KPSC Case No. 2017-00179
Commission Staff's First Set of Data Requests
Dated May 22, 2017
Item No. 51
Attachment 2
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WillisTowers Watson

American Electric Power

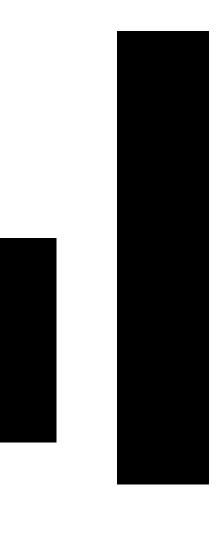
American Electric Power System Retirement Plan

Actuarial Valuation Report Employer Contributions for Plan Year Beginning January 1, 2016

Benefit Cost for Fiscal Year Beginning January 1, 2016 under US GAAP

April 2016





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American Electric Power System Retirement Plan

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Purposes of valuation

American Electric Power (the Company) retained Towers Watson Delaware Inc., a subsidiary of Willis Towers Watson PLC ("Willis Towers Watson"), to perform an actuarial valuation of the American Electric Power System Retirement Plan for the purpose of determining the following:

- 1. The minimum required contribution in accordance with ERISA and the Internal Revenue Code (IRC) for the plan year beginning January 1, 2016.
- 2. The estimated maximum tax-deductible contribution for the tax year in which the 2016 plan year ends in accordance with ERISA as allowed by the IRC. The maximum tax-deductible contribution should be finalized in consultation with the Company's tax advisor.
- 3. Plan accounting information in accordance with FASB Accounting Standards Codification Topic 960 (ASC 960).
- 4. An assessment of ERISA §4010 reporting requirements for the plan for 2016.
- 5. Determination of the Funding Target Attainment Percentage (FTAP) under IRC §430(d)(2), as reported in the Annual Funding Notice required under ERISA 101(f).
- 6. The value of benefit obligations as of January 1, 2016 and American Electric Power's pension cost for fiscal year ending December 31, 2016 in accordance with FASB Accounting Standards Codification Topic 715 (ASC 715-30).
- 7. As requested by American Electric Power, a "specific certification" of the Adjusted Funding Target Attainment Percentage (AFTAP) for the American Electric Power System Retirement Plan under IRC §436 for the plan year beginning January 1, 2016. Please see Appendix C for additional information. Note that the AFTAP certification included herein may be superseded by a subsequent AFTAP certification for the American Electric Power System Retirement Plan for the plan year beginning January 1, 2016.

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:

- This report does not determine the plan's liquidity shortfall requirements (if any) under IRC §430(j)(4). If applicable, we will determine such requirements separately as requested by the Company.
- This report does not determine 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

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cover the estimated cost of settling the plan's benefit obligations, as all such measures differ in some way from plan termination obligations. For example, measures shown in this report may reflect smoothed assets or interest rates, rather than current values, in accordance with funding and accounting rules. In addition, funded status measures shown in this report do not reflect the current costs of settling the plan 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).

- 3. The cost method for the minimum required contribution is established under IRC §430 and may not in all circumstances produce adequate assets to pay benefits under all optional forms of payment available under the plan when benefit payments are due.
- 4. The comparison of the plan's funding target to its actuarial value of assets (the funding shortfall (surplus) shown in Section 1) is used in determining required contributions for the coming year, and a contribution made on the valuation date equal to the shortfall would be considered to "fully fund" the plan for benefits accrued as of the valuation date under the funding rules, and thus is useful for assessing the need for and amount of future contributions. However, the funding shortfall (surplus) cannot be relied upon to determine either the need for or the amount of future contributions. The funding shortfall (surplus) is based on the interest rates elected to be used for funding purposes, which may be smoothed rates not reflecting current market conditions and will in any event change over time. It is also based on the actuarial value of assets, so if an asset smoothing method is used, it would be different than if based on market value of assets. In addition, asset gains and losses, demographic experience different from assumed, and future benefit accruals (if any) will all affect the need for and amount of future contributions.
- 5. There may be certain events that occurred since the valuation date that are not reflected in this valuation. See Subsequent Events (under the "Basis for valuation" portion of Section 1 below) for more information.
- 6. This valuation reflects our understanding of the relevant provisions of the Pension Protection Act of 2006 (PPA); the Worker, Retiree and Employer Recovery Act of 2008 (WRERA); the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 (PRA), the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Highway and Transportation Funding Act of 2014 (HATFA), and the Bipartisan Budget Act of 2015. The IRS has yet to issue final guidance with respect to certain 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 results shown in this report.

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Section 1: Summary of results

Summary of valuation results

All monetary amounts shown in US Dollars

Plan Year Beginning	01/01/2016	01/01/2015
Funding		
Market value of assets with discounted receivable contributions	4,764,796,511	4,975,864,249
Actuarial value of assets	4,845,528,901	5,126,953,429
Funding balances	732,713,704	728,778,301
Funding target	4,032,865,265	3,941,682,464
Target normal cost	79,939,884	76,942,794
Funding shortfall (surplus)	(79,949,932)	(456,492,664)
Funding target attainment percentage (FTAP)	101.98%	111.58%
Minimum required contribution		
Prior to application of funding balances	0	0
Net of available funding balances	0	0
Effective interest rate	5.95%	6.15%
.S. GAAP Accounting (ASC 715) as of Measurement Date	01/01/2016	01/01/2015
Projected benefit obligation (PBO)	4,936,569,137	5,121,214,558
Fair value of assets (without receivable contributions)	4,764,796,511	4,975,864,249
Funded status	(171,772,626)	(145,350,309)
Total benefit cost/(income)	98,494,271	126,471,542
Discount rate	4.30%	4.00%
articipants as of Census Date	01/01/2016	01/01/2015
Active employees	16,859	17,737
Participants with deferred benefits	4,372	3,634
Participants receiving benefits	15,645	15,722
Total	36,876	37,093
lan Accounting (ASC 960)	01/01/2016	01/01/2015
Present value of accumulated benefits	4,062,659,954	4,063,252,469
Market value of assets with receivable contributions	4,764,796,511	4,975,864,249
Plan accounting discount rate	6.00%	6.00%

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Minimum required contribution and funding policy

All monetary amounts shown in US Dollars

Plan Year Beginning	01/01/2016	01/01/2015
Minimum Required Contribution (MRC)		
Prior to application of funding balances	0	0
Net of available funding balances	0	0
Sponsor's Funding Policy Contribution	85,953,000	92,514,000

The minimum required contribution for the 2016 plan year must be satisfied by September 15, 2017. This requirement may be satisfied through contributions and/or an election to apply the available funding balances. The minimum required contribution is determined assuming it is paid as of the valuation date for the plan year. Contributions made on a date other than the valuation date must be adjusted for interest at the plan's effective interest rate. The minimum funding schedule, before reflecting any funding balance elections or amounts already contributed for the 2016 plan year prior to the issuance of this report, is shown below:

All monetary amounts shown in US Dollars

Date	Funding Balance Applied	Current Plan Year Contributions	Discounted Value of Contributions as of Valuation Date	Portion of MRC Satisfied
April 15, 2016	0	0	0	0
July 15, 2016	0	0	0	0
October 15, 2016	0	0	0	0
January 15, 2017	0	0	0	0
September 15, 2017	0	0	0	0
Total				0

If a plan has a funding shortfall for the current plan year, quarterly contributions will be required for the following plan year.

Because the plan does not have a funding shortfall, no quarterly contributions will be required for the 2017 plan year based on this year's valuation results.

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Change in minimum funding requirement and funding shortfall (funding surplus)

The minimum funding requirement is unchanged from \$0 for the 2015 plan year to \$0 for the 2016 plan year, and the funding shortfall (surplus) decreased from \$(456,492,664) on January 1, 2015 to \$(79,949,932) on January 1, 2016, as set forth below:

All monetary amounts shown in US Dollars

(\$ in millions)	Minimum Funding Requirement	Funding Shortfall (Surplus)
Prior year	0	(456.5)
Change due to:		
Expected based on prior valuation, contributions, and use of/creation of funding balances	0	202.7
Sponsor election or deemed election to reduce funding balances	0	0
Unexpected noninvestment experience	0	32.3
Unexpected investment experience	0	68.8
Assumption changes	0	72.8
Method changes	0	0
Unpredictable contingent events	0	0
Becoming at-risk	0	0
Plan amendments	0	0
Current year	0	(79.9)

Significant reasons for these changes include the following:

- The plan's effective interest rate decreased 20 basis points compared to the prior year, which caused the funding surplus to deteriorate.
- Investment experience was less favorable than expected which decreased the funding surplus.
- Demographic experience was less favorable than expected which caused the funding surplus to deteriorate.

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Funding ratios

The Pension Protection Act of 2006 (PPA) defines several Funding Ratios. All of these ratios are based on a ratio of plan assets to plan liabilities, but the assets and liabilities are defined differently for different purposes. Depending on the purpose, the assets may be market value or, if different, a smoothed actuarial value of assets, and may be reduced by the prefunding balance or all funding balances. The liabilities may be based on the funding target, funding target disregarding at-risk assumptions, or the funding target calculated using at-risk assumptions (see the At-Risk status section below), and may or may not reflect stabilized interest rates.

Following are the key funding ratios and their implications for the 2016 or 2017 plan years. See Appendix D for details on how each ratio is calculated.

January 1, 2015 Funding ratios

	Ratio Test Implications	Threshold	Ratio Value
1	Funding balances can be used to satisfy the 2016 Minimum Required Contribution (MRC) if threshold met	80%	115.64%
2	Quarterly contribution exemption applies in 2016 if threshold met	100%	111.58%
3	Plan is not at-risk for 2016 if the threshold for either the Prong 1 or		
	Prong 2 test is met		
	- Prong 1 Test	80%	111.58%
	- Prong 2 Test	70%	N/A

January 1, 2016 Funding ratios

	Ratio Test Implications	Threshold	Ratio Value
1	Funding balances can be used to satisfy the 2017 MRC if threshold met	80%	105.98%
2	Quarterly contribution exemption applies in 2017 if threshold met	100%	101.98%
3	Plan is not at-risk for 2017 if the threshold for either the Prong 1 or		
	Prong 2 test is met		
	- Prong 1 Test	80%	101.98%
	- Prong 2 Test	70%	N/A
4	PBGC 4010 filing may be required in 2017 if threshold is not met by every plan in the controlled group	80%	85.46%
5	Plan is exempt from creating a new Shortfall Amortization Base	100%	105.98%
	(SAB) for 2016 when prefunding balance <u>is</u> applied to the 2016 MRC if threshold met		
6	Plan is exempt from creating a new SAB for 2016 when prefunding balance is not applied to the 2016 MRC if threshold met	100%	120.15%
7	Previously established SABs are eliminated for 2016 if threshold met	100%	101.98%

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Benefit limitations

The Adjusted Funding Target Attainment Percentage (AFTAP) for the plan year beginning January 1, 2016 is 120.15%. This AFTAP may be changed by subsequent events.

Under the PPA, a plan may become subject to various benefit limitations if its AFTAP falls below certain thresholds.

If the AFTAP is below 60%, plans are prohibited from paying lump sums or other accelerated forms of distribution. If the AFTAP is at least 60% but less than 80%, the amounts that can be paid are limited. In addition, lump sums to the 25 highest paid employees may be restricted if a plan's AFTAP is below 110%. These limitations do not apply to mandatory lump sum cash-outs of \$5,000 or less. In addition, plans that were completely frozen before September 2005 are exempt from the restrictions on lump sums and other accelerated forms of distribution.

If the AFTAP is below 60%, benefit accruals must cease, amendments to improve benefits cannot take effect, and plant shutdown benefits and other Unpredictable Contingent Event Benefits (UCEBs) cannot be paid without being fully paid for. In addition, if the AFTAP would be below 80% reflecting a proposed amendment, the plan amendment cannot take effect unless actions are taken to increase plan assets.

To avoid these benefit limitations, a plan sponsor may take a variety of steps, including reducing the funding balances, contributing additional amounts to the plan for the prior plan year, contributing special "designated IRC §436 contributions" for the current plan year, or providing security outside the plan. Not all of these approaches are available for all of the restrictions discussed above. For example, restrictions on accelerated distributions cannot be avoided by making designated IRC §436 contributions.

As requested by American Electric Power Co. in your letter dated April 26, 2016 this report is intended to constitute a "specific certification" of the AFTAP, effective as of April 29, 2016, for the plan year beginning January 1, 2016 for the purpose of determining benefit restrictions under IRC §436 for the American Electric Power System Retirement Plan. This AFTAP certification is based on the data, methods, assumptions, plan provisions, annuity purchase information, and other information provided in this report. Please see the Appendices for additional information. Note that the AFTAP certification provided herein may be superseded by a subsequent AFTAP certification for the plan year beginning January 1, 2016. Please see Appendix C for a discussion of the implications of this certified AFTAP.

PBGC reporting requirements

Certain financial and actuarial information (i.e., a "4010 filing") must be provided to the PBGC if the PBGC Funding Target Attainment Percentage (PBGC FTAP) is less than 80% for any plan in the contributing sponsor's controlled group. However, this reporting requirement may be waived for

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controlled groups with no more than \$15 million in aggregate funding shortfall (PBGC 4010 FS). Note that stabilized segment rates do not apply for purposes of determining the PBGC FTAP and for the purpose of determining the PBGC 4010 FS.

The 2016 FTAP is 85.46%. In addition, we understand that all other pension plans within the Company's controlled group also have PBGC FTAPs of at least 80%. As a result, no 4010 filing is expected to be required for 2016 as a result of the plans' funded status. However, a filing may also be required if there are outstanding funding waivers or missed contributions within the controlled group.

At-Risk status for determining minimum required contributions

The plan is not in at-risk status, as defined in the PPA, for the 2016 plan year, because the plan's FTAP for the 2015 plan year was at least 80%, and/or the plan's FTAP measured using "at-risk assumptions" was at least 70%.

The plan will not be in at-risk status, as defined in the PPA, for the 2017 plan year, because the plan's FTAP for the 2016 plan year is at least 80%, and/or the plan's FTAP measured using "at-risk assumptions" is at least 70%.

When a plan is in at-risk status as defined in the PPA:

The plan is subject to potentially higher minimum contribution requirements. The funding target and target normal cost for purposes of determining the minimum required contribution must be measured reflecting certain mandated assumptions ("at-risk assumptions"). Specifically, participants eligible to retire within the next 11 years must be assumed to retire immediately when first eligible (but not before the end of the current year, except in accordance with the regular valuation assumptions), and all participants must be assumed to elect the most valuable form of payment available when they begin receiving benefits. In addition, plans that have been at-risk in past years may also be required to increase the funding target and target normal cost for prescribed assumed expenses. The net effect of these assumptions and expense adjustments in most cases is to increase required contributions and PBGC variable premiums.

The plan sponsor must indicate in the annual funding notice for the plan that the plan is at-risk and disclose additional at-risk funding targets.

Immediate taxation of non-qualified pension or deferred compensation for certain employees may occur if the plan sponsor is a public company. This may result when non-qualified pension or deferred compensation for such employees is funded during a period when a plan sponsored by the plan sponsor or another member of the plan sponsor's controlled group is in at-risk status.

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Pension cost and funded position

The cost of the pension plan is determined in accordance with ASC 715. The Fiscal 2016 pension cost for the plan is \$98,494,271.

Under ASC 715, the funded position (fair value of plan assets less the projected benefit obligation, or "PBO") of each pension plan at the plan sponsor's fiscal year-end (measurement date) is required to be reported as an asset (for overfunded plans) or a liability (for underfunded plans). The PBO 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) PBO as of January 1, 2016 was \$(171,772,626), based on the fair value of plan assets of \$4,764,796,511 and the PBO of \$4,936,569,137.

Fiscal year-end financial reporting information and disclosures are prepared before detailed participant data and full valuation results are available. Therefore, the funded position at December 31, 2015 was derived from a roll forward of the January 1, 2015 valuation results, adjusted for the year-end discount rate, changes in other key assumptions and asset values, as well as significant changes in plan provisions and participant population. The fiscal year-end December 31, 2016 financial reporting information will be developed based on the results of the January 1, 2016 valuation, projected to the end of 2016 and similarly adjusted for the year-end discount rate and asset values, as well as significant changes in plan provisions and participant population.

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Change in pension cost and funded position

The pension cost declined from \$126,471,542 in fiscal 2015 to \$98,494,271 in fiscal 2016 and the funded position declined from \$(145,350,309) to \$(171,772,626), as set forth below:

All monetary amounts shown in US Dollars

		Net Periodic Cost	Funded Position
Pri	or year	126.5	(145.3)
Ch	ange due to:		
•	Expected based on prior valuation and contributions during prior year	(26.3)	89.9
•	Unexpected noninvestment experience	(2.3)	12.0
•	Unexpected investment experience	18.0	(306.9)
•	Assumption changes	(17.4)	178.5
•	Plan amendments	0	0
•	Settlements, curtailments, termination benefits	0	0
•	Acquisitions	0	0
•	Method changes	0	0
Cu	rrent year	98.5	(171.8)

Significant reasons for these changes include the following:

- The return on the fair value of plan assets since the prior measurement date was less than expected, which increased the pension cost and decreased the funded position.
- The discount rate increased 30 basis points compared to the prior year, which reduced the pension cost and improved the funded position.
- Demographic experience was more favorable than expected which decreased the pension cost and improved the funded position.
- The lump sum conversion rate decreased from 5.00% to 4.50%, which decreased the pension cost and improved the funded position.

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Basis for valuation

Appendix A summarizes the assumptions and methods used in the valuation. Appendix B summarizes the principal provisions of the plan being valued, including 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.

Changes in Assumptions

The discount rate increased from 4.00% to 4.30%.

The mortality used to convert 417(e) based forms of payment was updated for an additional year of mortality improvements.

The lump sum conversion rate decreased from 5.00% to 4.50%.

Changes in Methods

None.

Changes in Benefits Valued

None.

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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 discussed below regarding this valuation.

Reliances

In preparing the results presented in this report, we have relied upon information regarding plan provisions, participants, assets, and sponsor elections and methods provided to us orally and in writing by AEP and other persons or organizations designated by AEP. In addition, the results in this report are dependent on contributions reported for the prior plan year and maintenance of funding balance elections after the valuation date.

We have not independently verified the accuracy or completeness of the data or information provided, but we have performed limited checks for consistency. 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 directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or information regarding contributions or funding balance elections provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by AEP, may produce materially different results that could require that a revised report be issued.

Assumptions and methods under ERISA and the Internal Revenue Code for funding purposes

The plan sponsor selected, as prescribed by regulation, key assumptions and funding methods (including asset valuation method and choice among prescribed interest rates) employed in the development of the contribution amounts and communicated them to us in the letter dated April 26, 2016.

To the extent not prescribed by ERISA, the Internal Revenue Code and regulatory guidance from the Treasury and the IRS, or selected by the sponsor, the actuarial assumptions and methods employed in the development of the contribution amounts have been selected by Willis Towers Watson, with the concurrence of the plan sponsor. It is beyond the scope of this actuarial valuation to analyze the reasonableness and appropriateness of prescribed methods and assumptions, or to analyze other sponsor elections from among the alternatives available for prescribed methods and assumptions.

