



CWA/ITU Negotiated Pension Plan

Certificate of Actuarial Valuation as of January 1, 2020

Produced by Cheiron

November 2020

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CERTIFICATION

November 4, 2020

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, 2020 in accordance with generally accepted actuarial principles and practices (see 2020 report dated November 3,, 2020). 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 2020 actuarial valuation report for more information about the Plan, its funding, and an assessment and disclosure of risk. This certification may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety.

The results shown may not be applicable for other purposes. Future results may differ significantly from the results presented in this certification due to such factors as the following: plan experience differing from that anticipated by the assumptions (e.g. COVID-19); changes in assumptions; and changes in Plan provisions or applicable law.

The valuation assumes that the Plan is qualified as a multiemployer plan for the year and is based on financial 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. 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.

Christian Benjaminson, FSA, EA, MAAA

Denjaminson

Principal Consulting Actuary Enrolled Actuary No. 20-07015 Greg Reardon, FSA, EA, MAAA Principal Consulting Actuary Enrolled Actuary No. 20-06866



SECTION I – SUMMARY

Summary of Principal Results	
Participant Counts	1/1/2020
Actives	2,403
Terminated Vesteds	7,557
In Pay Status	 16,480
Total	26,440
Financial Information	
Market Value of Assets (MVA)	\$ 576,220,426
Actuarial Value of Assets (AVA)	\$ 576,220,426
Unit Credit Actuarial Liability (PPA Liability)	\$ 1,041,618,367
Unfunded Actuarial Liability (AVA Basis)	465,397,941
Funding Ratio (AVA Basis - PPA Liability)	55.3%
Accumulated Benefits (FASB ASC 960)	\$ 1,073,647,486
Unfunded Actuarial Liability (MVA Basis)	497,427,060
Funding Ratio (MVA Basis - FASB ASC 960)	53.7%
Minimum Funding and Cash Flows	
Total Normal Cost (including Admin. Expenses)	\$ 5,231,479
ERISA Minimum Funding before Funding Deficiency	63,071,251
ERISA Funding Deficiency (Beginning of Year)	(217,164,323)
Prior Year Contributions (net from all sources)	\$ 16,458,679
Prior Year Benefit Payments	84,397,269
Prior Year Administrative Expenses	2,430,248
Prior Year Investment Income (net of investment expenses)	96,238,902



SECTION II – ACCOUNTING DISCLOSURES

Present Value of Accumulated Ber In Accordance with FASI		2020	
Actuarial Present Value of Vested Benefits	Amounts	Par	ticipants
For Retirees and Beneficiaries	\$ 721,944,785		16,480
Terminated Vesteds	238,379,168		7,557
Active Participants	80,112,489		1,494
Vested Benefits	\$ 1,040,436,442		25,531
2. Non-vested Benefits	\$ 1,181,925		909
3. Present Value of Expected Administrative Expenses*	\$ 32,029,119		
4. Accumulated Benefits	\$ 1,073,647,486		26,440
5. Market Value of Assets	\$ 576,220,426		
6. Funded Ratios Vested Benefits (without Administrative Expenses) Accumulated Benefits (with Administrative Expenses)	55.4% 53.7%		
Reconciliation of Present Value	of Accumulated Benefi	its	
1. Actuarial Present Value at Start of Prior Year (without Ad	ministrative Expenses)	\$ 995,	832,869
2. Increase / (decrease) over Prior Year due to:			
Accrual of Benefits		\$ 2,	523,423
Benefit Payments		(84,	397,269
Interest Accrual		64,	587,152
Plan Amendment			0
Assumption Change			877,089
Experience (Gains)/Losses			804,897
Total		\$ 45,	785,498
3. Actuarial Present Value at End of Prior Year		\$ 1,041,	618,367
4. Present Value of Expected Administrative Expenses*		\$ 32,	029,119
5. Actuarial Present Value at End of Prior Year (with Admin	istrative Expenses)	\$ 1,073,	647,486

^{*} The present value of expected administrative expenses is estimated to be 3.07% of the Accrued Benefits liabilities.



