

American Electric Power

Non-UMWA Postretirement Health Care Plan

Actuarial Valuation Report Benefit Cost for Fiscal Year Beginning January 1, 2024 under US GAAP

Employer Contributions for Plan Year Beginning January 1, 2024

April 2024

wtwco.com

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Purposes of valuation

American Electric Power (the Company) engaged Willis Towers Watson US LLC (WTW) to value the Company's other postretirement benefit plan.

As requested by the Company, this report documents the results of an actuarial valuation of the American Electric Power Non-UMWA Postretirement Health Care Plan (the Plan) as of January 1, 2024.

The primary purpose of this valuation is to determine the Net Periodic Postretirement Benefit Cost/(Income) (Benefit Cost), in accordance with FASB Accounting Standards Codification Topic 715 (ASC 715) for the fiscal year ending December 31, 2024. It is anticipated that a separate report will be prepared for year-end financial reporting purposes.

This report also contains information regarding the following:

- 1. Plan reporting information in accordance with FASB Accounting Standards Codification Topic 965 (ASC 965).
- 2. Expected contributions under the plan sponsor's funding policy for the 2024 plan year.
- 3. The estimated maximum tax-deductible contribution for the tax year in which the 2024 plan year ends as allowed by the Internal Revenue Code. The maximum tax-deductible contribution should be finalized in consultation with AEP's tax advisor.

Limitations

This valuation has been conducted for the purposes described above and may not be suitable for any other purpose. In particular, please note the following:

- 1. The expected contribution to the Plan has been set at an amount equal to the postretirement welfare cost plus retiree drug subsidy payments received (the sum of which can be no less than zero). Note that any significant change in the amounts contributed or expected to be contributed in 2024 from what is disclosed at December 31, 2023 may require disclosure in the interim financial statements, but should not affect the expected return on plan assets absent a remeasurement for another purpose.
- 2. There may be certain events that have occurred since the valuation date that are not reflected in the current valuation. See Subsequent events in the Basis for valuation section below for more information.
- 3. This report does not present liabilities on a plan termination basis, for which a separate extensive analysis would be required. No funded status measure included in this report is intended to assess, and none may be appropriate for assessing, the sufficiency of plan assets to cover the estimated cost of settling benefit obligations, as all such measures differ in some way from plan termination obligations. In addition, funded status measures shown in this report do not reflect the current costs of settling obligations by offering immediate lump sum payments to participants and/or purchasing annuity contracts for the remaining participants (e.g., insurer profit, insurer pricing of contingent benefits and/or provision for anti-selection in the choice of a lump sum vs. an annuity).



4. The comparisons of plan obligations as determined for accounting and financial reporting purposes to plan assets presented in this report cannot be relied upon to determine the need for nor the amount of required future plan contributions. Nevertheless, such comparisons may be useful to assess the need for future contributions because they reflect current interest rates at the measurement date in determining benefit obligations. However, asset gains and losses, demographic experience different from assumed, changes in interest rates, future benefit accruals, if any, and other factors will all affect the need for and amount of future contributions. In addition, if a plan is not required by law to be funded, benefit payments may also be paid directly by the plan sponsor as they come due.



Section 1 : Summary of key results

1.1 Benefit cost, plan assets & obligations

All monetary amounts shown in US Dollars

Fiscal Year Begin	ning	01/01/2024	01/01/2023
Benefit Cost/ (Income)	Net Periodic Postretirement Benefit Cost/(Income)	(74,671,906)	(108,026,950)
	Benefit Cost/(Income) due to Special Events	0	0
	Total Benefit Cost/(Income)	(74,671,906)	(108,026,950)
Measurement Date	te	01/01/2024	01/01/2023
Plan Assets	Fair Value of Plan Assets (FVA)	1,638,591,631	1,509,382,550
Benefit Obligations	Accumulated Postretirement Benefit Obligation (APBO)	(785,012,341)	(808,589,040)
Funded Ratio	Fair Value of Plan Assets to APBO	208.7%	186.7%
Accumulated Other	Net Prior Service Cost/(Credit)	(27,548,802)	(90,610,377)
Comprehensive (Income)/Loss	Net Loss/(Gain)	198,274,182	305,543,359
(Pre-tax)	Total Accumulated Other Comprehensive (Income)/Loss (pre-tax)	170,725,380	214,932,982
Assumptions	Discount rate	5.15%	5.50%
	Expected Long-Term Rate of Return on Plan Assets	6.75%	7.25%
	Current Health Care Cost Trend Rate	7.00% Medical / 9.00% Rx	7.50% Medical / 10.00% Rx
	Ultimate Health Care Cost Trend Rate	4.50%	4.50%
	Year of Ultimate Trend Rate	2029	2029
Participant Data	Census Date	01/01/2024	01/01/2023



Employer Contributions (net of Medicare subsidy)		Plan Year 2024 (est)	Plan Year 2023
Cash Flow Funding policy contributions		0	0
Maximum tax deductible contributions		149,000,000	135,166,692
Actual contributions		631,867 ¹	551,231 ²
Expected benefit payments and expenses, net of participant contributions		68,286,810	90,329,593

¹ Includes \$649,781 expected to be paid directly for key retirees in 2024, offset by \$17,914 in Medicare Retiree Drug Subsidies.

1.2 Employer contributions

Employer contributions are the amounts paid by AEP to provide for postretirement benefits, net of participant contributions and Medicare Part D payments. Most participants receiving benefits are required to contribute toward the cost of the plan.

AEP's funding policy is to contribute an amount equal to the postretirement welfare cost plus retiree drug subsidy payments received (the sum of which can be no less than zero). AEP maximizes its contribution to the 401(h) account and contributes the remainder to the various VEBAs. AEP may deviate from this policy, as permitted by its terms, based on cash, tax or other considerations.



² Includes \$771,695 paid directly for key retirees in 2023, offset by \$220,464 in Medicare Retiree Drug Subsidies.

1.3 Comments on results

The actuarial gains/(losses) due to demographic experience, including any assumption changes, and investment return different from assumed during the prior year were \$(19,649,668) and \$112,056,696 respectively.

Change in net periodic cost and funded position

The net periodic cost increased from \$(108,026,950) in fiscal 2023 to \$(74,671,906) in fiscal 2024.

All monetary amounts shown in US Dollars

Postretirement Welfare Cost	Net Periodic Benefit Cost
Prior year	(108.0)
Change due to:	
Expected based on prior valuation and contributions during prior year	44.5
Noninvestment experience different than assumed	(0.4)
Investment experience greater or less than assumed	(16.2)
Assumption changes	5.4
Plan amendments	0
Settlements, curtailments, certain termination benefits	0
Acquisitions	0
Method changes	0
Changes in estimation techniques	0
Current year	(74.7)



Significant reasons for these changes include the following:

Per capita health care cost assumption was updated and decreased the postretirement welfare cost.

All monetary amounts shown in millions of U.S. Dollars

	2024	2023			
Medical (Overall Average)	Medical (Overall Average)				
Under age 65 ¹					
HSA Basic	12,525	11,040			
HSA Plus	13,284	11,643			
• HRA	15,447	13,359			
Age 65 and older (before Part D offsets)					
Medicare Select	4,228	4,265			
Medicare Standard	3,543	3,404			
• CSP	2,476	2,489			
Medicare Part D offsets					
Medicare Advantage (EGWP)	(1,874)	(1,830)			
CSP (RDS)	(307)	(276)			

See Appendix A for additional details on per capita claims costs assumptions including assumed claims costs adjusted for age-related morbidity adjustments and assumed future utilization changes resulting from COVID-19.

- The discount rate decreased 35 basis points since the prior year which increased the postretirement welfare cost.
- Actual asset returns during 2023 were much greater than the assumed rate of 7.25% which decreased the postretirement welfare cost.
- The expected return on assets assumption was decreased by 50 basis points to 6.75% which increased the postretirement welfare cost.

Pre-65 per capita claims costs shown above do not include the 5% adjustment for potential dependent children covered under the plan.



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Effects of Health Care Reform

This valuation reflects our understanding of the relevant provisions of the Patient Protection and Affordable Care Act (PPACA) and Health Care and Education Reconciliation Act (HCERA), and subsequent legislation (the SECURE Act of 2019) that eliminated the Cadillac tax, medical device tax and health insurance issuer tax. It also reflects our understanding of the effects of the Inflation Reduction Act of 2022 on retiree medical costs. The IRS and the Centers for Medicare Services (CMS) have yet to issue final guidance with respect to many aspects of these laws. It is possible that future guidance may conflict with our understanding of these laws based on currently available guidance and could therefore affect the results shown in this report. The valuation does not anticipate the effects of any additional possible future changes.

1.4 Basis for valuation

Appendix A summarizes the assumptions, methods and models used in the valuation. Appendix B summarizes our understanding of the principal provisions of the plan being valued. Both of these appendices include a summary of any changes since the prior valuation. Unless otherwise described below under Subsequent events, assumptions were selected based on information known as of the measurement date.

Subsequent events

None.

Additional information

The Inflation Reduction Act (IRA) was signed on August 16, 2022. This new law includes health care provisions related to Medicare and healthcare financing. While guidance is still forthcoming, the potential effect of the new legislation has been considered in preparing these results. Based on the information available, AEP updated its trend assumption at year-end 2022, and incorporated expected impacts on EGWP reimbursements. Additional changes may be reflected in future valuations as more guidance becomes available and actual plan experience is used to inform future expectations.



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Actuarial certification

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. However, please note the information described below regarding this valuation.

Reliances

In preparing the results presented in this report, we have relied on information regarding plan provisions, participants, assets, and sponsor accounting policies and methods provided by the Company and other persons or organizations designated by the Company. See the Sources of Data and Other Information section of Appendix A for further details. We have relied on all the data and information provided as complete and accurate. We have reviewed this information for overall reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with and concurrence by the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations. The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by the Company, may produce materially different results that could require that a revised report be issued.

Measurement of benefit obligations, plan assets and balance sheet adjustments

Census date/measurement date

The measurement date is January 1, 2024. The benefit obligations were measured as of January 1, 2024 and are based on participant data as of the census date, January 1, 2024.

Plan assets and balance sheet adjustments

Information about the fair value of plan assets and the general ledger account balances for the other postretirement benefit plan cost at December 31, 2023, which reflect the expected funded status of the plan before adjustment to reflect the funded status based on the year-end measurements, and differences between the expected Medicare Part D subsidies and amounts received during the year was reviewed for reasonableness and consistency, but no audit was performed.

Accumulated other comprehensive (income)/loss amounts shown in the report are shown prior to adjustment for tax effects. Any tax effects in AOCI should be determined by the Company in consultation with its tax advisors and independent accountants.

Assumptions and methods under the Internal Revenue Code for contribution limit purposes

The actuarial assumptions and methods employed in the development of the contribution limits have been selected by the plan sponsor, with the concurrence of WTW. The Internal Revenue Code requires the use of reasonable assumptions (taking into account the experience of the plan and reasonable expectations) which, in combination, offer the actuary's best estimate of anticipated experience under the plan. We



believe that the assumptions used in our valuation are reasonable and appropriate for the purposes for which they have been used

Assumptions and methods under U.S. GAAP

As required by U.S. GAAP, the actuarial assumptions and methods employed in the development of the benefit cost and other financial reporting have been selected by the Company. WTW has evaluated the assumptions used and believes that they do not significantly conflict with what would be reasonable. In addition, we believe that the combined effect of assumptions is expected to have no significant bias. See Appendix A for a description of each significant assumption used and our rationale for concluding that it does not significantly conflict with what would be reasonable. U.S. GAAP requires that each significant assumption "individually represent the best estimate of the plan's future experience solely with respect to that assumption."

