020

### Suspension Limitation: Age-based Limitation

Participant date of birth	3/23/194	3
Beneficiary date of birth	2/27/194	3
Date of retirement (DOR)	4/1/200	5
Participant Age at retirement date	62 years,	0 months
Spouse Age at suspension date	77 years,	5 months
Disabled?	No	
Current monthly benefit	\$ 640.35	
Amount of current monthly benefit earned prior to 5/1/2007	\$ 640.35	
Amount of current monthly benefit earned on and after 5/1/2007	\$-	
Late retirement factor (LRD) applied to current benefit	1.0000	
Total years of service as of April 30, 2019	7	
Form of pension	Survivor Benet	fit (50% Joint & Survivor)

### Calculation of 110% of PBGC Guarantee

Current monthly benefit, without regard to LRF	\$ 640.35
PBGC accrual rate	\$ 91.48
PBGC guaranteed accrual rate	\$ 35.75
PBGC guaranteed benefit (no greater than current benefit)	\$ 250.25
110% of PBGC guaranteed benefit (no greater than current benefit)	\$ 275.28

### Calculation of Monthly Benefit under Proposed Suspension

Current monthly benefit	\$	640.35
MPRA Reduction for benefit earned prior to 5/1/2007	\$	102.46
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	537.89
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	-
Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	537.89
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	537.89
Months from age 80 (at suspension date, max 60 mos)		31
Monthly benefit after age-based limitation	\$	587.41
Final Monthly Benefit under Proposed Suspension	\$	587.41
Summary of Applicable Federal Limitations	5	

	,
No	110% of PBGC guaranteed limit?
No	Disability limit?

Age-based limit? Yes
## Exhibit XV - Group E3 retiree who is between age 75 and 79 as of 7/31/2020

#### Suspension Limitation: Age-based Limitation

Date of birth Date of retirement (DOR)		2/14/1942 5/1/2008	
Age at retirement date	66	years,	2 months
Age at suspension date		years,	5 months
Disabled?	70	No	5 11011113
Current monthly benefit	\$	1,212.58	
Amount of current monthly benefit earned prior to 5/1/2007	\$	1,093.01	
Amount of current monthly benefit earned on and after 5/1/2007	ې \$	1,093.01	
-	Ş		
Late retirement factor (LRD) applied to current benefit		1.0000	
Total years of service as of April 30, 2019	<b>C</b> !	7	
Form of pension	SIN	gle Life	
Calculation of 110% of PBGC Guarantee			
Current monthly benefit, without regard to LRF	\$	1,212.58	
PBGC accrual rate	\$	173.23	
PBGC guaranteed accrual rate	\$	35.75	
PBGC guaranteed benefit (no greater than current benefit)	\$	250.25	
110% of PBGC guaranteed benefit (no greater than current benefit)	\$	275.28	
Calculation of Monthly Benefit under Proposed Suspension			
Current monthly benefit	\$	1,212.58	
MPRA Reduction for benefit earned prior to 5/1/2007	\$	174.88	
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$	918.13	
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	119.57	
Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	1,037.70	
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	1,037.70	
Months from age 80 (at suspension date, max 60 mos)	Ŧ	19	
Monthly benefit after age-based limitation	\$	1,157.20	
Final Monthly Benefit under Proposed Suspension	\$	1,157.20	
Summary of Applicable Federal Limitation	S		
110% of PBGC guaranteed limit	?	No	
Disability limit	?	No	
Ago bosod limit	2	Vec	

