UMWA Postretirement Health Care Plan

Actuarial Valuation Report Postretirement Welfare Cost for Fiscal Year Ending December 31, 2012, under U.S. GAAP

April 2012



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Purpose and Actuarial Certification

Purposes of Valuation

American Electric Power retained Towers Watson Pennsylvania Inc. ("Towers Watson"), to perform an actuarial valuation of its postretirement welfare programs for the purpose of determining the following:

- (1) The value of benefit obligations as of January 1, 2012 and American Electric Power's postretirement welfare cost for fiscal year ending December 31, 2012 in accordance with FASB Accounting Standards Codification Topic 715 (ASC 715-60). It is anticipated that a separate report will be prepared for year-end financial reporting and disclosure purposes.
- (2) Plan reporting information in accordance with FASB Accounting Standards Codification Topic 965 (ASC 965).

This valuation has been conducted in accordance with generally accepted actuarial principles and practices.

Reliances

In preparing the results presented in this report, we have relied upon information regarding plan provisions, participants, claims data, contributions and assets (if any) provided by American Electric Power and other persons or organizations designated by American Electric Power. 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. We have relied on all the information provided as complete and accurate. The results presented in this report are dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data and information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by American Electric Power, may produce materially different results that could require that a revised report be issued.

Effects of Health Care Reform

In March 2010, the Patient Protection and Affordable Care Act (PPACA) and Health Care and Education Reconciliation Act (HCERA) were enacted. The key aspects of the Acts affecting American Electric Power's benefit obligation and cost of providing retiree medical benefits are:

- Availability of subsidies from the Early Retiree Reinsurance Program (ERRP)
- Mandatory coverage for adult children until age 26 beginning in 2011
- Loss of the tax free status of the Retiree Drug Subsidy (RDS) beginning in 2013
- Excise ("Cadillac") tax on high-cost plans beginning in 2018

All subsequent measurements for tax purposes reflect the new law.

This valuation reflects our understanding of the relevant provisions of PPACA and HCERA. The IRS has yet to issue final guidance with respect to many aspects of this law. 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.

Nature of Actuarial Calculations

The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated or selected by Towers Watson, we consider reasonable and within the "best-estimate range" as described by the Actuarial Standards of Practice. Other actuarial assumptions could also be considered to be reasonable and within the best-estimate range. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points within the best-estimate ranges for various assumptions.

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 certainty. The effects of certain plan provisions may be approximated, or determined to be insignificant and therefore not valued. Assumptions may be made, in consultation with American Electric Power, about participant data or other factors. 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. The numbers shown in this report are not rounded. This is for convenience only and should not imply precision; by their nature, actuarial calculations are not precise.

If overall future plan experience produces higher benefit payments than assumed, the relative level of plan costs or contribution requirements 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; increases or reductions 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. It is beyond the scope of this valuation to analyze the potential range of future postretirement welfare contributions, but we can do so upon request.

See Basis for Valuation in Section 1 below 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 engagement letter dated February 13, 2012, and any accompanying or referenced terms and conditions.

The information contained in this report was prepared for the internal use of American Electric Power and its auditors in connection with our actuarial valuation of the postretirement welfare 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. American Electric Power may distribute this actuarial valuation report to the appropriate authorities who have the legal right to require American Electric Power to provide them this report, in which case American Electric Power will use best efforts to notify Towers Watson in advance of this distribution, and will include the nonreliance notice included at the end of this report. Further distribution to, or use by, other parties of all or part of this report is expressly prohibited without Towers Watson's prior written consent. In the absence of such consent and an express assumption of responsibility, we accept no responsibility



whatsoever for any consequences arising from any third party relying on this report or any advice relating to its contents. There are no intended third-party beneficiaries of this report or the work underlying it.

Professional Qualifications

The undersigned consulting actuaries 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 postretirement welfare plans. Our objectivity is not impaired by any relationship between American Electric Power and our employer, Towers Watson Pennsylvania Inc.

Matthew J. Pilkey, FSA, MAAA Consultant

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Martin P. Franzinger, ASA, MAAA Consulting Actuary

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Section 1: Summary of Results

Summary of Valuation Results

	All monetary amounts shown in 03	Donaro	
Fiscal Year Ending		December 31, 2012	December 31, 2011
Benefit Cost/ (Income)	Postretirement Welfare Cost/(Income)	10,250,773	9,898,694
Measurement Date		January 1, 2012	January 1, 2011
Plan Assets	Fair Value of Assets (FVA)	0	0
Benefit Obligations	Accumulated Postretirement Benefit Obligation (APBO)	101,985,143	89,830,818
Funded Status	Funded Status	(101,985,143)	(89,830,818)
	Transition Obligation/(Asset)	1,036,845	2,520,332
Accumulated Other Comprehensive	Net Prior Service Cost/(Credit)	0	0
(Income)/Loss (AOCI)	Net Loss/(Gain)	53,479,113	46,391,221
	Total AOCI	54,515,958	48,911,553
Assumptions	Discount Rate	4.75%	5.25 %
	Current Health Care Cost Trend Rate	7.00 %	7.50 %
	Ultimate Health Care Cost Trend Rate	5.00 %	5.00 %
	Year of Ultimate Trend Rate	2020	2016
Census Date		January 1, 2012	January 1, 2011
Plan reporting (ASC 965)) for Plan Year Beginning	January 1, 2012	January 1, 2011
	Present value of accumulated benefits	110,729,518	89,830,818
	Market value of assets	0	0
	Plan reporting discount rate	4.75 %	5.25 %
Employer Contributions	(net of Medicare subsidy)	Plan Year 2012	Plan Year 2011
Cash Flow	Expected benefit payments and expenses, net of participant contributions	3,998,745	3,941,862