The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated by WTW, we believe do not significantly conflict with what would be reasonable. Other actuarial assumptions could also be considered to not significantly conflict with what would be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

A summary of the assumptions, methods and sources of data and other information used is provided in Appendix A. Note that any subsequent changes in methods or assumptions for the January 1, 2024 measurement date will change the results shown in this report.

Certain models (as described in ASOP No. 56) were used in preparing the information presented herein. Further information on these models can be found in Appendix A.

Nature of actuarial calculations

The results shown in this report are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. The effects of certain plan provisions may be approximated, or determined to be insignificant and therefore not valued. Reasonable efforts were made in preparing this valuation to confirm that items that are significant in the context of the actuarial liabilities or costs are treated appropriately, and are not excluded or included inappropriately. Any rounding (or lack thereof) used for displaying numbers in this report is not intended to imply a degree of precision, which is not a characteristic of actuarial calculations.

If overall future plan experience produces higher benefit payments or lower investment returns than assumed, the relative level of plan costs reported in this valuation will likely increase in future valuations (and vice versa). Future actuarial measurements may differ significantly from the current measurements presented in this report due to many factors, including: 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 the measurements (such as the end of an amortization period), and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of such future measurements. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements.



See Basis for valuation in Section 1 above for a discussion of any material events that have occurred after the valuation date that are not reflected in this valuation.

Limitations on use

This report is provided subject to the terms set out herein and in our Master Consulting Services Agreement dated July 29, 2004 and any accompanying or referenced terms and conditions.

The information contained in this report was prepared for the internal use of the Company and its independent accountants in connection with our actuarial valuation of the other postretirement benefit plan as described in Purposes of valuation above. It is not intended for and may not be used for other purposes, and we accept no responsibility or liability in this regard. The Company may distribute this actuarial valuation report to the appropriate authorities who have the legal right to require the Company to provide them this report, in which case the Company will use best efforts to notify WTW in advance of this distribution. Further distribution to, or use by, other parties of all or part of this report is expressly prohibited without WTW's prior written consent. WTW accepts no responsibility for any consequences arising from any party other than American Electric Power relying on this report or any advice relating to its contents.

Professional qualifications

The undersigned are members of the Society of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to [pension][other postretirement benefit] plans. Our objectivity is not impaired by any relationship between the plan sponsor and our employer, Willis Towers Watson US LLC.

Chad M. Greenwalt, FSA, EA

Chad Dreamas

Director, Retirement - Valuation Actuary

April 30, 2024

John Igrec, FSA

Senior Associate - Valuation Actuary

April 30, 2024

Abigail Lange, FSA, MAAA

Heath & Benefits Actuary

Pricing Specialist

April 30, 2024



The Pricing Specialist is responsible for developing and/or determining the reasonableness of retiree welfare plan trend and participation assumptions as well as assumed per capita claims costs (including the aging/morbidity assumption if applicable). The Valuation Actuary is responsible for other aspects of the valuation (e.g., developing and/or reviewing the reasonableness of other valuation assumptions and methods, ensuring that the valuation model reasonably reflects the substantive plan, preparing demographic data, performing the valuation, implementing the appropriate accounting or funding calculations, etc.).



Section 2 : Accounting exhibits

2.1 Balance sheet asset/(liability)

All monetary amounts shown in US Dollars

Meas	urement Date	01/01/2024	01/01/2023
A De	evelopment of Balance Sheet Asset/(Liability) ¹		
1	Accumulated postretirement benefit obligation (APBO)	(785,012,341)	(808,589,040)
2	Fair value of plan assets (FVA) ²	1,638,591,631	1,509,382,550
3	Net balance sheet asset/(liability)	853,579,290	700,793,510
ВС	urrent and Noncurrent Classification ³		
1	Noncurrent asset	853,579,290	700,793,510
2	Current liability	0	0
3	Noncurrent liability	0	0
4	Net balance sheet asset/(liability)	853,579,290	700,793,510
C Ac	ccumulated Other Comprehensive (Income)/Loss		
1	Net prior service cost/(credit)	(27,548,802)	(90,610,377)
2	Net loss/(gain)	198,274,182	305,543,359
3	Accumulated other comprehensive (income)/loss ⁴	170,725,380	214,932,982
D As	ssumptions and Dates		
1	Discount rate	5.15%	5.50%
2	Current health care cost trend rate	7.00% Medical / 9.00% Rx	7.50% Medical / 10.00% Rx
3	Ultimate health care cost trend rate	4.50%	4.50%
4	Year of ultimate trend rate	2029	2029
5	Census date	01/01/2024	01/01/2023



Whether any amounts in this table that differ from those disclosed at year-end must be disclosed in subsequent interim financial statements should be determined.

Excludes receivable contributions.

The current liability (for each underfunded plan) was measured as the discounted value of benefits expected to be paid over the next 12 months in excess of the fair value of the plan's assets at the measurement date.

⁴ Amount shown is pre-tax and should be adjusted by plan sponsor for tax effects.

2.2 Summary of net balances

All monetary amounts shown in US Dollars

A Summary of Prior Service Cost/(Credit) Bases

Measurement Date Established	Original Amount	Net Amount at 01/01/2024	Remaining Amortization Period	Amortization Amount in 2024	Effect of Curtailments	Other Events
12/31/2012	(468,077,578)	(10,341,446)	0.20333	10,341,446	0	0
12/31/2019	(7,509,373)	(4,735,029)	6.82684	693,586	0	0
12/31/2020	(11,724,863)	(8,054,872)	7.00000	1,150,697	0	0
12/31/2021	(5,489,273)	(4,417,455)	8.24292	535,909	0	0
Total		(27,548,802)		12,721,638	0	0

All monetary amounts shown in US Dollars

B Summary of Net Loss/(Gain) (see Appendix A for a description of amortization method)

Net Amount at 01/01/2024 ¹	Amortization Amount in 2024	Effect of Curtailments	Effect of Settlements	Other Events (Identify)
198,274,182	(3,310,867)	0	0	0

¹ Before any immediate recognition on the same date.



2.3 Summary and comparison of benefit cost and cash flows

All monetary amounts shown in US Dollars

Fi	scal	Year Ending	12/31/2024	12/31/2023
Δ	Tot	al Benefit Cost		
	1	Employer service cost	4,170,164	4,298,510
	2	Interest cost	38,906,588	42,804,716
	3	Expected return on plan assets	(108,337,887)	(106,930,747)
	4	Subtotal	(65,261,135)	(59,827,521)
	5	Net prior service cost/(credit) amortization	(12,721,638)	(63,061,575)
	6	Net loss/(gain) amortization	3,310,867	14,862,146
	7	Subtotal	(9,410,771)	(48,199,429)
	8	Net periodic postretirement benefit cost/(income)	(74,671,906)	(108,026,950)
	9	Curtailment (gain)/loss	0	0
	10	Settlement (gain)/loss	0	0
	11	Special/contractual termination benefits	0	0
	12	Other adjustments	0	0
	13	Total benefit cost	(74,671,906)	(108,026,950)
В	Ass	sumptions (See Appendix A for interim measurements, if any)		
	1	Discount rate	5.15%	5.50%
	2	Expected long-term rate of return on plan assets	6.75%	7.25%
	3	Current health care cost trend rate	7.00% Medical / 9.00% Rx	7.50% Medical / 10.00% Rx
	4	Ultimate health care cost trend rate	4.50%	4.50%
	5	Year of ultimate trend rate	2029	2029
	6	Census date	01/01/2024	01/01/2023
С	Fai	r Value of Assets at Beginning of Year	1,638,591,631	1,509,382,550
D	Cas	sh Flows Net of Medicare Part D Subsidy	Expected	Actual
	1	Employer contributions	649,781	771,695
	2	Plan participants' contributions	44,984,963	43,956,192
	3	Benefits paid from Company assets	113,271,772	134,506,249
	4	Expected Medicare retiree drug subsidy on current year benefit payments	(17,914)	(220,464)
Ε	Am	ortization Period		
	1	For gain/loss amortization, if applicable	10.39456	10.40261



2.4 Detailed results for postretirement welfare cost and funded position

All monetary amounts shown in U.S. Dollars

etaile	ed results	01/01/2024	01/01/2023
Se	ervice Cost		
1	Medical	3,127,166	3,270,505
2	Life insurance	1,042,998	1,028,005
3	Dental	0	0
4	Total	4,170,164	4,298,510
A c	ccumulated Postretirement Benefit Obligation [Medical:	APBO]	
•	a Participants currently receiving benefits	357,039,931	387,034,567
	b Fully eligible active participants	29,842,032	31,767,317
	c Other participants	71,232,296	73,526,309
	d Total	458,114,259	492,328,193
2	Life insurance:	,	,,,,,,,
	a Participants currently receiving benefits	278,385,321	268,989,542
	b Fully eligible active participants	16,495,092	15,781,946
	c Other participants	24,769,216	23,946,321
	d Total	319,649,629	308,717,809
3	Dental:		
	a Participants currently receiving benefits	7,096,943	7,403,704
	b Fully eligible active participants	151,510	139,334
	c Other participants	0	0
	d Total	7,248,453	7,543,038
4	All Benefits:		
	a Participants currently receiving benefits	642,522,195	663,427,813
	b Fully eligible active participants	46,488,634	47,688,597
	c Other participants	96,001,512	97,472,630
	d Total	785,012,341	808,589,040
As	ssets		
1	Fair value [FV]	1,638,591,631	1,509,382,550
Fı	unded Position		
1	Overfunded (underfunded) APBO	853,579,290	700,793,510
2	APBO funded percentage	208.7%	186.7%
Δι	mounts in Accumulated Other Comprehensive	Income	
1	Prior service cost (credit)	(27,548,802)	(90,610,377)
2	Net actuarial loss (gain)	198,274,182	305,543,359
3	Total	170,725,380	214,932,982
		-, -,	, , - , -



2.5 ASC 965 (plan reporting) information

All monetary amounts shown in U.S. Dollars

mma	ary of Present Value of Benefits	01/01/2024	01/01/2023
Me	dical (ignoring Retiree Drug Subsidy)		
1	Current retirees	357,140,956	387,147,950
2	Active participants fully eligible for benefits	29,842,032	31,767,317
3	Other active participants	71,232,296	73,526,309
4	Total	458,215,284	492,441,576
Life	e Insurance		
1	Current retirees	278,385,321	268,989,542
2	Active participants fully eligible for benefits	16,495,092	15,781,946
3	Other active participants	24,769,216	23,946,321
4	Total	319,649,629	308,717,809
De	ntal		
1	Current retirees	7,096,943	7,403,704
2	Active participants fully eligible for benefits	151,510	139,334
3	Other active participants	0	0
4	Total	7,248,453	7,543,038
To	tal (ignoring Retiree Drug Subsidy)		
1	Current retirees	642,623,220	663,541,196
2	Active participants fully eligible for benefits	46,488,634	47,688,597
3	Other active participants	96,001,512	97,472,630
4	Total	785,113,366	808,702,423
30 T	rend Sensitivities		
Bas	eline APBO	785,113,366	808,702,423
APE	3O with +1% Trend Sensitivity	788,666,232	814,416,704
	Impact:	3,552,866	5,714,281
APE	BO with -1% Trend Sensitivity	782,983,717	804,606,998
	Impact:	(2,129,649)	(4,095,425)
	Me 1 2 3 4 Lift 1 2 3 4 De 1 2 3 4 To 1 2 3 4 SO T Bass APE	2 Active participants fully eligible for benefits 3 Other active participants 4 Total Life Insurance 1 Current retirees 2 Active participants fully eligible for benefits 3 Other active participants 4 Total Dental 1 Current retirees 2 Active participants fully eligible for benefits 3 Other active participants fully eligible for benefits 3 Other active participants 4 Total Total (ignoring Retiree Drug Subsidy) 1 Current retirees 2 Active participants fully eligible for benefits 3 Other active participants fully eligible for benefits 3 Other active participants 4 Total BO Trend Sensitivities Baseline APBO APBO with +1% Trend Sensitivity	Medical (ignoring Retiree Drug Subsidy) 1 Current retirees 357,140,956 2 Active participants fully eligible for benefits 29,842,032 3 Other active participants 71,232,296 4 Total 458,215,284 Life Insurance 1 Current retirees 278,385,321 2 Active participants fully eligible for benefits 16,495,092 3 Other active participants 24,769,216 4 Total 319,649,629 Dental 1 Current retirees 7,096,943 2 Active participants fully eligible for benefits 151,510 3 Other active participants 0 4 Total 7,248,453 Total (ignoring Retiree Drug Subsidy) 1 Current retirees 642,623,220 2 Active participants fully eligible for benefits 46,488,634 3 Other active participants 96,001,512 4 Total 785,113,366 SOTrend Sensitivities Baseline APBO 785,113,366 APBO with +1% Trend Sensitivity 788,666,232 Impact: 3,552,866