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Other than prescribed assumptions, ERISA and the Internal Revenue Code require the use of assumptions each of which is "reasonable (taking into account the experience of the plan and reasonable expectations), and which, in combination, offer the actuary's best estimate of anticipated experience under the plan." The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated or selected by Willis Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to 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 and methods used is provided in Appendix A. Note that any subsequent changes in methods or assumptions for the 2016 plan year will change the results shown in this report and could result in plan qualification issues under IRC §436 if the application of benefit restrictions is affected by the change.

Assumptions and methods under U.S. GAAP

As required by U.S. GAAP, the actuarial assumptions and methods employed in the development of the pension cost have been selected by the plan sponsor. Willis Towers Watson has concurred with these assumptions and methods, except for the expected rate of return on plan assets selected as of January 1, 2016. Evaluation of the expected return assumption was outside the scope of Willis Towers Watson's assignment and would have required substantial additional work that we were not engaged to perform. U.S. GAAP requires that each significant assumption "individually represent the best estimate of a particular future event."

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 in consultation with American Electric Power Co.'s tax advisors and auditors.

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 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; 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)

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or additional contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. It is beyond the scope of this valuation to analyze the potential range of future pension contributions, but we can do so upon request.

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 American Electric Power and its auditors and any organization that provides benefit administration services for the plan, in connection with our actuarial valuation of the pension 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 Willis Towers Watson in advance of this distribution. Further distribution to, or use by, other parties of all or part of this report is expressly prohibited without Willis Towers Watson's prior written consent. Willis Towers Watson accepts no responsibility for any consequences arising from any other party relying on this report or any advice relating to its contents.

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 pension plans. Our objectivity is not impaired by any relationship between American Electric Power Co. and our employer, Towers Watson Delaware Inc., a subsidiary of Willis Towers Watson PLC ("Willis Towers Watson").

Joseph A. Perko, FSA, EA, MAAA Senior Consultant – Valuation Actuary

Jule

Brian A. Hartman, FSA, EA Consulting Actuary – Valuation Actuary

Brin a. North

Towers Watson Delaware Inc., a subsidiary of Willis Towers Watson PLC ("Willis Towers Watson").

April 29, 2016

http://natct.internal.towerswatson.com/clients/604598/AEP2016Valuations/Documents/2016 Qualified Report.docx

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Section 2: Actuarial exhibits

2.1 Summary of liabilities for minimum funding purposes

All monetary amounts shown in US Dollars

Pl	an Year Beginning	01/01/2016	01/01/2015
Α	Funding Target (Disregarding At-risk Assumptions)		
	1 Funding target	4,032,865,265	3,941,682,464
	2 Target normal cost ¹	79,939,884	76,942,794
В	Funding Target (At-risk Assumptions)		
	1 Funding target	N/A	N/A
	2 Target normal cost	N/A	N/A
С	Funding Target		
	1 Number of consecutive years at-risk	0	0
	2 Funding target		
	a Active employees – non-vested benefits ²	10,757,492	14,798,412
	b Active employees – vested benefits ²	1,615,270,507	1,578,544,951
	c Participants with deferred benefits	225,404,031	184,154,401
	d Participants receiving benefits	2,181,433,235	2,164,184,700
	e Total funding target	4,032,865,265	3,941,682,464
	3 Target normal cost ¹	79,939,884	76,942,794

Includes administrative expenses.

See section 2.7 for definition of vested benefits.

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2.2 Change in plan assets during plan year

All monetary amounts shown in US Dollars

Plan	Year Beginning	January 1, 2015			
A F	Reconciliation of Market Value of Assets				
	1 Market value of assets at January 1, 2015 (including discounted contributions receivable)	4,975,864,249			
	2 Discounted contributions receivable at January 1, 2015	0			
	3 Market value of assets at January 1, 2015 (excluding contributions receivable)	4,975,864,249			
	4 Employer contributions				
	a For prior plan year	92,514,000			
	b For current plan year	0			
	c IRC §436 contributions for current plan year	0			
	d Total	92,514,000			
	5 Employee contributions	0			
	6 Benefit payments	(324,789,029)			
	7 Administrative expenses paid by plan	(5,225,943)			
	8 Transfers from/(to) other plans	0			
	9 Investment return				
	a Interest and dividends	0			
	b Investment expenses	0			
	c Realized gains/(losses)	0			
	d Change in unrealized appreciation	26,433,234			
	e Total	26,433,234			
•	10 Market value of assets at January 1, 2016 (excluding contributions receivable)	4,764,796,511			
•	11 Discounted contributions receivable at January 1, 2016	0			
•	12 Market value of assets at January 1, 2016 (including discounted contributions receivable)	4,764,796,511			
	B Rate of Return on Invested Assets (i.e., for crediting unused funding balances)				
`	1 Weighted invested assets	4,858,655,970			
	2 Rate of return	0.54%			

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Development of actuarial value of assets 2.3

AEP elected a smoothing method that uses seven monthly data points to calculate the AVA.

All monetary amounts shown in US Dollars

Plan Year Beginning January 1, 2016					
	Dev	velopment of AVA			
<u>Month</u>	<u>Expenses</u>	Benefit Payments	Contributions	Fair Value at Beginning of Month	
July 2015	169,436	36,045,644	0	4,950,653,409	
August 2015	292,499	28,674,990	0	4,960,841,357	
September 2015	435,311	27,449,411	0	4,828,742,337	
October 2015	2,262,958	26,396,263	0	4,793,000,133	
November 2015	170,200	25,517,034	0	4,875,952,560	
December 2015	217,287	25,980,438	0	4,829,647,362	
AVA with receivables					

Preliminary Actuarial Value of Assets before Corridor as of January 1, 2016

1 Monthly asset values adjusted for expenses and benefit payments rolled forward to January 1, 2016

	Mo	onth	Asset value
	а	July 2015	4,918,518,396
	b	August 2015	4,941,000,147
	С	September 2015	4,813,862,470
	d	October 2015	4,782,636,571
	е	November 2015	4,871,057,547
	f	December 2015	4,826,830,671
	g	January 2016	4,764,796,511
	h	Average of monthly asset values	4,845,528,901
	2 Pro	eliminary Actuarial Value of Assets and before	
	ар	plication of corridor	4,845,528,901
В	Lower	Bound of Corridor (90% of A12 from prior page)	4,288,316,860
С	Upper	Bound of Corridor (110% of A12 from prior page)	5,241,276,162
	Actua	rial Value of Assets as of January 1, 2016	
D	(A2 bı	ut not smaller than B nor larger than C)	4,845,528,901

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2.4 Calculation of minimum required contribution

All monetary amounts shown in US Dollars

Reco	Reconciliation of Funding Balances as of January 1, 2016						
		Funding Standard Carryover Balance	Prefunding Balance	Total			
A De	etermination of Funding Balances						
1	Funding balance as of January 1, 2015	160,373,510	568,404,791	728,778,301			
2	Amount used to offset prior year minimum required contribution ¹	0	0	0			
3	Adjustment for investment experience	866,017	3,069,386	3,935,403			
4	Amount of additional prefunding balance created by election	N/A	0	0			
5	Amount of funding balance reduction for current year by election or deemed election	0	0	0			
6	Funding balance as of January 1, 2016	161,239,527	571,474,177	732,713,704			

Plan Year Beginning	January 1, 2016						
B Calculation of Minimum Required Contribution							
1 Target normal cost	79,939,884						
2 Funding surplus	(79,949,932)						
3 Net shortfall amortization installment (see section 2.5)	0						
4 Waiver amortization installment	0						
5 Minimum required contribution	0						
6 Funding balance available	732,713,704						
7 Remaining cash requirement (assuming sponsor elects full use of the available funding balances)	0						

The minimum required contribution is determined as of the plan's valuation date. Any payment made on a date other than the valuation date must be adjusted for interest using the plan's effective interest rate of 5.95%.

Additional details regarding the calculation of the minimum required contribution may be obtained from the Form 5500 Schedule SB forms and attachments.

¹ Net of revoked excess application of funding balance, if any.

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2.5 Schedule of minimum funding amortization bases

All monetary amounts shown in US Dollars

Type of Base	Date Established	Remaining Amortization Period (Years)	Outstanding Balance	Amortization Payment
Total			0	0

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2.6 Calculation of estimated maximum deductible contribution

All monetary amounts shown in US Dollars

Ва	sed on Plan Year	2016
Α	Basic Maximum	
	1 Funding target	4,032,865,265
	2 Target normal cost	79,939,884
	3 Actuarial value of assets	4,845,528,901
	4 50% of funding target	2,016,432,633
	5 Additional funding target for future compensation or benefit increases	96,126,103
	6 Basic maximum deductible contribution	1,379,834,984
В	At-risk Maximum ¹	
	1 Funding target (at-risk assumptions)	N/A
	2 Target normal cost (at-risk assumptions)	N/A
	3 Actuarial value of assets	N/A
	4 At-risk maximum deductible contribution	N/A
С	Minimum Required Contribution	0
D	Estimated Maximum Deductible Contribution	1,379,834,984

The estimated maximum deductible contribution applies to the tax year in which the plan year ends, and is based on our understanding of IRC §404(a)(1). Regulatory guidance from the IRS/Treasury is pending. Allocations of costs to inventory have not been considered, and amounts deductible for state income tax purposes may differ. Deductibility can be influenced by timing of contributions, differences between fiscal year and plan year, and differences (if any) between the years to which prior contributions were assigned for minimum funding purposes and the years in which they were deducted. Our results have not been adjusted for non-deducted contributions included in the valuation assets, nor is it clear that such adjustment is appropriate post-PPA. We recommend the plan sponsor review with tax counsel the tax-deductibility of all contributions as Willis Towers Watson does not provide legal or tax advice.

The calculation above reflects stabilized interest rates (including their effect on at-risk status), which is not required in determining the maximum deductible contribution. Not reflecting such corridors would likely result in a higher maximum deductible amount, but would require substantial additional work that may not be of value to the Company. We can discuss not reflecting the corridors if the Company wishes to consider contributions in excess of the estimated maximum amount above.

In addition, the actuarial value of assets shown is the same as used for determining the minimum required contribution. Thus contributions receivable (if any) are discounted at stabilized rates, and the limit on the expected return on assets reflected in asset smoothing (if applicable) is the 3rd segment

At-risk maximum applies only for plans not in at-risk status for purposes of determining maximum deductible contributions for the plan year.

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rate, reflecting stabilized rates as expressly allowed by IRS Notice 2012-61 when the stabilized 3rd segment rate is higher than the rate ignoring the corridors.

This limit has been determined without regard to the special rule of IRC §404(o)(2)(B) providing a potentially higher maximum deduction based on at-risk assumptions, which is available for plans that are not at risk.

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2.7 ASC 960 (plan accounting) information

All monetary amounts shown in US Dollars

Pla	an Year Beginning	January 1, 2016
Α	Present Value of Accumulated Benefits	
	1 Vested accumulated benefits	
	a Active employees	1,602,500,749
	b Participants with deferred benefits	228,431,485
	c Participants receiving benefits	2,220,022,243
	d Total vested accumulated benefits	4,050,954,477
	2 Non-vested accumulated benefits	11,705,477
	3 Total accumulated benefits	4,062,659,954
	4 Market value of assets ¹	4,764,796,511
	Benefits 1 Present value of accumulated benefits as of December 31, 2014	4,063,252,469
	2 Changes during the year due to:	
	a Benefits accumulated	69,332,520
	b Actuarial (gains)/losses	27,085,779
	c Decrease in the discount period	234,193,405
	d Actual benefits paid	(324,789,029)
	e Assumption changes	(6,415,190)
	f Plan amendments	0
	g Net increase/(decrease)	(592,515)
	3 Present value of accumulated benefits as of December 31, 2015	4,062,659,954

Actuarial Assumptions and Methods

The present value of accumulated benefits was developed using the actuarial assumptions described in Appendix A, except a discount rate of 6.00% was used. For the prior valuation, a discount rate of 6.00% was used. The same plan provisions shown in Appendix B were used to determine the present value of accumulated benefits.

Plan Provisions

Plan provisions reflected in these calculations are described in Appendix B.

Assets include accrued contributions for the 2015 plan year of \$ 0 not yet deposited at January 1, 2016.

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Accumulated and Vested Benefits

Accumulated benefits include benefits earned under the plan's benefit formula based on service rendered and compensation earned before the measurement date.

Benefits included in vested benefits are the same as described above for accrued benefits, except the following benefits are excluded:

- For participants who are not disabled on the measurement date, disability benefits in excess of the value of standard termination benefits (retirement benefits for those eligible).
- For participants who have not yet satisfied the eligibility requirements for these benefits, early retirement benefits and supplements in excess of standard termination benefits.
- Death benefits in excess of the plan's QPSA.
- All benefits for participants who are not yet vested in their accrued benefits or eligible for other benefits.

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2.8 Pension obligations and funded position under U.S. GAAP (ASC 715)

All monetary amounts shown in US Dollars

Ме	asur	rement Date	01/01/2016	01/01/2015
Α	Ob	ligations		
	1	Accumulated Benefit Obligation (ABO)		
		a. Active participants	1,970,101,788	2,093,049,746
		b. Participants with deferred benefits	272,272,257	234,062,526
		c. Participants receiving benefits	2,545,649,263	2,634,437,247
		d. Total	4,788,023,308	4,961,549,519
	2	Future salary increases	148,545,829	159,665,039
	3	Projected benefit obligation (PBO)	4,936,569,137	5,121,214,558
В	As	sets		
	1	Fair value [FV] 1	4,764,796,511	4,975,864,249
	2	Investment losses/(gains) not yet in market-related		
		value	31,960,120	(280,508,021)
	3	Market-related value	4,796,756,631	4,695,356,228
С	Fu	nded Position		
	1	Overfunded/(underfunded) PBO	(171,772,626)	(145,350,309)
	2	PBO funded percentage	96.5%	97.2%
D	Am	nounts in Accumulated Other Comprehensive		
	Inc	ome		
	1	Prior service cost/(credit)	3,176,136	5,395,057
	2	Net actuarial loss/(gain)	1,536,370,582	1,541,686,894
	3	Total	1,539,546,718	1,547,081,951
Ε	Ke	y Assumptions		
	1	Discount rate	4.30%	4.00%
	2	Rate of compensation increase	Rates vary by age from	Rates vary by age from
			3.5% to 12.0%	3.5% to 12.0%
F	Ce	nsus Date	01/01/2016	01/01/2015

The results above may differ from the amounts reported in American Electric Power Co.'s December 31, 2015 financial statements because year-end financial reporting is prepared before the corresponding valuation results are available.

Excludes receivable contributions.

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2.9 Changes in benefit obligations and assets

All monetary	amounts	shown	in	US Dollars

Pe	riod I	Beginning	01/01/2016	01/01/2015
Α		ange in Projected Benefit Obligation (PBO)		
	1	PBO at beginning of prior fiscal year	5,121,214,558	4,741,966,540
	2	Employer service cost	92,514,545	71,463,632
	3	Interest cost	202,041,675	217,701,098
	4	Actuarial loss/(gain)	(154,412,612)	379,485,916
	5	Plan participants' contributions	0	0
	6	Benefits paid from plan assets	(324,789,029)	(289,402,628)
	7	Administrative expenses paid ¹	0	0
	8	Plan change	0	0
	9	Acquisitions/divestitures	0	0
	10	Curtailments	0	0
	11	Settlements	0	0
	12	Special/contractual termination benefits	0	0
	13	PBO at beginning of current fiscal year	4,936,569,137	5,121,214,558
В	Cha	ange in Plan Assets		
	1	Fair value of assets at beginning of prior fiscal year	4,975,864,249	4,726,059,114
	2	Actual return on assets	26,433,234	473,590,114
	3	Employer contributions	92,514,000	71,464,000
	4	Plan participants' contributions	0	0
	5	Benefits paid	(324,789,029)	(289,402,628)
	6	Administrative expenses paid	(5,225,943)	(5,846,351)
	7	Acquisitions/divestitures	0	0
	8	Settlements	0	0
	9	Fair value of assets at beginning of current fiscal year	4,764,796,511	4,975,864,249

Only if future expenses are accrued in PBO through a load on service cost.

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2.10 Pension cost under U.S. GAAP (ASC 715)

All monetary amounts shown in US Dollars

Fis	cal \	/ear Ending	12/31/2016	12/31/2015
Α	Pei	nsion Cost		
	1	Service cost	85,952,960	92,514,545
	2	Interest cost	208,678,856	202,041,675
	3	Expected return on assets	(280,216,445)	(274,742,098)
	4	Net prior service cost/(credit) amortization	2,157,571	2,218,916
	5	Net loss/(gain) amortization/recognition	81,921,329	104,438,504
	6	Net periodic pension cost/(income)	98,494,271	126,471,542
	7	Curtailments	0	0
	8	Settlements	0	0
	9	Special/contractual termination benefits	0	0
	10	Total pension cost	98,494,271	126,471,542
В	Ke	y Assumptions¹		
	1	Discount rate	4.30%	4.00%
	2	Rate of return on assets	6.00%	6.00%
	3	Rate of compensation increase	Rates vary by age from 3.5% to 12.0%	Rates vary by age from 3.5% to 12.0%
С	-	nsus Date	01/01/2016	01/01/2015

These assumptions were used to calculate Net Periodic Pension Cost/(Income) as of the beginning of the year. For other assumptions used, as well as assumptions used for interim remeasurements, if any, refer to Appendix A.

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2.11 Development of market-related value of assets under U.S. GAAP (ASC 715)

All monetary amounts shown in US Dollars

Fiscal Y	ear Ending			12/31/2016			
Market	Market-Related Value of Assets as of January 1, 2016						
1	Fair value of assets as of January	1, 2016		4,764,796,511			
2	Deferred investment (gains)/losse	s for prior periods					
Fisc	cal Year	(Gain)/Loss	Percent Deferred	Deferred Amount			
а	2016	270,591,925	80%	216,473,539			
b	2015	(190,546,751)	60%	(114,328,051)			
С	2014	(50,899,071)	40%	(20,359,628)			
d	2013	(249,128,700	20%	(49,825,740)			
е	Total			31,960,120			
3	Market-Related Value of Assets			4,796,756,631			

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2.12 Summary of net prior service cost/(credit) balances

All monetary amounts shown in US Dollars

Base Number	Net Amount at prior financial year end	Remaining Amortization Period	Amortization Amount	Effect of Curtailments	Other Events
1	215,855	0.93302	215,855	0	0
2	1,771,927	2.01100	881,116	0	0
3	4,771	0.49318	4,771	0	0
4	1,183,588	1.12100	1,055,829	0	0
Total	3,176,136		2,157,571	0	0

Summary of Net Loss/(Gain)1

Net Amount at 01/01/2016		Effect of Curtailments	Effect of Settlements	Other Events
1,536,370,582	81,921,329	0	0	0

See Appendix A for description of amortization method.