Age-based limit? Yes

## Exhibit XVI - Beneficiary of a group E3 retiree who is between age 75 and 79 as of 7/31/2020

#### Suspension Limitation: Age-based Limitation

Beneficiary date of birth Date of retirement (DOR) Age at retirement date Age at suspension date Disabled? Current monthly	63 y	8/23/1940 7/1/2004 years, years,	10 months 11 months
benefit	\$	952.66	
Amount of current monthly benefit earned prior to 5/1/2007	\$	933.39	
Amount of current monthly benefit earned on and after 5/1/2007	\$	19.27	
Late retirement factor (LRD) applied to current benefit Total years of service as of April 30, 2019		1.0000 8	
Form of pension	Ben	eficiary	
Calculation of 110% of PBGC Guarantee			
Current monthly benefit, without regard to LRF	\$	952.66	
PBGC accrual rate	\$	119.08	
PBGC guaranteed accrual rate	\$	35.75	
PBGC guaranteed benefit (no greater than current benefit)	\$	286.00	
110% of PBGC guaranteed benefit (no greater than current benefit)	\$	314.60	
Calculation of Monthly Benefit under Proposed Suspension			
Current monthly benefit	\$	952.66	
MPRA Reduction for benefit earned prior to 5/1/2007	\$	149.34	
Step 1: Benefit earned prior to 5/1/2007 reduced for MPRA	\$ \$	784.05	
Step 2: Benefit earned after 5/1/2007 (not reduced for MPRA)	\$	19.27	
Step 3: Current monthly benefit reduced for MPRA (Step 1 + Step 2)	\$	803.32	
Step 4: Step 3 or 110% of PBGC guaranteed benefit if greater	\$	803.32	
Months from age 80 (at suspension date, max 60 mos)		1	
Monthly benefit after age-based limitation	\$	950.17	
Final Monthly Benefit under Proposed Suspension	\$	950.17	
Summary of Applicable Federal Limitations			
110% of PBGC guaranteed limit?		No	
Disability limit?		No	
Age-based limit?		Yes	

#### Proposed Suspension Is Reasonably Estimated to Enable the Pension Plan to Avoid Insolvency Utilizing Stochastic Projections

This Document 10.1 summarizes the results of 2,000 stochastic trials. Each trial consists of a projection of the market value of Plan assets for the plan years ending April 30, 2020 through 2065.

#### The probability of maintaining solvency over the extended period is: **51.7%**

The 5<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup> and 95<sup>th</sup> percentiles of the projected market value of plan assets are shown below in graphical format in Exhibit I and in tabular format in Exhibit II.

Checklist Item #25 describes the actuarial assumptions and methodology used in the reports filed with this application, as required under Revenue Procedure 2017-43, Section 4.02(3).



# Exhibit I – Graphical Representation of Projected Market Value of Plan Assets Recognizing Proposed Suspension Utilizing Stochastic Projections

Plan Year	Market Value of Plan Assets – 2,000 Trials							
Ending	5 <sup>th</sup> %-ile	25 <sup>th</sup> %-ile	50 <sup>th</sup> %-ile	75 <sup>th</sup> %-ile	95 <sup>th</sup> %-ile			
4/30/2020	\$779,361,598	\$779,361,598	\$779,361,598	\$779,361,598	\$779,361,598			
4/30/2021	\$669,264,529	\$746,868,272	\$805,044,495	\$868,552,013	\$972,688,294			
4/30/2022	\$637,349,852	\$741,475,868	\$828,642,275	\$924,905,761	\$1,091,481,207			
4/30/2023	\$592,822,868	\$728,567,924	\$835,193,763	\$963,316,983	\$1,188,239,522			
4/30/2024	\$560,572,658	\$715,297,410	\$840,750,574	\$992,196,012	\$1,268,790,507			
4/30/2025	\$521,873,016	\$695,043,848	\$848,354,307	\$1,018,035,025	\$1,353,497,507			
4/30/2026	\$484,830,324	\$681,798,299	\$834,153,892	\$1,044,953,442	\$1,443,399,657			
4/30/2027	\$436,547,388	\$655,254,535	\$827,100,029	\$1,056,660,343	\$1,525,092,901			
4/30/2028	\$384,895,464	\$619,279,895	\$828,251,906	\$1,068,730,372	\$1,613,968,125			
4/30/2029	\$342,484,522	\$590,007,455	\$812,982,268	\$1,074,706,000	\$1,686,107,711			
4/30/2030	\$286,121,067	\$548,858,474	\$796,469,784	\$1,102,644,294	\$1,745,181,564			
4/30/2031	\$228,629,750	\$509,594,853	\$780,854,823	\$1,118,720,542	\$1,880,764,996			
4/30/2032	\$164,503,952	\$471,138,015	\$766,845,098	\$1,132,921,282	\$2,001,286,413			
4/30/2033	\$94,244,776	\$430,501,387	\$739,752,515	\$1,148,467,332	\$2,116,554,979			
4/30/2034	\$20,094,738	\$380,992,973	\$724,560,429	\$1,150,607,733	\$2,226,219,088			
4/30/2035	insolvent	\$335,271,477	\$690,657,808	\$1,168,344,226	\$2,392,290,072			
4/30/2036		\$277,080,727	\$655,552,804	\$1,203,235,159	\$2,543,429,820			
4/30/2037		\$220,331,839	\$618,521,722	\$1,203,518,474	\$2,619,821,085			
4/30/2038		\$150,780,093	\$588,267,081	\$1,221,733,157	\$2,784,596,349			
4/30/2039		\$83,819,678	\$553,936,652	\$1,226,120,862	\$3,029,603,458			
4/30/2040		\$12,447,449	\$521,153,060	\$1,269,244,842	\$3,225,321,367			
4/30/2041		insolvent	\$487,084,172	\$1,274,975,825	\$3,285,971,181			
4/30/2042			\$458,937,541	\$1,297,851,980	\$3,437,038,729			
4/30/2043			\$414,245,022	\$1,344,704,221	\$3,697,674,818			
4/30/2044			\$379,012,636	\$1,395,298,679	\$3,990,429,491			
4/30/2045			\$345,427,306	\$1,441,520,493	\$4,093,285,728			
4/30/2046			\$324,579,581	\$1,454,241,373	\$4,340,728,392			
4/30/2047			\$279,367,590	\$1,524,726,131	\$4,725,488,874			
4/30/2048			\$251,410,829	\$1,593,393,704	\$5,140,370,177			
4/30/2049			\$231,686,968	\$1,673,843,807	\$5,294,872,190			
4/30/2050			\$214,407,338	\$1,736,441,853	\$5,978,197,380			
4/30/2051			\$183,828,332	\$1,850,433,328	\$6,758,963,735			
4/30/2052			\$172,552,178	\$1,963,084,882	\$7,109,354,315			