All monetary amounts shown in US Dollars

Employer Contributions

Employer contributions are the amounts paid by American Electric Power to provide for postretirement benefits, net of participant contributions and Medicare subsidy.

American Electric Power's funding policy is to pay claims costs for the year and administrative expenses, less participant contributions and any Medicare Part D subsidy (RDS) received. We understand the sponsor may deviate from this policy, as permitted by its terms, based on cash, tax or other considerations.

Postretirement Welfare Cost and Funded Position

The cost of the postretirement welfare plan is determined in accordance with generally accepted accounting principles in the U.S. ("U.S. GAAP"). The Fiscal 2012 postretirement welfare benefit cost for the plan is \$10,250,773. Under U.S. GAAP, the funded position (fair value of plan assets less the projected benefit obligation, or "APBO") of each postretirement welfare plan at the plan sponsor's fiscal year-end (measurement date) is required to be reported as a liability. The APBO is the actuarial present value of benefits attributed to service rendered prior to the measurement date, taking into consideration expected future pay increases for pay-related plans. The plan's overfunded (underfunded) APBO as of January 1, 2012, was \$(101,985,143), based on the fair value of plan assets of \$0 and the APBO of \$101,985,143.

Fiscal year-end financial reporting information and disclosures are prepared before detailed participant data and full valuation results are available. Therefore, the postretirement benefit asset (liability) at December 31, 2011, was derived from a roll forward of the January 1, 2011 valuation results, adjusted for the year-end discount rate and asset values, as well as significant changes in plan provisions and participant population. The current fiscal year-end financial reporting information will be developed based on the results of the January 1, 2012 valuation, projected to the end of the year and similarly adjusted for the year-end discount rate and asset values, as well as significant changes in plan provisions and participant population.

Change in Postretirement Welfare Cost

The postretirement welfare cost increased from \$9,898,694 in fiscal 2011 to \$10,250,773 in fiscal 2012, as set forth below:

		Postretirement welfare cost
Pri	or year	9,898,694
Ch	ange due to:	
Þ	Expected based on prior valuation and contributions during prior year	(515,843)
►	Unexpected noninvestment experience	(358,066)
►	Assumption changes	1,225,987
►	Changes in substantive plan	0
Cu	rrent year	10,250,773

All monetary amounts shown in US Dollars

Significant reasons for these changes include the following:

- Trend rate assumption was increased to an initial rate of 7.00% in 2012, reducing 25 basis points annually before reaching an ultimate trend of 5.00% in 2020.
- The discount rate declined 50 basis points compared to the prior year which increased the postretirement welfare cost.

 The mortality table was updated to reflect an additional year of mortality improvements which increased the postretirement welfare cost.

Basis for Valuation

Appendix A summarizes the assumptions and methods used in the valuation. Appendix B summarizes our understanding of the principal provisions of the plan being valued. The most recent plan change reflected in this valuation was effective on January 1, 2005.

Changes in Assumptions

The following assumptions were revised for the 2012 valuation: discount rate, per capita claims costs, trend and mortality.

Changes in Methods

None.

Changes in Benefits Valued

None.



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Section 2: Actuarial Exhibits

2.1 Balance Sheet Asset / (Liability)

		All monetary amounts shown in U	S Dollars	
Ме	asu	rement Date	January 1, 2012	January 1, 2011 $^-$
Α	De	velopment of Balance Sheet Asset/(Liability) ¹		
	1	Accumulated postretirement benefit obligation (APBO)	101,985,143	89,830,818
	2	Fair value of assets (FVA)	0	0
	3	Net balance sheet asset/(liability)	(101,985,143)	(89,830,818)
в	Cu	rrent and Noncurrent Allocation		
	1	Noncurrent assets	0	0
	2	Current liabilities	(3,998,745)	(3,941,862)
	3	Noncurrent liabilities	(97,986,398)	(85,888,956)
	4	Net balance sheet asset/(liability)	(101,985,143)	(89,830,818)
С	Ac	cumulated Other Comprehensive (Income)/Loss		
	1	Transition obligation/(asset)	1,036,845	2,520,332
	2	Net prior service cost/(credit)	0	0
	3	Net loss/(gain)	53,479,113	46,391,221
	4	Accumulated other comprehensive (income)/loss ²	54,515,958	48,911,553
D	As	sumptions		
	1	Discount rate	4.75%	5.25%
	2	Current health care cost trend rate	7.00%	7.50%
	3	Ultimate health care cost trend rate	5.00%	5.00%
	4	Year of ultimate trend rate	2020	2016
Е	Ce	nsus date	January 1, 2012	January 1, 2011

¹ If the amounts in this table differ materially from those disclosed at year-end, consideration should be given to disclosing the true-up in the quarterly financial statements.

