

CWA/ITU Negotiated Pension Plan

**Certificate of Actuarial Valuation
as of January 1, 2018**

Produced by Cheiron

December 2018

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**CWA/ITU NEGOTIATED PENSION PLAN
CERTIFICATE OF ACTUARIAL VALUATION AS OF JANUARY 1, 2018**

CERTIFICATION

December 13, 2018

This is to certify that Cheiron, Inc. (“Cheiron”) has prepared an actuarial valuation of the CWA/ITU Negotiated Pension Plan (“Plan”) as of January 1, 2018 in accordance with generally accepted actuarial principles and practices (see 2018 report dated December 7, 2018). It has been prepared at the request of the Board of Trustees to assist in administering the Plan and meeting filing requirements of federal government agencies. This certification includes summary exhibits from the actuarial valuation report provided to the Board of Trustees. Please refer to the 2018 actuarial valuation report for more information and analysis regarding the Plan and its funding. This valuation certification may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

The valuation is based on the assumption that the Plan is qualified as a multiemployer plan for the year and on information supplied by the auditor with respect to contributions and assets and reliance on the Plan Administrator with respect to the participant data. Cheiron does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Cheiron does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results. Adjustments for incomplete or apparently inconsistent data were made as described in Appendix C.

We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Each prescribed assumption for the determination of Current Liability was applied in accordance with applicable law and regulations. In our opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer our best estimate of anticipated experience under the plan.

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**CWA/ITU NEGOTIATED PENSION PLAN
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SECTION I – SUMMARY

Summary of Principal Results	
Participant Counts	1/1/2018
Actives	2,587
Terminated Vesteds	8,231
In Pay Status	<u>17,431</u>
Total	28,249
Financial Information	
Market Value of Assets (MVA)	\$ 653,823,420
Actuarial Value of Assets (AVA)	\$ 653,823,420
Unit Credit Actuarial Liability (PPA Liability)	\$ 951,959,329
Present Value of Accrued Benefits	\$ 951,959,329
Unfunded Actuarial Liability	298,135,909
Funding Ratio (FASB ASC 960)	68.7%
Minimum Funding, and Cash Flows	
Total Normal Cost (including Admin. Expenses)	\$ 4,660,845
ERISA Minimum Funding before Credit Balance	49,700,794
ERISA Funding Deficiency (Beginning of Year)	(117,006,759)
Prior Year Contributions (net from all sources)	\$ 13,866,055
Prior Year Benefit Payments	85,796,534
Prior Year Administrative Expenses	2,325,679
Prior Year Investment Income (net of investment expenses)	76,990,695

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SECTION II – ACCOUNTING DISCLOSURES

Present Value of Accumulated Benefits as of January 1, 2018 In Accordance with FASB ASC Topic 960		
	Amounts	Participants
1. Actuarial Present Value of Vested Benefits		
For Retirees and Beneficiaries	\$ 676,820,331	17,431
Terminated Vesteds	202,149,327	8,231
Active Participants	71,805,622	1,617
Vested Benefits	<u>\$ 950,775,280</u>	<u>27,279</u>
2. Non-vested Benefits	\$ 1,184,049	970
3. Present Value of Expected Administrative Expenses*	\$ 27,087,858	
4. Accumulated Benefits	\$ 979,047,187	28,249
5. Market Value of Assets	\$ 653,823,420	
6. Funded Ratios		
Vested Benefits	68.8%	
Accumulated Benefits	66.8%	
Reconciliation of Present Value of Accumulated Benefits		
1. Actuarial Present Value at Start of Prior Year (without Administrative Expenses)	\$ 969,638,153	
2. Increase / (decrease) over Prior Year due to:		
Accrual of Benefits	\$ 2,361,417	
Benefit Payments	(85,796,534)	
Interest Accrual	69,740,761	
Plan Amendment	0	
Assumption Change	0	
Experience (Gains)/Losses	(3,984,468)	
Total	<u>\$ (17,678,824)</u>	
3. Actuarial Present Value at End of Prior Year	\$ 951,959,329	
4. Present Value of Expected Administrative Expenses*	\$ 27,087,858	
5. Actuarial Present Value at End of Prior Year (with Administrative Expenses)	\$ 979,047,187	

* The present value of expected administrative expenses is estimated to be 2.85% of the Accrued Benefits liabilities.