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Section 3: Participant data

3.1 Summary of plan participants

All monetary amounts shown in US Dollars

Ce	nsus Date	·	01/01/2016	01/01/2015
Α	Active Employees			
	1 Number		16,859	17,737
	2 Expected plan compensation valuation date (limited by IRC		1,642,729,251	1,664,610,452
	3 Average plan compensation		97,439	93,850
	4 Average age		48.2	47.8
	5 Average credited service		18.6	18.3
	6 Average future workinglife (ye	ears)	12.338	12.544
В	Participants with Deferred Ben	efits		
	1 Number (non-cash balance)		1,603	1,663
	2 Total annual pension (non-ca	sh balance)	8,831,108	9,296,296
	3 Average annual pension (non	-cash balance)	5,509	5,590
	4 Number of cash balance		2,769	1,971
	5 Total cash balance		181,246,355	141,908,731
	6 Average cash balance		65,456	71,998
	7 Average age		52.3	53.4
	8 Distribution at January 1, 201	6		
	Non-Cash			
	Non-Cash Balance	Age	Number	Annual Pension
		Under 40	1	423
		Under 40 40-44	1 2	423 2,451
		Under 40 40-44 45-49	1 2 81	423 2,451 3,978
		Under 40 40-44 45-49 50-54	1 2 81 373	423 2,451 3,978 5,148
		Under 40 40-44 45-49 50-54 55-59	1 2 81 373 608	423 2,451 3,978 5,148 5,701
		Under 40 40-44 45-49 50-54 55-59 60-64	1 2 81 373 608 476	423 2,451 3,978 5,148 5,701 5,998
		Under 40 40-44 45-49 50-54 55-59 60-64 65 and over	1 2 81 373 608 476 62	423 2,451 3,978 5,148 5,701 5,998 4,232
	Balance	Under 40 40-44 45-49 50-54 55-59 60-64	1 2 81 373 608 476	423 2,451 3,978 5,148 5,701 5,998
		Under 40 40-44 45-49 50-54 55-59 60-64 65 and over	1 2 81 373 608 476 62	423 2,451 3,978 5,148 5,701 5,998 4,232
	Balance Non-Cash	Under 40 40-44 45-49 50-54 55-59 60-64 65 and over	1 2 81 373 608 476 62 1,603	423 2,451 3,978 5,148 5,701 5,998 4,232 5,509
	Balance Non-Cash	Under 40 40-44 45-49 50-54 55-59 60-64 65 and over Total	1 2 81 373 608 476 62 1,603	423 2,451 3,978 5,148 5,701 5,998 4,232 5,509
	Balance Non-Cash	Under 40 40-44 45-49 50-54 55-59 60-64 65 and over Total Age Under 40	1 2 81 373 608 476 62 1,603 Number 720	423 2,451 3,978 5,148 5,701 5,998 4,232 5,509 Annual Pension 13,667
	Balance Non-Cash	Under 40 40-44 45-49 50-54 55-59 60-64 65 and over Total Age Under 40 40-44	1 2 81 373 608 476 62 1,603 Number 720 253	423 2,451 3,978 5,148 5,701 5,998 4,232 5,509 Annual Pension 13,667 30,602
	Balance Non-Cash	Under 40 40-44 45-49 50-54 55-59 60-64 65 and over Total Age Under 40 40-44 45-49	1 2 81 373 608 476 62 1,603 Number 720 253 318	423 2,451 3,978 5,148 5,701 5,998 4,232 5,509 Annual Pension 13,667 30,602 43,340
	Balance Non-Cash	Under 40 40-44 45-49 50-54 55-59 60-64 65 and over Total Age Under 40 40-44 45-49 50-54	1 2 81 373 608 476 62 1,603 Number 720 253 318 440	423 2,451 3,978 5,148 5,701 5,998 4,232 5,509 Annual Pension 13,667 30,602 43,340 63,991
	Balance Non-Cash	Under 40 40-44 45-49 50-54 55-59 60-64 65 and over Total Age Under 40 40-44 45-49 50-54 55-59	1 2 81 373 608 476 62 1,603 Number 720 253 318 440 519	423 2,451 3,978 5,148 5,701 5,998 4,232 5,509 Annual Pension 13,667 30,602 43,340 63,991 105,991

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C Participants Receiving Benefits

1 Number	15,645	15,722
2 Total annual pension	233,059,750	235,331,778
3 Average annual pension	14,897	14,712
4 Average age	74.5	74.4
5 Distribution at January 1, 2016		

Age	Number	Annual Pension
Under 55	140	5,764
55-59	410	14,354
60-64	1,685	19,555
65-69	3,325	17,073
70-74	2,774	13,205
75-79	2,383	13,431
80-84	2,199	14,837
85 and over	2,729	12,967
Total	15,645	14,897

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Participant reconciliation 3.2

	Active	Deferred Inactive	Currently Receiving Benefits	Total
1 Included in January 1, 2015 valuation	17,737	3,634	15,722	37,093
2 Change due to:				
a New hire and rehire ¹	1,170	(16)	0	1,154
b Non-vested termination	(75)	0	0	(75)
c Vested termination	(1,003)	1,003	0	0
d Retirement	(324)	(99)	423	0
e Disability	(24)	(3)	27	0
f Death without beneficiary	(25)	(8)	(540)	(573)
g Death with beneficiary	(1)	0	(214)	(215)
h New Beneficiary	0	0	214	214
i Cashout	(594)	(151)	(7)	(752)
j Miscellaneous ²	(2)	12	20	30
k Net change	(878)	738	(77)	(217)
3 Included in January 1, 2016 valuation ³	16,859	4,372	15,645	36,876

¹ Includes 278 newly eligible participants in Dolet Hills.

Includes adjustments for prior omissions and data corrections.
 The deferred inactive count includes a duplicate record for 52 CSW participants that are still active at AEP.

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3.3 Age and service distribution of participating employees

Number distributed by attained age and attained years of credited service

						Years Of Credited Service									
Attained Age		Under 1			1 to 4		5 to 9		10 to 14			15 to 19			
		Avei	rage		Ave	rage		Ave	rage		Ave	rage		Ave	rage
	No.	Comp.	Cash Bal.	No.	Comp.	Cash Bal.	No.	Comp.	Cash Bal.	No.	Comp.	Cash Bal.	No.	Comp.	Cash Bal.
<25				242	69,881	3,537	2								
25 to 29				596	73,819	5,407	333	85,411	16,134	5					
30 to 34				495	77,986	6,679	797	90,194	22,340	253	94,016	34,171	5		
35 to 39				356	77,492	7,252	686	88,972	25,645	487	99,103	43,089	163	97,000	57,200
40 to 44				256	80,719	9,146	567	90,647	30,504	470	100,094	51,202	350	101,816	71,373
45 to 49				200	86,902	10,609	438	88,459	34,655	332	103,512	62,172	328	105,328	86,564
50 to 54				133	85,205	11,670	304	89,966	39,839	272	100,589	69,985	315	100,572	96,465
55 to 59				97	90,982	14,582	212	92,817	46,663	204	97,272	73,931	227	100,491	111,210
60 to 64				45	87,045	15,182	119	86,533	45,334	84	100,413	88,818	109	103,099	129,555
65 to 69				12			36	86,658	51,489	28	113,683	112,603	24	86,767	119,507
>70				2			2			7			7		

		Years Of Credited Service													
Attained	20 to 24				25 to 29		30 to 34		35 to 39			40 & up			
Age		Aver	age		Aver	age		Ave	rage		Ave	rage		Aver	age
	No.	Comp.	Cash Bal.	No.	Comp.	Cash Bal.	No.	Comp.	Cash Bal.	No.	Comp.	Cash Bal.	No.	Comp.	Cash Bal.
<25															
25 to 29															
30 to 34															
35 to 39	5														
40 to 44	98	104,268	89,519	2											
45 to 49	350	110,071	116,711	318	111,418	137,826	29	93,509	133,724						
50 to 54	302	95,485	121,211	762	109,912	165,494	771	105,044	191,372	108	100,003	211,375	1		
55 to 59	216	101,494	150,931	533	98,324	175,502	940	112,618	234,137	1,145	105,738	251,512	33	96,392	263,015
60 to 64	110	94,261	159,526	206	100,307	204,035	338	104,682	251,084	557	112,880	304,130	222	105,462	328,829
65 to 69	12			38	93,996	196,163	37	108,964	291,068	46	97,827	296,473	64	115,876	434,103
>70	3			4						4			5		

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Appendix A: Statement of actuarial assumptions and methods

1. Assumptions and methods for contribution purposes

Actuarial Assumptions and Methods — Contributions

E.				
	onomic Assumptions			
Inte	erest rate basis:			
•	Applicable month (published)			October 2015
•	Yield curve basis			Segment rates
Fu	nding interest rates:		Reflecting Corridors	Not Reflecting Corridors
•	First segment rate		4.43%	1.35%
•	Second segment rate		5.91%	4.01%
•	Third segment rate		6.65%	5.04%
•	Effective interest rate		5.95%	4.13%
An	nual rates of increase			
•	Compensation:			
	 Representative rates 	<i>Age</i> < 26 26 – 30		Rate 12.00% 8.50%
		31 – 35 36 – 40 41 – 45 46 – 50 > 50		7.00% 6.00% 5.00% 4.00% 3.50%
	 Weighted average 			4.75%
•	Cash balance crediting rate			4.00%
•	Lump sum/annuity conversion rate		October 20	15 segment rates
•	Future Social Security wage bases			4.00%
•	Statutory limits on compensation			N/A
•	Expected rate of return on assets for prior year	6.00%	but not gre	ater than the third segment rate

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Demographic Assumptions

Inclusion Date The valuation date coincident with or next following the date on which the

employee becomes a participant.

New or rehired employees. It was assumed there will be no new or rehired employees.

Mortality

Healthy
 Separate rates for non-annuitants (based on RP-2000 "Employees" table

without collar or amount adjustments, projected to 2031 using Scale AA and annuitants (based on RP-2000 "Healthy Annuitants" table without collar or

amount adjustments, projected to 2023 using Scale AA.

Disabled Post-1994 current liability disabled

Lump sum/annuity conversion

Applicable 417(e) IRS Mortality Table

Termination Rates varying by age and service:

Pe	rcentage leaving during the	year
Attained Age	Less than five years of service	Five or more years of service
9	•	-
< 25	8.00%	7.30%
25 – 29	8.00%	5.00%
30 – 34	8.00%	4.20%
35 – 39	8.00%	3.40%
40 – 44	8.00%	2.50%
45 – 49	8.00%	1.90%
50 +	8.00%	1.70%

Disability

Rates apply to employees not eligible to retire and vary by age and sex as indicated by the following sample values:

Percentage becoming disabled during the year							
Age	Male	Female					
20	0.060%	0.090%					
30	0.060%	0.090%					
40	0.074%	0.110%					
50	0.178%	0.267%					
60	0.690%	1.035%					

Retirement

Rates varying by age; average retirement age 64:

Percentage retiring during the year						
Age	Rate					
55 – 57	1.00%					
58 – 60	6.00%					
61 – 63	16.00%					
64 - 69	13.00%					
70 +	100.00%					

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Benefit commencement date:

 Preretirement death benefit The later of the death of the active participant or the date the participant would have attained age 55.

Deferred vested benefit The later of age 55 or termination of employment.

Disability benefit Upon disablement.

Retirement benefit Upon termination of employment.

Form of payment

40% lump sum; 60% annuity for retirement eligible East grandfathered participants and 75% lump sum; 25% annuity for all other participants. Married participants are assumed to elect the 50% joint and survivor annuity and unmarried participants are assumed to elect the single life annuity. No other optional form of payment election is assumed.

Percent married 80% of male participants; 70% of female participants.

Spouse ages Wives are assumed to be three years younger than husbands.

Valuation pay 2016 base salary pay (Grandfathered) – not estimated due to freeze of

final average pay accruals at December 31, 2010.

2016 expanded pay (Cash Balance) – sum of the following updated one year according to the salary increase assumption:

(i) 2016 base salary

(ii) a 15% increase for overtime eligible employees and a target bonus percent increase for incentive-eligible employees

At-risk assumptions

If at-risk calculations are required, all participants eligible to elect benefits during the current and subsequent ten plan years are assumed to commence benefits at the earliest possible date under the plan, but not before the end of the current plan year, except in accordance with the regular valuation assumptions. In addition, all participants (not just those eligible to begin benefits within the next 11 years) are assumed to elect the most valuable form of benefit under the plan, which is usually a joint and survivor form of payment.

Timing of benefit payments

Annuity payments are payable monthly at the beginning of the month and lump

sum payments are payable on date of decrement.

Methods

Valuation date First day of plan year.

Funding target Present value of accrued benefits.

Target normal cost Present value of benefits expected to accrue during plan year

plus plan-related expenses expected to be paid from the trust (based on actual trust expenses paid in previous year, adjusted by the difference between the prior and expected current year

PBGC premiums).

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Actuarial value of assets

Average of the fair market value of assets on the valuation date and the six immediately preceding months, adjusted for contributions, benefit/expense payments and expected investment returns. The average asset value must be within 10% of fair value, including contributing receivable. The method of computing the actuarial value of assets complies with rules governing the calculation of such values under PPA.

These rules produce smoothed values that reflect the underlying market value of plan assets but fluctuate less than the market value. As a result, the actuarial value of assets will be lower than the market value in some years and greater in other years. However, over the long term under PPA's smoothing rules, the method has a bias to produce an actuarial value of assets that is below the market value of assets.

Benefits Not Valued

All benefits were valued except:

- Any liabilities that may be reinstated in the event of reemployment
- The alternate benefit formula for members who did not elect to withdraw their employee contributions
- Any liabilities relating to members" unwithdrawn employee contributions
- Liabilities related to special benefits as a result of termination due to downsizing and restructuring

Data Sources

Willis Towers Watson used participant and asset data as of January 1, 2016, supplied by Mercer, the third party administrator for AEP. 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 was adjusted to reflect any significant events that occurred between the date the data was collected and the measurement date. To the extent that data were not provided, estimates were made based on prior year information.

The Company also provided the amounts recognized in accumulated other comprehensive income as of the end of the December 31, 2015 fiscal year and amounts recognized in other comprehensive income in the December 31, 2015 fiscal year.

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2. Assumptions and methods for pension cost purposes

Actuarial Assumptions and Methods — Pension Cost

Discount rate		4.30%
Return on assets*		6.00%
Annual rates of increase		
Compensation:		
Representative rates	Age	Rate
	< 26 26 - 30 31 - 35 36 - 40 41 - 45 46 - 50 > 50	12.00% 8.50% 7.00% 6.00% 5.00% 4.00% 3.50%
 Weighted average 		4.75%
Cash balance crediting rate		4.00%
 Lump sum/annuity conversion rate 		4.50%
 Future Social Security wage bases 		4.00%
 Statutory limits on compensation 		3.00%

The return on assets shown above is net of investment expenses and administrative expenses assumed to be paid from the trust.

^{*} Also used as discount rate for plan accounting (ASC 960) purposes.

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Demographic Assumptions

Inclusion Date The valuation date coincident with or next following the date on which the

employee becomes a participant.

New or rehired employees
It was assumed there will be no new or rehired employees.

Mortality Based on modified versions of RP-2014 with long-term improvement rates of 0.75%.

Base mortality rates are derived from the RP-2014 mortality table with improvements factored to 2006 with no collar adjustments.

Mortality improvements are projected forward on a generational basis. Improvement rates grade linearly from the MP-2015 rate in 2007 to the ultimate rate in 2015:

Age	Ultimate Improvement rate per year	Age	Ultimate improvement rate per year
85 and younger	0.750%	91	0.300%
86	0.675%	92	0.225%
87	0.600%	93	0.150%
88	0.525%	94	0.075%
89	0.450%	95 and older	0.000%
90	0.375%		

Lump sum/annuity conversion

Applicable 417(e) IRS Mortality Table

Termination

Rates varying by age and service

Percentage leaving during the year		
Attained Age	Less than five years of service	Five or more years of service
9	•	•
< 25	8.00%	7.30%
25 – 29	8.00%	5.00%
30 - 34	8.00%	4.20%
35 – 39	8.00%	3.40%
40 – 44	8.00%	2.50%
45 – 49	8.00%	1.90%
50 +	8.00%	1.70%

Disability

Rates apply to employees not eligible to retire and vary by age and sex a indicated by the following sample values:

Percentage becoming disabled during the year		
Age	Male	Female
20	0.060%	0.090%
30	0.060%	0.090%
40	0.074%	0.110%
50	0.178%	0.267%
60	0.690%	1.035%

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Retirement

Rates varying by age; average retirement age 64:

Percentage retiring during the year	
Age	Rate
55-57	1.00%
58-60	6.00%
61-63	16.00%
64-69	13.00%
70+	100.00%

Benefit commencement date:

•	Preretirement death
	benefit

The later of the death of the active participant or the date the participant would have attained age 55.

 Deferred vested benefit The later of age 55 or termination of employment.

Disability benefit

Upon disablement.

Retirement benefit

Upon termination of employment.

Form of payment

40% lump sum; 60% annuity for retirement eligible East grandfathered participants and 75% lump sum; 25% annuity for all other participants. Married participants are assumed to elect the 50% joint and survivor annuity and unmarried participants are assumed to elect the single life annuity. No other optional form of payment election is assumed.

Percent married

80% of male participants; 70% of female participants.

Spouse ages

Wives are assumed to be three years younger than husbands.

Valuation pay

2016 base salary pay (Grandfathered) – not estimated due to freeze of final average pay accruals at December 31, 2010.

2016 expanded pay (Cash Balance) – sum of the following updated one year according to the salary increase assumption:

- (i) 2016 base salary
- (ii) a 15% increase for overtime eligible employees and a target bonus percent increase for incentive-eligible employees

Administrative expenses

Discount rate is net of expenses paid by the trust.

Timing of benefit payments

Annuity payments are payable monthly at the beginning of the month and lump sum payments are payable on date of decrement.

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Methods

Service cost and projected benefit obligation

Projected unit credit

Market-related value of assets

The market value on the valuation date less the following percentages of prior years' investment gains and losses:

- 80% of the prior year
- 60% of the second prior year
- 40% of the third prior year
- 20% of the fourth prior year

The investment gain or loss is calculated each year by:

- Rolling forward the prior year's fair value of assets with actual contributions, benefit payments and expected return on investments using the long-term yield assumption
- Comparing the actual fair value of assets to the expected value calculated above.

Benefits not valued

All benefits were valued except:

- Any liabilities that may be reinstated in the event of reemployment
- The alternate benefit formula for members who did not elect to withdraw their employee contributions
- Any liabilities relating to members' unwithdrawn employee contributions
- Liabilities related to special benefits as a result of termination due to restructuring or downsizing

Data Sources

Willis Towers Watson used participant and asset data as of January 1, 2016, supplied by Mercer, the third party administrator for AEP. 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 was adjusted to reflect any significant events that occurred between the date the data was collected and the measurement date. To the extent that data were not provided, estimates were made based on prior year information.

The Company also provided the amounts recognized in accumulated other comprehensive income as of the end of the December 31, 2015 fiscal year and amounts recognized in other comprehensive income in the December 31, 2015 fiscal year.

Assumptions Rationale - Significant Economic Assumptions for Contributions

Discount rate

The basis chosen was selected by the plan sponsor from among choices prescribed by law, all of which are based on

observed market data over certain periods of time.

Cash Balance Interest crediting

rate

The plan credits interest to cash balance accounts using the 30-year Treasury rate for the September of the preceding year with a minimum rate of 4.00%. The assumption is based on the plan sponsor's long-term expectations of yields on U.S. Treasuries. We believe that the selected assumption does not significantly conflict with what would be reasonable based on market conditions at the measurement date.

market conditions at the measurement date.

Lump sum conversion rate As required by IRC 430, lump sum benefits are valued using

"annuity substitution", so that the interest rates assumed are effectively the same as described above for the discount rate.