Exhibit II – Tabular Presentation of Projected Market Value of Plan Assets Recognizing Proposed Suspension Utilizing Stochastic Projections

Plan Year		Market Value of Plan Assets – 2,000 Trials								
Ending	5 <sup>th</sup> %-ile	25 <sup>th</sup> %-ile	50 <sup>th</sup> %-ile	75 <sup>th</sup> %-ile	95 <sup>th</sup> %-ile					
4/30/2053			\$161,974,988	\$2,093,538,571	\$7,764,070,926					
4/30/2054			\$149,048,056	\$2,337,622,083	\$8,422,667,085					
4/30/2055			\$140,450,782	\$2,473,042,886	\$8,801,732,145					
4/30/2056			\$138,399,698	\$2,613,493,598	\$9,508,114,222					
4/30/2057			\$150,390,788	\$2,790,241,562	\$10,326,055,659					
4/30/2058			\$149,317,709	\$2,909,488,046	\$11,443,132,631					
4/30/2059			\$169,462,281	\$3,169,403,501	\$11,823,481,678					
4/30/2060			\$200,732,059	\$3,459,923,600	\$13,112,273,784					
4/30/2061			\$222,712,665	\$3,776,339,323	\$14,760,534,122					
4/30/2062			\$249,213,026	\$4,108,726,999	\$15,959,668,373					
4/30/2063			\$283,174,386	\$4,330,784,247	\$17,623,103,133					
4/30/2064			\$313,186,409	\$4,729,366,071	\$19,161,176,308					
4/30/2065			\$351,155,351	\$5,244,356,006	\$21,370,183,900					

Exhibit II – Tabular Presentation of Projected Market Value of Plan Assets Recognizing Proposed Suspension Utilizing Stochastic Projections (Cont.)

#### Demonstration That the Proposed Suspension Is Not Projected To Materially Exceed the Level Necessary to Avoid Insolvency Based On a <u>Deterministic</u> Projection

As required by Revenue Procedure 2017-43, Section 4.03, the application must include a deterministic projection demonstrating that, if the dollar amount of the proposed suspension for each participant and beneficiary was reduced by the greater of:

- 5% of the reduction in payment proposed for that participant or beneficiary, or
- 2% of that participant's or beneficiary's payment determined without regard to the proposed reduction,

then the Plan would <u>not</u> be reasonably estimated to avoid insolvency.

Exhibit I provides plan-year-by-plan-year projections demonstrating projected insolvency and identification of the available resources during each of those years.

The illustration is based on the actuary's interpretation of the requirements under Revenue Procedure 2017-43, Section 4.03.

Checklist Item #25 describes each of the assumptions used, as required under Revenue Procedure 2017-43, Section 4.02(3).