**CWA/ITU NEGOTIATED PENSION PLAN
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SECTION III – CURRENT LIABILITY

Liabilities/Net Surplus (Unfunded)	
	1/1/2018
Current Liability (RPA '94)	\$ 1,500,461,756
Market Value of Assets	653,823,420
Net Surplus (Unfunded)	\$ (846,638,336)
Percent Funded	43.6%
RPA '94 Prescribed Interest Rate	2.98%

Allocation of Current Liability by Type

The Plan's participants may qualify for a benefit on death, termination, or disability as well as on retirement. The value of the liabilities arising from each of these sources is shown in the following table.

Allocation of Liabilities by Type January 1, 2018					
Benefit Type	Retirement	Termination	Death	Disability	Total
RPA Current Liability Normal Cost	\$ 3,708,436	\$ 678,943	\$ 76,735	\$ 802,612	\$ 5,266,726
RPA Current Liability					
Actives	\$ 115,105,891	\$ 9,908,654	\$ 1,802,626	\$ 22,484,009	\$ 149,301,180
Terminated Vesteds	0	407,091,850	0	0	407,091,850
Retirees	771,573,531	0	0	65,834,697	837,408,228
Beneficiaries	0	0	106,660,498	0	106,660,498
Total	\$ 886,679,422	\$ 417,000,504	\$ 108,463,124	\$ 88,318,706	\$ 1,500,461,756
Vested RPA Current Liability					
Actives	\$ 50,667,896	\$ 73,682,536	\$ 2,869,363	\$ 19,659,398	\$ 146,879,193
Terminated Vesteds	0	407,091,850	0	0	407,091,850
Retirees	771,573,531	0	0	65,834,697	837,408,228
Beneficiaries	0	0	106,660,498	0	106,660,498
Total	\$ 822,241,427	\$ 480,774,386	\$ 109,529,861	\$ 85,494,095	\$ 1,498,039,769

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SECTION IV – INFORMATION ON PLAN STATUS

As of January 1, 2018, the Plan was classified as being in critical and declining status under Code Section 432 as added by the Pension Protection Act of 2006 and amended by the Multiemployer Pension Reform Act of 2014. This determination was made on the basis of the following:

- The Plan was in critical and declining status for 2017;
- The Plan has an existing accumulated funding deficiency for the 2018 plan year, without regard to the use of the shortfall funding method but taking into account any extensions of the amortization periods under section 431(d) of the Code; and
- The Plan is projected to run out of assets during the 2030 plan year.

The rehabilitation period began January 1, 2012 and ends December 31, 2021. The Plan is not projected to emerge from critical status by the end of its Rehabilitation Period. However, the Trustees adopted a rehabilitation plan to forestall insolvency (within the meaning of ERISA Section 4245) as they have determined that based on reasonable actuarial assumptions and upon exhaustion of all reasonable measures, the Plan cannot be reasonably expected to emerge from critical status by the end of its rehabilitation period. To that end, the Plan was certified as making scheduled progress in meeting the requirements of its rehabilitation plan.

A certification of the Plan's status was submitted to the Board of Trustees and Secretary of the Treasury on March 30, 2018.

**CWA/ITU NEGOTIATED PENSION PLAN
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SECTION V – CONTRIBUTIONS

Funding Standard Account for 2018 Plan Year		
1. Charges for Plan Year		2018
(a) Prior Year Funding Deficiency	\$	117,006,759
(b) Normal Cost Plus Expenses		4,660,845
(c) Amortization Charges		71,323,722
(d) Interest on (a), (b), and (c) to Year End		14,474,349
(e) Total Charges	\$	207,465,675
2. Credits for Plan Year		
(a) Contributions and WL Payments (<i>Expected</i>)		<i>12,456,370</i>
(b) Amortization Credits		29,751,270
(c) Interest on (a) and (b) to Year End		<i>2,690,015</i>
(d) Full Funding Limit Credit		0
(e) Total Credits	\$	<i>44,897,655</i>
3. Funding Deficiency at End of Year [2.(e) – 1.(e)]	\$	<i>(162,568,020)</i>