Actuarial assumptions and methods

The key actuarial assumptions used for plan reporting calculations are the same as those used to determine the postretirement welfare cost and are shown in the Actuarial Assumptions and Methods section, except that the Retiree Drug Subsidy (RDS) associated with Medicare Part D is not reflected. For the prior valuation, a discount rate of 5.50% was used. The same plan provisions shown in Appendix B were used to determine the present value of accumulated benefits.



Re	econciliation of Present Value of Benefits	Plan Year 2023	Plan Year 2022
A	Medical (ignoring Retiree Drug Subsidy)		
^	Benefit obligation, beginning of year	492,441,576	511,158,908
	2 Service cost	3,270,505	4,375,461
	3 Interest cost	25,917,893	14,153,690
	4 Participant contributions	35,113,254	36,094,967
	5 Net actuarial (gain)/loss - experience	20,483,220	27,111,266
	6 Net actuarial (gain)/loss - assumptions	(10,749,540)	11,032,122
	7 Plan amendments	0	0)
	8 Gross benefits paid	(108,261,624)	(111,484,838)
	9 Benefit obligation, end of year	458,215,284	492,441,576
В	Life Insurance		
	1 Benefit obligation, beginning of year	308,717,809	428,719,252
	2 Service cost	1,028,005	2,235,730
	3 Interest cost	16,498,743	12,216,814
	4 Participant contributions	771,695	748,633
	5 Net actuarial (gain)/loss - experience	(1,909,792)	(2,875,230)
	6 Net actuarial (gain)/loss - assumptions	11,935,549	(115,192,839)
	7 Plan amendments	0	0
	8 Gross benefits paid	(17,392,380)	(17,134,551)
	9 Benefit obligation, end of year	319,649,629	308,717,809
С	Dental		
	 Benefit obligation, beginning of year 	7,543,038	11,341,254
	2 Service cost	0	0
	3 Interest cost	414,867	328,896
	4 Participant contributions	8,071,243	7,543,319
	5 Net actuarial (gain)/loss - experience	(65,969)	(1,603,251)
	6 Net actuarial (gain)/loss - assumptions	137,519	(1,433,585)
	7 Plan amendments	0	0)
	8 Gross benefits paid	(8,852,245)	(8,633,595)
	9 Benefit obligation, end of year	7,248,453	7,543,038
D	Total (ignoring Retiree Drug Subsidy)		
	 Benefit obligation, beginning of year 	808,702,423	951,219,414
	2 Service cost	4,298,510	6,611,191
	3 Interest cost	42,831,503	26,699,400
	4 Participant contributions	43,956,192	44,386,919
	5 Net actuarial (gain)/loss - experience	18,507,459	22,632,785)
	6 Net actuarial (gain)/loss - assumptions	1,323,528	(105,594,302)
	7 Plan amendments	0	0)
	8 Gross benefits paid	(134,506,249)	(137,252,984)
	9 Benefit obligation, end of year	785,113,366	808,702,423



Basic results for employer contributions - VEBAs 2.6

All monetary amounts shown in U.S. Dollars

All	Pos	tretirement VEBAs	Estimated December 31, 2024	Actual December 31, 2023
Α	Qu	alified Asset Account Limits [QAAL] ¹	333,000,000	337,889,408
В	As	sets		
	1	Market value	1,430,000,000	1,371,158,039
	2	Unrecognized investment losses (gains)	0	0
	3	Actuarial value [AV]	1,430,000,000	1,371,158,039
С	Fu	nded Position		
	1	Unfunded account limits [QAAL – FV]	(1,097,000,000)	(1,033,268,631)
D	Employer Contributions			
	1	Maximum deductible available ²	150,000,000	135,166,692
	2	Qualified additions		
		a Prior years' carryover	0	0
		b Current year additions	0	0
		c Total deductions available [a + b]	0	0
	3	Other non-deductible current year additions	0	0
	4	Total additions [2.c + 3]	0	0
		a Life insurance VEBA	0	0
		b Union medical and dental VEBAs	0	0
		c Non-union medical and dental VEBAs	0	0



 $^{^{\}rm 1}$ Includes the present value of projected benefits for the union retiree medical VEBA. $^{\rm 2}$ Includes amounts not contributed to trusts with capacity at year-end.

2.7 VEBA deduction limits

All monetary amounts shown in U.S. Dollars

Re	tiree	Life Insurance	2023	2022
Α	Qu	ralified Asset Account Limit (QAAL)		
	1	December 31 actuarial accrued liability	209,884,508	199,491,977
	2	Unrecognized liability	0	0
	3	QAAL	209,884,508	199,491,977
В	As	sets		
	1	Market value as of December 31	74,717,816	76,522,196
	2	Unrecognized investment losses (gains)	0	0
	3	Actuarial value [AV]	74,717,816	76,522,196
С	Fu	nded position		
	1	Unfunded account limit [QAAL - AV]	135,166,692	122,969,781
	2	Contributions received in trust, but not yet deducted		
		Through 2013	0	0
		2014	0	0
		2015	0	0
		2016	0	0
		2017	0	0
		2018	0	0
		2019	0	0
		2020	0	0
		2021	0	0
		2022	0	0
		2023	0	0
		Total	0	0
D	En	nployer deductions for contributions to VEBAs		
	1	Maximum deduction available ¹ [C.1 + Total of C.2]	135,166,692	122,969,781
	2	Qualified additions		
		a Prior years' carryover	0	0
		b Current year additions	0	0
		c Total deductions available [a + b]	0	0
	3	Other non-deductible current year additions	0	0
	4	Total additions [2.c + 3]	0	0

¹ Includes amounts not contributed.



All monetary amounts shown in U.S. Dollars

Un	ion I	Medical and Dental	2023	2022
Α	Qu	alified Asset Account Limit (QAAL)		
	1	December 31 present value of projected benefits	96,519,526	102,437,188
	2	Unrecognized liability	0	0
	3	QAAL	96,519,526	102,437,188
В	As	sets		
	1	Market value as of December 31	505,377,909	462,972,449
	2	Unrecognized investment losses (gains)	0	0
	3	Actuarial value [AV]	505,377,909	462,972,449
С	Fu	nded position		
	1	Unfunded account limit [QAAL - AV]	(\$408,858,383)	(360,535,261)
	2	Contributions received in trust, but not yet deducted		
		Through 2013	0	0
		2014	0	0
		2015	0	0
		2016	0	0
		2017	0	0
		2018	0	0
		2019	0	0
		2020	0	0
		2021	0	0
		2022	0	0
		2023	0	0
		Total	0	0
D	Em	ployer deductions for contributions to VEBAs		
	1	Maximum deduction available [greater of C.1+C.2 and 0]	0	0
	2	Qualified additions		
		a Prior years' carryover	0	0
		b Current year additions	0	0
		c Total deductions available [a + b]	0	0
	3	Other non-deductible current year additions	0	0
	4	Total additions [2.c + 3]	0	0



¹ Includes amounts not contributed.

All monetary amounts shown in U.S. Dollars

No	n-Ur	nion Retiree Medical and Dental	2023	2022
Α	Qu	alified Asset Account Limit (QAAL)		
	1	December 31 actuarial accrued liability	31,485,374	33,017,236
	2	Unrecognized liability	0	0
	3	QAAL	31,485,374	33,017,236
В	As	sets		
	1	Market value as of December 31	791,062,314	691,591,115
	2	Unrecognized investment losses (gains)	0	0
	3	Actuarial value [AV]	791,062,314	691,591,115
С	Fu	nded position		
	1	Unfunded account limit [QAAL - AV]	(759,576,940)	(658,573,879)
	2	Contributions received in trust, but not yet deducted		
		Through 2013	285,901,694	285,901,694
		2014	0	0
		2015	0	0
		2016	0	0
		2017	0	0
		2018	10,082,000	10,082,000
		2019	0	0
		2020	0	0
		2021	0	0
		2022	0	0
		2023	0	0
		Total	295,983,694	295,983,694
D	Em	ployer deductions for contributions to VEBAs		
	1	Maximum deduction available ¹ [greater of C.1+C.2 and 0]	0	0
	2	Qualified additions		
		a Prior years' carryover	0	0
		b Current year additions	0	0
		c Total deductions available [a + b]	0	0
	3	Other non-deductible current year additions	0	0
	4	Total additions [2.c + 3]	0	0

¹ Includes amounts not contributed.



2.8 Cumulative nondeductible contributions

All monetary amounts shown in U.S. Dollars

Union Retiree Mo	edical and Dental VEBAs		
	Contributions Made by December 31, 2023, but Not Deducted as of December 31, 2022	Deductible in 2023	Remaining Nondeductible Contributions as of December 31, 2023
Through 2008	\$0	\$0	\$0
2009	105,440,603	0	105,440,603
2010	73,467,453	0	73,467,453
2011	38,701,148	0	38,701,148
2012	68,292,490	0	68,292,490
2013	0	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	10,082,000	0	10,082,000
2019	0	0	0
2020-23	0	0	0
Total	\$295,983,694	\$0	\$295,983,694

	Contributions Made by December 31, 2023, but Not Deducted as of December 31, 2022	Deductible in 2023	Remaining Nondeductible Contributions as of December 31, 2023
Through 2008	\$0	\$0	\$
2009	0	0	
2010	0	0	
2011	0	0	
2012	0	0	
2013	0	0	
2014	0	0	
2015	0	0	
2016	0	0	
2017	0	0	
2018	0	0	
2019	0	0	
2020-23	0	0	
Total	\$0	\$0	\$



Development of maximum deductible contribution - 401(h) 2.9

All monetary amounts shown in U.S. Dollars

Pla	n Ye	ear Beginning	January 1, 2024
Α	Dev	elopment of Maximum Deductible Contribution	
	1	Present value of projected benefits	292,349,537
	2	Fair value of assets	267,433,592
	3	Unfunded (surplus) [A.1 – A.2]	24,915,945
	4	Average present value of future service	7
	5	Preliminary maximum deductible contribution	
		a 10% of unfunded surplus [10% x A.3]	2,491,595
		b Aggregate normal cost [A.3 / A.4]	3,535,571
		c Greater of A.5.a, A.5.b and 0	3,535,571
	6	Preliminary maximum contribution [1.07 x A.5.c]	3,783,061
	7	Subordination test (development shown below)	145,371,303
	8	Maximum deductible contribution ignoring expenses [lesser of A.6 and A.7]	3,783,061
	9	Total trust expenses paid from 401(h) account	296,125
	10	Maximum deductible contribution including expenses [A.8 + A.9]	4,079,186