#### Exhibit I – Deterministic Projection Based on Proposed Suspension <u>Reduced</u> Pursuant to Revenue Procedure 2017-43, Section 4.03

The projected Market Value of Assets and Solvency Ratio for Plan Years ending April 30, 2020 through April 30, 2047 are shown below:

			3. EWL	4. EWL						
			Payments	Payments			7.		9. Resources	Solvency
Plan Year	1. Beginning	2. Employer	Prior	Future	5. Benefit	6.	Investment	8. Ending	(1)+(2)+(3)+(4)-	Ratio
Ending	Assets	Contributions	Wthdrwls	Wthdrwls	Payments	Expenses	Income	Assets	(6)+(7)	(9)/(5)
4/30/2020	\$770,972,113	\$120,850,224	\$1,333,196	\$0	\$154,780,950	\$6,101,734	\$47,088,749	\$779,361,598	\$934,142,548	6.04
4/30/2021	\$779,361,598	\$120,000,000	\$36,159	\$963 <i>,</i> 841	\$146,055,136	\$4,090,000	\$49,711,287	\$799,927,749	\$945,982,885	6.48
4/30/2022	\$799,927,749	\$117,000,000	\$36,159	\$963,841	\$146,709,647	\$4,182,025	\$50,926,324	\$817,962,401	\$964,672,048	6.58
4/30/2023	\$817,962,401	\$105,000,000	\$36,159	\$963,841	\$150,107,715	\$4,276,121	\$51,595,081	\$821,173,646	\$971,281,361	6.47
4/30/2024	\$821,173,646	\$105,000,000	\$36,159	\$763,841	\$153,788,981	\$4,372,334	\$51,674,544	\$820,486,875	\$974,275,856	6.34
4/30/2025	\$820,486,875	\$105,000,000	\$36,159	\$613,841	\$157,649,695	\$4,470,712	\$51,496,359	\$815,512,827	\$973,162,522	6.17
4/30/2026	\$815,512,827	\$105,000,000	\$36,159	\$613,841	\$161,323,359	\$4,571,303	\$51,050,382	\$806,318,547	\$967,641,906	6.00
4/30/2027	\$806,318,547	\$105,000,000	\$36,159	\$613,841	\$164,781,620	\$4,674,157	\$50,337,018	\$792,849,788	\$957,631,408	5.81
4/30/2028	\$792,849,788	\$105,000,000	\$36,159	\$613,841	\$168,212,307	\$4,779,326	\$49,346,633	\$774,854,788	\$943,067,095	5.61
4/30/2029	\$774,854,788	\$105,000,000	\$36,159	\$613,841	\$171,441,739	\$4,886,861	\$48,068,507	\$752,244,695	\$923,686,434	5.39
4/30/2030	\$752,244,695	\$105,000,000	\$36,159	\$613,841	\$174,311,352	\$4,996,815	\$53,656,171	\$732,242,699	\$906,554,051	5.20
4/30/2031	\$732,242,699	\$105,000,000	\$36,159	\$613,841	\$176,729,580	\$5,109,243	\$52,061,122	\$708,114,998	\$884,844,578	5.01
4/30/2032	\$708,114,998	\$105,000,000	\$36,159	\$613,841	\$178,646,190	\$5,224,201	\$50,175,360	\$680,069,967	\$858,716,157	4.81
4/30/2033	\$680,069,967	\$105,000,000	\$36,159	\$613,841	\$180,061,400	\$5,341,746	\$48,014,505	\$648,331,326	\$828,392,726	4.60
4/30/2034	\$648,331,326	\$105,000,000	\$12,056	\$637,944	\$181,062,279	\$5,461,935	\$45,592,066	\$613,049,178	\$794,111,457	4.39
4/30/2035	\$613,049,178	\$105,000,000	\$7,236	\$642,764	\$181,480,132	\$5,584,829	\$42,925,627	\$574,559,844	\$756,039,976	4.17
4/30/2036	\$574,559,844	\$105,000,000	\$7,236	\$642,764	\$181,451,391	\$5,710,488	\$40,035,293	\$533,083,258	\$714,534,649	3.94
4/30/2037	\$533,083,258	\$105,000,000	\$7,236	\$642,764	\$180,927,529	\$5,838,974	\$36,939,375	\$488,906,130	\$669,833,659	3.70
4/30/2038	\$488,906,130	\$105,000,000	\$3,618	\$646,382	\$179,935,456	\$5,970,351	\$33,658,367	\$442,308,690	\$622,244,146	3.46
4/30/2039	\$442,308,690	\$105,000,000	\$0	\$650,000	\$178,304,466	\$6,104,684	\$30,219,684	\$393,769,224	\$572,073,690	3.21
4/30/2040	\$393,769,224	\$105,000,000	\$0	\$650,000	\$176,525,701	\$6,242,039	\$26,640,777	\$343,292,261	\$519,817,962	2.94
4/30/2041	\$343,292,261	\$105,000,000	\$0	\$650,000	\$174,089,312	\$6,382,485	\$22,941,102	\$291,411,566	\$465,500,878	2.67

Exhibit I – Deterministic Projection Based on Proposed Suspension <u>Reduced</u> Pursuant to Revenue Procedure 2017-43, Section 4.03

(cont.)