**CWA/ITU NEGOTIATED PENSION PLAN
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SECTION V – CONTRIBUTIONS

Schedule of Amortization Charges Required for Minimum Required Contribution As of January 1, 2018					
Type of Base	Date Established	Initial Amortization Years	1/1/2018 Outstanding Balance	Remaining Amortization Years	Beginning of Year Amortization Amount
1. Combined Base	1/1/2006	15.66	\$ 66,980,519	3.66	\$ 20,092,014
2. Plan Amendment	1/1/2007	30.00	540,701	19.00	50,505
3. Change in Assumptions	1/1/2007	30.00	20,929,093	19.00	1,954,892
4. Plan Amendment	1/1/2008	15.00	422,627	5.00	97,170
5. Plan Amendment	1/1/2009	15.00	179,115	6.00	35,498
6. Actuarial Loss	1/1/2009	15.00	111,258,575	6.00	22,049,368
7. Actuarial Loss	1/1/2011	15.00	22,948,382	8.00	3,644,566
8. Plan Amendment	1/1/2012	15.00	189,024	9.00	27,565
9. Change in Assumptions	1/1/2012	15.00	19,953,102	9.00	2,909,759
10. Actuarial Loss	1/1/2012	15.00	46,956,149	9.00	6,847,611
11. Plan Amendment	1/1/2013	15.00	217,163	10.00	29,430
12. Actuarial Loss	1/1/2013	15.00	40,587,497	10.00	5,500,490
13. Plan Amendment	1/1/2014	15.00	141,139	11.00	17,947
14. Change in Assumptions	1/1/2015	15.00	36,912,487	12.00	4,439,038
15. Change in Asset Method	1/1/2017	10.00	24,877,395	9.00	3,627,869
Total Charges			\$ 393,092,968		\$ 71,323,722

**CWA/ITU NEGOTIATED PENSION PLAN
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SECTION V – CONTRIBUTIONS

Schedule of Amortization Credits Required for Minimum Required Contribution As of January 1, 2018					
Type of Base	Date Established	Initial Amortization Years	1/1/2018 Outstanding Balance	Remaining Amortization Years	Beginning of Year Amortization Amount
1. Actuarial Gain	1/1/2007	15.00	\$ 1,864,020	4.00	\$ 517,707
2. Actuarial Gain	1/1/2008	15.00	338,253	5.00	77,772
3. Plan Amendment	5/1/2009	15.00	23,616,386	6.33	4,483,755
4. Plan Amendment	1/1/2010	15.00	83,462	7.00	14,658
5. Actuarial Gain	1/1/2010	15.00	31,515,994	7.00	5,535,098
6. Plan Amendment	1/1/2011	15.00	23,586,946	8.00	3,745,980
7. Actuarial Gain	1/1/2014	15.00	32,994,620	11.00	4,195,611
8. Actuarial Gain	1/1/2015	15.00	20,653,529	12.00	2,483,761
9. Plan Amendment	1/1/2016	15.00	368,371	13.00	42,171
10. Actuarial Gain	1/1/2016	15.00	5,489,761	13.00	628,458
11. Change in Assumptions	1/1/2016	15.00	7,991,336	13.00	914,835
12. Actuarial Gain	1/1/2017	15.00	5,145,644	14.00	563,854
13. Change in Assumptions	1/1/2017	15.00	14,916,098	14.00	1,634,490
14. Change in Funding Method	1/1/2017	10.00	8,394,810	9.00	1,224,215
15. Actuarial Gain	1/1/2018	15.00	35,004,588	15.00	3,688,905
Total Credits			\$ 211,963,818		\$ 29,751,270
Net Charge			\$ 181,129,150		\$ 41,572,452

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SECTION VI – EXPECTED BENEFIT PAYMENTS

Plan Year	Expected Annual Benefit Payments
2018	\$ 86,935,122
2019	86,983,012
2020	87,225,274
2021	87,005,660
2022	86,776,539
2023	86,173,346
2024	85,414,572
2025	84,505,927
2026	83,190,127
2027	81,683,265

Expected Annual Benefit Payments are payable mid-year and do not include additional benefit accruals, new hires or expected administrative expenses.