Subordination Test

Year-by-year minimum of actual pension plan contribution and pension plan normal cost with interest

Year	West Plan	East Plan	Combined Plan
1992	9,766,169	N/A	N/A
1993	22,392,743	N/A	N/A
1994	21,208,326	N/A	N/A
1995	21,683,436	N/A	N/A
1996	20,271,648	N/A	N/A
1997 - 2002	0	N/A	N/A
2003	19,197,145	39,165,054 ¹	N/A
2004	18,614,338	56,614,811	N/A
2005	16,222,550	55,872,817	N/A
2006-2007	0	0	N/A
2008	0	0	0
2009	N/A	N/A	100,540,448
2010	N/A	N/A	125,586,018
2011	N/A	N/A	62,751,522
2012	N/A	N/A	0
2013	N/A	N/A	65,249,050
2014	N/A	N/A	0
2015	N/A	N/A	81,674,776
2016	N/A	N/A	84,696,307
2017	N/A	N/A	93,590,761
2018	N/A	N/A	0
2019	N/A	N/A	99,347,283
2020-2023	N/A	N/A	0
Cumulative pension contributions not for past service	149,356,355	151,652,682	1,014,445,203
	x 1/3	x 1/3	x 1/3
	49,785,452	50,550,894	338,148,401
Cumulative 401(h) contributions before plan year 2023	49,785,452	50,550,894	192,777,098
Subordination limit	0	0	145,371,303

¹ Includes only portion of normal cost and contributions after 401(h) account adoption for indicated year



2.10 Expected benefit disbursements, administrative expenses, and participant contributions

All monetary amounts shown in U.S. Dollars

2 Participant contributions (44,256,657) (42,982,17) 3 Net disbursements 48,168,001 50,400,430 B Life Insurance 1 Gross disbursements 20,865,028 20,596,070 2 Participant contributions (728,305) (797,820) 3 Net disbursements 20,136,723 19,798,180 C Gross without RDS 1 113,289,686 113,978,620 2 Participant contributions (44,984,962) (43,780,000) 3 Net disbursements 68,304,724 70,198,620 D RDS¹ (17,914) (19,35-620) 2 Participant contributions 0 0 3 Net disbursements (17,914) (19,35-620) E Net with RDS 1 Gross disbursements 113,271,772 113,959,270 2 Participant contributions (44,984,962) (43,780,000)				January 1, 2024	January 1, 2023
2 Participant contributions (44,256,657) (42,982,17) 3 Net disbursements 48,168,001 50,400,43 B Life Insurance 20,865,028 20,596,07 1 Gross disbursements 20,865,028 20,596,07 2 Participant contributions (728,305) (797,82 3 Net disbursements 20,136,723 19,798,18 C Gross without RDS 1 113,289,686 113,978,62 2 Participant contributions (44,984,962) (43,780,00 3 Net disbursements (17,914) (19,35-62) D RDS¹ (17,914) (19,35-62) 2 Participant contributions 0 (17,914) (19,35-62) E Net with RDS (17,914) (19,35-62) (17,914) (19,35-62) E Net with RDS 1 Gross disbursements 113,271,772 113,959,27 2 Participant contributions (44,984,962) (43,780,00	Α	Me	dical and Dental without RDS		
3 Net disbursements 48,168,001 50,400,43 B Life Insurance 1 Gross disbursements 20,865,028 20,596,07 2 Participant contributions (728,305) (797,82 3 Net disbursements 20,136,723 19,798,18 C Gross without RDS 1 Gross disbursements 113,289,686 113,978,62 2 Participant contributions (44,984,962) (43,780,000) 3 Net disbursements 68,304,724 70,198,62 D RDS¹ 1 Gross disbursements (17,914) (19,35,62) 2 Participant contributions 0 3 Net disbursements (17,914) (19,35,62) E Net with RDS 1 Gross disbursements (113,271,772 113,959,27) 2 Participant contributions (44,984,962) (43,780,000)		1	Gross disbursements	92,424,658	93,382,609
B Life Insurance 20,865,028 20,596,07 1 Gross disbursements 20,865,028 20,596,07 2 Participant contributions (728,305) (797,82 3 Net disbursements 20,136,723 19,798,18 C Gross without RDS 1 113,289,686 113,978,62 2 Participant contributions (44,984,962) (43,780,00 3 Net disbursements (17,914) (19,35-20) 2 Participant contributions 0 (17,914) (19,35-20) E Net with RDS 1 Gross disbursements 113,271,772 113,959,270 2 Participant contributions (44,984,962) (43,780,00)		2	Participant contributions	(44,256,657)	(42,982,173)
1 Gross disbursements 20,865,028 20,596,07 2 Participant contributions (728,305) (797,82 3 Net disbursements 20,136,723 19,798,18 C Gross without RDS 1 Gross disbursements 113,289,686 113,978,62 2 Participant contributions (44,984,962) (43,780,00 3 Net disbursements 68,304,724 70,198,62 D RDS¹ (17,914) (19,35-20) 2 Participant contributions 0 (17,914) (19,35-20) E Net with RDS 1 Gross disbursements 113,271,772 113,959,270 2 Participant contributions (44,984,962) (43,780,000)		3	Net disbursements	48,168,001	50,400,436
2 Participant contributions (728,305) (797,82) 3 Net disbursements 20,136,723 19,798,18 C Gross without RDS 1 Gross disbursements 113,289,686 113,978,62 2 Participant contributions (44,984,962) (43,780,00 3 Net disbursements 68,304,724 70,198,62 D RDS¹ (17,914) (19,35-2) 2 Participant contributions 0 (17,914) (19,35-2) 2 Net with RDS (17,914) (13,271,772 113,959,27 2 Participant contributions (44,984,962) (43,780,00	В	Lif	e Insurance		
3 Net disbursements 20,136,723 19,798,18 C Gross without RDS 1 Gross disbursements 113,289,686 113,978,62 2 Participant contributions (44,984,962) (43,780,00 3 Net disbursements 68,304,724 70,198,62 D RDS¹ (17,914) (19,35-2) 2 Participant contributions 0 (17,914) (19,35-2) E Net with RDS 1 Gross disbursements 113,271,772 113,959,27-2 2 Participant contributions (44,984,962) (43,780,00)		1	Gross disbursements	20,865,028	20,596,016
C Gross without RDS 1 Gross disbursements 113,289,686 113,978,62 2 Participant contributions (44,984,962) (43,780,00 3 Net disbursements 68,304,724 70,198,62 D RDS¹ (17,914) (19,35-2) 2 Participant contributions 0 (17,914) (19,35-2) E Net with RDS (17,914) (13,271,772 113,959,27-2 2 Participant contributions (44,984,962) (43,780,00)		2	Participant contributions	(728,305)	(797,827)
1 Gross disbursements 113,289,686 113,978,62 2 Participant contributions (44,984,962) (43,780,00 3 Net disbursements 68,304,724 70,198,62 D RDS¹ (17,914) (19,35-2) 2 Participant contributions 0 (17,914) (19,35-2) 2 Net with RDS (17,914) (13,271,772 113,959,27-2 2 Participant contributions (44,984,962) (43,780,00-2)		3	Net disbursements	20,136,723	19,798,189
2 Participant contributions (44,984,962) (43,780,000) 3 Net disbursements 68,304,724 70,198,620 D RDS¹ (17,914) (19,356) 2 Participant contributions 0 (17,914) (19,356) 2 Net disbursements (17,914) (19,356) E Net with RDS 1 Gross disbursements 113,271,772 113,959,276 2 Participant contributions (44,984,962) (43,780,000)	С	Gr	oss without RDS		
3 Net disbursements 68,304,724 70,198,62 D RDS¹ 1 Gross disbursements (17,914) (19,354) 2 Participant contributions 0 3 Net disbursements (17,914) (19,354) E Net with RDS 1 Gross disbursements 113,271,772 113,959,276 2 Participant contributions (44,984,962) (43,780,000)		1	Gross disbursements	113,289,686	113,978,625
D RDS¹ (17,914) (19,354) 1 Gross disbursements 0 2 Participant contributions 0 3 Net disbursements (17,914) (19,354) E Net with RDS 1 Gross disbursements 113,271,772 113,959,274 2 Participant contributions (44,984,962) (43,780,000)		2	Participant contributions	(44,984,962)	(43,780,000)
1 Gross disbursements (17,914) (19,35-2) 2 Participant contributions 0 3 Net disbursements (17,914) (19,35-2) E Net with RDS 1 Gross disbursements 113,271,772 113,959,27-2 2 Participant contributions (44,984,962) (43,780,000)		3	Net disbursements	68,304,724	70,198,625
2 Participant contributions 0 3 Net disbursements (17,914) (19,354) E Net with RDS 1 Gross disbursements 113,271,772 113,959,27 2 Participant contributions (44,984,962) (43,780,000)	D	RD	S ¹		
3 Net disbursements (17,914) (19,354) E Net with RDS 1 Gross disbursements 113,271,772 113,959,27 2 Participant contributions (44,984,962) (43,780,000)		1	Gross disbursements	(17,914)	(19,354)
E Net with RDS 1 Gross disbursements 113,271,772 113,959,27 2 Participant contributions (44,984,962) (43,780,000)		2	Participant contributions	0	0
1 Gross disbursements 113,271,772 113,959,27 2 Participant contributions (44,984,962) (43,780,000)		3	Net disbursements	(17,914)	(19,354)
2 Participant contributions (44,984,962) (43,780,00	E	Ne	t with RDS		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	Gross disbursements	113,271,772	113,959,271
		2	Participant contributions	(44,984,962)	(43,780,000)
3 Net disbursements 68,286,810 70,179,27		3	Net disbursements	68,286,810	70,179,271



 $^{^{\}rm 1}$ 2022-2023 RDS payments expected to be received in 2024-2025.