			3. EWL	4. EWL						
			Payments	Payments			7.		9. Resources	Solvency
Plan Year	1. Beginning	2. Employer	Prior	Future	5. Benefit	6.	Investment	8. Ending	(1)+(2)+(3)+(4)-	Ratio
Ending	Assets	Contributions	Wthdrwls	Wthdrwls	Payments	Expenses	Income	Assets	(6)+(7)	(9)/(5)
4/30/2042	\$291,411,566	\$105,000,000	\$0	\$650,000	\$171,396,987	\$6,526,091	\$19,145,627	\$238,284,115	\$409,681,102	2.39
4/30/2043	\$238,284,115	\$105,000,000	\$0	\$650,000	\$168,217,951	\$6,672,928	\$15,274,776	\$184,318,012	\$352,535,963	2.10
4/30/2044	\$184,318,012	\$105,000,000	\$0	\$650,000	\$164,541,804	\$6,823,069	\$11,056,622	\$129,659,761	\$294,201,565	1.79
4/30/2045	\$129,659,761	\$105,000,000	\$0	\$650,000	\$160,672,096	\$6,976,588	\$7,202,211	\$74,863,288	\$235,535,384	1.47
4/30/2046	\$74,863,288	\$105,000,000	\$0	\$650,000	\$156,576,203	\$7,133,561	\$3,345,839	\$20,149,363	\$176,725,566	1.13
4/30/2047	\$20,149,363	\$105,000,000	\$0	\$650,000	\$152,118,905	\$7,294,066	-\$491,445	insolvent	\$118,013,852	0.78

#### Demonstration That the Proposed Suspension Is Not Projected To Materially Exceed the Level Necessary to Avoid Insolvency Based On a <u>Stochastic</u> Projection

As required by Revenue Procedure 2017-43, Section 4.03, the application must include a demonstration utilizing stochastic projections that, if the dollar amount of the proposed suspension for each participant and beneficiary was reduced by the greater of:

- 5% of the reduction in payment proposed for that participant or beneficiary, or
- 2% of that participant's or beneficiary's payment determined without regard to the proposed reduction,

then the Plan would <u>not</u> be reasonably estimated to avoid insolvency.

This Document 11.2 summarizes the results of 2,000 stochastic trials. Each trial consists of a projection of the market value of Plan assets for the plan years ending April 30, 2020 through 2065 assuming implementation of the hypothetical <u>reduced</u> suspension as outlined above.

The probability of maintaining solvency over the extended period is: 44.7%

The 5<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup> and 95<sup>th</sup> percentiles of the projected market value of plan assets are shown below in graphical format in Exhibit I and in tabular format in Exhibit II.

Checklist Item #25 describes the actuarial assumptions and methodology used in the reports filed with this application, as required under Revenue Procedure 2017-43, Section 4.02(3).





Exhibit II – Tabular Representation of Projected Market Value of Plan Assets Recognizing Proposed Suspension <u>Reduced</u> Pursuant to Revenue Procedure 2017-43, Section 4.03 Utilizing Stochastic Projections