SECTION III – CURRENT LIABILITY

Liabilities/Net Surplus (Unfunded)									
		1/1/2020							
Current Liability (RPA '94)	\$	1,417,648,752							
Market Value of Assets		576,220,426							
Net Surplus (Unfunded)	\$	(841,428,326)							
Percent Funded		40.6%							
RPA '94 Prescribed Interest Rate		2.95%							

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, 2020														
Benefit Type	R	letirement	Τ	Cermination		Death		Disability		Total				
RPA Current Liability Normal Cost	\$	3,398,906	\$	777,362	\$	72,812	\$	723,282	\$	4,972,362				
RPA Current Liability														
Actives	\$	103,138,057	\$	9,018,047	\$	1,649,768	\$	18,413,604	\$	132,219,476				
Terminated Vesteds		0		379,901,709		7,557,733		1,156,782		388,616,224				
Retirees and Beneficiaries		737,141,350		0		102,395,632		57,276,070		896,813,052				
Total	\$	840,279,407	\$	388,919,756	\$	111,603,133	\$	76,846,456	\$	1,417,648,752				
Vested RPA Current Liability														
Actives	\$	44,222,273	\$	67,369,767	\$	1,616,452	\$	18,058,196	\$	131,266,688				
Terminated Vesteds		0		379,901,709		7,557,733		1,156,782		388,616,224				
Retirees and Beneficiaries		737,141,350		0		102,395,632		57,276,070		896,813,052				
Total	\$	781,363,623	\$	447,271,476	\$	111,569,817	\$	76,491,048	\$	1,416,695,964				



SECTION IV – INFORMATION ON PLAN STATUS

As of January 1, 2020, 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 2019;
- The Plan has an accumulated Funding Deficiency for the 2020 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 2031 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, 2020.



SECTION V – CONTRIBUTIONS

Funding Standard Account for 2020 Plan	Year	•
1. Charges for Plan Year		2020
(a) Prior Year Funding Deficiency	\$	217,164,323
(b) Normal Cost Plus Expenses		5,231,479
(c) Amortization Charges		89,142,792
(d) Interest on (a), (b), and (c) to Year End		18,692,316
(e) Total Charges	\$	330,230,910
2. Credits for Plan Year		
(a) Contributions and WL Payments (Expected)		13,486,446
(b) Amortization Credits		34,873,091
(c) Interest on (a) and (b) to Year End		2,491,085
(d) Full Funding Limit Credit		0
(e) Total Credits	\$	50,850,622
3. Funding Deficiency at End of Year [2.(e) – 1.(e)]	\$	(279,380,288)



SECTION V – CONTRIBUTIONS

Schedule of Amortization Charges Required for Minimum Required Contribution As of January 1, 2020										
Type of Base	Date Established	Initial Amortization	1/1/2020 Outstanding Balance	Remaining Amortization Years	Beginning of Year Amortization Amount					
1. Combined Base	1/1/2006	15.66	\$ 32,478,370	1.66	\$ 19,935,246					
2. Plan Amendment	1/1/2007	30.00	511,086	17.00	46,019					
3. Change in Assumptions	1/1/2007	30.00	19,782,773	17.00	1,781,286					
4. Plan Amendment	1/1/2008	15.00	270,774	3.00	95,565					
5. Plan Amendment	1/1/2009	15.00	127,407	4.00	34,687					
6. Actuarial Loss	1/1/2009	15.00	79,140,396	4.00	21,546,458					
7. Actuarial Loss	1/1/2011	15.00	18,335,303	6.00	3,517,656					
8. Plan Amendment	1/1/2012	15.00	156,498	7.00	26,447					
9. Change in Assumptions	1/1/2012	15.00	16,519,685	7.00	2,791,749					
10. Actuarial Loss	1/1/2012	15.00	38,876,200	7.00	6,569,895					
11. Plan Amendment	1/1/2013	15.00	184,789	8.00	28,073					
12. Actuarial Loss	1/1/2013	15.00	34,536,665	8.00	5,246,834					
13. Plan Amendment	1/1/2014	15.00	122,733	9.00	17,023					
14. Change in Assumptions	1/1/2015	15.00	32,667,762	10.00	4,187,266					
15. Change in Asset Method	1/1/2017	10.00	20,596,632	7.00	3,480,734					
16. Actuarial Loss	1/1/2019	15.00	70,791,366	14.00	7,184,984					
17. Change in Assumptions	1/1/2019	15.00	59,703,807	14.00	6,059,650					
18. Change in Assumptions	1/1/2020	15.00	67,877,089	15.00	6,593,220					
Total Charges			\$ 492,679,335		\$ 89,142,792					