Rates of increase in:

• Compensation Rates of increase in compensation were based on an

experience study conducted in 2014, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

 National average wages (NAW) (e.g., Social Security wage bases) The assumed NAW is based on assumed CPI as shown below, plus assumed increases in real wages (the portion of GDP increases that becomes part of wages). Such assumed future increases in real wages are based on a combination of historical averages and an expectation that the future rates will be lower (higher) than historical averages.

 Increases in statutory limits (CPI) The assumed CPI is based on a combination of historical average CPI, current conditions and an assumed progression from recently experienced CPI to the long-term expected level. The final assumption represents a composite of current rates and long term expected rates.

Assumptions Rationale - Significant Economic Assumptions for 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.

Expected 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.

Cash balance interest crediting

rate

The plan credits interest to cash balance accounts using the 30-year Treasury rate for the September of the preceding year with a minimum rate of 4.00%. The assumption is based on

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the plan sponsor's long-term expectations of yields on U.S. Treasuries. We believe that the selected assumption does not significantly conflict with what would be reasonable based on market conditions at the measurement date.

Conversion rate for lump sums and

annuities

The plan uses IRC 417(e)(3) as its basis to convert between lump sums and annuities. Because the 417(e)(3) interest rates are based on corporate bond yields, the assumption is based on the plan sponsor's long-term expectations of yields on high-quality corporate bonds. We believe that the selected assumption does not significantly conflict with what would be reasonable based on market conditions at the measurement date.

Rate of increase in compensation

Rates of increase in compensation were based on an experience study conducted in 2014, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

Assumptions Rationale - Significant Demographic Assumptions

Mortality Assumptions were selected by the plan sponsor and, as

required by U.S. GAAP, represent a best estimate of future

experience.

Termination Termination rates are based on an experience study

conducted in 2014, with annual consideration of whether any conditions have changed that would be expected to produce

different results in the future.

Assumed termination rates differ by service because of observed differences in termination rates between employees who have attained at least five years of service and those with

less than five years of service.

Retirement Retirement rates are based on an experience study conducted

in 2014, with annual consideration of whether any conditions have changed that would be expected to produce different

results in the future.

Form of payment Rates at which retirees elect lump sums versus annuities are

based on an experience study conducted in 2014, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

Source of Prescribed Methods

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Funding methods

The methods used for funding purposes as described in Appendix A, including the method of determining plan assets, are "prescribed methods set by law", as defined in the actuarial standards of practice (ASOPs). These methods are required by IRC §430, or were selected by the plan sponsor from a range of methods permitted by IRC §430.

Accounting methods

The methods used for accounting purposes as described in Appendix A, including the method of determining the market-related value of plan assets, are "prescribed methods set by another party", as defined in the actuarial standards of practice (ASOPs). As required by U.S. GAAP, these methods were selected by the plan sponsor.

Changes in Assumptions and Methods

Change in assumptions since prior valuation

The interest rates used to calculate the funding target, target normal cost and to convert 417(e) based forms of payments were updated from the segment rates as of October 2014 to the segment rates as of October 2015.

The required mortality table used to value the funding target and target normal cost was updated to include one additional year of projected mortality improvements.

Assumed plan-related expenses of \$5,225,943 were added to the target normal cost.

The discount rate increased from 4.00% to 4.30%.

The lump sum conversion rate decreased from 5.00% to 4.50% for accounting purposes.

The mortality used to convert to 417(e) based forms of payment was updated for an additional year of mortality improvements.

Change in methods since prior valuation

None.

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Appendix B1: Summary of plan provisions covered by the former East Retirement Plan

Plan Provisions		
Effective Date	May 1, 1955. Restated effective January 1, 2012.	
Recent Amendments	Executed as of December 22, 2014.	
Covered Employees	Employees become Members of the Plan on the first day of the month following completion of one year of service.	
Participation Date	Date of becoming a covered employee.	
	Definitions	
Grandfathered employee	If, on December 31, 2000, either:	
	 Participating in AEP System Retirement Plan, or 	
	 In one-year waiting period for AEP System Retirement Plan participation. 	
Vesting service	A period of time from employment date to termination date and, in general, includes periods of severance that are not in the excess of 12 months.	
Accredited service	Elapsed time from date of hire (from benefit service start date).	
Cash balance pay	Pay received during the year, including base pay, overtime, shift differential/Sunday premium pay and incentive pay, subject to IRS limits.	
Covered compensation amount	The average of the Social Security taxable wage based during the 35-year period including the year in which the participant retires, dies, becomes disabled or otherwise terminates employment. This monthly average is calculated to the next lower or equal whole dollar amount and is then rounded to nearest \$50.	
Final average pay	Average of the highest 36-consecutive months of base pay out of the last 120 months of employment, subject to IRS limits.	
Normal retirement date (NRD)	The first day of the calendar month whose first day is nearest the later of the member's 65 th birthday or the completion of five years of Vesting Service.	

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Cash balance account

Recordkeeping account to which annual Interest Credits and annual Company Credits are credited. The cash balance account is updated at the end of each plan year and is equal to:

Cash Balance Account as of the end of the prior plan year

Interest Credits

Company Credits

Cash balance benefit
Opening balance

Cash Balance Account converted to a monthly annuity

For those participating in or eligible for the AEP System Retirement Plan on December 31, 2000, opening balance is calculated as follows:

- Present value of monthly normal retirement benefit determined as of December 31, 2000, and payable at age 65 (or current age if older)
 - Present value determined based on 5.78% interest and IRS regulated mortality (GAM83 Unisex) data for lump sums (postretirement only)

Plus

 Credit for early retirement subsidy for monthly payments beginning at age 62 (or current age if older)

Plus

- Transition credit based on age, service and pay received in 2000 (see "Company Credits" for credit percentages)
 - Age and service based on completed whole years as of December 31, 2000.

For employees hired on or after January 1, 2001, opening balance is \$0.

Interest credits

Interest credits are applied to beginning of year account balance on December 31 each year.

Based on the average 30-year Treasury Bond rate for November of the previous year.

Minimum of 4%.

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Company	credits
---------	---------

Applied to account balance on December 31 or termination date if earlier.

Amount is a percentage of eligible pay received during the year, based on age plus years of Vesting Service (age and service in completed whole years as of December 31).

Annual
Company Credit
3.0%
3.5%
4.5%
5.5%
7.0%
8.5%

Monthly Grandfathered Benefit

Sum of (1), (2) and (3):

- (1) 1.10% of Final Average Pay x Accredited Service up to 35 years
- (2) 0.50% of Final Average Pay Less Covered Compensation x Accredited Service up to 35 years
- (3) 1.33% of Final Average Pay x Accredited Service between 35 and 45 years

Accruals for the grandfathered benefit ceased on December 31, 2010.

Long-term disability and paid leaves

Participants do not receive company credits while on long-term disability. Vesting service continues.

Unpaid leave

No compensation for annual Company Credit. Vesting service continues

Continues.		
Eligibility for Benefits		
Normal retirement	All members at or after their Normal Retirement Date.	
Early retirement	Any time after attainment of age 55 and completion of five years of vesting. Applicable only to grandfathered benefits.	
Postponed retirement	Retirement after Normal Retirement Date.	
Vested termination	All members who terminate employment after completion of three years of Vesting Service, or upon death.	
Disability	All members who are unable to work at own occupation solely because of sickness or injury for the first 24 months of disability. After 24 months of disability, the participant is eligible if unable to work at any gainful occupation for which the participant may be able, or may reasonably become qualified by education, training or experience, to perform.	
Surviving spouse	The surviving spouse of a Grandfathered Member who retired or is eligible to retire on Normal or Early Retirement and who was married to that spouse for the year preceding commencement and whose grandfathered benefit exceeds his or her Cash Balance Benefit.	

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Preretirement death

Beneficiary of deceased member.

Benefits Paid Upon the Following Events	
Normal retirement	For Grandfathered Employees, the better of the monthly grandfathered benefit or the Cash Balance Benefit determined as of Normal Retirement Date. For all other employees, the Cash Balance Benefit determined as of Normal Retirement Date.
Early retirement	For Grandfathered Employees, the better of:
	(1) The monthly grandfathered retirement benefit reduced by 3% per year for each year commencement precedes age 62, and
	(2) The Cash Balance Benefit determined as of the Early Retirement Date.
	For all other employees, the Cash Balance Benefit determined as of the Early Retirement Date.
Deferred vested retirement	The accrued Normal Retirement Benefit (better of Cash Balance and Grandfathered Benefits, if eligible), payable at Normal Retirement Date or actuarially reduced and payable at any age.
Disability	The greater of (1) or (2):
	(1) Accrued Grandfathered Retirement Benefit reduced as in the Early Retirement Benefit. If retirement occurs prior to age 55, the benefit is further reduced actuarially from age 55. The Disability Retirement Benefit will reflect Accredited Service that accrued (at most recent rate of base earnings) to a member while receiving benefits under the Company's LTD plan.
	(2) The Cash Balance Benefit with continued Company Credits while disabled.
	Benefit (1) applies for Grandfathered Employees only.
Preretirement	Better of (1) or (2):
death	(1) The grandfathered monthly benefit as if the employee commenced a 60% qualified joint and survivor benefit at his earliest retirement date
	(2) Annuity equivalent of Cash Balance account or the cash balance account.
	Benefit (1) applies for a Grandfathered Employee whose beneficiary is his or her spouse.
Surviving spouse benefits	A benefit payable for life equal to 30% of the single life annuity payable to the grandfathered member. The spouse's benefit is actuarially reduced for each year by which the spouse is more than ten years younger than the member. Payable to Grandfathered Employees only.

Other Plan Provisions

Forms of payment

Grandfathered employees

The following are available for Grandfathered Employees for both the Grandfathered Benefit and the Cash Balance Benefit:

- Full lump sum payment.
- Combination of partial lump sum (25%, 50% or 75% of full lump sum) with remainder paid as a monthly benefit (see below).
- Monthly payment:
 - Single life annuity.
 - Optional joint annuities (spouse or other beneficiary).
 - Available in 40%, 50%, 60%, 75%, 100%.
 - Can elect pop-up and/or level income options.
 - Automatic company-paid 30% surviving spouse annuity included in Grandfathered Benefit annuity if terminate on or after age 55 and married at least one year. Cash Balance Benefit is actuarially reduced for this feature.

A one-time option to elect a lump sum of the accrued benefit for terminated vested participants whose benefit was determined in no way by reference to either the AEP or CSW cash balance formulas was offered during the period from May 1, 2012 through June 30, 2012. Participants eligible for the window were also permitted to elect any of the other optional forms of payment generally applicable to such a participant under the normal terms of the plan document. Any participant who elected to commence benefits under this window, regardless of lump sum or annuity election, had a benefit commencement date of August 1, 2012.

 Employees hired on or after January 1, 2001 The following are available for those hired on or after January 1, 2001:

- Full lump sum payment.
- Combination of partial lump sum (25%, 50% or 75% of full lump sum) with remainder paid as a monthly benefit (see below).
- Monthly payment:
 - Single life annuity.
 - Joint annuities (spouse or other beneficiary).
 - Available in 50%, 75%, 100%.

Form of payment conversion for non-417(e) covered conversions

Dated May 22, 2017 Attachment 2 Page 60 of 89

Cash balance 7.50% interest and the applicable 417(e) Mortality Table.

Grandfathered benefit 7.50% interest and the 1974 George B. Buck Mortality Table.

Pension Increases None.

Plan Participants' Contributions Prior to January 1, 1978, employee contributions were required as a

> condition of Membership. In May and June of 1981, Members were permitted an election to withdraw those contributions. Those who did not elect to withdraw have retirement benefits based on a formula that differs from the formulas previously described in this section. However, the number of nonelecting Members is so small that special plan provisions for that group have not been included in

this summary.

Maximum on benefits and

pay

All benefits and pay for any calendar year may not exceed the maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes become effective. Increases in the dollar limits are assumed for determining pension cost but not for determining

contributions.

Benefits not valued A small portion of the population made employee contributions to the

plan. Because the amount of these contributions is not material to

the plan, they are not part of the valuation.

Participants who were employees of Columbus Southern Power (CSP) at the time AEP acquired that company have a frozen benefit under the CSP benefit formula at December 31, 1986. Benefits for these participants are the greater of an all-service AEP benefit and a two-part benefit consisting of the frozen CSP benefit plus an AEP benefit accrued from January 1, 1987. Because this applies to a small portion of the population and the CSP frozen benefit is not often the greater benefit for these participants, this benefit is not

valued.

Plan status Ongoing.

Future Plan Changes

Willis Towers Watson is not aware of any future plan changes that are required to be reflected.

Changes in Benefits Valued Since Prior Year

None.

Appendix B2: Summary of plan provisions covered by the former West Retirement Plan

Plan Provisions		
Effective Date	January 1940. Restated effective January 1, 1997.	
Recent Amendments	Executed as of December 22, 2014.	
Covered Employees	All full-time employees of a Participating Company employed by CSW before January 1, 2001, and not covered by a union (that has not bargained for coverage) or another pension plan provided by AEP. Part-time employees of the Company had to work more than 1,000 hours in the first anniversary year or subsequent calendar years.	
Participation Date	Date of becoming a covered employee	
Definitions		
Grandfathered employee	Employees who were at least age 50 with ten years of vesting service of July 1, 1997.	
Vesting service	All service from date of hire in completed years.	
Credited service	The aggregate of:	
	For the period prior to January 1, 1976:	
	(1) The number of full years in the last continuous period that employee was a participant after June 30, 1970, plus	
	(2) Credited service under any prior plan if service extended to July 1, 1970.	
	For the period beginning on or after January 1, 1976, the number of full years of service.	
Cash balance pay	Pay received during the year, including base pay, overtime, shift differential/Sunday premium pay and incentive pay, subject to IRS limits	
Final average pay	Highest average annual earnings (base pay only) during any 36 consecutive months in the 120 months before retirement. Any changes in earnings within the last three months before retirement will not be taken into account.	
Normal retirement date (NRD)	The first day of the calendar month on or following the member's 65 th birthday.	

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Cash balance account

Recordkeeping account to which annual interest credits and annual company credits are credited. The cash balance account is updated at the end of each plan year and is equal to:

Cash Balance Account as of the end of the prior plan year

Interest Credits

Company Credits

Cash balance benefit

Interest credits

Cash Balance Account converted to a monthly annuity

Interest credits are applied to beginning of year account balance on December 31 each year.

Based on the average 30-year Treasury Bond rate for November of the previous year.

Minimum of 4%.

Company credits

Applied to account balance on December 31 or termination date if earlier.

Amount is a percentage of eligible pay received during the year, based on age plus years of Vesting Service (age and service in completed whole years as of December 31).

Age Plus	Annual
Years of Service	Company Credit
Less than 30	3.0%
30 – 39	3.5%
40 – 49	4.5%
50 – 59	5.5%
60 – 69	7.0%
70+	8.5%

Monthly Grandfathered Benefit

Greater of (1) or (2) below with automatic cost of living adjustments upon retirement:

(1) Basic benefit — An annual amount equal to:

The aggregate of a participant's (a) earned benefit (if any) under any prior plan or acquired Company pension plan under which no election was made to receive a paid-up annuity; and (b) participant contributions without interest for the period commencing on or after July 1, 1970. For the period after September 1, 1980, participants will be deemed to have made contributions at the rate of 2% annually of the participant's annual rate of earnings as of January 1.

(2) Minimum benefit:

1-2/3% of final average annual earnings less 50% of participant's annual primary Social Security benefit times years of credited service up to 30 years.

Minimum benefits	The benefit payable will never be less than the frozen accrued benefit	
	as of July 1, 1997, under the prior plan.	
Primary Social Security benefit	The annual amount payable under the Social Security Act as amended in effect at the employee's date of retirement. The date as of which the amount is to be determined is:	
	(1) In the case of an employee (including deferred vested employees) retiring on or after normal retirement date, normal retirement date.	
	(2) In the case of an employee retiring prior to normal retirement date, the later of employee's 62 nd birthday or actual retirement date.	
	Early retirees and deferred vested employees are assumed to have no earnings after termination in determining the amount of this benefit.	
Long-term disability and paid leaves	Participants do not receive company credits while on long-term disability. For the grandfathered formula, the final average pay will be determined as of the date on which the participant became disabled. Vesting service continues.	
Unpaid leave	No compensation for annual compensation credit. Vesting service continues.	
Eligibility for Benefits		
Normal retirement	All members at or after their Normal Retirement Date	
Early retirement	Any time after attainment of age 55 and completion of five years of vesting	
Postponed retirement	Retirement after NRD.	

Disability

Surviving spouse

Vested

All participants who become permanently and totally disabled. Permanent and total disability is determined by reference to the LTD

plan covering that participant.

Upon disability.

of the following applies:

(1)

(2)(3)

Three years of vesting service

Death prior to termination

Attainment of age 55 while an employee

The surviving spouse of a participant who retired or is eligible to retire

The participant's cash balance account is 100% vested when any one

on normal or early retirement.

Preretirement death Beneficiary of participant who dies after becoming vested.

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Benefits Paid Upon the Following Events

Normal retirement

Grandfathered employees must elect either the cash balance or the grandfathered formula. For purposes of this valuation, the employee is assumed to elect the formula with the higher present value. Employees with a prior plan frozen benefit get the better of the cash balance benefit and the prior plan frozen benefit. For all other employees, the Cash Balance Benefit is determined as of Normal Retirement Date.

Early retirement

Greater of (1) if applicable or (2):

(1) The grandfathered accrued benefit and the prior plan frozen are payable subject to reduction according to the following schedule if payments commence prior to the normal retirement date.

Age at	Percent of
Retirement	Benefit Payable
64	100%
63	100%
62	100%
61	95%
60	90%
59	84%
58	78%
57	72%
56	66%
55	60%

(2) The Cash Balance Benefit determined as of the Early Retirement Date.

Deferred vested retirement

Greater of (1) if applicable or (2):

- (1) Grandfathered accrued benefit payable at age 65, or if earlier reduced 5% per year from age 65, 6% per year from age 60 and 7.5% per year compounded from age 55.
- (2) Vested cash balance account.

Disability retirement

The greatest of grandfathered accrued benefit, if eligible, based on projected service and frozen pay deferred to age 65, prior plan frozen benefit if eligible and cash balance account with continued pay credits.

Preretirement death

If the beneficiary is the spouse and the participant is a grandfathered/protected plan participant, then:

- (1) For an active participant who dies on or after 55th birthday but before retirement, a monthly benefit equal to 50% of the benefit accrued to the date of death without reduction for early retirement is payable immediately as a life annuity to a qualifying spouse.
- (2) For an active participant who dies after completing five or more years of vesting service but before age 55, a deferred monthly benefit equal to 50% of the benefit accrued to the date of death reduced as for early retirement is payable as a life annuity to a

- qualifying spouse. Benefit commencement is deferred to when the deceased participant would have attained age 55.
- (3) For a deferred vested participant who dies before benefits commence, a monthly benefit equal to 50% of the deferred vested benefit reduced for early commencement (as for deferred vesteds) is payable as a life annuity to a qualifying spouse. If death occurs before age 55, the benefit to the spouse is deferred to when the deceased participant would have attained age 55.

The spouse's benefit is actuarially reduced for each year by which the spouse is more than five years younger than the participant.

For all employees, the minimum benefit is the cash balance account immediate annuity, which is also payable if the beneficiary is not the participant's spouse.