² Amount shown is pre-tax and should be adjusted by plan sponsor for tax effects.

2.2 Summary and Comparison of Postretirement Benefit Cost and Cash Flows

Fis	cal	Year Ending	December 31, 2012	December 31, 2011			
Α	То	tal Postretirement Benefit Cost					
	1	Employer service cost	1,244,527	1,022,413			
	2	Interest cost	4,809,541	4,667,644			
	3	Expected return on assets	0	0			
	4	Subtotal	6,054,068	5,690,057			
	5	Transition obligation/(asset) amortization	1,036,845	1,483,487			
	6	Net prior service cost/(credit) amortization	0	0			
	7	Net loss/(gain) amortization	3,159,860	2,725,150			
	8 Amortization subtotal		4,196,705	4,208,637			
	9 Net periodic postretirement benefit cost/(income)		10,250,773	9,898,694			
в	As	sumptions ¹					
	1	Discount rate	4.75 %	5.25 %			
	2	Current health care cost trend rate	7.00 %	7.50 %			
	3	Ultimate health care cost trend rate	5.00 %	5.00 %			
	4	Year ultimate trend rate is expected	2020	2016			
С	Ce	nsus Date	January 1, 2012	January 1, 2011			
D	As	sets at Beginning of Year					
	1	Fair market value	0	0			
Е	Ca	sh Flow	Expected	Actual			
	1	Employer contributions	3,998,745	4,030,718			
	2	Plan participants' contributions	0	0			
	3	Benefits paid by the Employer	3,998,745	4,030,718			
	4	Expected Medicare subsidy on current year benefit payments	(305,425)	N/A			

All monetary amounts shown in US Dollars

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These assumptions were used to calculate the Net Postretirement Benefit Cost/ (Income) as of the beginning of the year. Rates are expressed on an annual basis where applicable. For assumptions used for interim measurement periods, if any, refer to Appendix A.

2.3 Information for Deferred Tax Calculations

The following information is provided for purposes of determining the deferred portion of the tax provision and the deferred tax asset associated with the postretirement welfare cost and obligation, respectively. This information reflects the tax-exempt status of the Retiree Drug Subsidy ("RDS") payment at the valuation date.

All monetary amounts shown in US Dollars

		Book Basis Net of Part D Subsidy	Tax Basis Net of Part D Subsidy after 2012
Α	Postretirement Welfare Cost		
	1 Fiscal 2012	10,250,773	10,849,929
	2 Fiscal 2011	9,898,694	9,924,113
в	Funded Position		
	1 Overfunded (underfunded) APBO	(101,985,143)	(110,729,518)



2.4 Detailed Results for Postretirement Welfare cost and Funded Position

		All monetary amounts shown in US	Dollars	
De	taile	d results	January 1, 2012	January 1, 2011
Α	Se	rvice Cost		
	1	Medical	1,244,527	1,022,413
в	Ac	cumulated Postretirement Benefit Obligation [APBO]		
	1	Medical:		
		a Participants currently receiving benefits	70,185,126	64,309,150
		b Fully eligible active participants	22,058,872	18,054,443
		c Other participants	9,741,145	7,467,225
		d Total	101,985,143	89,830,818
С	As	sets		
	1	Fair value [FV]	0	0
D	Fu	nded Position		
	1	Overfunded (underfunded) APBO	(101,985,143)	(89,830,818)
Е	An	nounts in Accumulated Other Comprehensive Income		
	1	Transition obligation/(asset)	1,036,845	2,520,332
	2	Net prior service cost/(credit)	0	0
	3	Net loss/(gain)	53,479,113	46,391,221
	4	Total	54,515,958	48,911,553
F	Eff	fect of Change in Health Care Cost Trend Rate		
	1	One-percentage-point increase:		
		a Sum of service cost and interest cost	1,355,267	1,193,428
		b APBO	19,464,828	15,018,660
	2	One-percentage-point decrease:		
		a Sum of service cost and interest cost	(1,019,786)	(907,037)
		b APBO	(15,327,142)	(11,898,353)