Plan Year	Market Value of Plan Assets – 2,000 Trials   5 <sup>th</sup> %-ile 25 <sup>th</sup> %-ile 75 <sup>th</sup> %-ile 95 <sup>th</sup> %-ile							
Ending	5 <sup>th</sup> %-ile	25 <sup>th</sup> %-ile	50 <sup>th</sup> %-ile	95 <sup>th</sup> %-ile				
4/30/2020	\$779,361,598	\$779,361,598	\$779,361,598	\$779,361,598	\$779,361,598			
4/30/2021	\$667,221,293	\$744,715,580	\$802,809,746	\$866,227,689	\$970,217,090			
4/30/2022	\$632,641,472	\$736,376,575	\$823,406,205	\$919,427,703	\$1,085,662,605			
4/30/2023	\$585,002,088	\$720,495,893	\$826,699,083	\$954,508,717	\$1,178,083,420			
4/30/2024	\$550,198,182	\$704,357,664	\$828,415,889	\$979,408,335	\$1,253,992,837			
4/30/2025	\$507,755,048	\$679,790,216	\$831,714,291	\$1,000,701,662	\$1,334,304,495			
4/30/2026	\$468,669,428	\$661,720,973	\$814,072,698	\$1,020,642,190	\$1,419,105,878			
4/30/2027	\$415,873,275	\$632,200,856	\$801,976,862	\$1,029,710,263	\$1,493,739,166			
4/30/2028	\$360,836,916	\$591,764,498	\$797,077,292	\$1,034,322,303	\$1,576,390,147			
4/30/2029	\$312,523,112	\$557,985,109	\$775,151,642	\$1,032,215,181	\$1,637,835,605			
4/30/2030	\$256,018,462	\$508,116,715	\$753,790,843	\$1,055,817,607	\$1,688,928,137			
4/30/2031	\$190,475,901	\$464,144,744	\$730,918,708	\$1,058,451,312	\$1,816,663,049			
4/30/2032	\$119,707,730	\$421,051,807	\$708,415,585	\$1,069,570,717	\$1,932,630,611			
4/30/2033	\$38,396,284	\$373,703,893	\$673,879,421	\$1,068,308,000	\$2,027,686,895			
4/30/2034	insolvent	\$313,114,218	\$646,033,169	\$1,059,638,053	\$2,116,811,425			
4/30/2035		\$258,328,148	\$604,110,161	\$1,072,442,740	\$2,268,534,185			
4/30/2036		\$191,556,039	\$558,487,175	\$1,089,323,638	\$2,401,729,525			
4/30/2037		\$125,240,654	\$518,162,104	\$1,084,101,192	\$2,477,020,331			
4/30/2038		\$47,696,830	\$475,182,616	\$1,085,406,056	\$2,619,529,787			
4/30/2039		insolvent	\$422,135,857	\$1,075,720,092	\$2,827,070,316			
4/30/2040			\$377,616,454	\$1,081,005,881	\$3,018,760,316			
4/30/2041			\$339,382,435	\$1,069,017,082	\$3,068,552,285			
4/30/2042			\$289,304,017	\$1,100,939,875	\$3,206,065,480			
4/30/2043			\$232,957,646	\$1,130,586,803	\$3,395,248,129			
4/30/2044			\$168,993,527	\$1,151,102,570	\$3,680,964,567			
4/30/2045			\$113,258,794	\$1,157,092,776	\$3,786,503,007			
4/30/2046			\$60,194,817	\$1,172,258,405	\$3,998,977,775			
4/30/2047			\$7,936,183	\$1,199,233,635	\$4,353,475,524			
4/30/2048			insolvent	\$1,231,612,371	\$4,664,224,114			
4/30/2049				\$1,264,818,745	\$4,740,007,575			
4/30/2050				\$1,329,156,297	\$5,321,288,629			
4/30/2051				\$1,397,492,609	\$5,975,233,759			
4/30/2052				\$1,460,803,923	\$6,323,552,555			

Exhibit II – Tabular Representation of Projected Market Value of Plan Assets Recognizing Proposed Suspension <u>Reduced</u> Pursuant to Revenue Procedure 2017-43, Section 4.03 Utilizing Stochastic Projections (Cont.)

Plan Year		Market Valu	ue of Plan Asse	ts – 2,000 Trials	
Ending	5 <sup>th</sup> %-ile	25 <sup>th</sup> %-ile	50 <sup>th</sup> %-ile	75 <sup>th</sup> %-ile	95 <sup>th</sup> %-ile
4/30/2053				\$1,560,341,743	\$6,918,272,776
4/30/2054				\$1,686,010,917	\$7,341,272,004
4/30/2055				\$1,843,742,789	\$7,868,883,618
4/30/2056				\$1,921,231,805	\$8,438,496,928
4/30/2057				\$2,048,151,508	\$9,274,204,517
4/30/2058				\$2,176,923,683	\$10,010,024,674
4/30/2059				\$2,376,745,863	\$10,502,519,389
4/30/2060				\$2,536,986,910	\$11,803,045,885
4/30/2061				\$2,798,297,334	\$12,940,112,049
4/30/2062				\$3,038,100,262	\$14,158,770,842
4/30/2063				\$3,230,055,620	\$15,402,914,550
4/30/2064				\$3,421,001,780	\$17,010,926,566
4/30/2065				\$3,679,321,669	\$18,952,717,554

#### The Pension Plan's Demonstration of Equitable Distribution

#### Effect of Proposed Suspension on the Plan in the Aggregate

Exhibit I provides the information on the effect of the suspension required by sub-section 4.04(1)(a) of Revenue Procedure 2017-43 on an aggregate basis.