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Section 3 : Participant data

3.1 Summary of participant data

All monetary amounts shown in U.S. Dollars

Cens	us Da	ite	01/01/2024	01/01/2023	
A	Pa	rticipating Employees			
^	1	Number			
	•	a Fully eligible	1,530	1,577	
		b Other	6,509	7,022	
		c Total participating employees	8,039	8,599	
	2	Average age	52.66	52.14	
	3	Average credited service	23.76	23.13	
В	Re	tirees, Surviving Spouses and Surviving Dependents			
	1	Retirees			
		a Number	14,782	14,924	
		b Average age	73.38	72.95	
		c Number of spouses	7,690	7,985	
	2	Surviving spouses and surviving dependents			
		a Number	2,977	3,018	
		b Average age	80.61	80.64	
	3	Total retirees, surviving spouses and surviving dependent	ents		
		a Number	17,759	17,942	
		b Average age	74.59	74.24	
		c Number of spouses	7,690	7,985	
		d Distribution at January 1, 2024			
		Age	Number		
		Under 55	77		
		55-59	330		
		60-64	1,851		
		65-69	3,750		
		70-74	3,551		
		75-79	3,597		
		80-84	2,245		
		85 and over	2,358		



3.2 Age and service distribution of active participants

All monetary amounts shown in US Dollars

Attained	Attained Years of Credited Service									
Age —	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25-29	0	0	5	0	0	0	0	0	0	5
30-34	0	0	160	14	2	0	0	0	0	176
35-39	0	0	344	324	6	0	0	0	0	674
40-44	0	0	292	643	170	4	0	0	0	1,109
45-49	0	0	206	545	293	109	2	0	0	1,155
50-54	0	0	173	423	295	252	131	6	0	1,280
55-59	0	0	115	290	228	215	392	288	16	1,544
60-64	0	0	73	166	137	149	196	436	354	1,511
65-69	0	0	26	48	31	29	49	69	249	501
70 & over	0	0	9	4	8	3	3	8	49	84
Total	0	0	1,403	2,457	1,170	761	773	807	668	8,039
Average:	Age	52		Number of P	articipants					
	Service	24		Fu	ılly eligible	1,530		Males	6,526	
					Other	6,509		Females	1,513	



Appendix A: Statement of actuarial assumptions, methods and data sources

Actuarial Assumptions and Methods — Postretirement Welfare Cost and Funding/Tax Deductions Based on Plan Year beginning January 1, 2024

Ec	onomic Assumptions			
		Postretirement Welfare Cost	Plan Reporting	Employer Contributions
Di	scount rate ¹	5.15%	5.15%	N/A
Ra	ates of return on assets, pre-tax: 1			
•	401(h) accounts	N/A	N/A	7.00%
•	Life insurance	N/A	N/A	8.50%
•	Union medical/dental	N/A	N/A	7.50%
•	Non-union medical/dental	N/A	N/A	6.50%
•	Aggregate	6.75%	N/A	N/A
	Annual rates of compensation increases	Age	Rate	
•		< 25	11.50%	
	moreages	25 – 29	8.50%	
		30 - 34	7.00%	
		35 - 39	6.00%	
		40 – 44	5.00%	
		45 – 49	4.50%	
		50 – 54	4.00%	
		55 – 59	3.75%	
		60 – 64	3.50%	
		65 – 69	3.25%	
		70+	3.00%	
		Weighted average	5.05%	
		_		Prescription
•	Medical cost trend rate ²		Medical	Drug
		2024	7.00%	9.00%
		2025	6.50%	8.00%
		2026	6.00%	7.00%
		2027	5.50%	6.00%
		2028	5.00%	5.00%
		2029+	4.50%	4.50%



Dental cost trend rate²

All years 3.00%

Medicare covered charges trend rate

Same as medical cost trend

Retiree contribution trend rate

Same as medical cost trend. For capped retirees, future retiree contributions are developed based on expected

gross costs compared to the applicable cap.

²0% trend assumed for non-union VEBA account limit.

Participation Assumptions		
Inclusion Date	The valuation date coincident with o employee is hired.	r next following the date on which the
New or rehired employees	It was assumed there will be no new	or rehired employees.
	Current Retirees	Future Retirees
Participation	Based on valuation census data.	76% in 2024 with the rate decreasing by 2% annually to an ultimate rate of 60% in 2032.
Persistency	Capped retirees will drop coverage at a rate of 4% annually; Noncapped retirees will drop coverage at a rate of 0.85% annually	Same as current retirees
Percentage of retiree with spousal coverage	Based on valuation census data.	72.6% for males, 52.6% for females.
Spouse age	Based on valuation census data.	Wife three years younger than husband.
Demographic Assumptions		
Mortality	Base mortality rates are derived from	n the Pri-2012 headcount weighted

Mortality Base mortality rates are derived from the Pri-2012 headcount weighted

mortality table without collar adjustments.

Mortality improvements are projected forward on a generational basis

using Scale MP-2021.

Disabled mortality (through age

65)

Rates vary by age and sex.

Representative rates:

Age	Males	Females
30	1.05%	0.54%
40	1.52	1.00
50	2.23	1.51
60	2.62	1.96



¹ Only discount rate and asset return assumptions vary between the reporting standards. All other assumptions are consistent throughout.

Disability

Rates apply to employees not eligible to retire and vary by age and sex.

Representative rates:

Perc	ercentage becoming disabled during the year	
Age	Males	Females
20	0.060%	0.090%
30	0.060	0.090
40	0.074	0.110
50	0.178	0.270
60	0.690	1.035

Termination (not due to disability or retirement)

Rates apply to employees not eligible to retire and vary by age.

Representative rates:

Percentage leaving during the year		
Attained vested service	Rate	
< 3	7.00%	
3 – 4	6.00%	
5 – 9	5.00%	
10 – 14	4.00%	
15 – 19	2.50%	
20 +	1.50%	

Retirement

Rates vary by age.

Representative rates:

Percentage retir	ercentage retiring during the year	
Age	Rate	
55 – 58	4.00%	
59	6.00%	
60	7.50%	
61	9.00%	
62 - 64	16.00%	
65 – 67	25.00%	
68 - 69	20.00%	
70+	100.00%	



2024 Per Capita Claims Costs (shown in U.S. dollars)

Medical

Prior to age 65¹

Age	HSA Basic	HSA Plus	HRA
<= 29	4,445	4,714	5,482
30 - 34	5,438	5,767	6,706
35 - 39	5,750	6,098	7,092
40 - 44	6,289	6,670	7,756
45 – 49	7,257	7,696	8,950
50 – 54	8,911	9,450	10,989
55 – 59	10,699	11,347	13,195
60 - 64	13,240	14,042	16,329
Average	12,525	13,284	15,447

Age 65 and after

Age	Medicare Select	Medicare Standard	CSP
65 – 69	3,994	3,336	2,138
70 – 74	4,340	3,625	2,368
75 – 79	4,480	3,742	2,548
80 - 84	4,436	3,705	2,625
85 – 89	4,140	3,458	2,620
90 - 94	3,576	2,987	2,455
≥ 95	2,873	2,400	2,297
Average	4,228	3,543	2,476

• Medicare Part D - RDS

Age	Medicare Advantage	CSP
65 – 69	N/A	(331)
70 – 74	N/A	(360)
75 – 79	N/A	(371)
80 - 84	N/A	(368)
85 – 89	N/A	(343)
90 – 94	N/A	(296)
≥ 95	N/A	(238)
Average	N/A	(307)

Pre-65 per capita claims costs do not include the 5% adjustment for potential dependent children covered under the plan.
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 Medicare Part D - Employer Group Waiver Plan (EGWP) for Medicare Advantage plans¹

Age	CMS Direct Payments & Catastrophic Reinsurance	Manufacturer's Coverage Gap Discount
65 – 69	(993)	(774)
70 – 74	(1,079)	(842)
75 – 79	(1,114)	(869)
80 - 84	(1,103)	(860)
85 - 89	(1,029)	(803)
90 - 94	(889)	(693)
≥ 95	(714)	(557)
Average	(1,053)	(821)

Dental 452

Administrative expenses Included in claims costs shown above.

Additional Assumptions Timing of benefit payments Benefit payments are assumed to be made uniformly throughout the year and on average at mid-year. **Methods** Census date January 1, 2024 Measurement date January 1, 2024 Service cost and APBO Costs are determined using the Projected Unit Credit Cost Method. The annual service cost is equal to the present value of the portion of the projected benefit attributable to service during the upcoming year, and the Accumulated Postretirement Benefit Obligation (APBO) is equal to the present value of the portion of the projected benefit attributable to service before the valuation date. Service from hire date through the expected full eligibility date is counted in allocating costs. The fair value of assets on the measurement date. Market-related value of assets

Amortization of unamortized amounts:

Prior service cost (credit)

Increase in APBO resulting from a plan amendment is amortized on a straight-line basis over the average expected remaining service of active participants expected to benefit under the plan. Amortization of net prior service cost/(credit) resulting from a plan change is included as a component of Net Periodic Postretirement Benefit Cost/(Income) in the year first recognized and every year thereafter until such time as it is fully amortized. The annual amortization payment is determined in the first year as the increase in APBO due to the plan change divided by the average remaining service period to full eligibility for participating employees expected to receive benefits under the Plan. Reductions in APBO first reduce any unrecognized prior service cost; any remaining amount is amortized on a straight-line basis as described above.



¹ EGWP CMS Direct Payments and Catastrophic Reinsurance payments are projected to decrease 26.6% in 2025 for the expected impact of the IRA

Net loss (gain)

Amortization of the net gain or loss resulting from experience different from that assumed and from changes in assumptions (excluding asset gains and losses not yet reflected in market-related value) is included as a component of Net Periodic Postretirement Benefit Cost/(Income) for a year.

Net loss (gain) in excess of 10% of the greater of APBO or the market-related value of assets is amortized on a straight-line basis over the average expected remaining service of active participants expected to benefit under the plan.

ASC 965 (formerly SOP 92-6)

Present value of benefits

Present value of benefits is equal to the present value of the portion of the projected benefit attributable to service before the valuation date. Service from hire date through the expected full eligibility date is counted in allocating costs.

Funding policy

AEP's funding policy is to contribute an amount equal to the postretirement welfare cost plus retiree drug subsidy payments received (the sum of which can be no less than zero). AEP maximizes its contribution to the 401(h) account and contributes the remainder to the VEBAs.

Benefits Not Valued

All benefits described in the Plan Provisions section of this report were valued. Life insurance benefits in excess of \$50,000, RDS offsets and health care benefits for key employees were not included in determining the maximum deductible contribution. WTW has reviewed the plan provisions with AEP and based on that review is not aware of any significant benefits required to be valued that were not included.

 Change in Assumptions and Methods Since Prior Valuation

- Per capita claims costs were updated to reflect 2022 retiree claims experience
- Discount rate was changed from 5.50% to 5.15%
- The expected return on assets assumption was decreased by 50 basis points to 6.75%

Sources of Data and Other Information

American Electric Power (AEP), through BusinessSolver, its third-party administrator, furnished active and inactive participant data as of January 1, 2024. AEP also provided the accrued postretirement benefit costs and assets information as of December 31, 2023. Health plan vendors furnished the claims cost data. AEP supplied 2022 prescription drug rebates and EGWP payments. Data were reviewed for reasonableness and consistency, but no audit was performed. Based on discussions with the plan sponsor, assumptions or estimates were made when data were not available, and the data were adjusted to reflect any significant events that occurred between the date the data were collected and the measurement date. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.



Assumptions Rationale - Significant Economic Assumptions - Funding and Accounting

Discount rate As required by U.S. GAAP, the discount rate was chosen by the plan

sponsor based on market information on the measurement date. We believe the discount rate chosen does not significantly conflict with what

would be reasonable.

Interest rate (funding) The interest rate is the expected rate of return on plan assets and

represents an estimate of future experience for trust asset returns, reflecting the plan's current asset allocation, and current and expected future market conditions. We believe the interest rates chosen does not

significantly conflict with what would be reasonable.

Expected long-term return on plan assets

We understand that the expected return on assets assumption reflects the plan sponsor's estimate of future experience for trust asset returns, reflecting the plan's current asset allocation and any expected changes during the current plan year, current market conditions and the plan sponsor's expectations for future market conditions. Therefore, we believe the expected return on plan assets chosen does not significantly conflict with what would be reasonable.

Rates of increase in:

 Plan administrative expenses Administrative expenses are included in per capita claims costs and thus the medical plan trend rate is applied to these expenses. We believe this assumption does not significantly conflict with what would be reasonable.

Claims cost trend rates

Assumed increases were chosen by the plan sponsor and as required by U.S. GAAP, they represent an estimate of future experience, informed by an analysis of recent plan experience, leading to select and ultimate assumed trend rates and reflecting the expected near-term effect of recently enacted plan changes. In setting near term trend rates, other pertinent statistics were considered, including surveys on general medical cost increases. In setting the ultimate trend rate, considerations included assumed GDP growth consistent with the assumed future economic conditions inherent in other economic assumptions chosen by the client at the measurement date.