2.5 Expected Benefit Disbursements, Administrative Expenses, and Participant Contributions

		All monetary an	nounts shown in US Dollars	
			January 1, 2012	January 1, 2011
Α	Me	dical		
	1	Gross disbursements	4,304,170	4,268,399
	2	Participant contributions	0	0
	3	Net disbursements	4,304,170	4,268,399
в	RD	S		
	1	Gross disbursements	(305,425)	(326,537)
	2	Participant contributions	0	0
	3	Net disbursements	(305,425)	(326,537)
С	То	tal		
	1	Gross disbursements	3,998,745	3,941,862
	2	Participant contributions	0	0
	3	Net disbursements	3,998,745	3,941,862

nonetary amounts shown in US Dollars



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Section 3: Participant Data

Summary of Plan Participants 3.1

All monetary amounts shown in US Dollars

	_					
Ce	nsu	is D	ate		January 1, 2012	January 1, 2011
Α	Ра	rtici	pating Employees			
	1	Νι	Imber			
		а	Fully eligible		37	37
		b	Other		36	40
		с	Total participating employees		73	77
	2	Av	erage age		48.0	47.0
	3	Av	erage credited service		20.1	18.9
	4	Av	erage future working life			
		а	to expected retirement age		12.7	13.4
		b	to full eligibility age		9.9	10.3
в	Re	tiree	es and Surviving Spouses			
	1		etirees and surviving spouses			
		а	Number under 65		43	56
		b	Number 65 and older		243	252
		с	Total		286	308
		d	Number with married/family health care cove	rage	117	128
		e	Number with single health care coverage		169	183
		f	Average age		75.9	75.8
					15.5	75.0
٨	_	g	Age Distribution at January 1, 2012	Number		
Ag	e		Under 55	Number 3		
			55-59	12		
			60-64	28		
			65-69	43		
			70-74	29		
			75-79	40		
			80-84	72		

59

80-84 85 and over

С	De	pendents		
	1	Number	117	125
	2	Average age	69.3	69.3
	3	Age Distribution at January 1, 2012		

•	rige Blothbatterr at calladiy 1, 2012	
Age		Number
	Under 55	5
	55-59	14
	60-64	26
	65-69	31
	70-74	12
	75-79	16
	80-84	20
	85 and over	18

Participant data was supplied by the AEP as of the census date.

3.2 Age and Service Distribution of Participating Employees

Attained							ervice and Number				
Age			0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
Under 25	Count										
25-29	Count	1	3							4	
30-34	Count	3	6	1						10	
35-39	Count		2	3						5	
40-44	Count	1	4	1	1					7	
45-49	Count		2	2	1		1			6	
50-54	Count	2		1		1	2	4	2	12	
55-59	Count	1	1	1			3	7	12	2 25	
60-64	Count						2		2	4	
65-69	Count										
70 & over	Count										
Total	Count	8	18	9	2	1	8	11	16	5 73	
Average:	Age	48		Numb	er of Participar	nts:	Fully elig	gible 37			
	Service	20.1					Other	36			
							Males	73			
							Females	s 0			



Appendix A: Statement of Actuarial Assumptions and Methods

Actuarial Assumptions and Methods									
Economic Assumpti	ons								
Discount rate			4.75 %						
Medical cost trend rat	e	2012 2013 2014 2015 2016 2017 2018 2019 2020+	5.50 5.25						
Demographic Assun	nptions								
Mortality	Preretirement: RP2000, projec	cted to 2027							
	Postretirement: RP2000, proje	ected to 2019	9.						
Disability	Rates vary by age as indicate Age	d by the follo	owing sample values: Rate						

		Age	Rate
		20	10.7%
		30	5.9
		40	2.1
		≥45	0.0
Termination	Rates vary by an	e as indicated by the	following sample values
1 on maria and	rated vary by ag	jo do maiodiod by the	Tollowing barripto valueo
- crimitation		Age	Rate
		Age	Rate
		Age 20	Rate 0.12
		Age 20 30	Rate 0.12 0.120

Retirement	Rates vary b	y age as indicated by th	e following values:	
	Age	Rate	Age	Rate
	55	6.0%	61	10.0%
	56	6.5	62	12.0
	57	7.0	63	15.0
	58	7.5	64	20.0
	59	8.0	65	50.0
	60	9.0	66 – 69	30.0
			70	100.0
Percent married	95%			
Spouses ages	Wives three	years younger than hus	bands.	
Participation rates	Employees	Dependent		
	100%	100%		
2012 Per Capita Cla	aims Costs			
Basis for Per Capita				

Basis for Per Capita Claim Cost Assumptions

		Age	Medicare Part D Subsidy	Post-1993 retirees	Pre-1994 retirees
► Ove	erall average	< 65	N/A	14,866	15,486
		>=65	998	9,112	9,112
► By	age group	< 35	N/A	6,235	6,495
		35-49	N/A	6,907	7,195
		40-44	N/A	7,858	8,186
		45-49	N/A	9,619	10,020
		50-54	N/A	11,457	11,934
		55-59	N/A	12,748	13,279
		60-64	N/A	17,292	18,013
		65-69	886	7,632	7,632
		70-74	1,001	8,783	8,783
		75-79	1,037	9,342	9,342
		80-84	1,028	9,584	9,584
		85-89	1,019	9,809	9,809
		90-94	930	9,284	9,284
		>= 95	753	7,996	7,996



Medicare Part D subsidy We calibrated our modeling tool to reflect the 2012 cost of the current prescription drug plans for AEP's post-65 retirees. The tool employs a continuance table of annual retiree drug utilization levels, developed from analyzing the experience of several large Towers Watson clients.

calculate the average pre-65 and post-65 claim rates for medical and prescription drugs. These rates were then age-graded over

standard Towers Watson morbidity curves to generate guinguennial 2012 medical and prescription drug rates.