Other Plan Provisions

Form of payment

The following are available for those participants who did not work an hour of service on or after January 1, 2003:

- Full lump sum payment.
- Monthly payment:
 - Single life annuity.
 - 50% joint annuity (spouse or other beneficiary).

A one-time option to elect a lump sum of the accrued benefit for terminated vested participants whose benefit was determined in no way by reference to either the AEP or CSW cash balance formulas was offered during the period from May 1, 2012 through June 30, 2012. Participants eligible for the window were also permitted to elect any of the other optional forms of payment generally applicable to such a participant under the normal terms of the plan document. Any participant who elected to commence benefits under this window, regardless of lump sum or annuity election, had a benefit commencement date of August 1, 2012.

The following are available for those participants who work an hour of service on or after January 1, 2003:

- Full lump sum payment.
- ◆ Combination of partial lump sum (25%, 50% or 75% of full lump sum) with remainder paid as a monthly benefit (see below).
- Monthly payment:
 - Single life annuity.
 - Joint annuities (spouse or other beneficiary).
 - Available in 50%, 75%, 100%.

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Form of payment conversion for non-417(e) covered conversions

Cash balance
 7.50% interest and the applicable 417(e) Mortality Table

Grandfathered benefit
 Factors as specified in Tables I, II, III and IV of Exhibit A to the

American Electric Power System Retirement Plan document. 7.50% interest and the 1951 Group Annuity male mortality table to the extent

not covered by Tables I, II, III and IV.

Pension Increases None.

Member Contributions None.

Maximum on benefits and pay All benefits and pay for any calendar year may not exceed the

maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes become effective. Increases in the dollar limits are assumed for determining pension cost but not for determining

contributions.

Plan status Continuing accruals. All new entrants to plan are covered under former

East plan provision.

Future Plan Changes

Willis Towers Watson is not aware of any future plan changes that are required to be reflected.

Changes in Benefits Valued Since Prior Year

None.

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Appendix C: Adjusted Funding Target Attainment Percentage (AFTAP)

American Electric Power retained Towers Watson Delaware Inc., a subsidiary of Willis Towers Watson PLC ("Willis Towers Watson") to perform a valuation of its pension plan for the purpose of measuring the plan's AFTAP for the plan year beginning January 1, 2016 in accordance with ERISA and the Internal Revenue Code. This valuation has been conducted in accordance with generally accepted actuarial principles and practices.

The enrolled actuary making this certification is a member of the Society of Actuaries and other professional actuarial organizations and meets their "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States."

We hereby certify that the plan's AFTAP for the plan year beginning January 1, 2016 is 120.15%. This percentage is based on the assumptions, participant data, and plan provisions we relied upon to prepare the results shown in this report, reflects the valuation limitations discussed in this report and is also based on the following additional information:

Annuity Purchases

American Electric Power Co.'s representation that there were no annuity purchases made on behalf of non-highly compensated employees by the plan in the plan years beginning in 2014 and 2015.

Funding Balances

Our understanding is that American Electric Power has not elected to reduce the plan's funding balance as of the first day of the 2016 plan year.

Our understanding is that the plan is not subject to a deemed election to reduce the funding balances in 2016.

Our understanding is that American Electric Power has not elected to apply any of the plan's funding balances to the 2016 minimum required contribution.

Our understanding is that American Electric Power has not elected to increase the prefunding balance as of the first day of the 2016 plan year.

Contributions

Our understanding is that American Electric Power Co. has not made any employer contributions after December 31, 2015 and before April 29, 2016 for the 2015 plan year.

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Subsequent Events

There were no plan amendments that took effect in the current plan year that were taken into account for the current plan year's AFTAP certification.

There were no UCEBs that took effect in the current plan year that were taken into account for the current plan year's AFTAP certification.

There were no previously suspended accruals restored during the current plan year that were taken into account for the current plan year's AFTAP certification.

Elections

Our understanding of sponsor elections required under the Pension Protection Act of 2006 (PPA), with respect to interest rates, Actuarial Value of Assets and other methods and/or assumptions, as confirmed in the Sponsor's letter dated April 26, 2016.

In making this certification, we relied on asset, contribution, funding balance election, and annuity purchase information provided by the Company, including dates and amounts of contributions made to the plan through the date of this certification, dates and amounts of funding balance elections by the Company through the date of this certification, and amounts of annuity purchases in the past two years, as shown above. We have reviewed this information for overall reasonableness and consistency but, consistent with the scope of our engagement, have neither audited nor independently verified this information. We do not certify to the accuracy or completeness of asset, contribution, funding balance election and annuity purchase information, and this certification relies on and is contingent on the accuracy and completeness of this information.

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The development of the AFTAP is shown below:

All monetary amounts shown in US Dollars

Plan Year Beginning	01/01/2016
Actuarial value of assets as of January 1, 2016 ¹	4,845,528,901
Funding standard carryover balance at January 1, 2016 ²	161,239,527
Prefunding balance at January 1, 2016 ²	571,474,177
Funding target (disregarding at-risk assumptions)	4,032,865,265
AVA/funding target (disregarding at-risk assumptions)	120.15%
Assets for AFTAP calculation ³	4,845,528,901
Annuity purchases for NHCEs during 2014 and 2015	0
Reflection of Post-Valuation Date Events not Previously Reflected	
Increase in funding target (disregarding at-risk assumptions) for 2016 amendments/UCEBs/restored accruals ⁴	0
IRC §436 contributions made to enable plan amendments/UCEBs/restored accruals to take effect ⁵	0
Adjusted funding target, disregarding at-risk assumptions, (includes NHCE annuity purchases and amendments)	0
Adjusted assets (includes NHCE annuity purchases and IRC §436 contributions)	0
Specific AFTAP	
Adjusted Funding Target Attainment Percentage (AFTAP)	120.15%

Reflects discounted contributions made for the 2015 plan year only if paid on or before the certification date. Includes security posted by the beginning of the plan year in the form of a bond or cash held in escrow.

Reflects elections made to-date (other than elections to apply the funding balances to 2016 MRC).

AVA if AVA/Funding Target (disregarding at-risk assumptions) >=100%; otherwise (AVA-funding balances).

If amendments/UCEBs/restored accruals (i) went into effect before this specific certification, (ii) were not reflected in the funding valuation and (iii) require AFTAP recertification, or if AFTAP recertification is not required but the plan sponsor decides to reflect the amendment/UCEBs/restored accruals in the specific AFTAP certification. Discounted to January 1, 2016 using the 2016 plan year effective interest rate.

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Immediate Implications of AFTAP Certification

We believe that the certified AFTAP of 120.15% for the 2016 plan year has the following implications for benefit limitations described in IRC §436. American Electric Power should review these conclusions with ERISA counsel:

Benefit accruals called for under the plan without regard to IRC §436 must continue.

Accelerated distributions called for under the plan without regard to IRC §436 must continue in full.

Amendments that increase benefits must be evaluated at the time they would take effect to determine if they are permissible.

Plant shutdown and other unpredictable UCEBs must be evaluated at the time they would take effect to determine if they are permissible.

Implications of 2016 AFTAP for Presumptions in Next Plan Year

Because the AFTAP for the 2016 plan year is at least 90%, the presumed AFTAP for 2017 will remain equal to the 2016 certified AFTAP, and changes in benefit restrictions will not occur, before the 2017 AFTAP is certified, provided that the 2017 AFTAP is certified before the first day of the tenth month of the plan year.

Note, however, that adoption of plan amendments and/or payment of UCEBs may change this result.

Appendix D: Results by business unit

Unless otherwise indicated, the data, assumptions, methods, data and plan provisions upon which the figures in this Appendix D rely are consistent with those indicated throughout the rest of the report.

Summary of key assumptions for Appendix D of 2016 AEP Retirement Plan valuation report:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Discount rate	4.30%	4.50%	4.75%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
PPA effective interest rate	5.95%	5.77%	5.59%	5.43%	5.30%	4.89%	4.49%	4.23%	4.18%	4.18%	4.18%
Actual return on assets	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Cash balance crediting rate	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Lumpa auma comunica rata	4 E00/										

RP-2014, factored to 2006, collar adjustments as appropriate. Beginning in 2017, new IRS mortality tables were assumed for purposes of calculating lump sum amounts. Mortality projection scale
Rates grade linearly by year from MP-2014 in 2007 to 0.75% in 2015. Rates grade linearly by year from MP-2014 in 2007 to 0.75% in 2015. Rates grade linearly by get to zero at age 95 from age 85.
Retirement rates
Age-graded rates based on AEP experience during 2009-2013, average retirement age of 64.
Age-graded rates based on AEP experience during 2009-2013, average retirement age of 64.
Age-graded rates based on AEP experience during 2009-2013.
Age-graded rates based on AEP experience during 2011-2013, with average annual increase of 4.75%.

Valuation and data January 1, 2016

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AMERICAN ELECTRIC POWER
QUALIFIED RETIREMENT PLAN
SUMMARY OF PLAN PARTICIPANTS FOR THE 2016 VALUATION

Location	Vested Actives	Non-Vested Actives	Total Actives	Retirees Receiving Benefits	Beneficiaries	Deferred Vesteds	Total Inactives	Total Participants
140 Appalachian Power Co - Distribution 215 Appalachian Power Co - Generation	1,054 774	0	1,054 774	1,051 762	380 221	164 96	1,595 1,079	2,649 1,853
150 Appalachian Power Co - Transmission	10	0	10	117	16	13	146	156
Appalachian Power Co FERC	1,838	0	1,838	1,930	617	273	2,820	4,658
225 Cedar Coal Co Appalachian Power Co SEC	0 1,838	0 0	0 1,838	85 2,015	30 647	13 286	128 2,948	128 4,786
			.,,		• • • • • • • • • • • • • • • • • • • •			
211 AEP Texas Central Company - Distribution	915	0	915	822 0	242 40	311	1,375	2,290
147 AEP Texas Central Company - Generation 169 AEP Texas Central Company - Transmission	0 126	0	0 126	66	28	0 33	40 127	40 253
AEP Texas Central Co.	1,041	0	1,041	888	310	344	1,542	2,583
170 Indiana Michigan Power Co - Distribution	564	0	564	587	249	93	929	1,493
132 Indiana Michigan Power Co - Distribution	300	0	300	288	83	102	929 473	773
190 Indiana Michigan Power Co - Nuclear	1,135	0	1,135	381	62	289	732	1,867
120 Indiana Michigan Power Co - Transmission	128	0	128	104	16	13	133	261
280 Ind Mich River Transp Lakin Indiana Michigan Power Co FERC	251 2,378	0 0	251 2,378	115 1,475	40 450	55 552	210 2,477	461 4,855
202 Price River Coal	0	0	0	0	0	0	0	0
Indiana Michigan Power Co SEC	2,378	0	2,378	1,475	450	552	2,477	4,855
110 Kentucky Power Co - Distribution	249	0	249	180	60	28	268	517
117 Kentucky Power Co - Generation	53	0	53	105	26	17	148	201
180 Kentucky Power Co - Transmission	2	0	2	11	1	3	15	17
600 Kentucky Power Co Kammer Actives 701 Kentucky Power Co Mitchell Actives	8 243	0	8 243	4 0	0	3 0	7 0	15 243
701 Kentucky Power Co Mitchell Inactives 702 Kentucky Power Co Mitchell Inactives	0	0	0	102	14	9	125	125
Kentucky Power Co.	555	0	555	402	101	60	563	1,118
250 Ohio Rouse Co. Distribution	1,482	0	1.400	1.550	494	225	2,269	3,751
250 Ohio Power Co - Distribution 160 Ohio Power Co - Transmission	1,462	0	1,482 14	1,550 191	494 56	17	2,269	278
Ohio Power Co	1,496	Ö	1,496	1,741	550	242	2,533	4,029
167 Public Service Co of Oklahoma - Distribution	620		620	400	470	425	747	4 240
198 Public Service Co of Oklahoma - Distribution	632 365	0	632 365	406 161	176 58	135 54	717 273	1,349 638
114 Public Service Co of Oklahoma - Transmission	99	Ö	99	45	15	17	77	176
Public Service Co. of Oklahoma	1,096	0	1,096	612	249	206	1,067	2,163
159 Southwestern Electric Power Co - Distribution	501	0	501	164	87	53	304	805
168 Southwestern Electric Power Co - Generation	617	0	617	164	86	45	295	912
161 Southwestern Electric Power Co - Texas - Distribution	229	0	229	93	37	37	167	396
111 Southwestern Electric Power Co - Texas - Transmission 194 Southwestern Electric Power Co - Transmission	0 87	0	0 87	0 31	3 11	0 11	3 53	3 140
Southwestern Electric Power Co.	1,434	0	1,434	452	224	146	822	2,256
	0.17				70	70		
119 AEP Texas North Company - Distribution 166 AEP Texas North Company - Generation	247 0	0	247 0	164 86	72 42	73 29	309 157	556 157
192 AEP Texas North Company - Transmission	65	ŏ	65	24	11	4	39	104
AEP Texas North Co.	312	0	312	274	125	106	505	817
230 Kingsport Power Co - Distribution	50	0	50	43	14	3	60	110
260 Kingsport Power Co - Transmission	1	ő	1	9	1	1	11	12
Kingsport Power Co.	51	0	51	52	15	4	71	122
210 Wheeling Power Co - Distribution	52	0	52	52	27	6	85	137
200 Wheeling Power Co - Transmission	0	ő	0	3	6	ő	9	9
Wheeling Power Co.	52	0	52	55	33	6	94	146
103 American Electric Power Service Corporation	5,372	0	5,372	2,572	469	1,249	4,290	9,662
293 Elmwood	0,012	Ö	0	19	0	64	83	83
292 AEP River Operations LLC	0	0	0	80	0	839	919	919
American Electric Power Service Corp	5,372	0	5,372	2,671	469	2,152	5,292	10,664
143 AEP Pro Serv, Inc.	0	0	0	1	0	2	3	3
189 Central Coal Company	0	0	0	0	0	0	0	0
171 CSW Energy, Inc. Miscellaneous	0 0	0 0	0 0	3 4	1 1	29 31	33 36	33 36
Miscellaneous	v	•	v	•		31	30	30
270 Cook Coal Terminal	20	0	20	12	4	2	18	38
AEP Generating Company	20	0	20	12	4	2	18	38
104 Cardinal Operating Company	298	0	298	179	52	15	246	544
181 Ohio Power Co - Generation	556	0	556	1,195	375	216	1,786	2,342
AEP Generation Resources - FERC	854 0	0	854 0	1,374	427 1	231 2	2,032	2,886
290 Conesville Coal Preparation Company AEP Generation Resources - SEC	854	0	854	12 1,386	428	233	15 2,047	15 2,901
175 AEP Energy Partners	81	0	81	0	0	2	2	83
419 Onsite Partners	1 026	0	1 026	1 296	0	0	2.040	2 095
AEP Energy Supply	936	0	936	1,386	428	235	2,049	2,985
245 Dolet Hills	278	0	278	0	0	0	0	278
Dolet Hills	278	0	278	0	0	0	0	278
Total	16,859	0	16,859	12,039	3,606	4,372	20,017	36,876

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AMERICAN ELECTRIC POWER - QUALIFIED RETIREMENT PLAN FUNDED STATUS OF PRESENT VALUE OF ACCUMULATED PLAN BENEFITS (ASC 960) AS OF JANUARY 1, 2016

	Present Value of Vested	Present Value of Non-Vested	Present Value of Accumulated	Market Value	Percent
Location	Benefits	Benefits	Plan Benefits	of Assets	Funded
140 Appalachian Power Co - Distribution	\$277,833,730	\$658.881	\$278,492,611	\$311,628,899	111.9%
215 Appalachian Power Co - Generation	228,984,408	137,656	229,122,064	264,108,428	115.3%
150 Appalachian Power Co - Transmission	27,558,026	11,733	27,569,759	21,212,923	76.9%
Appalachian Power Co FERC	\$534,376,164	\$808,270	\$535,184,434	\$596,950,250	111.5% 168.5%
225 Cedar Coal Co Appalachian Power Co SEC	2,726,625 \$537,102,789	0 \$808,270	2,726,625 \$537,911,059	4,593,971 \$601,544,221	111.8%
•					
211 AEP Texas Central Company - Distribution 147 AEP Texas Central Company - Generation	\$236,363,426 2,793,462	\$525,203 0	\$236,888,629 2,793,462	\$276,161,228 11,194,282	116.6% 400.7%
169 AEP Texas Central Company - Transmission	23,139,565	104,432	23,243,997	26,064,723	112.1%
AEP Texas Central Co.	\$262,296,453	\$629,635	\$262,926,088	\$313,420,233	119.2%
170 Indiana Michigan Power Co - Distribution	\$139,262,207	\$253,920	\$139,516,127	\$162,252,962	116.3%
132 Indiana Michigan Power Co - Generation	91,241,330	(6,317)	91,235,013	108,308,688	118.7%
190 Indiana Michigan Power Co - Nuclear	192,202,895	477,551	192,680,446	232,274,522	120.5%
120 Indiana Michigan Power Co - Transmission	31,388,778	78,675	31,467,453	33,573,929	106.7%
280 Ind Mich River Transp Lakin Indiana Michigan Power Co FERC	27,699,864 \$481,795,074	72,163 \$875,992	27,772,027 \$482,671,066	35,538,949 \$571,949,050	128.0% 118.5%
202 Price River Coal	0	0	0	0	0.0%
Indiana Michigan Power Co SEC	\$481,795,074	\$875,992	\$482,671,066	\$571,949,050	118.5%
110 Kentucky Power Co - Distribution	\$62,220,804	\$110,930	\$62,331,734	\$66,883,416	107.3%
117 Kentucky Power Co - Generation	28,850,870	40,958	28,891,828	30,481,910	105.5%
180 Kentucky Power Co - Transmission	2,889,176	3,661	2,892,837	1,708,037	59.0%
600 Kentucky Power Co Kammer Actives 701 Kentucky Power Co Mitchell Actives	2,950,288 25,225,988	13,072 113,161	2,963,360 25,339,149	4,659,408 35,854,029	157.2% 141.5%
702 Kentucky Power Co Mitchell Inactives	23,755,646	0	23,755,646	32,707,839	137.7%
Kentucky Power Co.	\$145,892,772	\$281,782	\$146,174,554	\$172,294,639	117.9%
250 Ohio Power Co - Distribution	\$367,049,895	\$476,463	\$367,526,358	\$430,843,606	117.2%
160 Ohio Power Co - Transmission	40,296,060	25,708	40,321,768	40,951,084	101.6%
Ohio Power Co	\$407,345,955	\$502,171	\$407,848,126	\$471,794,690	115.7%
167 Public Service Co of Oklahoma - Distribution	\$131,822,076	\$348,624	\$132,170,700	\$160.527.531	121.5%
198 Public Service Co of Oklahoma - Generation	67,114,159	190,433	67,304,592	81,307,065	120.8%
114 Public Service Co of Oklahoma - Transmission	15,568,482	101,573	15,670,055	20,052,482	128.0%
Public Service Co. of Oklahoma	\$214,504,717	\$640,630	\$215,145,347	\$261,887,078	121.7%
159 Southwestern Electric Power Co - Distribution	\$84,898,477	\$183,499	\$85,081,976	\$101,765,189	119.6%
168 Southwestern Electric Power Co - Generation	94,935,154	459,394	95,394,548	111,936,078	117.3%
161 Southwestern Electric Power Co - Texas - Distribution 111 Southwestern Electric Power Co - Texas - Transmis	43,781,923 124,657	120,818 0	43,902,741 124,657	50,487,625 44,022	115.0% 35.3%
194 Southwestern Electric Power Co - Transmission	11,717,045	66,288	11,783,333	16,155,297	137.1%
Southwestern Electric Power Co.	\$235,457,256	\$829,999	\$236,287,255	\$280,388,211	118.7%
119 AEP Texas North Company - Distribution	\$60,606,784	\$117,480	\$60,724,264	\$64,249,090	105.8%
166 AEP Texas North Company - Generation	16,680,585	0	16,680,585	24,442,255	146.5%
192 AEP Texas North Company - Transmission	8,811,048	69,060	8,880,108	10,627,982	119.7%
AEP Texas North Co.	\$86,098,417	\$186,540	\$86,284,957	\$99,319,327	115.1%
230 Kingsport Power Co - Distribution	\$11,457,552	(\$1,426)	\$11,456,126	\$13,044,346	113.9%
260 Kingsport Power Co - Transmission	2,000,858	0	2,000,858	1,642,949	82.1%
Kingsport Power Co.	\$13,458,410	(\$1,426)	\$13,456,984	\$14,687,295	109.1%
210 Wheeling Power Co - Distribution	\$13,791,022	\$36,393	\$13,827,415	\$15,516,088	112.2%
200 Wheeling Power Co - Transmission	561,357	0	561,357	829,975	147.9%
Wheeling Power Co.	\$14,352,379	\$36,393	\$14,388,772	\$16,346,063	113.6%
103 American Electric Power Service Corporation	\$1,284,444,160	\$6,463,279	\$1,290,907,439	\$1,428,991,690	110.7%
293 Elmwood	2,703,799	0	2,703,799	5,175,574	191.4%
292 AEP River Operations LLC American Electric Power Service Corp	32,351,317 \$1,319,499,276	0 \$ 6,463,279	32,351,317 \$1,325,962,555	51,888,002 \$1,486,055,266	160.4% 112.1%
143 AEP Pro Serv, Inc.	\$914,372	\$0	\$914,372	999,443	109.3%
171 CSW Energy, Inc. 189 Central Coal Company	2,225,398 0	0	2,225,398 0	2,488,464 0	111.8% 0.0%
Miscellaneous	\$3,139,770	\$0	\$3,139,770	\$3,487,907	111.1%
270 Cook Cook Torreitor	60 702 002	650 672	E0 042 526	£4.000.275	444.00/
270 Cook Coal Terminal AEP Generating Company	\$2,783,863 \$2,783,863	\$59,673 \$59,673	\$2,843,536 \$2,843,536	\$4,099,375 \$4,099,375	144.2% 144.2%
104 Cardinal Operating Company	\$66,792,664	\$152,611	\$66,945,275	\$89,809,783	134.2%
181 Ohio Power Co - Generation AEP Generation Resources - FERC	251,203,713 \$317,996,377	112,297 \$264,908	251,316,010 \$318,261,285	365,246,919 \$455,056,702	145.3% 143.0%
290 Conesville Coal Preparation Company	2,743,915	0	2,743,915	4,317,539	157.3%
AEP Generation Resources - SEC	\$320,740,292	\$264,908	\$321,005,200	\$459,374,241	143.1%
175 AEP Energy Partners 419 Onsite Partners	6,484,717 2,337	127,618 13	6,612,335 2,350	8,148,915 0	123.2% 0.0%
AEP Energy Supply	\$327,227,346	\$392,539	\$327,619,885	\$467,523,156	266.3%
,,					
245 Dolet Hills Dolet Hills	0 \$0	0 \$0	0 \$0	0 \$0	0.0% 0.0%
Total	\$4,050,954,477	\$11,705,477	\$4,062,659,954	\$4,764,796,511	117.3%