Exhibit II provides the distribution of participants by benefit reduction percentage on an aggregate basis as required by sub-section 4.04(1)(b) of Revenue Procedure 2017-43.

#### Effect of Proposed Suspension on the Plan on a Group-by-group Basis

Exhibit III provides the information on the effect of the suspension described in sub-section 4.04(1)(a) of Revenue Procedure 2017-43 broken out according to the groupings described in Checklist Item #2, as required by sub-section 4.04(2)(a) of Revenue Procedure 2017-43.

Exhibits IV through XV provide the distribution of participants by benefit reduction percentage described in sub-section 4.04(1)(b) of Revenue Procedure 2017-43 on a group-by-group basis, as required by sub-section 4.04(2)(a) of Revenue Procedure 2017-43. Note that groups A1, C2 and D2 do not include any participants, so <u>there are no exhibits included for these groups</u>.

Please refer to the following table:

Group	Description	Exhibit
A1	Active, pre-5/1/2007 accruals only	n/a
A2	Active, post-5/1/2007 accruals only	IV
A3	Active, pre- and post-5/1/2007 accruals	V
B1	Deferred vested, pre-5/1/2007 accruals only	VI
B2	Deferred vested, post-5/1/2007 accruals only	VII
B3	Deferred vested, pre- and post-5/1/2007 accruals	VIII
C1	Retiree with benefit reduction effective 8/1/2013, pre-5/1/2007 accruals only	IX
C2	Retiree with benefit reduction effective 8/1/2013, post-5/1/2007 accruals only	n/a
C3	Retiree with benefit reduction effective 8/1/2013, pre- and post- 5/1/2007 accruals	х
D1	Beneficiary of the October 2016 disability lawsuit settlement, pre- 5/1/2007 accruals only	ХІ
D2	Beneficiary of the October 2016 disability lawsuit settlement, post- 5/1/2007 accruals only	n/a
D3	Beneficiary of the October 2016 disability lawsuit settlement, pre- and post-5/1/2007 accruals	XII
E1	Retiree not included in a C or D group, pre-5/1/2007 accruals only	XIII
E2	Retiree not included in a C or D group, post-5/1/2007 accruals only	XIV

Group	Description	Exhibit
E3	Retiree not included in a C or D group, pre- and post-5/1/2007 accruals	XV

#### Handling of Non-Participants

Employees who have not yet satisfied the Plan's initial participation requirements have been <u>excluded</u> from this analysis. There were 945 non-participants included in the valuation runs. None of these people had accruals before 5/1/2007 and therefore they are not impacted by the proposed suspension.

#### **Identification of Factors Taken Into Account**

See Application at Section 4.04

## Explanation as to Why No Factors Listed in IRC Section 432(e)(9)(D)(vi)(I) through (XI) Were Taken Into Account

See Application at Section 4.04

#### Relevance of Factors Not Listed in IRC Section 432(e)(9)(D)(vi)(I) through (XI)

See Application at Section 4.04

#### Differences in Treatment Among Groups Result from Reasonable Application of Relevant Factors

See Application at Section 4.04

## Exhibit I –Effect of Suspension – Aggregate Basis

Group	Count	Average Monthly Benefit Before Suspension		Bei	age Monthly nefit After spension	PV	PV Reduction in Benefits <sup>1</sup>	
All	18,392	\$	1,465.71	\$	1,273.31	\$	279,427,436	

<sup>&</sup>lt;sup>1</sup> Estimated using a "blended form" of expected benefit election

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7%
5%
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1%
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%

		Average Monthly Benefit Before	Average Monthly Benefit After	PV Reduction in
Group	Count	Suspension	Suspension	Benefits <sup>2</sup>
A1	0	\$ 0.00	\$ 0.00	\$0
A2	2,077	270.03	270.03	0
A3	2,829	2,794.48	2,500.17	46,047,084
B1	3,603	612.36	462.23	30,992,826
B2	274	145.36	145.36	0
B3	2,217	1,505.65	1,179.66	28,512,599
C1	44	1,563.85	1,401.42	939,537
C2	0	0.00	0.00	0
C3	499	3,909.41	3,495.61	27,571,953
D1	23	1,986.98	1,676.31	689,509
D2	0	0.00	0.00	0
D3	277	2,646.37	2,272.70	9,633,888
E1	5,401	1,319.78	1,189.70	82,162,578
E2	6	126.49	126.49	0
E3	1,142	2,608.97	2,245.11	52,877,462