After examining historical variability in trend rates, we believe that the selected assumptions do not significantly conflict with what would be reasonable based on a combination of market conditions at the measurement date and future expectations consistent with other economic assumptions used, other than the discount rate.

For the medical VEBA funding limit of the non-bargained group, no future increases in medical or dental costs have been assumed, in accordance with U.S. tax law. We believe this assumption does not significantly conflict with what would be reasonable.

Participant contribution trend rates

In accordance with the substantive plan communicated to participants, participant contributions for non-capped participants are intended to remain a fixed percentage of total plan costs, and thus the trend rates, and the description of the derivation of the trend rates, are the same as for claims costs as shown above. We believe this assumption does not significantly conflict with what would be reasonable.



Basis for Per Capita Claims Cost Assumptions

Pre-65 retiree medical rates

AEP supplied data on retiree medical and prescription drug claims incurred in 2022 and paid through March 2023. AEP reported prescription drug rebates they received for 2022. Claim experience rates were calculated for medical plans by normalizing claims experience for benefit differences and combining, then dividing combined incurred claims, net of prescription rebates by covered lives and trending forward two years to 2024. Adjustments for carrier and minor plan design changes were also made. Finally, administrative expense rates were added to claims cost rates. Claims cost models were developed by age-grading these claims rates over standard WTW morbidity curves for both medical and prescription drugs to develop the quinquennial claims cost models.

Post-65 retiree medical rates

2024 monthly claim rates were calculated separately for the Medicare Advantage options and CSP Medicare-eligible plans by dividing 2022 incurred claims (Rx only, except for CSP) paid through March 2023 by covered lives and trending forward two years to 2024. Prescription drug claim rates were then multiplied by pricing change factors representing the effect of any pricing and other program changes for 2023 and 2024.

Next, 2024 premium rates for new Medicare Advantage (MA) plans were added. There is a guarantee premium of \$0 through 2028, and additional premium credits through Aetna further support an assumption of a \$0 premium rate for Medicare Advantage plans holding indefinitely.

Finally, administrative expense rates were added to Rx and CSP claims cost rates. Claims cost models were developed separately for medical and prescription drug by age-grading these rates over standard WTW morbidity curves for medical and prescription drugs to develop quinquennial agebanded claims cost models. We believe this assumption does not significantly conflict with what is reasonable.

Dental rates

Aetna supplied data on dental claims incurred in 2022 and paid through March 2023. Claims experience for retirees was analyzed to derive the 2024 dental claim rates. The single coverage rate was trended to 2024 and administrative costs were added to derive the per capita claims cost assumption. We believe this assumption does not significantly conflict with what would be reasonable.



Medicare Part D offsets

RDS

We calibrated our modelling tool to reflect the 2023 cost of the current prescription drug plans for AEP's CSP retirees. The tool employs a continuance table of annual retiree drug utilization levels, developed from analyzing the experience of many large companies, reflecting 0.9 million Medicare-eligible members' experience from 2020.

After the plan-specific benefit provisions have been calibrated to current costs, the Modeler trends costs forward to 2024 at 8.00% per year. Actuarial equivalence was determined using the following two-prong approach outlined in the regulations for Medicare Part D:

- Gross Value Test The Modeler calculates the value of standard Medicare Part D coverage and compares it to AEP's plan costs. AEP's plans passed this test by being richer than the projected value of standard Medicare part D coverage for these groups.
- Net Value Test The net value prong of the test compares the value of Standard Part D coverage in 2024 minus the greater of \$416.40 per year (the national average Part D premium) and 25.5% of the gross value of Part D to the projected 2024 value of AEP coverage minus the average projected 2024 retiree contribution rate. For this purpose, retiree contributions were assumed to apply pro rata between the value of medical benefits and prescription drug benefits.

The tool calculates the average expected value of the employer subsidy in 2024, using the continuance table calibrated to AEP's CSP plan costs. This produced an expected 2024 per person employer subsidy of \$307 for CSP, which was then converted to rates that varied by participant age band using WTW's prescription drug morbidity factors. We believe this assumption does not significantly conflict with what is reasonable.

EGWP

Estimated plan cost offsets associated with the EGWP arrangement were calculated using actual historical payments provided by Express Scrips and OptumRx for direct subsidy payments, coverage gap discounts and reinsurance payments. These projections incorporated national average bid results for 2024 Part D plans. These amounts were converted to rates varying by quinquennial age band using WTW's standard prescription drug morbidity factors. We believe this assumption does not significantly conflict with what is reasonable.

Assumptions Rationale - Significant Demographic Assumptions

Healthy Mortality

Assumptions were selected by the plan sponsor and as required by U.S. GAAP, represent a best estimate of future experience. We believe this assumption does not significantly conflict with what would be reasonable.

Disabled Mortality

Assumptions were selected by the plan sponsor and as required by U.S. GAAP, represent a best estimate of future experience. We believe this assumption does not significantly conflict with what would be reasonable.

Termination

Termination rates are based on a recent demographic study and plan sponsor expectations for the future with periodic monitoring of observed gains and losses caused by termination patterns different than assumed. We believe this assumption does not significantly conflict with what would be reasonable.

Disability Disability rates are based on plan sponsor expectations for the future with

> periodic monitoring of observed gains and losses caused by disability patterns different than assumed. We believe this assumption does not

significantly conflict with what would be reasonable.

Retirement Retirement rates are based on a recent demographic study and plan

> sponsor expectations for the future with periodic monitoring of observed gains and losses caused by retirement patterns different than assumed. We believe this assumption does not significantly conflict with what would

be reasonable.

Persistency Persistency rates are based on a recent demographic study and plan

> sponsor expectations for the future with periodic monitoring of observed gains and losses caused by persistency patterns different than assumed. We believe this assumption does not significantly conflict with what would

be reasonable.

Participation

The assumed coverage rates for participants and spouses reflect historical Participants/Spouses

experience as well as anticipated future reductions in rates due to expected rates of increase in participant contributions and availably of coverage through public exchanges. We believe this assumption does not

significantly conflict with what would be reasonable.

The assumed dependent coverage is based on the dependent coverage Covered dependents

observed among recent retirees and general population statistics on the marital status of individuals of retirement age. We believe this assumption

does not significantly conflict with what would be reasonable.

The assumed age difference for spouses is based on the age difference Covered Spouse age

observed among recent retirees and general population statistics of the age difference for married individuals of retirement age. We believe this assumption does not significantly conflict with what would be reasonable.

Source of Prescribed Methods

Funding methods The methods used for determining maximum deductible contributions to

the 401(h) account and VEBA are chosen from acceptable methods

prescribed by law.

Model Descriptions and Disclosure in Accordance with ASOP No. 56

Quantify Quantify is the WTW centrally developed, tested and maintained Global

actuarial valuation system. It is used to perform valuations of clients'

benefit plans.

Quantify provides the ability to process data, calculate benefits and value benefit liabilities, develop results using applicable standards, and generate

client reports.

Quantify parameters provide significant flexibility to model populations and plan designs. Various demographic, economic and benefit related

assumptions exist for users to model multiple demographic and economic situations.



Plan liabilities are calculated based on standard actuarial techniques, developing actuarially reasonable results using the population and parameters entered. The calculation and presentation of liabilities in Quantify relies on the assumptions used and the reasonability of the assumptions selected.

Quantify incorporates standard liability methodologies that are intended to reasonably reflect a variety of economic or demographic conditions. The model itself does not evaluate any assumptions entered for reasonableness, consistency or probability of occurrence.

Quantify is designed specifically for these purposes, and we know of no material limitations that would prevent the system from being suitable for these intended purposes. The actuaries signing this report have relied on the actuaries who develop, test and maintain this system, and have also performed a limited review of results to ensure that system parameters have been set appropriately and plan provisions coded correctly.

BOND:Link

U.S. BOND:Link is a methodology to assist with the selection of discount rates used in liability and cost measurements related to employee benefit plans. Discount rates are derived by identifying a theoretical settlement portfolio of high-quality corporate bonds sufficient to provide for a plan's projected benefit payments. The single interest rate is then determined that results in a discounted value of the plan's benefit payments that equals the market value of the selected bond portfolio.

Updated BOND:Link models are developed monthly as of the last day of the month. The construction of a BOND:Link model relies on bond data collected as of the measurement date. Parameters provide the user the ability to control aspects of the model. The model output allows the user to see the effects of those parameters.

Published demographic tables

Certain demographic tables described above are standard published tables or are based on standard published tables from models developed by organizations with the requisite expertise

AgeDist

AgeDist is a spreadsheet tool that applies relative cost factors by age to average per capita costs (pre and post 65) and census weights to produce age-graded plan costs for pre- and post-65 populations. The average per capita costs and census weights are provided as inputs to the tool which is then combined with a morbidity curve to produce a set of weighted average age-related costs that equal the average. The age-graded costs are used in the actuarial valuation.

The morbidity curve was developed from a broad set of claims data aggregated by age and blended and does not reflect a client's specific morbidity. The model does not evaluate the average per capita costs or census weights for reasonableness or consistency.

The models used for this analysis are designed specifically for these purposes, and we know of no material limitations that would prevent the models from being suitable for these intended purposes.

We are not aware of any material inconsistencies among assumptions used in this work. The model itself does not evaluate any assumptions entered for reasonableness, consistency or probability of occurrence. The



calculation and presentation of results relies on the assumptions used and the reasonability of the assumptions selected. The output of the models used in this analysis is considered reasonable based on the aggregation of assumptions used. However, a different set of results could also be considered reasonable based on a range of possible values used for each assumption.

Pricing & Underwriting Tool (PUT)

The Pricing and Underwriting Tool (PUT) develops projected premium equivalent rates, employee contributions, and COBRA rates for self-insured employer health plans (medical, prescription drugs, dental, and vision). The tool develops rates by plan or in aggregate leveraging historic claims, enrollment, plan design and administrative fee data for an employer. The model allows flexibility to incorporate plan design changes, seasonality, and multiple methods of estimating incurred claims amounts from paid claims data.

The models used for this analysis are designed specifically to support pricing and underwriting analysis for our clients' medical, prescription drug and dental plans and we know of no material limitations that would prevent the models from being suitable for these intended purposes.

We are not aware of any material inconsistencies among assumptions used in this work. The models itself does not evaluate any assumptions entered for reasonableness, consistency or probability of occurrence. The calculations and presentation of results relies on the assumptions used and the reasonability of the assumptions selected. The output of the models used in this analysis is considered reasonable based on the aggregation of assumptions used. However, a different set of results could also be considered reasonable based on a range of possible values used for each assumption.

The individuals signing or delivering this report have relied on other WTW employees and actuaries who develop, test and maintain each of the proprietary models used for this analysis and have also performed a limited review of assumptions and results to ensure that the models have been set up appropriately and coded correctly. We have not relied on any external experts to develop, review, or validate the models used in this analysis.



Appendix B: Summary of principal other postretirement benefit plan provisions

Health Care Benefits				
Eligibility	Participants are eligible upon retirement after age 55 with ten years of service or upon attaining age 55 with ten years of service after becoming permanently disabled. If involuntary termination, then eligible after age 50 with ten years of service.			
	Employees hired on or at the plan.	fter January 1, 2014 are n	ot eligible to participate in	
Surviving spouse	spouses are eligible until	e or active employee eligi death or remarriage. Surv niting age provision outline	viving children are also	
Dependent	•	spouse, unmarried children me student) and unmarried		
Benefits – Post-65	two Medicare Advantage	al Plan provides broad me plans with \$2,000 annual ces between the two optio	out-of-pocket	
		Medicare Select	Medicare Standard	
	Deductible	\$0	\$200	

Coinsurance

In-patient copay

Prescription drug benefits are provided under a separate design with the following copayments:

\$250 per stay

5%

20%

\$200 per day (1-5)

	Generic	Brand Name Formulary	Brand Name Nonformulary
30-day retail	\$10 copay	20% \$20 minimum \$100 maximum	35% \$35 minimum \$200 maximum
90-day retail	\$20 copay	20% \$50 minimum \$200 maximum	35% \$90 minimum \$300 maximum

Prescription drug benefits are also subject to a \$50 deductible and a \$1,000 out-of-pocket maximum per person.