AMERICAN ELECTRIC POWER - QUALIFIED RETIREMENT PLAN SUMMARY OF ASC 715-30 VALUATION RESULTS AS OF JANUARY 1, 2016

				Accumulated	Projected	January 1, 2016
Location	Valuation Earnings	Market-Related Value of Assets	Fair Value of Assets	Benefit Obligation	Benefit Obligation	Pre-Tax AOCI
140 Appalachian Power Co - Distribution	\$94,435,677	\$313,719,166	\$311,628,899	\$329,232,041	\$334,983,789	\$117,631,763
215 Appalachian Power Co - Generation	71,678,940	265,879,949	264,108,428	270,759,067	276,024,509	\$76,531,325
150 Appalachian Power Co - Transmission Appalachian Power Co FERC	706,651 \$166,821,268	21,355,210 \$600,954,325	21,212,923 \$596,950,250	31,873,982 \$631,865,090	31,901,179 \$642,909,477	\$18,540,767 \$212,703,855
225 Cedar Coal Co	0	4,624,785	4,593,971	3,089,002	3,089,002	\$2,695,150
Appalachian Power Co SEC	\$166,821,268	\$605,579,110	\$601,544,221	\$634,954,092	\$645,998,479	\$215,399,005
211 AEP Texas Central Company - Distribution	\$81,376,170	\$278,013,594	\$276,161,228	\$274,681,525	\$283,195,960	\$129,578,233
147 AEP Texas Central Company - Generation 169 AEP Texas Central Company - Transmission	0 11,296,257	11,269,368 26,239,553	11,194,282 26,064,723	3,113,524 27,072,679	3,113,524 28,179,771	(\$8,080,758) \$17,521,948
AEP Texas Central Co.	\$ 92,672,427					
170 Indiana Michigan Power Co - Distribution	654 005 440	6462 244 202	6460 050 060	C4C4 402 042	E4C0 000 404	EE4 E02 202
132 Indiana Michigan Power Co - Distribution	\$51,235,449 28,544,608	\$163,341,282 109,035,174	\$162,252,962 108,308,687	\$164,193,213 108,128,332	\$168,829,491 109,464,471	\$54,593,392 \$21,970,793
190 Indiana Michigan Power Co - Nuclear	124,082,627	233,832,515	232,274,522	232,613,072	243,026,712	\$38,220,346
120 Indiana Michigan Power Co - Transmission 280 Ind Mich River Transp Lakin	11,598,891 18,763,943	33,799,128 35,777,328	33,573,929 35,538,949	37,311,026 33,159,501	38,351,971 35,198,925	\$11,727,222 \$5,110,650
Indiana Michigan Power Co FERC	\$234,225,518	\$575,785,427	\$571,949,049	\$575,405,144	\$594,871,570	\$131,622,403
202 Price River Coal	0	0	0	0	0	*****
Indiana Michigan Power Co SEC	\$234,225,518	\$575,785,427	\$571,949,049	\$575,405,144	\$594,871,570	\$131,622,403
110 Kentucky Power Co - Distribution	\$22,519,325	\$67,332,040	\$66,883,416	\$73,984,917	\$75,177,688	\$21,847,430
117 Kentucky Power Co - Generation	4,965,265	30,686,369	30,481,910	34,151,385	34,310,331	\$9,531,072
180 Kentucky Power Co - Transmission 600 Kentucky Power Co Kammer Actives	126,792 831,511	1,719,494 4,690,661	1,708,037 4,659,408	3,399,502 3,522,004	3,403,278 3,522,004	\$2,538,805 \$2,152,723
701 Kentucky Power Co Mitchell Actives	23,295,980	36,094,522	35,854,029	31,492,931	33,188,583	\$10,942,505
702 Kentucky Power Co Mitchell Inactives	\$0	\$32,927,229	\$32,707,839	\$27,696,025	\$27,696,025	\$8,444,611
Kentucky Power Co.	\$51,738,873	\$173,450,315	\$172,294,639	\$174,246,764	\$177,297,909	\$55,457,146
250 Ohio Power Co - Distribution	\$128,244,686	\$433,733,512	\$430,843,606	\$431,005,400	\$444,076,050	\$185,085,715
160 Ohio Power Co - Transmission	1,106,037	41,225,766	40,951,084	46,195,889	46,244,308	\$30,373,366
Ohio Power Co	\$129,350,723	\$474,959,278	\$471,794,690	\$477,201,289	\$490,320,358	\$215,459,081
167 Public Service Co of Oklahoma - Distribution	\$57,406,683	\$161,604,278	\$160,527,531	\$153,312,904	\$160,307,560	\$61,878,094
198 Public Service Co of Oklahoma - Generation	34,990,681	81,852,436	81,307,065	77,838,059	81,027,006	\$23,876,789
114 Public Service Co of Oklahoma - Transmission Public Service Co. of Oklahoma	9,521,377 \$101,918,741	20,186,985 \$263,643,699	20,052,482 \$261,887,078	18,293,382 \$249,444,345	19,292,769 \$260,627,335	\$5,518,717 \$91,273,600
159 Southwestern Electric Power Co - Distribution 168 Southwestern Electric Power Co - Generation	\$45,547,635	\$102,447,784	\$101,765,188	\$99,073,971	\$104,641,800	\$41,189,116
161 Southwestern Electric Power Co - Generation 161 Southwestern Electric Power Co - Texas - Distribution	58,849,725 20,698,094	112,686,895 50,826,273	111,936,078 50,487,625	110,740,592 51,053,952	115,742,190 53,234,492	\$36,159,399 \$22,401,883
111 Southwestern Electric Power Co - Texas - Transmission	0	44,317	44,022	133,742	133,742	\$931,435
194 Southwestern Electric Power Co - Transmission Southwestern Electric Power Co.	8,315,565	16,263,659	16,155,296	13,875,574	14,894,342	\$3,892,518
Southwestern Electric Power Co.	\$133,411,019	\$282,268,928	\$280,388,209	\$274,877,831	\$288,646,566	\$104,574,351
119 AEP Texas North Company - Distribution	\$22,551,541	\$64,680,044	\$64,249,090	\$69,921,235	\$71,642,790	\$36,289,125
166 AEP Texas North Company - Generation 192 AEP Texas North Company - Transmission	0 5,951,795	24,606,203 10,699,270	24,442,255 10,627,982	18,991,220 10,275,506	18,991,220 10,861,519	\$14,680,489 \$3,962,534
AEP Texas North Co.	\$28,503,336	\$99,985,517	\$99,319,327	\$99,187,961	\$101,495,529	\$54,932,148
000 Kr	61 244 646	042 424 040		642 504 474	642.005.440	E4 005 400
230 Kingsport Power Co - Distribution 260 Kingsport Power Co - Transmission	\$4,311,646 75,435	\$13,131,842 1,653,969	\$13,044,346 1,642,948	\$13,591,474 2,299,058	\$13,925,140 2,299,058	\$4,925,106 \$1,410,510
Kingsport Power Co.	\$4,387,081	\$14,785,811	\$14,687,294	\$15,890,532	\$16,224,198	\$6,335,616
210 Wheeling Power Co - Distribution	\$4,402,626	\$15,620,163	\$15,516,088	\$16,258,124	\$16.530.232	\$7,374,034
200 Wheeling Power Co - Transmission	0	835,542	829,975	609,703	609,703	\$641,909
Wheeling Power Co.	\$4,402,626	\$16,455,705	\$16,346,063	\$16,867,827	\$17,139,935	\$8,015,943
103 American Electric Power Service Corporation	\$578,401,797	\$1,438,576,728	\$1,428,991,694	\$1,530,211,891	\$1,585,718,760	\$430,806,049
143 AEP Pro Serv, Inc.	\$0	\$1,006,147	\$999,443	\$1,107,854	\$1,107,854	\$28,290
171 CSW Energy, Inc.	0	2,505,155	2,488,464	2,689,018	2,689,018	\$1,036,920
American Electric Power Service Corp	\$578,401,797	\$1,442,088,030	\$1,432,479,601	\$1 ,534,008,763	\$1,589,515,632	\$431,871,259
293 Elmwood	0	5,210,289	5,175,574	3,225,217	3,225,217	(\$2,257,252)
292 AEP River Operations LLC 189 Central Coal Company	0	52,236,043 0	51,888,002 0	39,264,389 0	39,264,389 0	(\$16,116,926) \$0
Miscellaneous	\$0	\$57,446,332	\$57,063,576	\$42,489,606	\$42,489,606	(\$18,374,178)
270 Cook Coal Terminal	\$1,797,195	\$4,126,872	\$4.099.376	\$3,394,194	\$3.516.545	(\$40.803)
AEP Generating Company	\$1,797,195	\$4,126,872	\$4,099,376	\$3,394,194	\$3,516,545	(\$40,803)
104 Cardinal Operating Company 181 Ohio Power Co - Generation	\$27,942,119 52,688,996	\$90,412,187 367,696,832	\$89,809,783 365,246,919	\$79,429,743 293,828,602	\$81,561,935 298,461,370	(\$8,247,848) \$107,211,087
AEP Generation Resources - FERC	\$80,631,115	\$458,109,019	\$455,056,702	\$373,258,345	\$380,023,305	\$98,963,239
290 Conesville Coal Preparation Company	0	4,346,499	4,317,539	3,197,345	3,197,345	\$422,058
AEP Generation Resources - SEC 175 AEP Energy Partners	\$80,631,115 \$11,540,182	\$462,455,518 \$8,203,574	\$459,374,241 \$8,148,914	\$376,455,690 \$8,728,232	\$383,220,650 \$10,493,707	\$99,385,297 \$4,483,804
419 Onsite Partners	\$265,000	\$0,203,574	\$0,140,314	\$3,310	\$132,623	\$132,623
AEP Energy Supply	\$92,436,297	\$470,659,092	\$467,523,155	\$385,187,232	\$393,846,980	\$104,001,724
245 Dolet Hills	\$22,662,350	\$0	\$0	\$0	\$89,240	\$0
Dolet Hills	\$22,662,350	\$0	\$0	\$0	\$89,240	\$0
Total	1,642,729,251	4,796,756,631	4,764,796,511	4,788,023,308	4,936,569,137	1,539,546,718