Additional Assumptions	
Administrative expenses	\$447 per primary participant in 2012, increasing 3.5% per year.
Excise tax	To determine impact of the excise tax on the UMWA postretirement plan, we projected future gross plan costs using the valuation trend assumption and compared these on a year-by-year basis to the excise tax thresholds beginning in 2018 and projected to future years using CPI (CPI + 1% for 2019). The expected cost of the UMWA plan, which was blended pre-65/post-65 based on headcount, exceeded these thresholds beginning in 2018.
	The amount of the excise tax valued was 40% times the portion of the cost exceeding the thresholds, grossed up by 35% to account for the nondeductibility of these charges for AEP's administrators.
Timing of benefit payments	Benefit payments are assumed to be made uniformly throughout the year and on average at mid-year.
Gain/loss amortization period	The plan covers primarily inactive participants. Gains and losses are amortized over the retiree's average life expectancy. After the plan-specific benefit provisions have been calibrated to current costs, the Modeler trends costs forward to 2012. 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 compared the value of Standard Part D coverage in 2012 less the greater of \$372.96 (the national average Part D premium) and 25.5% of the gross value of Part D coverage to the projected 2012 value of AEP coverage.



When the plans are deemed to be actuarially equivalent, the tool calculates the average expected value of the employer subsidy in 2012, using the continuance table calibrated to AEP's plan costs. This produced a 2012 per person employer subsidy of \$998.

Methods – Postretirement Welfar	e Cost and Funded Position
Service cost and APBO	Projected unit credit actuarial cost method, allocated in equal amounts, from the valuation date on or after date of hire to full eligibility date.
Transition obligation	Amortized over 20 years beginning January 1, 1993.
Net loss (gain)	Net loss (gain) in excess of 10% of the APBO is amortized on a straight-line basis over the expected average remaining life expectancy of the inactive participants.
Benefits Not Valued	All benefits described in the Plan Provisions section of this report were valued. Towers Watson 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	The discount rate was decreased from 5.25% to 4.75%.
Methods Since Prior Valuation	The mortality table was updated to better reflect future anticipated experience.
	Anticipated per capita claims costs were updated to reflect more recent experience.
	Trend rate was increased to an initial rate of 7.0% in 2012 grading down to an ultimate trend of 5.0% in 2020.
Data Sources	

American Electric Power furnished the participant and claims cost data, as well as the accrued postretirement benefits cost as of December 31, 2011. Data were reviewed for reasonableness and consistency, but no audit was performed. We are aware of no errors or omissions in the data that would have a significant effect on the results of our calculation.



Appendix B: Summary of Substantive Plan Provisions Reflected in Valuation

Medical Benefits	
Eligibility	Participants are eligible upon retirement after age 55 with ten years of service or attaining age 55 with ten years of service after becoming permanently disabled or age 55 if retired with 20 years of service prior to age 50. Miners with less than ten years at retirement who are permanently and totally disabled as a result of a mine accident will retain a health services card for life.
Dependent eligibility	Eligible dependents are spouse and unmarried children who have not attained age 22.
Survivor eligibility	After the death of retiree or active employee eligible to retire, surviving spouses are eligible until death or remarriage subject to a \$2,000 per month earnings limit.
Retiree contributions	None.
Benefits provisions	The UMWA medical plan covers substantially all medical services. Effective for retirements on or after January 1, 1994, a \$750 annual per family deductible is in place for non-Medicare-eligible retirees. Copayments are required only for outpatient physician visits (\$12 in- network and \$20 out-of-network, maximum of \$240 per family per 12 months) and for prescription drugs (\$5 retail in PPL, \$10 out of PPL, no copay mail order). A schedule of allowances for vision care is also provided. Benefits after age 65 are coordinated with Medicare. Expenses associated with the treatment of Black Lung Disease are not covered by this plan.

Future Plan Changes

No future plan changes were recognized in determining postretirement welfare cost.