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APPENDIX A – MEMBERSHIP INFORMATION

Distribution of Active Members By Age and Service as of January 1, 2018											
Counts By Age/Service											
Age	Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	14	69	6	0	0	0	0	0	0	0	89
25 to 29	21	144	44	0	0	0	0	0	0	0	209
30 to 34	9	104	50	29	7	0	0	0	0	0	199
35 to 39	12	101	45	38	21	2	0	0	0	0	219
40 to 44	9	93	54	32	38	11	1	0	0	0	238
45 to 49	16	96	58	55	54	41	17	3	0	0	340
50 to 54	2	89	49	55	46	31	14	25	4	0	315
55 to 59	6	84	56	58	59	29	28	34	35	32	421
60 to 64	6	56	41	49	49	23	21	35	27	77	384
65 to 69	0	17	28	18	28	8	5	8	8	19	139
70 & up	0	13	6	5	5	1	0	1	0	3	34
Total	95	866	437	339	307	146	86	106	74	131	2,587

Average Age = 47.9

Average Service = 12.1

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APPENDIX A – MEMBERSHIP INFORMATION

Age Distribution of Inactive Participants								
Participants Entitled to Future Benefits as of January 1, 2018								
	Terminated Vested		Terminal Disability with Deferred Benefits		Surviving Spouses and Beneficiaries with Deferred Benefits		Total	
Age	Number	Average Monthly Benefit*	Number	Average Monthly Benefit*	Number	Average Monthly Benefit*	Number	Average Monthly Benefit*
Under 30	40	\$ 34	0	\$ 0	5	N/A	45	\$ 85
30-34	133	107	0	0	0	\$ 0	133	107
35-39	309	214	0	0	4	N/A	313	216
40-44	513	330	0	0	4	N/A	517	330
45-49	843	372	2	N/A	11	N/A	856	368
50-54	1,377	408	7	N/A	15	N/A	1,399	404
55-59	1,972	476	28	96	25	255	2,025	468
60-64	1,806	458	47	154	24	190	1,877	447
65 & Over	895	225	33	100	6	N/A	934	222
Missing	125	58	0	0	7	N/A	132	79
Total	8,013	\$ 387	117	\$ 120	101	\$ 255	8,231	\$ 381

* Averages are not shown for groups with less than 20 participants.

**CWA/ITU NEGOTIATED PENSION PLAN
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APPENDIX A – MEMBERSHIP INFORMATION

Age Distribution of Inactive Participants									
Pensioners and Beneficiaries Receiving Benefits as of January 1, 2018									
Disability Retirements			Normal, Early Deferred Vested, & QDRO Retirements			Surviving Spouses and Beneficiaries Receiving Benefits			Total
Age	Number	Average Monthly Benefit*	Number	Average Monthly Benefit*		Number	Average Monthly Benefit*	Number	Average Monthly Benefit*
Under 55	10	N/A	1	N/A		48	\$ 404	59	\$ 439
55-59	19	N/A	1	N/A		34	312	54	425
60-64	80	\$ 626	146	\$ 962		60	367	286	743
65-69	194	520	1,717	534		177	374	2,088	519
70-74	204	437	2,471	530		359	368	3,034	505
75-79	188	454	3,033	473		605	362	3,826	454
80 & Over	291	307	5,568	345		2,219	215	8,078	308
Missing	0	0	1	N/A		5	N/A	6	N/A
Total	986	\$ 440	12,938	\$ 442		3,507	\$ 270	17,431	\$ 407

* Averages are not shown for groups with less than 20 participants.

**CWA/ITU NEGOTIATED PENSION PLAN
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APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

This summary of plan provisions provides an overview of the major provisions of the pension plan used in the actuarial valuation. It is not intended to replace the more precise language of the plan document, and if there is any difference between the description of the plan herein and the actual text of the plan document, the plan document will govern.

1. Plan Year

January 1 through December 31

2. Pension Credit Year

January 1 through December 31

3. Normal Pension

Age Requirement: 65

Service Requirement: 10 years of service, or 5 years of service including one hour of service on January 1, 1989 or later.

Amount: 1.7% of all monies contributed to the plan prior to January 1, 1977, 1% of all monies contributed to the plan from January 1, 1977 to December 31, 1983, 1.3% of all monies contributed to the plan from January 1, 1984 to June 30, 1985, 1.7% of all monies contributed to the plan from July 1, 1985 to June 30, 1987, 3.0% of all monies contributed to the plan from July 1, 1987 to December 31, 1992, 3.0% of all monies credited to the Participant's account from January 1, 1993 to June 30, 1998, 3.25% of all monies credited to the Participant's account from July 1, 1998 to December 31, 2002, 2.50% of all monies credited to the Participant's account from January 1, 2003 to April 30, 2009 and 1.00% of all monies credited to the Participants' account on or after May 1, 2009.