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	ASC 715-30				F	landa d Nad Davis	di- Di Ct				
	Cost _ 2016	2017	2018	2019	2020	imated Net Perio 2021	2022	2023	2024	2025	2026
Location											
140 Appalachian Power Co - Distribution 215 Appalachian Power Co - Generation	\$5,949,550 4,317,468	\$4,325,875 2,945,803	\$3,606,341 2,403,511	\$3,208,100 2,133,281	\$3,738,773 2,537,088	\$3,585,002 2,374,317	\$3,387,113 2,156,600	\$3,151,466 1,940,173	\$2,885,537 1,706,136	\$2,609,894 1,470,859	\$2,327,837 1,236,204
150 Appalachian Power Co - Generation 150 Appalachian Power Co - Transmission	626.705	543.726	358.955	(101.817)	(78.406)	(113.888)	(130.833)	(159.026)	(176.248)	(196.883)	(215.540)
Appalachian Power Co FERC	10,893,723	7,815,404	6,368,807	5,239,564	6,197,455	5,845,431	5,412,880	4,932,613	4,415,425	3,883,870	3,348,501
225 Cedar Coal Co Appalachian Power Co SEC	(92,151) 10,801,572	(111,416) 7,703,988	(122,812) 6,245,995	(132,606) 5,106,958	(136,044) 6,061,411	(145,646) 5,699,785	(155,827) 5,257,053	(166,040) 4,766,573	(176,585) 4,238,840	(187,709) 3,696,161	(199,080) 3,149,421
Apparachian Fower Co SEC	10,001,372	7,703,300	0,243,333		0,001,411			4,700,373		3,030,101	3,143,421
211 AEP Texas Central Company - Distribution	5,682,872	3,945,603	3,741,174	3,553,018	4,028,737	3,930,201	3,819,109	3,651,019	3,436,146	3,244,352	3,025,327
147 AEP Texas Central Company - Generation 169 AEP Texas Central Company - Transmission	(480,414) 829,651	(526,855) 654,656	(561,833) 610.334	(595,243) 561,553	(620,519) 619,540	(658,220) 624,739	(698,816) 614,679	(741,070) 597,352	(786,068) 583,400	(834,240) 564,280	(884,380) 546,995
AEP Texas Central Co.	6,032,109	4,073,404	3,789,675	3,519,328	4,027,758	3,896,720	3,734,972	3,507,301	3,233,478	2,974,392	2,687,942
170 Indiana Michigan Power Co - Distribution	2.953.680	2.090.489	1,776,998	1.629.816	1.915.127	1.841.399	1.736.301	1.595.962	1.458.043	1,311,357	1.156.294
132 Indiana Michigan Power Co - Generation	1,577,790	1,018,444	864,178	740,503	906,071	831,043	732,154	634,549	519,932	427,166	309,780
190 Indiana Michigan Power Co - Nuclear	7,515,815 859 040	6,097,514	5,652,325	5,519,953	6,125,763	6,094,358 498 905	5,958,549	5,802,846 452 264	5,571,858	5,275,611	5,031,529
120 Indiana Michigan Power Co - Transmission 280 Ind Mich River Transp Lakin	875,837	674,319 682,688	567,825 658,341	449,566 633,643	514,640 706,519	705,373	477,910 684,891	452,264 657,790	416,968 618,934	392,453 576,730	362,716 549,892
Indiana Michigan Power Co FERC	13,782,162	10,563,454	9,519,667	8,973,481	10,168,120	9,971,078	9,589,805	9,143,411	8,585,735	7,983,317	7,410,211
202 Price River Coal Indiana Michigan Power Co SEC	0 13,782,162	0 10,563,454	0 9,519,667	0 8,973,481	0 10,168,120	0 9,971,078	0 9,589,805	0 9,143,411	0 8,585,735	0 7,983,317	0 7,410,211
indiana wichigan Fower Co SEC											
110 Kentucky Power Co - Distribution	1,599,915	1,250,928	1,047,469	859,212	993,308	959,295 97,695	928,126	875,193	817,926	756,921	697,987
117 Kentucky Power Co - Generation 180 Kentucky Power Co - Transmission	421,695 103,998	292,752 96,386	189,947 68,312	90,137 (9,007)	130,136 (6,396)	(9,336)	78,744 (13,243)	41,832 (15,041)	24,880 (17,785)	(2,290) (20,519)	(32,169) (23,005)
600 Kentucky Power Co Kammer Actives	(50,151)	(71,160)	(83,669)	(91,122)	(102,122)	(104,549)	(114,203)	(138,032)	(134,302)	(143,088)	(155,142)
701 Kentucky Power Co Mitchell Actives 702 Kentucky Power Co Mitchell Inactives	1,044,542 (312.930)	879,633 (451.069)	869,952 (529,634)	848,890 (590,461)	937,672 (593,529)	930,555 (646,908)	905,870 (702,646)	864,497 (757,809)	801,528 (814.820)	760,892 (875,992)	710,327 (943.804)
Kentucky Power Co.	2,807,069	1,997,470	1,562,377	1,104,649	1,359,069	1,226,752	1,082,648	870,640	677,427	475,924	254,194
250 Ohio Power Co - Distribution	7,296,660	5,035,713	4,463,324	4 098 965	4,796,321	4 618 196	4,325,334	4,026,599	3,671,389	3 275 572	2 878 964
160 Ohio Power Co - Transmission	332,025	155,583	11,547	(140,390)	(100,036)	(131,019)	(164,572)	(196,321)	(219,828)	(246,206)	(270,932)
Ohio Power Co.	7,628,685	5,191,296	4,474,871	3,958,575	4,696,285	4,487,177	4,160,762	3,830,278	3,451,561	3,029,366	2,608,032
167 Public Service Co of Oklahoma - Distribution	3,614,941	2.599.131	2,493,907	2,400,161	2,734,721	2.659.093	2.607.858	2,479,583	2,354,001	2,210,126	2,093,910
198 Public Service Co of Oklahoma - Generation	2,257,233	1,724,540	1,710,215	1,658,689	1,847,530	1,851,296	1,827,412	1,779,472	1,721,529	1,652,513	1,593,620
114 Public Service Co of Oklahoma - Transmission Public Service Co. of Oklahoma	540,792 6,412,966	419,212 4,742,883	433,553 4,637,675	428,357 4,487,207	471,610 5,053,861	476,184 4,986,573	468,723 4,903,993	456,892 4,715,947	435,633 4,511,163	417,467 4,280,106	395,444 4,082,974
159 Southwestern Electric Power Co - Distribution 168 Southwestern Electric Power Co - Generation	3,084,353 4.037.534	2,383,284 3,229,853	2,269,137 3.111.821	2,246,037 3.077.403	2,495,167 3.406,796	2,499,851 3,401,202	2,460,145 3,391,917	2,419,443 3.339.227	2,324,813 3,270,594	2,254,769 3,199,283	2,168,418 3 099 741
161 Southwestern Electric Power Co - Texas - Distribution	1,506,205	1,150,734	1,062,826	1,039,120	1,156,140	1,166,488	1,143,830	1,115,256	1,081,809	1,041,985	1,009,066
111 Southwestern Electric Power Co - Texas - Transmissio	4,882	4,803	3,667	(604)	(480)	(493)	(499)	(493)	(484)	(473)	(459)
194 Southwestern Electric Power Co - Transmission Southwestern Electric Power Co.	425,942 9,058,916	339,258 7,107,932	336,420 6,783,871	330,492 6,692,448	362,351 7,419,974	366,445 7,433,493	351,665 7,347,058	342,517 7,215,950	323,186 6,999,918	311,466 6,807,030	292,740 6,569,506
119 AEP Texas North Company - Distribution 166 AEP Texas North Company - Generation	1,949,599 (342,999)	1,546,429 (441,900)	1,386,150 (498,610)	1,245,919 (546.320)	1,391,567 (555.515)	1,381,706 (598,951)	1,374,951 (646,360)	1,327,861 (688,873)	1,298,922 (740,912)	1,254,107 (782.330)	1,231,085 (832,596)
192 AEP Texas North Company - Transmission	390,586	311,319	308,196	307,386	333,994	341,450	340,453	327,593	321,876	317,507	312,304
AEP Texas North Co.	1,997,186	1,415,848	1,195,736	1,006,985	1,170,046	1,124,205	1,069,044	966,581	879,886	789,284	710,793
230 Kingsport Power Co - Distribution	279,595	208,463	180,590	167,569	194,017	189,039	180,627	167,996	158,473	145,978	133,880
260 Kingsport Power Co - Transmission	36,372	29,797	18,705	(8,756)	(7,152)	(9,663)	(10,655)	(12,188)	(13,614)	(14,994)	(16,239)
Kingsport Power Co.	315,967	238,260	199,295	158,813	186,865	179,376	169,972	155,808	144,859	130,984	117,641
210 Wheeling Power Co - Distribution	304,058	221,452	186,945	174,280	202,164	191,351	187,685	176,545	164,089	149,784	139,177
200 Wheeling Power Co - Transmission Wheeling Power Co.	(14,308) 289,750	(17,558) 203.894	(19,265) 167,680	(20,660) 153.620	(21,014) 181,150	(22,312) 169.039	(23,646) 164,039	(24,969) 151,576	(26,338) 137,751	(27,783) 122,001	(29,271) 109,906
-	,	•	,	,		•			•	,	•
103 American Electric Power Service Corporation 293 Flmwood	38,678,016 (112,296)	30,520,699 (133,676)	26,816,928 (148,427)	24,149,113 (165,097)	27,190,111 (167,760)	26,773,011 (183,666)	26,100,436 (193,158)	25,131,408 (211,938)	23,863,908 (228,210)	22,746,469 (238,582)	21,528,053 (260,308)
292 AEP River Operations LLC	(786,085)	(926,003)	(1,078,126)	(1,194,336)	(1,209,434)	(1,351,756)	(1,447,034)	(1,568,532)	(1,661,339)	(1,790,259)	(1,918,563)
American Electric Power Service Corp	37,779,635	29,461,020	25,590,375	22,789,680	25,812,917	25,237,589	24,460,244	23,350,938	21,974,359	20,717,628	19,349,182
143 AEP Pro Serv, Inc.	5,666	1,696	(1,037)	(3,649)	(2,886)	(4,035)	(5,493)	(6,884)	(8,012)	(9,362)	(10,638)
189 Central Coal Company	0	0	0	0	0	0	0	0	0	0	0
171 CSW Energy, Inc. Miscellaneous	12,131 17,797	111 1,807	(6,037) (7,074)	(10,152) (13,801)	(9,375) (12,261)	(11,245) (15,280)	(14,356) (19,849)	(18,604) (25,488)	(24,849) (32,861)	(27,486) (36,848)	(25,030) (35,668)
270 Cook Coal Terminal	72,980 72,980	54,804 54.804	52,263 52,263	49,429 49,429	57,050 57,050	55,324 55,324	51,320 51,320	47,470 47,470	41,294 41,294	34,347 34,347	28,103 28,103
AEP Generating Company	72,980	34,804	32,263	49,429	57,050	33,324	31,320	47,470	41,294	34,341	28,103
104 Cardinal Operating Company	927,046	537,029	420,555	322,126	433,999	360,280	264,684	157,604	27,787	(95,595)	(231,289)
181 Ohio Power Co - Generation AEP Generation Resources - FERC	(1,256,745) (329,699)	(2,815,566) (2,278,537)	(3,541,919) (3,121,364)	(4,108,350) (3,786,224)	(3,992,067) (3,558,068)	(4,508,930) (4,148,650)	(5,069,232) (4,804,548)	(5,686,660) (5,529,056)	(6,330,431) (6,302,644)	(7,015,700) (7,111,295)	(7,674,272) (7,905,561)
290 Conesville Coal Preparation Company	(68,890)	(86,380)	(97,310)	(106, 156)	(108, 198)	(115,849)	(124,211)	(133,256)	(142,709)	(152,713)	(162,937)
AEP Generation Resources - SEC 175 AEP Energy Partners	(398,589) 759.065	(2,364,917) 674,697	(3,218,674) 655,154	(3,892,380) 587,923	(3,666,266) 605,202	(4,264,499) 614,765	(4,928,759) 616,530	(5,662,312) 609,510	(6,445,353) 593,105	(7,264,008) 577,488	(8,068,498) 561,695
419 Onsite Partners	17,042	16,384	14,797	8,789	9,030	9,180	9,226	9,104	8,877	8,614	8,332
AEP Energy Supply	377,518	(1,673,836)	(2,548,723)	(3,295,668)	(3,052,034)	(3,640,554)	(4,303,003)	(5,043,698)	(5,843,371)	(6,677,906)	(7,498,471)
245 Dolet Hills	1,119,959	1,049,010	1,073,962	1,055,671	1,093,913	1,135,795	1,162,603	1,172,200	1,171,946	1,171,598	1,166,252
Dolet Hills	1,119,959	1,049,010	1,073,962	1,055,671	1,093,913	1,135,795	1,162,603	1,172,200	1,171,946	1,171,598	1,166,252
Total	\$98,494,271	\$72,131,234	\$62,737,645	\$55,747,375	\$64,224,124	\$61,947,072	\$58,830,661	\$54,825,487	\$50,171,985	\$45,497,384	\$40,710,018
. 5141	400,404,211	J. 2, 101,204	402,131,043	400,141,010	40-1,224,124	401,041,012	200,000,001	-0-1,023,401	400,111,000	\$40,4J1,JU4	240,170,010

AMERICAN ELECTRIC POWER QUALIFIED RETIREMENT PLAN 2016 NET PERIODIC PENSION COST

Location	Projected Benefit Obligation	Market-Related Value of Assets	Service Cost	Interest Cost	Expected Return on Assets	Amortization of Prior Service Cost	Amortization of Gain/Loss	Net Periodic Pension Cost
Location	Obligation	Ul Assets	Cost	COSI	UII Assets	COSI	Gall/LUSS	COSI
140 Appalachian Power Co - Distribution	\$334,983,789	\$313,719,166	\$4,520,254	\$14,113,077	(\$18,326,815)	\$84,048	\$5,558,986	\$5,949,550
215 Appalachian Power Co - Generation 150 Appalachian Power Co - Transmission	276,024,509 31,901,179	265,879,949 21,355,210	3,556,407 18,070	11,632,520 1,314,895	(15,532,148) (1,247,527)	80,120 11,874	4,580,569 529,393	4,317,468 626,705
Appalachian Power Co FERC	\$642,909,477	\$600,954,325	\$8,094,731	\$27,060,492	(\$35,106,490)	\$176,042	\$10,668,948	\$10,893,723
225 Cedar Coal Co	3,089,002	4,624,785	0	126,758	(270,170)	0	51,261	(92,151)
Appalachian Power Co SEC	\$645,998,479	\$ 605,579,110	\$8,094,731	\$27,187,250	(\$35,376,660)	\$176,042	\$10,720,209	\$10,801,572
211 AEP Texas Central Company - Distribution	283,195,960	278,013,594	5,034,205	11,959,342	(16,240,970)	230,717	4,699,578	5,682,872
147 AEP Texas Central Company - Generation	3,113,524	11,269,368	0,034,203	126,251	(658,333)	0	51,668	(480,414)
169 AEP Texas Central Company - Transmission	28,179,771	26,239,553	675,347	1,193,245	(1,532,860)	26,282	467,637	829,651
AEP Texas Central Co.	\$314,489,255	\$ 315,522,515	\$5,709,552	\$13,278,838	(\$18,432,163)	\$256,999	\$5,218,883	\$6,032,109
170 Indiana Michigan Power Co - Distribution	168,829,491	163,341,282	2,534,999	7,115,637	(9,542,055)	43,409	2,801,690	2,953,680
132 Indiana Michigan Power Co - Generation	109,464,471	109,035,174	1,476,610	4,625,369	(6,369,606)	28,877	1,816,540	1,577,790
190 Indiana Michigan Power Co - Nuclear	243,026,712	233,832,515	6,632,555	10,430,117	(13,660,004)	80,170	4,032,977	7,515,815
120 Indiana Michigan Power Co - Transmission	38,351,971	33,799,128	564,293	1,623,265	(1,974,474)	9,513	636,443	859,040
280 Ind Mich River Transp Lakin Indiana Michigan Power Co FERC	35,198,925 \$594,871,570	35,777,328 \$575,785,427	859,167 \$12,067,624	1,507,085 \$25,301,473	(2,090,036) (\$33,636,175)	15,502 \$177,471	584,119 \$9,871,769	875,837 \$13,782,162
202 Price River Coal	0	0	0	0	0	0	0	0
Indiana Michigan Power Co SEC	\$594,871,570	\$575,785,427	\$12,067,624	\$25,301,473	(\$33,636,175)	\$177,471	\$9,871,769	\$13,782,162
110 Kentucky Power Co - Distribution	75,177,688	67,332,040	1,092,643	3,170,965	(3,933,396)	22,145	1,247,558	1,599,915
117 Kentucky Power Co - Generation	34,310,331	30,686,369	206,926	1,426,177	(1,792,633)	11,852	569,373	421,695
180 Kentucky Power Co - Transmission	3,403,278	1,719,494	3,347	140,984	(100,449)	3,639	56,477	103,998
600 Kentucky Power Co Kammer Actives 701 Kentucky Power Co Mitchell Actives	3,522,004 33,188,583	4,690,661 36,094,522	14,434 1,139,501	149,452 1,456,099	(274,019) (2,108,566)	1,535 6,750	58,447 550,758	(50,151) 1,044,542
702 Kentucky Power Co Mitchell Inactives	27,696,025	32,927,229	1,133,301	1,145,377	(1,923,540)	5,623	459,610	(312,930)
Kentucky Power Co.	\$177,297,909	\$173,450,315	\$2,456,851	\$7,489,054	(\$10,132,603)	\$51,544	\$2,942,223	\$2,807,069
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250 Ohio Power Co - Distribution 160 Ohio Power Co - Transmission	444,076,050 46,244,308	433,733,512 41,225,766	6,470,420 44,466	18,681,589 1,906,090	(25,337,801) (2,408,323)	113,103 22,377	7,369,349 767,415	7,296,660 332,025
Ohio Power Co.	\$490,320,358	\$474,959,278	\$6,514,886	\$20,587,679	(\$27,746,124)	\$135,480	\$8,136,764	\$7,628,685
167 Public Service Co of Oklahoma - Distribution	160,307,560	161,604,278	3,459,409	6,787,664	(9,440,582)	148,180	2,660,270	3,614,941
198 Public Service Co of Oklahoma - Generation 114 Public Service Co of Oklahoma - Transmission	81,027,006 19,292,769	81,852,436 20,186,985	2,166,811 552,461	3,448,265 828,497	(4,781,647) (1,179,281)	79,178 18,956	1,344,626 320,159	2,257,233 540,792
Public Service Co. of Oklahoma	\$260,627,335	\$263,643,699	\$6,178,681	\$11,064,426	(\$15,401,510)	\$246,314	\$4,325,055	\$6,412,966
450 0 . II	404 644 000	400 447 704	0.704.440	4 450 005	/F 004 704)	440.400	4 700 500	2 004 252
159 Southwestern Electric Power Co - Distribution 168 Southwestern Electric Power Co - Generation	104,641,800 115,742,190	102,447,784 112,686,895	2,761,440 3,630,806	4,460,995 4,952,673	(5,984,784) (6,582,932)	110,193 116,270	1,736,509 1,920,717	3,084,353 4,037,534
161 Southwestern Electric Power Co - Texas - Distribution	53,234,492	50,826,273	1,268,875	2,265,815	(2,969,164)	57,264	883,415	1,506,205
111 Southwestern Electric Power Co - Texas - Transmission	133,742	44,317	0	5,252	(2,589)	0	2,219	4,882
194 Southwestern Electric Power Co - Transmission	14,894,342	16,263,659	469,241	640,637	(950,089)	18,985	247,168	425,942
Southwestern Electric Power Co.	\$288,646,566	\$282,268,928	\$8,130,362	\$12,325,372	(\$16,489,558)	\$302,712	\$4,790,028	\$9,058,916
119 AEP Texas North Company - Distribution	71,642,790	64,680,044	1,456,268	3,006,714	(3,778,472)	76,192	1,188,897	1,949,599
166 AEP Texas North Company - Generation	18,991,220	24,606,203	0	778,529	(1,437,443)	760	315,155	(342,999)
192 AEP Texas North Company - Transmission	10,861,519	10,699,270	357,404	467,347	(625,029)	10,619	180,245	390,586
AEP Texas North Co.	\$101,495,529	\$99,985,517	\$1,813,672	\$4,252,590	(\$5,840,944)	\$87,571	\$1,684,297	\$1,997,186
230 Kingsport Power Co - Distribution	13,925,140	13,131,842	223,109	589,390	(767,135)	3,146	231,085	279,595
260 Kingsport Power Co - Transmission	2,299,058	1,653,969	0	94,370	(96,621)	471	38,152	36,372
Kingsport Power Co.	\$16,224,198	\$14,785,811	\$223,109	\$683,760	(\$863,756)	\$3,617	\$269,237	\$315,967
210 Wheeling Power Co - Distribution	16,530,232	15,620,163	240,039	696,440	(912,497)	5,760	274,316	304,058
200 Wheeling Power Co - Transmission	609,703	835,542	0	24,385	(48,811)	0	10,118	(14,308)
Wheeling Power Co.	\$17,139,935	\$ 16,455,705	\$240,039	\$720,825	(\$961,308)	\$5,760	\$284,434	\$289,750
103 American Electric Power Service Corporation	1,585,808,000	1,438,576,728	28,656,130	67,171,919	(84,038,629)	572,445	26,316,151	38,678,016
293 Elmwood	3,225,217	5,210,289	20,030,130	132,044	(304,374)	6,512	53,522	(112,296)
292 AEP River Operations LLC	39,264,389	52,236,043	0	1,577,389	(3,051,520)	36,462	651,584	(786,085)
American Electric Power Service Corp	\$1,628,297,606	\$1,496,023,060	\$28,656,130	\$68,881,352	(\$87,394,523)	\$ 615,419	\$27,021,257	\$37,779,635
143 AEP Pro Serv. Inc.	1.107.854	1,006,147	0	46,019	(58,777)	39	18,385	5,666
189 Central Coal Company	1,107,034	1,000,147	0	40,013	(30,777)	0	0,303	0
171 CSW Energy, Inc.	2,689,018	2,505,155	0	113,138	(146,346)	715	44,624	12,131
Miscellaneous	\$3,796,872	\$3,511,302	\$0	\$159,157	(\$205,123)	\$754	\$63,009	\$17,797
270 Cook Coal Terminal	3,516,545	4,126,872	103,698	151,138	(241,083)	871	58,356	72,980
AEP Generating Company	\$3,516,545	\$4,126,872	\$103,698	\$151,138	(\$241,083)	\$871	\$58,356	\$72,980
104 Cardinal Operating Company 181 Ohio Power Co - Generation	81,561,935	90,412,187 367,696,832	1,380,076	3,458,423	(5,281,690) (21,480,076)	16,734	1,353,503	927,046
AEP Generation Resources - FERC	298,461,370 \$380,023,305	\$458,109,019	2,710,233 \$4,090,309	12,482,758 \$15,941,181	(\$26,761,766)	77,436 \$94,170	4,952,904 \$6,306,407	(1,256,745) (\$329,699)
290 Conesville Coal Preparation Company	3,197,345	4,346,499	0	131,350	(253,913)	614	53,059	(68,890)
AEP Generation Resources - SEC	\$383,220,650	\$462,455,518	\$4,090,309	\$16,072,531	(\$27,015,679)	\$94,784	\$6,359,466	(\$398,589)
175 AEP Energy Partners	10,493,707	8,203,574 0	590,765	471,162	(479,236)	2,233	174,141	759,065
419 Onsite Partners AEP Energy Supply	132,623 \$393,846,980	\$470,659,092	8,765 \$4,689,839	6,076 \$16,549,769	0 (\$27,494,915)	\$97,017	2,201 \$6,535,808	17,042 \$377,518
0, 11,								
245 Dolet Hills	\$0 \$0	\$0 \$0	\$1,073,786 \$1,073,786	\$46,173 \$46,173	\$0 \$0	\$0 \$0	\$0 \$0	\$1,119,959 \$1,119,959
Dolet Hills	\$0	\$0	\$1,073,786	\$46,173	\$0	\$0	\$0	\$1,119,959
Total	\$4,936,569,137	\$4,796,756,631	\$85,952,960	\$208,678,856	(\$280,216,445)	\$ 2,157,571	\$81,921,329	\$98,494,271

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AMERICAN ELECTRIC POWER QUALIFIED RETIREMENT PLAN ESTIMATED 2017 NET PERIODIC PENSION COST