SECTION V – CONTRIBUTIONS

Schedule of An	nortization Credit As	s Required for of January 1, 2	and the second s	red Contribution	on	
Type of Base	Date Established	Initial Amortization	1/1/2020 Outstanding Balance	Remaining Amortization Years		nning of Year nortization Amount
1. Actuarial Gain	1/1/2007	15.00	\$ 996,004	2.00	\$	512,507
2. Actuarial Gain	1/1/2008	15.00	216,715	3.00		76,486
3. Plan Amendment	5/1/2009	15.00	17,236,353	4.33		4,372,281
4. Plan Amendment	1/1/2010	15.00	63,559	5.00		14,235
5. Actuarial Gain	1/1/2010	15.00	24,000,364	5.00		5,375,094
6. Plan Amendment	1/1/2011	15.00	18,845,504	6.00		3,615,539
7. Actuarial Gain	1/1/2014	15.00	28,691,607	9.00		3,979,532
8. Actuarial Gain	1/1/2015	15.00	18,278,492	10.00		2,342,888
9. Plan Amendment	1/1/2016	15.00	330,772	11.00		39,566
10. Actuarial Gain	1/1/2016	15.00	4,929,436	11.00		589,639
11. Change in Assumptions	1/1/2016	15.00	7,175,682	11.00		858,326
12. Actuarial Gain	1/1/2017	15.00	4,676,882	12.00		526,268
13. Change in Assumptions	1/1/2017	15.00	13,557,260	12.00		1,525,537
14. Change in Funding Method	1/1/2017	10.00	6,950,278	7.00		1,174,564
15. Actuarial Gain	1/1/2018	15.00	32,144,862	13.00		3,425,554
16. Actuarial Gain	1/1/2020	15.00	66,351,947	15.00		6,445,075
Total Credits			\$ 244,445,717		\$	34,873,091
Net Charge			\$ 248,233,618		\$	54,269,701



SECTION VI – EXPECTED BENEFIT PAYMENTS

Plan Year	Expected Annual Benefit Payments
2020	\$ 84,857,396
2021	84,487,445
2022	84,343,467
2023	83,909,041
2024	83,382,327
2025	82,819,034
2026	81,822,072
2027	80,836,698
2028	79,446,817
2029	77,817,217

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



APPENDIX A – MEMBERSHIP INFORMATION

	Distribution of Active Members By Age and Service as of January 1, 2020														
	Counts By Age/Service														
	Service														
Age	Age 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	12	66	6	0	0	0	0	0	0	0	84				
25 to 29	16	120	43	2	0	0	0	0	0	0	181				
30 to 34	13	126	54	18	0	0	0	0	0	0	211				
35 to 39	12	91	50	25	22	0	0	0	0	0	200				
40 to 44	14	99	59	30	36	7	0	0	0	0	245				
45 to 49	8	88	57	43	39	36	9	2	0	0	282				
50 to 54	5	73	53	44	40	42	14	17	5	0	293				
55 to 59	11	83	53	47	52	45	15	25	23	7	361				
60 to 64	2	41	45	48	40	30	15	34	29	87	371				
65 to 69	2	10	25	21	31	13	5	7	5	21	140				
70 & up	0	11	11	2	3	2	1	1	1	3	35				
Total	95	808	456	280	263	175	59	86	63	118	2,403				