Changes in Benefits Valued Since Prior Year

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



Appendix C: Results by Business Unit

UMWA Postretirement Welfare Plan

2012 Summary of Postretirement Health Care Plan Participants

	Active Participants	Retirees*	Dependent Spouses	Surviving Spouses	Total
Cedar Coal Co.	0	106	75	115	296
Central Coal Co.	0	0	0	0	0
Conesville Coal Preparation Co.	12	22	14	0	48
Ohio Power Co Cook Coal	61	20	18	0	99
Blackhawk Coal Co.	<u>0</u>	<u>16</u>	<u>10</u>	<u>7</u>	33
Total	73	164	117	122	476

* includes disabled employees



UMWA Postretirement Welfare Plan

2012 Net Periodic Postretirement Benefit Cost - UMWA Benefits Reflects Effect of Medicare Part D

	Accumulated Postretirement	Expected Net	Fair Value	Service	Interest	Expected Return on	A	mortization	s	Net	Net Periodic Postretirement
Location	Benefit Obligation	Benefit Payments	of Assets	Cost	Cost	Assets	NTO	PSC	(G)/L	Amortization	Benefit Cost
Cedar Coal Co.	\$48,562,987	\$2,815,624	\$0	\$0	\$2,240,647	\$0	\$779,591	\$0	\$1,504,653	\$2,284,244	\$4,524,891
Central Coal Co.	0	0	0	0	0	0	21,335	0	0	21,335	21,335
Appalachian Power Co SEC	\$48,562,987	\$2,815,624	\$0	\$0	\$2,240,647	\$0	\$800,926	\$0	\$1,504,653	\$2,305,579	\$4,546,226
Blackhawk Coal Co.	\$4,256,819	\$291,079	\$0	\$0	\$195,366	\$0	\$131,675	\$0	\$131,891	\$263,566	\$458,932
Indiana Michigan Power Co SEC	\$4,256,819	\$291,079	\$0	\$0	\$195,366	\$0	\$131,675	\$0	\$131,891	\$263,566	\$458,932
Cook Coal Terminal	\$36,552,591	\$501,619	\$0	\$954,652	\$1,769,819	\$0	\$73,828	\$0	\$1,132,528	\$1,206,356	\$3,930,827
Ohio Power Co FERC	\$36,552,591	\$501,619	\$0	\$954,652	\$1,769,819	\$0	\$73,828	\$0	\$1,132,528	\$1,206,356	\$3,930,827
Conesville Coal Preparation Company	12,612,746	390,423	0	289,875	603,710	0	30,416	0	390,787	421,203	1,314,788
Ohio Power Co SEC	\$49,165,337	\$892,042	\$0	\$1,244,527	\$2,373,529	\$0	\$104,244	\$0	\$1,523,316	\$1,627,559	\$5,245,615
Total	\$101,985,143	\$3,998,745	\$0	\$1,244,527	\$4,809,542	\$0	\$1,036,845	\$0	\$3,159,860	\$4,196,704	\$10,250,773





UMWA Postretirement Welfare Plan

5-Year Forecast of Postretirement Welfare Cost Forecast Reflects Effect of Medicare Part D

	ASC 715-60 Cost	Estimated Net Postretirement Benefit Cost							
Location	2012	2013	2014	2015	2016	2017			
Cedar Coal Co.	\$4,524,891	\$3,556,608	\$3,379,903	\$3,214,655	\$3,058,971	\$2,911,338			
Central Coal Co.	21,335	0	0	0	0	0			
Appalachian Power Co SEC	\$4,546,226	\$3,556,608	\$3,379,903	\$3,214,655	\$3,058,971	\$2,911,338			
Blackhawk Coal Co.	\$458,932	\$307,391	\$289,007	\$271,959	\$256,320	\$242,551			
Indiana Michigan Power Co SEC	\$458,932	\$307,391	\$289,007	\$271,959	\$256,320	\$242,551			
Cook Coal Terminal	\$3,930,827	\$3,964,298	\$4,077,688	\$4,197,458	\$4,322,024	\$4,451,534			
Ohio Power Co FERC	\$3,930,827	\$3,964,298	\$4,077,688	\$4,197,458	\$4,322,024	\$4,451,534			
Conesville Coal Preparation Company	1,314,788	1,299,690	1,317,686	1,338,645	1,363,719	1,391,249			
Ohio Power Co SEC	\$5,245,615	\$5,263,988	\$5,395,374	\$5,536,103	\$5,685,743	\$5,842,783			
Total	\$10,250,773	\$9,127,987	\$9,064,284	\$9,022,717	\$9,001,034	\$8,996,672			