Plus 1% of the average monthly contributions per year of past service from January 1, 1968 to December 31, 1976.

In addition, all benefits accrued through December 31, 1997 are increased by 12% and all benefits accrued through December 31, 1998 are increased by 10%.

4. Early Retirement

Age Requirement: 62

Service Requirement: 20 years of service (5 years of service for disabled participants)

Amount: Normal benefit accrued, reduced as follows:

Commencement Age	Reduction Factor
64	.9016
63	.8146
62	.7375

5. Vesting

Age Requirement: None

Service Requirement: 10 years of service, or 5 years of service including one hour of service on January 1, 1989 or later.

Normal Retirement Age: 65

**CWA/ITU NEGOTIATED PENSION PLAN
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APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

6. Terminal Disability Lump Sum Benefit

Age Requirement: None

Service Requirement: Participants who are vested, have been awarded a Social Security Disability Pension with a date of entitlement prior to May 1, 2009, and provided two written statements from physicians stating that the disability will lead to the Participant's death within one year of application.

Amount: A lump sum equal to the greater of 36 times the monthly Normal Pension Benefit or 100% of employer contributions. If the Participant is still alive at his Normal Retirement Age, he will receive a monthly pension equal to his Normal Pension Benefit minus the actuarial equivalent of the lump sum received.

7. Pre-Retirement Death Benefit

Age Requirement: None

Service Requirement: Participants who are vested and have had at least \$250 of contributions made on their behalf.

Amount: Beneficiaries of married employees who die prior to retirement will receive a benefit under Option B on the date that the participant would have been eligible for a pension benefit. Beneficiaries of unmarried participants receive 100% of employer contributions payable in 60 equal monthly installments commencing at the participant's earliest retirement age.

8. Post-Retirement Death Benefit

Husband and Wife: If married, pension benefits are paid in the form of a 50% joint and survivor annuity (Option B), unless this form is rejected by employee and spouse. If not rejected, the benefit amount otherwise payable is reduced to reflect the joint and survivor coverage. If Option B has been rejected by employee and spouse or is not applicable, benefits are payable for the life of the employee without reduction, or in any other available optional form elected by the employee in an actuarially equivalent amount.

9. Optional Forms of Pension

- Life only
- 100% joint and survivor (Option A)
- 50% joint and survivor (Option B)
- Life with 10-year certain (Option C)
- 75% joint and survivor (Option D)

10. Participation

The earlier of the first day of the month following the month:

- i) during which the total employer contributions exceed \$250, provided contributions were made during each of twelve or more calendar months, or
- ii) during which the employee worked 1,000 hours during any 12-month consecutive period.

**CWA/ITU NEGOTIATED PENSION PLAN
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APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

11. Benefit Credit

Years of Past Service: The number of months prior to the employee's Applicable Effective Date provided such period of employment began prior to January 1, 1967, divided by 12.

Years of Future Service: In the fiscal year in which the Applicable Effective Date falls, an employee will be credited with the number of months between the Applicable Effective Date and the end of the fiscal year. Thereafter, a year of future service shall be granted at the rate of one year for each fiscal year during which employer contributions are made on his behalf or the Participant completed 1,000 hours of service.

12. Vesting Credit

The number of years of past service credit plus future service credit as outlined above.

13. Contribution Rate

Varies by employer based on rate per shift or percent of salary.

14. Changes in Plan Provisions since Last Valuation

None

**CWA/ITU NEGOTIATED PENSION PLAN
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APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Methods

Changes in Method since Last Valuation

Funding Method: Unit Credit Cost Method

None

The funding method for the valuation of liabilities used for this valuation is the Unit Credit method. This is one of a family of valuation methods known as accrued benefits methods. The chief characteristic of an accrued benefits method is that the funding pattern follows the pattern of benefit accrual.

Under the Unit Credit Funding Method, the normal cost for each participant is the present value of the benefit expected to be earned in the upcoming plan year. The Actuarial Liability, Accrued Liability, Present Value of Accrued Benefits, and the Present Value of Accumulated Benefits are the present value of each participant's current accrued benefit as of the valuation date.

One of the significant effects of this funding method is that, depending on the demographics of the population, the unit credit method tends to produce lower costs in the early years. There is a possibility that as the population ages, the annual cost could increase over time.