Average Age = 48.0

Average Service = 11.8



APPENDIX A – MEMBERSHIP INFORMATION

	Age Distribution of Inactive Participants Participants Entitled to Future Benefits as of January 1, 2020														
	Surviving Spouses														
Terminated Terminal Disability with and Beneficiaries with															
	Ves	teds	Deferre	d Benefits	Deferre	d Benefits	T	otal							
		Average		Average		Average		Average							
Age	Number	Monthly	Number	Monthly	Number	Monthly	Number	Monthly							
		Benefit*		Benefit*		Benefit*		Benefit*							
Under 30	32	\$ 42	0	\$ 0	19	N/A	51	\$ 127							
30-34	127	89	0	0	1	N/A	128	88							
35-39	264	160	0	0	5	N/A	269	160							
40-44	442	316	0	0	2	N/A	444	315							
45-49	741	338	0	0	13	N/A	754	336							
50-54	1,183	377	6	N/A	48	236	1,237	370							
55-59	1,820	455	15	N/A	31	194	1,866	447							
60-64	1,883	449	37	129	38	248	1,958	439							
65 & Over	796	249	27	243											
Total	7,288	\$ 379	85	\$ 103	184	\$ 229	7,557	\$ 372							

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



APPENDIX A – MEMBERSHIP INFORMATION

	Age Distribution of Inactive Participants Pensioners and Beneficiaries Receiving Benefits as of January 1, 2020														
				Nor	mal, Ea	rly	Surviv	ing Spo	uses						
	Dis	ability		Defer	red Ves	sted,	and B	eneficia	ries						
	Retin	rements		& QDR	O Retir	ements	Receiv	ing Ber	efits		Total				
		Aver	rage		A	verage		Av	verage	<u> </u>	A	verage			
Age	Number	Mon	thly	Number	M	lonthly	Number	M	onthly	Number	M	Ionthly			
		Bene	:fit*		В	enefit*		Ве	nefit*		В	enefit*			
Under 55	4		N/A	1		N/A	61	\$	319	66	\$	346			
55-59	14		N/A	6		N/A	28		327	48		413			
60-64	78	\$	507	149	\$	987	82		325	309		690			
65-69	164		545	1,553		568	147		364	1,864		550			
70-74	196		450	2,372		513	335		368	2,903		492			
75-79	178		470	2,712		492	567		385	3,457		473			
80 & Over	257		336	5,351	,351 375		2,225		240	7,833		335			
Total	891	\$	449	12,144	\$	460	3,445	\$	286	16,480	\$	423			

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



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



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.



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 hour, shift, or percent of salary.

14. Changes in Plan Provisions since Last Valuation

None



APPENDIX C – ACTUARIAL ASSUMPTIONS AND MEHODS

A. Actuarial Assumptions

1. Valuation Date

January 1, 2020

2. Investment Return (or Discount Rate)

6.00% for funding and ASC 960 disclosure purposes

5.00% for Withdrawal Liability purposes

2.95% 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 2020 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



APPENDIX C – ACTUARIAL ASSUMPTIONS AND MEHODS

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	
N. T.C. 1 1 1		

*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. Annuitants

Annuitant records that have been reported as not being in pay status for the last 3 years are not included for valuation purposes.

11. 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.

12. Future Benefit Accrual

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

13. Family Composition

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

14. 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.



APPENDIX C – ACTUARIAL ASSUMPTIONS AND MEHODS

15. Unknown Data for Participants

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

16. Administrative Expenses

\$2,598,000, payable mid-year, for the year beginning January 1, 2020 (or \$ 2,523,401 payable at the beginning of the year).

For financial disclosure under FASB ASC 960 the present value of future administrative expenses is assumed to be 3.07% of Accrued Liability. This assumes the expense assumption increases 2.0% per year.

17. Changes in Assumptions since Last Valuation

- The RPA '94 current liability interest rate was changed from 3.06% to 2.95% 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 2019 table was updated to 2020 in accordance with IRS Notice 2019-26
- The interest rate assumption was decreased from 6.75% to 6.00%.
- The annual administrative expense assumption was increased from \$2,547,000 to \$2,598,000.

18. Justification of Assumptions

Economic

In accordance with Actuarial Standard of Practice No. 27, the justification for 6.00% 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.



APPENDIX C – ACTUARIAL ASSUMPTIONS AND MEHODS

B. Actuarial Methods

Funding Method: Unit Credit Cost Method

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.

Changes in Method since Last Valuation

None



Modeling Disclosures

In accordance with Actuarial Standard of Practice No. 56 (Modeling), the following disclosures are made regarding ProVal:

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities, normal costs and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal as it relates to the Plan and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in the output of ProVal that would affect the contents of this actuarial valuation report.