UMWA Postretirement Welfare Plan

2013 Net Periodic Postretirement Benefit Cost Reflects Effect of Medicare Part D

	Accumulated Postretirement	Expected Net	Fair Value	Service	Interest	Expected Return on	Aı	nortization	s	Net	Net Periodic Postretirement
Location	Benefit Obligation	Benefit Payments	of Assets	Cost	Cost	Assets	NTO	PSC	(G)/L	Amortization	Benefit Cost
Cedar Coal Co.	\$47,988,010	\$2,852,418	\$0	\$0	\$2,212,471	\$0	\$0	\$0	\$1,344,137	\$1,344,137	\$3,556,608
Central Coal Co.	0	0	0	0	0	0	0	0	0	0	0
Appalachian Power Co SEC	\$47,988,010	\$2,852,418	\$0	\$0	\$2,212,471	\$0	\$0	\$0	\$1,344,137	\$1,344,137	\$3,556,608
Blackhawk Coal Co.	\$4,161,106	\$290,244	\$0	\$0	\$190,839	\$0	\$0	\$0	\$116,552	\$116,552	\$307,391
Indiana Michigan Power Co SEC	\$4,161,106	\$290,244	\$0	\$0	\$190,839	\$0	\$0	\$0	\$116,552	\$116,552	\$307,391
Cook Coal Terminal	\$38,775,443	\$580,529	\$0	\$1,002,385	\$1,875,819	\$0	\$0	\$0	\$1,086,094	\$1,086,094	\$3,964,298
Ohio Power Co FERC	\$38,775,443	\$580,529	\$0	\$1,002,385	\$1,875,819	\$0	\$0	\$0	\$1,086,094	\$1,086,094	\$3,964,298
Conesville Coal Preparation Company	13,115,908	405,435	0	304,369	627,946	0	0	0	367,375	367,375	1,299,690
Ohio Power Co SEC	\$51,891,351	\$985,964	\$0	\$1,306,754	\$2,503,765	\$0	\$0	\$0	\$1,453,469	\$1,453,469	\$5,263,988
Total	\$104,040,467	\$4,128,626	\$0	\$1,306,754	\$4,907,075	\$0	\$0	\$0	\$2,914,158	\$2,914,158	\$9,127,987

UMWA Postretirement Welfare Plan

2014 Net Periodic Postretirement Benefit Cost Reflects Effect of Medicare Part D

	Accumulated Postretirement	Expected Net	Fair Value	Service	Interest	Expected Return on	A	mortization	s	Net	Net Periodic Postretirement
Location	Benefit Obligation	Benefit Payments	of Assets	Cost	Cost	Assets	NTO	PSC	(G)/L	Amortization	Benefit Cost
Cedar Coal Co.	\$47,348,062	\$2,878,395	\$0	\$0	\$2,181,464	\$0	\$0	\$0	\$1,198,439	\$1,198,439	\$3,379,903
Central Coal Co.	0	0	0	0	0	0	0	0	0	0	0
Appalachian Power Co SEC	\$47,348,062	\$2,878,395	\$0	\$0	\$2,181,464	\$0	\$0	\$0	\$1,198,439	\$1,198,439	\$3,379,903
Blackhawk Coal Co.	\$4,061,701	\$286,716	\$0	\$0	\$186,200	\$0	\$0	\$0	\$102,807	\$102,807	\$289,007
Indiana Michigan Power Co SEC	\$4,061,701	\$286,716	\$0	\$0	\$186,200	\$0	\$0	\$0	\$102,807	\$102,807	\$289,007
Cook Coal Terminal	\$41,073,118	\$655,809	\$0	\$1,052,504	\$1,985,572	\$0	\$0	\$0	\$1,039,612	\$1,039,612	\$4,077,688
Ohio Power Co FERC	\$41,073,118	\$655,809	\$0	\$1,052,504	\$1,985,572	\$0	\$0	\$0	\$1,039,612	\$1,039,612	\$4,077,688
Conesville Coal Preparation Company	13,642,788	444,312	0	319,587	652,783	0	0	0	345,316	345,316	1,317,686
Ohio Power Co SEC	\$54,715,906	\$1,100,121	\$0	\$1,372,091	\$2,638,355	\$0	\$0	\$0	\$1,384,928	\$1,384,928	\$5,395,374
Total	\$106,125,669	\$4,265,232	\$0	\$1,372,091	\$5,006,019	\$0	\$0	\$0	\$2,686,174	\$2,686,174	\$9,064,284

UMWA Postretirement Welfare Plan

2015 Net Periodic Postretirement Benefit Cost Reflects Effect of Medicare Part D

	Accumulated Postretirement	Fair Value	Service	Interest	Expected Return on	A	mortization	s	Net	Net Periodic Postretirement	
Location	Benefit Obligation	Benefit Payments	of Assets	Cost	Cost	Assets	NTO	PSC	(G)/L	Amortization	Benefit Cost
Cedar Coal Co.	\$46,651,131	\$2,890,306	\$0	\$0	\$2,148,080	\$0	\$0	\$0	\$1,066,575	\$1,066,575	\$3,214,655
Central Coal Co.	0	0	0	0	0	0	0	0	0	0	0
Appalachian Power Co SEC	\$46,651,131	\$2,890,306	\$0	\$0	\$2,148,080	\$0	\$0	\$0	\$1,066,575	\$1,066,575	\$3,214,655
Blackhawk Coal Co.	\$3,961,185	\$288,028	\$0	\$0	\$181,395	\$0	\$0	\$0	\$90,564	\$90,564	\$271,959
Indiana Michigan Power Co SEC	\$3,961,185	\$288,028	\$0	\$0	\$181,395	\$0	\$0	\$0	\$90,564	\$90,564	\$271,959
Cook Coal Terminal	\$43,455,385	\$758,530	\$0	\$1,105,129	\$2,098,818	\$0	\$0	\$0	\$993,511	\$993,511	\$4,197,458
Ohio Power Co FERC	\$43,455,385	\$758,530	\$0	\$1,105,129	\$2,098,818	\$0	\$0	\$0	\$993,511	\$993,511	\$4,197,458
Conesville Coal Preparation Company	14,170,846	424,324	0	335,566	679,094	0	0	0	323,985	323,985	1,338,645
Ohio Power Co SEC	\$57,626,231	\$1,182,854	\$0	\$1,440,695	\$2,777,912	\$0	\$0	\$0	\$1,317,496	\$1,317,496	\$5,536,103
Total	\$108,238,547	\$4,361,188	\$0	\$1,440,695	\$5,107,387	\$0	\$0	\$0	\$2,474,635	\$2,474,635	\$9,022,717