Asset Valuation Method

The Actuarial Value of Assets is equal to the Market Value of Assets.

**CWA/ITU NEGOTIATED PENSION PLAN
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APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Assumptions

1. Valuation Date

January 1, 2018

2. Rates of Investment Return

7.50% for funding and disclosure purposes

5.00% for Withdrawal Liability purposes

2.98% for determining RPA '94 current liability

All investment returns are net of investment expenses.

3. Mortality

Funding

Healthy Lives: RP-2014 Healthy Blue Collar Mortality Table, with full generational projection using Scale MP-2016.

Disabled Lives: RP-2014 Disabled Retiree Mortality Table, with full generational projection using Scale MP-2016.

In accordance with Actuarial Standard of Practice No. 35, we have considered the effect of mortality improvement prior to and subsequent to the measurement date in developing this assumption.

Withdrawal Liability

Same as those used for Funding.

RPA '94 Current Liability

IRS 2018 Static Mortality Table.

4. Rates of Turnover

Terminations of employment for reasons other than death, disability or retirement are assumed to be in accordance with annual rates as shown below for illustrative ages.

Age	Rate (%)
20	11.91
25	11.59
30	10.83
35	9.41
40	7.73
45	5.96
50	3.84
55	1.41
60	0.14

Turnover rates do not apply at or beyond early retirement age.

5. Rates of Disability

Illustrative rates of disablement are shown below:

Age	Rate (%)
20	0.08
25	0.08
30	0.08
35	0.09
40	0.14
45	0.27
50	0.60
55	1.28
60	2.61

**CWA/ITU NEGOTIATED PENSION PLAN
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APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

6. Rates of Retirement

Age*	Rate (%)
62	30
63-64	15
65-66	30
67-68	25
69-70	20
71	75
72	100

**If eligible*

7. Rates of Retirement for Inactive Vested Participants

Age*	Rate (%)
62	50
63-64	25
65	55
66	25
67-71	10
72	100

**If eligible*

8. Delayed Retirement Factors

Inactive vested participants who are assumed to commence receipt of benefits after attaining normal retirement age qualify for delayed retirement increases.

9. Inactive Vested Participants

It is assumed that 90% of inactive participants past their required beginning date are either deceased or will not collect a benefit from this Plan.

Inactive vested participants who are assumed to commence receipt of benefits after attaining normal retirement age qualify for delayed retirement increases of 1% per month beyond normal retirement age.

10. Definition of Active

Employees for whom contributions were made for 50 or more shifts, excluding those who have retired as of the valuation date and those who worked for an employer that withdrew prior to the valuation date.

11. Future Benefit Accrual

Same as experienced during the Plan Year preceding the valuation date.

12. Family Composition

65% assumed married with the male spouse three years older than his wife.

13. Form of Benefit

65% of the married population is assumed to elect the 100% joint and survivor form of payment. The remaining population is assumed to elect the life form of payment.

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APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

14. Unknown Data for Participants

Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.

15. Administrative Expenses

\$2,497,000, payable mid-year, for the year beginning January 1, 2018 (or \$2,408,321 payable at the beginning of the year).

16. Changes in Assumptions since Last Valuation

- The RPA '94 current liability interest rate was changed from 3.05% to 2.98% to comply with appropriate guidance and remains within the required corridor as prescribed by the IRS, in accordance with §412(l)(7)(C) of the Internal Revenue Code.
- The mortality table used to determine RPA '94 current liability is the static mortality table as described under Regulation 1.430(h)(3)-1(a)(3). The 2017 table was updated to 2018 in accordance with Federal Document 2017-21485.

17. Justification of Assumptions

Economic

In accordance with Actuarial Standard of Practice No. 27, the justification for 7.50% discount rate is based on the Trustees risk preference, the Plan's current asset allocation, and the investment managers capital market outlook.

Demographic

In accordance with Actuarial Standard of Practice No. 35, the demographic assumptions used in this report were originally from the prior actuary's best estimates of demographic experience. These assumptions have been checked against the sources of liability gains and losses resulting from this valuation and are not producing significant deviations from actual plan experience. An experience study will be performed once a sufficient amount of recent data has been accumulated.

For purposes of calculating Current Liability per IRC §431(c)(6)-1, the static mortality table as described under Regulation §1.430(h)(3)-1(a)(3) was used.