## Exhibit III – Effect of Suspension – Group-by-group Basis

<sup>&</sup>lt;sup>2</sup> Estimated using a "blended form" of expected benefit election

Benefit Perce			Count	Percentage of Total
N	one		2,077	100.00%
0.001%	to	10%	0	0.00%
10.001%	to	20%	0	0.00%
20.001%	to	30%	0	0.00%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Exhibit IV – Distribution of Participants by Benefit Reduction Percentage – Group A2

Benefit   Perce			Count	Percentage of Total
N	one		5	0.18%
0.001%	to	10%	1,249	44.15%
10.001%	to	20%	1,575	55.67%
20.001%	to	30%	0	0.00%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Exhibit V – Distribution of Participants by Benefit Reduction Percentage – Group A3

Benefit Perce			Count	Percentage of Total
N	one		246	6.83%
0.001%	to	10%	748	20.76%
10.001%	to	20%	316	8.77%
20.001%	to	30%	2,293	63.64%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Exhibit VI – Distribution of Participants by Benefit Reduction Percentage – Group B1

## Exhibit VII – Distribution of Participants by Benefit Reduction Percentage – Group B2

Benefit Perce			Count	Percentage of Total
		se		
N	one		274	100.00%
0.001%	to	10%	0	0.00%
10.001%	to	20%	0	0.00%
20.001%	to	30%	0	0.00%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Benefit Perce			Count	Percentage of Total
N	one		89	4.01%
0.001%	to	10%	283	12.77%
10.001%	to	20%	452	20.39%
20.001%	to	30%	1,393	62.83%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Exhibit VIII – Distribution of Participants by Benefit Reduction Percentage – Group B3

Benefit   Perce			Count	Percentage of Total
N	one		1	2.27%
0.001%	to	10%	5	11.36%
10.001%	to	20%	38	86.37%
20.001%	to	30%	0	0.00%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Exhibit IX – Distribution of Participants by Benefit Reduction Percentage – Group C1

### Exhibit X – Distribution of Participants by Benefit Reduction Percentage – Group C3

Benefit	Redu	ction		Percentage
Perce	entag	ge	Count	of Total
N	one		1	0.20%
0.001%	to	10%	77	15.43%
10.001%	to	20%	421	84.37%
20.001%	to	30%	0	0.00%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Benefit Perce			Count	Percentage of Total
N	one		1	4.35%
0.001%	to	10%	0	0.00%
10.001%	to	20%	22	95.65%
20.001%	to	30%	0	0.00%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Exhibit XI – Distribution of Participants by Benefit Reduction Percentage – Group D1

Benefit Perce			Count	Percentage of Total
N	one		12	4.33%
0.001%	to	10%	6	2.17%
10.001%	to	20%	259	93.50%
20.001%	to	30%	0	0.00%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Exhibit XII – Distribution of Participants by Benefit Reduction Percentage – Group D3

Benefit Perce			Count	Percentage of Total
	one	,	2,306	42.70%
0.001%	to	10%	1,069	19.79%
10.001%	to	20%	2,026	37.51%
20.001%	to	30%	0	0.00%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Exhibit XIII – Distribution of Participants by Benefit Reduction Percentage – Group E1

Benefit Perce			Count	Percentage of Total
None			6	100.00%
0.001%	to	10%	0	0.00%
10.001%	to	20%	0	0.00%
20.001%	to	30%	0	0.00%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Exhibit XIV – Distribution of Participants by Benefit Reduction Percentage – Group E2

Benefit Reduction Percentage			Count	Percentage of Total
None			15	1.31%
0.001%	to	10%	104	9.11%
10.001%	to	20%	1,023	89.58%
20.001%	to	30%	0	0.00%
30.001%	to	40%	0	0.00%
40.001%	to	50%	0	0.00%
50.001%	to	60%	0	0.00%
60.001%	to	70%	0	0.00%
70.001%	to	80%	0	0.00%
80.001%	to	90%	0	0.00%
90.001%	to	100%	0	0.00%

Exhibit XV – Distribution of Participants by Benefit Reduction Percentage – Group E3