UMWA Postretirement Welfare Plan 2016 Net Periodic Postretirement Benefit Cost

Reflects Effect of Medicare Part D

	Accumulated Postretirement	Expected Net	Fair Value	Service	Interest	Expected Return on	Aı	nortization	s	Net	Net Periodic Postretirement
Location	Benefit Obligation	Benefit Payments	of Assets	Cost	Cost	Assets	NTO	PSC	(G)/L	Amortization	Benefit Cost
Cedar Coal Co.	\$45,908,905	\$2,929,574	\$0	\$0	\$2,111,903	\$0	\$0	\$0	\$947,068	\$947,068	\$3,058,971
Central Coal Co.	0	0	0	0	0	0	0	0	0	0	0
Appalachian Power Co SEC	\$45,908,905	\$2,929,574	\$0	\$0	\$2,111,903	\$0	\$0	\$0	\$947,068	\$947,068	\$3,058,971
Blackhawk Coal Co.	\$3,854,552	\$267,869	\$0	\$0	\$176,803	\$0	\$0	\$0	\$79,517	\$79,517	\$256,320
Indiana Michigan Power Co SEC	\$3,854,552	\$267,869	\$0	\$0	\$176,803	\$0	\$0	\$0	\$79,517	\$79,517	\$256,320
Cook Coal Terminal	\$45,900,802	\$880,523	\$0	\$1,160,386	\$2,214,737	\$0	\$0	\$0	\$946,901	\$946,901	\$4,322,024
Ohio Power Co FERC	\$45,900,802	\$880,523	\$0	\$1,160,386	\$2,214,737	\$0	\$0	\$0	\$946,901	\$946,901	\$4,322,024
Conesville Coal Preparation Company	14,761,182	469,874	0	352,344	706,862	0	0	0	304,513	304,513	1,363,719
Ohio Power Co SEC	\$60,661,984	\$1,350,397	\$0	\$1,512,730	\$2,921,599	\$0	\$0	\$0	\$1,251,414	\$1,251,414	\$5,685,743
Total	\$110,425,441	\$4,547,840	\$0	\$1,512,730	\$5,210,305	\$0	\$0	\$0	\$2,277,999	\$2,277,999	\$9,001,034

UMWA Postretirement Welfare Plan

2017 Net Periodic Postretirement Benefit Cost Reflects Effect of Medicare Part D

	Accumulated Postretirement	Expected Net	Fair Value	Service	Interest	Expected Return on	A	mortization	s	Net	Net Periodic Postretirement
Location	Benefit Obligation	Benefit Payments	of Assets	Cost	Cost	Assets	NTO	PSC	(G)/L	Amortization	Benefit Cost
Cedar Coal Co.	\$45,091,234	\$2,971,995	\$0	\$0	\$2,072,068	\$0	\$0	\$0	\$839,270	\$839,270	\$2,911,338
Central Coal Co.	0	0	0	0	0	0	0	0	0	0	0
Appalachian Power Co SEC	\$45,091,234	\$2,971,995	\$0	\$0	\$2,072,068	\$0	\$0	\$0	\$839,270	\$839,270	\$2,911,338
Blackhawk Coal Co.	\$3,763,486	\$266,831	\$0	\$0	\$172,502	\$0	\$0	\$0	\$70,049	\$70,049	\$242,551
Indiana Michigan Power Co SEC	\$3,763,486	\$266,831	\$0	\$0	\$172,502	\$0	\$0	\$0	\$70,049	\$70,049	\$242,551
Cook Coal Terminal	\$48,395,402	\$1,035,049	\$0	\$1,218,405	\$2,332,359	\$0	\$0	\$0	\$900,770	\$900,770	\$4,451,534
Ohio Power Co FERC	\$48,395,402	\$1,035,049	\$0	\$1,218,405	\$2,332,359	\$0	\$0	\$0	\$900,770	\$900,770	\$4,451,534
Conesville Coal Preparation Company	15,350,514	474,962	0	369,961	735,573	0	0	0	285,715	285,715	1,391,249
Ohio Power Co SEC	\$63,745,916	\$1,510,011	\$0	\$1,588,366	\$3,067,932	\$0	\$0	\$0	\$1,186,485	\$1,186,485	\$5,842,783
Total	\$112,600,636	\$4,748,837	\$0	\$1,588,366	\$5,312,502	\$0	\$0	\$0	\$2,095,804	\$2,095,804	\$8,996,672

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