Deductibles and out-of-pocket maximums are assumed to increase over time at approximately the same rate as benefit costs.

Benefits - Pre-65

Pre-65 retirees can elect coverage under the following plan options:

	HRA	HSA Plus	HSA Basic		
Embedded Individual Amounts	None	Out-of-Pocket Maximum only	Deductible & Out-of-Pocket Maximum		
Deductible Individual Two Person Family	\$1,500	\$2,000	\$3,200		
	\$2,250	\$3,200	\$6,000		
	\$3,000	\$4,000	\$9,000		
AEP Account Seed Single Two Person Family	\$1,000	\$500	\$0		
	\$1,500	\$750	\$0		
	\$2,000	\$1,000	\$0		
Coinsurance	85%	85%	90%		
Out-of-Pocket Maximum Individual Two Person Family	\$4,000	\$4,000	\$4,000		
	\$6,000	\$6,000	\$8,000		
	\$8,000	\$8,000	\$12,000		

Deductibles, account seeds and out-of-pocket maximums are assumed to increase over time at approximately the same rate as benefit costs.

Retiree contributions

Participant contributions are determined as a percentage of plan costs and vary by points (age at retirement plus service) as follows:

Points	Retiree Cost
65-69	46%
70-74	42
75-79	36
80-84	32
85-89	26
90-94	22
95+	20
Grandfathered	20

Spousal coverage requires contribution rates 5% higher than the retiree rates shown in the table above. These percentages do not apply to surviving spouses who pay 50% for pre-65 coverage and 25% for post-65 coverage.

For participants retiring on or after January 1, 2013, AEP's subsidy is capped at \$11,500 and \$3,800 times employer cost sharing percentage for pre-65 and post-65 participants, respectively.

For East participants who retired prior to January 1, 1989, and West participants who retired prior to January 1, 1993, no contributions are required.

For East participants who retired on or after January 1, 1989, and West participants who retired on or after January 1, 1993, the 20% "Grandfathered" contributions are in effect if they retired by December 31, 2000, or attained age 50 and had ten or more years of service with the company on that date. The percentages described above



are applied to plan costs that differ from the per capita claims costs assumed in the valuation as follows:

The Medicare status of dependents is not used to determine whether "pre-65" or "post-65" rates apply. The pre-65 plan rates used to calculate participant contributions are a blend of pre-65 retiree costs and active employee costs for those participants retired prior to January 1, 2013, only.

For purposes of determining retiree contribution rates, AEP excludes the value of the government's monthly direct payment amount and its catastrophic reinsurance payments from offsetting the plan cost to which the contribution percentages are applied.

Disabled employee contributions

Disabled employees are offered coverage for the same rates as active employees while an employee remains disabled and is receiving LTD benefits.

If an employee retires while disabled and became disabled before January 1, 2001, a waiver of premium provision continues for life as long as the retirement commenced on or before September 1, 2013. If an employee retires while disabled and became disabled after January 1, 2001, the employee will be subject to the same contribution schedule as normal retirees, based on age and service points earned prior to LTD commencement.

Those participants retiring after January 1, 2013, pay a percentage of true pre-65 retiree costs.

Life Insurance Benefits

Eligibility

Employees hired after January 1, 2011 are not eligible for a postretirement life insurance benefit.

Grandfathered participants

Participants over age 50 with ten years of service as of December 31, 2000.

Death benefit amount

Participants who had not turned 50 with 10 years of service as of December 31, 2010 are eligible for a non-contributory \$30,000 death benefit.

Grandfathered benefits

Grandfathered participants have the option of keeping current coverage. Active employee coverage for grandfathered East participants is one times final base pay at no cost with the option to buy up to two times base pay. The entire amount of coverage (basic plus supplemental) in force prior to retirement can be carried into retirement subject to reduction beginning at age 66. Current coverage for grandfathered West participants is one and one-half times final base pay prior to age 60, one times final base pay from age 60 to 64 and one-half times final base pay after age 65. In 2001, employees who had turned 50 with 10 years of service had the option to elect a non-contributory benefit at 50% of pay.



Life Insurance Benefit Reduction Table for Grandfathered East Participants						
Years of	A = 2 . C.C	A = 2 6 7	A = 2 C O	A = = = CO	Age 70	
Coverage	Age 66	Age 67	Age 68	Age 69	or Over	
10 – 11	65%	55%	45%	35%	25%	
11 – 12	70	60	50	40	30	
12 – 13	75	65	55	45	35	
13 – 14	80	70	60	50	40	
14 – 15	85	75	65	55	45	
15 or more	90	80	70	60	50	

Grandfathered contributions

Grandfathered East retirees must contribute \$0.60/\$1,000 of coverage (basic + supplemental) per month. West retirees are not required to contribute to the cost of coverage.

Dental Benefits

Eligibility Participants, including retirees and surviving dependents, are eligible upon

retirement after age 55 with ten years of service. There is a one-time election and if coverage terminates there is no opportunity to reenroll.

Benefits The AEP Dental Plan provides dental coverage with a deductible of \$50

single/\$150 family, 100% coinsurance for preventive care, 80% coinsurance for basic restorative care, 50% coinsurance for major restorative care and 50% coinsurance for orthodontia (for children under age 19). The plan has

an annual maximum benefit of \$1,750 per person.

Most retirees pay the full cost of dental coverage if they enroll. CSW employees who retired before January 1, 1993, contribute nothing to enroll for dental coverage. Former CSW employees retiring after January 1, 1993, who were either retired or had attained age 50 with ten years of service as of January 1, 2001, pay 40% (45% for spouses) of the full plan cost.

Changes in Benefits Valued Since Prior Year

There have been no changes in benefits valued since the prior year.

Overview of Benefits Provided by Funding Vehicles

Funding Vehicle	Provides for
Non-union postretirement medical/dental VEBAs	9.5% of retiree medical benefits and 100% of dental benefits to non-union retirees.
Union postretirement medical/dental VEBAs	100% of medical/dental benefits to union retirees.
Postretirement life insurance VEBA	Life insurance benefits for all retirees.
401(h) account	90.5% of retiree medical benefits for non-union retirees.



Appendix C: Results by business unit

SUMMARY OF PLAN PARTICIPANTS FOR THE 2023 VALUATION

					Reti	red Participa	nts	
	-	Nonretired Par			Dependent	Surviving		
Location		Active	Total	Retiree	Spouse	Spouse	Disabled	Total
140 Anna	alachian Power Co Distribution	531	531	1,031	589	269	36	1,925
	alachian Power Co Generation	385	385	949	550	200	26	1,725
	alachian Power Co Transmission	6	6	115	72	23	2	212
	alachian Power Co FERC	922	922	2,095	1,211	492	64	3,862
	ar Coal Co	0	0	1	0	5	0	6
Appa	alachian Power Co SEC	922	922	2,096	1,211	497	64	3,868
211 AEP	Texas Central Company - Distribution	550	550	774	387	230	14	1,405
147 AEP	Texas Central Company - Generation	0	0	0	0	0	0	0
169 AEP	Texas Central Company - Transmission	86	86	71	37	28	2	138
	Texas Central Co.	636	636	845	424	258	16	1,543
	Texas North Company - Distribution	123	123	251	126	56	6	439
	Texas North Company - Generation	0	0	59	22	30	0	111
	Texas North Company - Transmission	39	39	31	14	8	0	53
	Texas North Co. Texas	162 798	162 798	341 1,186	162 586	94 352	6 22	603 2,146
ALF	Texas	190	790	1,100	500	332	22	2, 140
170 India	ana Michigan Power Co Distribution	258	258	576	272	171	8	1,027
132 India	ana Michigan Power Co Generation	90	90	364	223	70	5	662
	ana Michigan Power Co Nuclear	552	552	630	362	88	4	1,084
	ana Michigan Power Co Transmission	56	56	128	77	26	2	233
	Mich River Transp Lakin	64	64	141	58	33	11	243
India	ana Michigan Power Co SEC	1,020	1,020	1,839	992	388	30	3,249
110 Kenti	ucky Power Co Distribution	112	112	216	105	38	10	369
	ucky Power Co Generation	12	12	322	200	46	4	572
180 Kenti	ucky Power Co Transmission	1	1	12	8	4	0	24
Kent	tucky Power Co.	125	125	550	313	88	14	965
250 Ohio	Power Co Distribution	778	778	1,458	746	399	17	2,620
	Power Co Transmission	10	10	157	86	62	2	307
Onio	Power Co.	788	788	1,615	832	461	19	2,927
167 Publi	ic Service Co. of Oklahoma - Distribution	347	347	482	247	147	5	881
	ic Service Co. of Oklahoma - Generation	143	143	248	133	57	5	443
	ic Service Co. of Oklahoma - Transmission	36	36	56	36	10	0	102
Pubi	lic Service Co. of Oklahoma	526	526	786	416	214	10	1,426
159 South	hwestern Electric Power Co Distribution	289	289	355	183	68	11	617
168 South	hwestern Electric Power Co Generation	292	292	367	221	75	14	677
161 South	hwestern Electric Power Co Texas - Distribution	118	118	162	82	43	4	291
	hwestern Electric Power Co Texas - Transmission	0	0	0	0	0	0	0
	hwestern Electric Power Co Transmission	52	52	51	27	20	3	101
Sout	thwestern Electric Power Co.	751	751	935	513	206	32	1,686
	sport Power Co Distribution	30	30	47	27	9	1	84
-	sport Power Co Transmission	0 30	0 30	7 54	2 29	2 11	0 1	11 95
Killy	sport Power Co.	30	30	34	29	11	'	95
210 Whe	eling Power Co Distribution	21	21	65	37	14	2	118
200 Whe	eling Power Co Transmission	0	0	0	0	1	0	1
	eeling Power Co - Generation	104	104	4	10	0	12	26
Whe	eeling Power Co.	125	125	69	47	15	14	145
103 Amei	rican Electric Power Service Corporation	2,901	2,901	3,812	1,922	411	40	6,185
293 Elmw	vood	0	0	35	1	0	0	36
	River Operations LLC	0	0	143	38	6	0	187
Ame	rican Electric Power Service Corporation	2,901	2,901	3,990	1,961	417	40	6,408
270 Cook	k Coal Terminal	4	4	11	8	1	0	20
AEP	Generating Company	4	4	11	8	1	0	20
104 Card	linal Operating Company	0	0	275	148	47	0	470
	Power Co Generation	0	0	992	581	272	2	1,847
	Generation Resources - FERC	0	0	1,267	729	319	2	2,317
	esville Coal Preparation Company	0	0	8	4	4	0	16
	Generation Resources - SEC	0	0	1,275	733	323	2	2,333
	Energy Partners	29	29	0	1	0	1	2
400 AEP		12	12	18	4	2	0	24
	te Partners	6	6	0	0	0	0	0
AEP	Energy Supply	47	47	1,293	738	325	3	2,359
	Pro Serv, Inc.	0	0	1	1	0	0	2
AEP	Pro Serv, Inc.	0	0	1	1	0	0	2
245 Dolet		2	2	101	43	2	7	153
Dole	t Hills	2	2	101	43	2	7	153
Tota	ıl	8,039	8,039	14,526	7,690	2,977	256	25,449



2024 NET PERIODIC POSTRETIREMENT BENEFIT COST

NET PERIODIC POSTRETIREMENT BENEFIT COST	"Other" Cost						
	Service	Interest	Expected Return				Periodic Pension
Location	Cost	Cost	on Assets	PSC	(G)/L	"Other" Cost	Cost
140 Appalachian Power Co - Distribution	\$241,954	\$3,016,092	(\$8,427,806)	(\$937,249)	\$257,559	(\$6,091,404)	(\$5,849,450
215 Appalachian Power Co - Generation 150 Appalachian Power Co - Transmission	\$233,832 \$2,115	\$2,529,228 \$287,978	(\$7,053,724) (\$802,549)	(\$764,498) (\$131,971)	\$215,566 \$24,526	(\$5,073,428) (\$622,016)	(\$4,839,596 (\$619,901
Appalachian Power Co FERC	\$477,901	\$5,833,298	(\$16,284,079)	(\$1,833,718)	\$497,651	(\$11,786,848)	(\$11,308,947
225 Cedar Coal Co Appalachian Power Co SEC	\$0 \$477,901	\$3,759 \$5,837,057	(\$10,817) (\$16,294,896)	(\$471) (\$1,834,189)	\$331 \$497,982	(\$7,198) (\$11,794,046)	(\$7,198 (\$11,316,145)
211 AEP Texas Central Company - Distribution 147 AEP Texas Central Company - Generation	\$241,257 \$0	\$2,170,049 \$0	(\$6,027,683) \$0	(\$706,746) (\$170)	\$184,209 \$0	(\$4,380,171) (\$170)	(\$4,138,914 (\$170
169 AEP Texas Central Company - Transmission	\$41,246	\$226,404	(\$622,770)	(\$72,160)	\$19,032	(\$449,494)	(\$408,248
AEP Texas Central Co.	\$282,503	\$2,396,453	(\$6,650,453)	(\$779,076)	\$203,241	(\$4,829,835)	(\$4,547,332
119 AEP Texas North Company - Distribution 166 AEP Texas North Company - Generation	\$47,890 \$0	\$653,049 \$112.054	(\$1,825,121) (\$316,590)	(\$234,757) (\$5,857)	\$55,777 \$9,675	(\$1,351,052) (\$200,718)	(\$1,303,162 (\$200,718
192 AEP Texas North Company - Transmission	\$17,701	\$95,338	(\$261,944)	(\$43,461)	\$8,005	(\$202,062)	(\$184,361
AEP Texas North Co. AEP Texas	\$65,591 \$348,094	\$860,441 \$3,256,894	(\$2,403,655) (\$9,054,108)	(\$284,075) (\$1,063,151)	\$73,457 \$276,698	(\$1,753,832) (\$6,583,667)	(\$1,688,241 (\$6,235,573
170 Indiana Michigan Power Co - Distribution 132 Indiana Michigan Power Co - Generation	\$132,669	\$1,397,124 \$904,756	(\$3,892,745)	(\$466,109)	\$118,964 \$78,108	(\$2,842,766) (\$1,919,422)	(\$2,710,097
190 Indiana Michigan Power Co - Generation 190 Indiana Michigan Power Co - Nuclear	\$31,537 \$336,647	\$1,868,313	(\$2,555,838) (\$5,180,094)	(\$346,448) (\$680,462)	\$158,307	(\$3,833,936)	(\$1,887,885 (\$3,497,289
120 Indiana Michigan Power Co - Transmission	\$28,397	\$331,840	(\$924,091)	(\$109,020)	\$28,241	(\$673,030)	(\$644,633
280 Ind Mich River Transp Lakin	\$41,280	\$330,798	(\$918,375)	(\$146,388)	\$28,066	(\$705,899)	(\$664,619
Indiana Michigan Power Co SEC	\$570,530	\$4,832,831	(\$13,471,143)	(\$1,748,427)	\$411,686	(\$9,975,053)	(\$9,404,523
110 Kentucky Power Co - Distribution	\$50,324 \$4,206	\$581,679 \$761,135	(\$1,614,437)	(\$221,152)	\$49,338 \$65,865	(\$1,204,572) (\$1,446,528)	(\$1,154,248 (\$1,442,322
117 Kentucky Power Co - Generation 180 Kentucky Power Co - Transmission	\$4,206 \$1,277	\$29,877	(\$2,155,235) (\$82,866)	(\$118,293) (\$33,960)	\$2,532	(\$1,446,526)	(\$1,442,322
Kentucky Power Co.	\$55,807	\$1,372,691	(\$3,852,538)	(\$373,405)	\$117,735	(\$2,735,517)	(\$2,679,710
250 Ohio Power Co - Distribution	\$396,497	\$3,840,285	(\$10,721,471)	(\$1,079,205)	\$327,654	(\$7,632,737)	(\$7,236,240
160 Ohio Power Co - Transmission	\$5,106	\$402,135	(\$1,125,987)	(\$172,783)	\$34,411	(\$862,224)	(\$857,118
Ohio Power Co.	\$401,603	\$4,242,420	(\$11,847,458)	(\$1,251,988)	\$362,065	(\$8,494,961)	(\$8,093,358
167 Public Service Co of Oklahoma - Distribution	\$187,059	\$1,308,198	(\$3,630,214)	(\$451,326)	\$110,941	(\$2,662,401)	(\$2,475,342
198 Public Service Co of Oklahoma - Generation 114 Public Service Co of Oklahoma - Transmission	\$85,144 \$19,460	\$668,113 \$162,577	(\$1,870,766) (\$453,160)	(\$280,868) (\$58,155)	\$57,172 \$13,849	(\$1,426,349) (\$334,889)	(\$1,341,205 (\$315,429
Public Service Co. of Oklahoma	\$291,663	\$2,138,888	(\$5,954,140)	(\$790,349)	\$181,962	(\$4,423,639)	(\$4,131,976
159 Southwestern Electric Power Co - Distribution	\$141,226	\$1,023,687	(\$2,843,023)	(\$391,406)	\$86,884	(\$2,123,858)	(\$1,982,632
168 Southwestern Electric Power Co - Generation	\$152,911	\$1,061,576	(\$2,965,773)	(\$405,818)	\$90,636	(\$2,219,379)	(\$2,066,468
161 Southwestern Electric Power Co - Texas - Distribution	\$58,166	\$444,527	(\$1,233,752)	(\$175,824)	\$37,704	(\$927,345)	(\$869,179
111 Southwestern Electric Power Co - Texas - Transmission 194 Southwestern Electric Power Co - Transmission	\$0 \$24,535	\$0 \$152,256	\$0 (\$422,475)	\$0 (\$51,405)	\$0 \$12,911	\$0 (\$308,713)	\$0 (\$284,178)
Southwestern Electric Power Co.	\$376,838	\$2,682,046	(\$7,465,023)	(\$1,024,453)	\$228,135	(\$5,579,295)	(\$5,202,457
230 Kingsport Power Co - Distribution	\$19,311	\$132,242	(\$368,178)	(\$33,053)	\$11,252	(\$257,737)	(\$238,426
260 Kingsport Power Co - Transmission	\$0	\$13,713	(\$38,467)	(\$6,640)	\$1,176	(\$30,218)	(\$30,218
Kingsport Power Co.	\$19,311	\$145,955	(\$406,645)	(\$39,693)	\$12,428	(\$287,955)	(\$268,644
210 Wheeling Power Co - Distribution	\$8,801	\$153,262	(\$429,369)	(\$46,837)	\$13,122	(\$309,822)	(\$301,021
200 Wheeling Power Co - Transmission 413 Wheeling Power Co - Generation	\$0 \$73,199	\$228 \$129,470	(\$690) (\$343,254)	(\$227) (\$198,278)	\$21 \$10.490	(\$668) (\$401,572)	(\$668 (\$328,373
Wheeling Power Co.	\$82,000	\$282,960	(\$773,313)	(\$245,342)	\$23,633	(\$712,062)	(\$630,062
103 American Electric Power Service Corporation	\$1,517,460	\$10,707,236	(\$29,615,140)	(\$3,171,904)	\$905,058	(\$21,174,750)	(\$19,657,290
293 Elmwood	\$0	\$26,784	(\$73,671)	(\$47,389)	\$2,251	(\$92,025)	(\$92,025
292 AEP River Operations LLC American Electric Power Service Corp	\$0 \$1,517,460	\$176,105 \$10,910,125	(\$489,904) (\$30,178,715)	(\$221,586) (\$3,440,879)	\$14,972 \$922,281	(\$520,413) (\$21,787,188)	(\$520,413 (\$20,269,728
American Electric Fower Service Corp	\$1,517,460	\$10,910,125	(\$30,176,713)	(\$3,440,679)	\$322,201	(\$21,767,166)	(\$20,265,726
270 Cook Coal Terminal AEP Generating Company	\$2,203 \$2,203	\$28,765 \$28,765	(\$79,921) (\$79,921)	(\$12,032) (\$12,032)	\$2,442 \$2,442	(\$60,746) (\$60,746)	(\$58,543 (\$58,543
104 Cardinal Operating Company 181 Ohio Power Co - Generation	\$0 \$0	\$577,831 \$2,357,042	(\$1,632,705) (\$6,647,129)	(\$202,690) (\$659,045)	\$49,896 \$203,140	(\$1,207,668) (\$4,745,992)	(\$1,207,668 (\$4,745,992
AEP Generation Resources - FERC	\$0	\$2,934,873	(\$8,279,834)	(\$861,735)	\$253,036	(\$5,953,660)	(\$5,953,660
290 Conesville Coal Preparation Company AEP Generation Resources - SEC	\$0 \$0	\$18,726 \$2,953,599	(\$51,832) (\$8,331,666)	(\$9,605) (\$871,340)	\$1,584 \$254,620	(\$41,127) (\$5,994,787)	(\$41,127 (\$5,994,787
175 AEP Energy Partners	\$15,321	\$2,953,599	(\$8,331,666) (\$51,644)	(\$8,333)	\$1,578	(\$38,367)	(\$23,046
400 AEP Energy	\$6,496	\$34,128	(\$95,557)	(\$2,780)	\$2,919	(\$61,290)	(\$54,794
419 Onsite Partners AEP Energy Supply	\$3,388 \$25,205	\$3,745 \$3,011,504	(\$9,582) (\$8,488,449)	(\$77) (\$882,530)	\$293 \$259,410	(\$5,621) (\$6,100,065)	(\$2,233 (\$6,074,860
143 AEP Pro Serv, Inc. AEP Pro Serv, Inc.	\$0 \$0	\$3,952 \$3,952	(\$10,831) (\$10,831)	(\$223) (\$223)	\$331 \$331	(\$6,771) (\$6,771)	(\$6,771 (\$6,771
				(\$14,977)			
245 Dolet Hills Dolet Hills	\$1,549 \$1,549	\$160,500 \$160,500	(\$460,707) (\$460,707)	(\$14,977) (\$14,977)	\$14,079 \$14,079	(\$301,105) (\$301,105)	(\$299,556 (\$299,556
Total	\$4,170,164	\$38,906,588	(\$108,337,887)	(\$12,721,638)	\$3,310,867	(\$78,842,070)	(\$74,671,906
Total without Dolet Hills	\$4,168,615	\$38,746,088	(\$107,877,180)	(\$12,706,661)	\$3,296,788	(\$78,540,965)	(\$74,372,350)