	Projected Benefit	Market-Related Value	Service	Interest	Expected Return	Amortization of Prior Service	Amortization of	Net Periodic Pension
Location	Obligation	of Assets	Cost	Cost	on Assets	Cost	Gain/Loss	Cost
140 Appalachian Power Co - Distribution 215 Appalachian Power Co - Generation	\$322,102,330 265,738,157	\$316,421,876 268,969,250	\$4,264,980 3,355,565	\$14,192,065 11,702,757	(\$18,512,775) (15,736,482)	\$78,793 74,093	\$4,302,812 3,549,870	\$4,325,875 2,945,803
150 Appalachian Power Co - Transmission Appalachian Power Co FERC	29,723,247 \$617,563,734	19,956,765 \$605,347,891	17,050 \$7,637,595	1,285,801 \$27,180,623	(1,167,603) (\$35,416,860)	11,419 \$164,305	397,059 \$8,249,741	543,726 \$7,815,404
225 Cedar Coal Co	2,853,497	4,641,991	0	122,052	(271,587)	3 104,303	38,119	(111,416)
Appalachian Power Co SEC	\$620,417,231	\$609,989,882	\$7,637,595	\$27,302,675	(\$35,688,447)	\$164,305	\$8,287,860	\$7,703,988
211 AEP Texas Central Company - Distribution	272,414,332	281,395,488	4,749,906	11,987,815	(16,463,499)	32,327	3,639,054	3,945,603
147 AEP Texas Central Company - Generation	2,805,436	11,673,839	0	118,666	(682,997)	0	37,476	(526,855)
169 AEP Texas Central Company - Transmission	27,083,786	26,462,845	637,208	1,200,014	(1,548,252)	3,887	361,799	654,656
AEP Texas Central Co.	\$302,303,554	\$ 319,532,172	\$5,387,114	\$13,306,495	(\$18,694,748)	\$36,214	\$4,038,329	\$4,073,404
170 Indiana Michigan Power Co - Distribution	162,210,241	164,950,659	2,391,839	7,145,346	(9,650,706)	37,120	2,166,890	2,090,489
132 Indiana Michigan Power Co - Generation 190 Indiana Michigan Power Co - Nuclear	105,889,608	111,062,872 242,531,236	1,393,221	4,681,846	(6,497,913)	26,761	1,414,529 3,196,519	1,018,444 6,097,514
120 Indiana Michigan Power Co - Nuclear 120 Indiana Michigan Power Co - Transmission	239,286,851 37,179,954	34,291,519	6,257,992 532,425	10,765,073 1,642,918	(14,189,683) (2,006,281)	67,613 8,588	496,669	674,319
280 Ind Mich River Transp Lakin	34,591,384	36,726,321	810,647	1,547,835	(2,148,733)	10,849	462,090	682,688
Indiana Michigan Power Co FERC	\$579,158,038	\$589,562,607	\$11,386,124	\$25,783,018	(\$34,493,316)	\$150,931	\$7,736,697	\$10,563,454
202 Price River Coal Indiana Michigan Power Co SEC	0 \$579,158,038	0 \$589,562,607	0 \$11,386,124	0 \$25,783,018	0 (\$34,493,316)	0 \$150,931	0 \$7,736,697	0 \$10,563,454
-	\$010,100,000	4000,002,001			(40 1) 100,010)	\$100,001	41,100,001	
110 Kentucky Power Co - Distribution	72,381,167	67,830,182	1,030,938	3,200,284	(3,968,515)	21,315	966,906	1,250,928
117 Kentucky Power Co - Generation 180 Kentucky Power Co - Transmission	32,341,578 3,202,651	30,140,660 1,565,908	195,240 3,158	1,417,986 138,834	(1,763,428) (91,616)	10,918 3,227	432,036 42,783	292,752 96,386
600 Kentucky Power Co Kammer Actives	3,469,398	4,888,513	13,619	153,502	(286,010)	1,383	46,346	(71,160)
701 Kentucky Power Co Mitchell Actives	33,928,445	37,717,762	1,075,149	1,551,907	(2,206,739)	6,082	453,234	879,633
702 Kentucky Power Co Mitchell Inactives	25,998,844	32,931,159	0	1,123,249	(1,926,691)	5,067	347,306	(451,069)
Kentucky Power Co.	\$171,322,083	\$175,074,184	\$2,318,104	\$7,585,762	(\$10,242,999)	\$47,992	\$2,288,611	\$1,997,470
250 Ohio Power Co - Distribution	425,233,330	436,688,088	6,105,013	18,702,369	(25,549,144)	96,985	5,680,490	5,035,713
160 Ohio Power Co - Transmission	43,069,141	39,900,099	41,955	1,853,383	(2,334,420)	19,325	575,340	155,583
Ohio Power Co.	\$468,302,471	\$476,588,187	\$6,146,968	\$20,555,752	(\$27,883,564)	\$116,310	\$6,255,830	\$5,191,296
167 Public Service Co of Oklahoma - Distribution	154,434,359	163,869,453	3,264,044	6,836,484	(9,587,448)	23,036	2,063,015	2,599,131
198 Public Service Co of Oklahoma - Generation	78,458,598	83,289,439	2,044,444	3,493,123	(4,872,984)	11,866	1,048,091	1,724,540
114 Public Service Co of Oklahoma - Transmission Public Service Co. of Oklahoma	18,993,366 \$251,886,323	20,394,882 \$267,553,774	521,262 \$5,829,750	834,852	(1,193,236)	2,611	253,723	419,212
Public Service Co. of Oktanoma	\$231,000,323	\$201,555,114	\$3,029,730	\$11,164,459	(\$15,653,668)	\$37,513	\$3,364,829	\$4,742,883
159 Southwestern Electric Power Co - Distribution	101,724,057	104,893,706	2,605,492	4,539,600	(6,136,976)	16,285	1,358,883	2,383,284
168 Southwestern Electric Power Co - Generation	112,804,462	115,700,415	3,425,762	5,050,462	(6,769,240)	15,968	1,506,901	3,229,853
161 Southwestern Electric Power Co - Texas - Distribution 111 Southwestern Electric Power Co - Texas - Transmission	51,715,685 112,515	51,933,115 22,170	1,197,217 0	2,292,607 4,597	(3,038,431) (1,297)	8,496 0	690,845 1,503	1,150,734 4,803
194 Southwestern Electric Power Co - Transmission	14,668,539	16,434,336	442,741	659,152	(961,517)	2,932	195,950	339,258
Southwestern Electric Power Co.	\$281,025,258	\$288,983,742	\$7,671,212	\$12,546,418	(\$16,907,461)	\$43,681	\$3,754,082	\$7,107,932
119 AEP Texas North Company - Distribution	67,856,836	64,004,296	1,374,028	3,000,129	(3,744,675)	10,480	906,467	1,546,429
166 AEP Texas North Company - Generation	17,506,867	24,403,897	0	751,932	(1,427,790)	92	233,866	(441,900)
192 AEP Texas North Company - Transmission	10,689,710	11,104,083	337,220	479,350	(649,662)	1,612	142,799	311,319
AEP Texas North Co.	\$96,053,413	\$99,512,276	\$1,711,248	\$4,231,411	(\$5,822,127)	\$12,184	\$1,283,132	\$1,415,848
230 Kingsport Power Co - Distribution	13,481,561	13,352,697	210,509	596,151	(781,221)	2,930	180,094	208,463
260 Kingsport Power Co - Transmission Kingsport Power Co.	2,125,088 \$15,606,649	1,542,702 \$14,895,399	0 \$210,509	91,278 \$687,429	(90,258) (\$871,479)	389 \$3,319	28,388 \$208,482	29,797 \$238,260
Kingsport Fower Co.	\$13,000,043	\$14,033,333	\$210,303	\$001,425	(3011,413)	\$3,313	\$200,402	\$230,200
210 Wheeling Power Co - Distribution	15,878,207	15,746,549	226,483	699,288	(921,277)	4,849	212,109	221,452
200 Wheeling Power Co - Transmission Wheeling Power Co.	533,552 \$16,411,759	801,373 \$16,547,922	9 \$226,483	22,201 \$721,489	(46,886) (\$968,163)	0 \$4,849	7,127 \$219,23 6	(17,558) \$203,894
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103 American Electric Power Service Corporation	1,534,477,727	1,459,050,112	27,037,821	68,071,193	(85,364,094)	277,418	20,498,361	30,520,699
293 Elmwood 292 AEP River Operations LLC	2,965,133 34,689,291	5,239,654 50,281,637	0	129,341 1,530,656	(306,554) (2,941,809)	3,927 21,752	39,610 463,398	(133,676) (926,003)
American Electric Power Service Corp		\$1,514,571,403	\$27,037,821	\$69,731,190	(\$88,612,457)	\$303,097	\$21,001,369	\$29,461,020
143 AEP Pro Serv, Inc.	1,049,474	994,782	0	45,839	(58,201)	39	14,019	1,696
189 Central Coal Company	1,043,474	0	0	45,055	(30,201)	0	0	0
171 CSW Energy, Inc.	2,614,609	2,554,895	0	114,342	(149,478)	320	34,927	111
Miscellaneous	\$3,664,083	\$3,549,677	\$0	\$160,181	(\$207,679)	\$359	\$48,946	\$1,807
270 Cook Coal Terminal	3,464,881	4,196,675	97,842	155,354	(245,533)	855	46,286	54,804
AEP Generating Company	\$3,464,881	\$4,196,675	\$97,842	\$155,354	(\$245,533)	\$855	\$46,286	\$54,804
104 Cardinal Operating Company	79,183,862	91,408,616	1,302,138	3,509,243	(5,348,009)	15,877	1,057,780	537,029
181 Ohio Power Co - Generation	284,012,031	370,064,601	2,557,177	12,414,728	(21,651,229)	69,776	3,793,982	(2,815,566)
AEP Generation Resources - FERC	\$363,195,893	\$461,473,217	\$3,859,315	\$15,923,971	(\$26,999,238)	\$85,653	\$4,851,762	(\$2,278,537)
290 Conesville Coal Preparation Company AEP Generation Resources - SEC	2,960,423 \$366,156,316	4,340,808 \$465,814,025	0 \$3,859,315	127,425 \$16,051,396	(253,966) (\$27,253,204)	614 \$86,267	39,547 \$4,891,309	(86,380) (\$2,364,917)
175 AEP Energy Partners	11,001,718	9,191,766	557,402	507,108	(537,779)	999	146,967	674,697
419 Onsite Partners	143,419	10,584	8,270	6,817	(619)	0	1,916	16,384
AEP Energy Supply	\$377,301,453	\$475,016,375	\$4,424,987	\$16,565,321	(\$27,791,602)	\$87,266	\$5,040,192	(\$1,673,836)
245 Dolet Hills	\$1,090,542	\$1,254,045	\$1,013,146	\$94,666	(\$73,370)	\$0	\$14,568	\$1,049,010
Dolet Hills	\$1,090,542	\$1,254,045	\$1,013,146	\$94,666	(\$73,370)	\$0	\$14,568	\$1,049,010
Total	\$4,760,139,889	\$4,856,828,320	\$81,098,903	\$210,591,620	(\$284,156,613)	\$1,008,875	\$63,588,449	\$72,131,234
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AMERICAN ELECTRIC POWER QUALIFIED RETIREMENT PLAN ESTIMATED 2018 NET PERIODIC PENSION COST

	Projected	Market-Related			Expected	Amortization of Prior		Net Periodic
Location	Benefit Obligation	Value of Assets	Service Cost	Interest Cost	Return on Assets	Service Cost	Amortization of Gain/Loss	Pension Cost
140 Appalachian Power Co - Distribution	\$310,162,798	\$317,237,526	\$4,345,217	\$14,414,465	(\$18,559,495)	\$865	\$3,405,289	\$3,606,341
215 Appalachian Power Co - Generation 150 Appalachian Power Co - Transmission	255,787,985 27,930,014	268,667,427 21,157,484	3,418,693 17,370	11,893,673 1,272,600	(15,717,976) (1,237,786)	815 126	2,808,306 306,645	2,403,511 358,955
Appalachian Power Co FERC	\$593,880,797	\$607,062,437	\$7,781,280	\$27,580,738	(\$35,515,257)	\$1,806	\$6,520,240	\$6,368,807
225 Cedar Coal Co Appalachian Power Co SEC	2,620,868 \$596,501,665	4,606,379 \$611,668,816	0 \$7,781,280	117,902 \$27,698,640	(269,489) (\$35,784,746)	0 \$1,806	28,775 \$6,549,015	(122,812) \$6,245,995
211 AEP Texas Central Company - Distribution	260,508,731	274,627,107	4,839,266	12,108,345	(16,066,638)	66	2,860,135	3,741,174
147 AEP Texas Central Company - Generation	2,517,183	11,990,389	0	112,010	(701,479)	0	27,636	(561,833)
169 AEP Texas Central Company - Transmission AEP Texas Central Co.	26,101,498 \$289,127,412	26,504,611 \$313,122,107	649,196 \$5,488,462	1,225,171 \$13,445,52 6	(1,550,612) (\$18,318,729)	10 \$76	286,569 \$3,174,340	610,334 \$3,789,675
170 Indiana Michigan Power Co - Distribution	155,875,887	164,353,869	2,436,837	7,243,657	(9,615,271)	408	1,711,367	1,776,998
132 Indiana Michigan Power Co - Generation	102,701,695	110,509,019	1,419,431	4,782,048	(6,465,161)	294	1,127,566	864,178
190 Indiana Michigan Power Co - Nuclear	237,272,756	249,700,097	6,375,724	11,279,152	(14,608,321)	744	2,605,026	5,652,325
120 Indiana Michigan Power Co - Transmission 280 Ind Mich River Transp Lakin	35,974,085 34,019,335	34,987,456 36,687,355	542,442 825,898	1,677,215 1,605,161	(2,046,887) (2,146,337)	94 119	394,961 373,500	567,825 658,341
Indiana Michigan Power Co FERC	\$565,843,758	\$596,237,796	\$11,600,332	\$26,587,233	(\$34,881,977)	\$1,659	\$6,212,420	\$9,519,667
202 Price River Coal Indiana Michigan Power Co SEC	0 \$565,843,758	0 \$596,237,796	0 \$11 ,600,332	0 \$26,587,233	0 (\$34,881,977)	0 \$1 ,659	0 \$6,212,420	0 \$9,519,667
- 110 Kentucky Power Co - Distribution	70,123,503	69,078,491	1,050,333	3,268,343	(4,041,331)	235	769,889	1,047,469
117 Kentucky Power Co - Generation	31,061,150	30,511,081	198,913	1,434,896	(1,785,004)	120	341,022	189,947
180 Kentucky Power Co - Transmission	3,021,119	1,818,915	3,217	138,303	(106,413)	36	33,169	68,312
600 Kentucky Power Co Kammer Actives 701 Kentucky Power Co Mitchell Actives	3,401,542 34,598,423	5,018,171 38,799,986	13,875 1,095,376	158,675 1,664,586	(293,580) (2,269,934)	15 67	37,346 379,857	(83,669) 869,952
702 Kentucky Power Co Mitchell Inactives	24,380,793	32,600,498	0,055,570	1,109,874	(1,907,242)	56	267,678	(529,634)
Kentucky Power Co.	\$166,586,530	\$177,827,142	\$2,361,714	\$7,774,677	(\$10,403,504)	\$529	\$1,828,961	\$1,562,377
250 Ohio Power Co - Distribution	407,488,985	429,626,531	6,219,867	18,903,195	(25, 134, 641)	1,066	4,473,837	4,463,324
160 Ohio Power Co - Transmission Ohio Power Co.	40,017,177 \$447,506,162	39,044,905 \$468,671,436	42,744 \$6,262,611	1,813,502 \$20,716,697	(2,284,262) (\$27,418,903)	213 \$1,279	439,350 \$4,913,187	11,547 \$4,474,871
167 Public Service Co of Oklahoma - Distribution 198 Public Service Co of Oklahoma - Generation	148,927,535 76,168,157	160,892,110 81,902,148	3,325,451 2,082,906	6,946,044 3,582,585	(9,412,746) (4,791,560)	77 31	1,635,081 836,253	2,493,907 1,710,215
114 Public Service Co of Oklahoma - Transmission	17,930,684	19,494,972	531,068	846,141	(1,140,523)	5	196,862	433,553
Public Service Co. of Oklahoma	\$243,026,376	\$262,289,230	\$5,939,425	\$11,374,770	(\$15,344,829)	\$113	\$2,668,196	\$4,637,675
159 Southwestern Electric Power Co - Distribution	99,276,369	104,687,581	2,654,509	4,649,210	(6,124,586)	45	1,089,959	2,269,137
168 Southwestern Electric Power Co - Generation 161 Southwestern Electric Power Co - Texas - Distribution	110,289,021 49,913,868	116,293,465 51,982,292	3,490,211 1,219,741	5,214,282 2,336,201	(6,803,571) (3,041,144)	32 22	1,210,867 548,006	3,111,821 1,062,826
111 Southwestern Electric Power Co - Texas - Transmission	93,678	23,506	0	4,014	(1,375)	0	1,028	3,667
194 Southwestern Electric Power Co - Transmission	14,452,223	16,387,683	451,071	685,405	(958,736)	9	158,671	336,420
Southwestern Electric Power Co.	\$274,025,159	\$289,374,527	\$7,815,532	\$12,889,112	(\$16,929,412)	\$108	\$3,008,531	\$6,783,871
119 AEP Texas North Company - Distribution 166 AEP Texas North Company - Generation	65,329,241 16,218,979	64,538,224 24,097,470	1,399,877 0	3,044,714 733,107	(3,775,710) (1,409,786)	17 0	717,252 178,069	1,386,150 (498,610)
192 AEP Texas North Company - Transmission	10,472,455	11,042,984	343,564	495,704	(646,053)	4	114,977	308,196
AEP Texas North Co.	\$92,020,675	\$99,678,678	\$1,743,441	\$4,273,525	(\$5,831,549)	\$21	\$1,010,298	\$1,195,736
230 Kingsport Power Co - Distribution	13,045,891	13,426,695	214,470	608,365	(785,508)	32	143,231	180,590
260 Kingsport Power Co - Transmission Kingsport Power Co.	1,968,921 \$15,014,812	1,576,428 \$15,003,123	0 \$214,470	89,311 \$697,676	(92,227) (\$877,735)	4 \$36	21,617 \$164,848	18,705 \$199,295
210 Wheeling Power Co - Distribution 200 Wheeling Power Co - Transmission	15,259,272 462,262	15,720,723 760,814	230,744	708,333 20,170	(919,717) (44,510)	53 0	167,532 5,075	186,945 (19,265)
Wheeling Power Co.	\$15,721,534	\$16,481,537	\$230,744	\$728,503	(\$964,227)	\$53	\$172,607	\$167,680
103 American Electric Power Service Corporation	1,491,538,521	1,485,368,411	27,546,480	69,791,235	(86,899,205)	2,761	16,375,657	26,816,928
293 Elmwood	2,835,900	5,348,441	0	133,297	(312,902)	43	31,135	(148,427)
292 AEP River Operations LLC American Electric Power Service Corp	33,960,311 \$1,528,334,732	51,755,251 \$1,542,472,103	0 \$27,546,480	1,576,645 \$71,501,177	(3,027,862) (\$90,239,969)	239 \$3,043	372,852 \$16,779,644	(1,078,126) \$25,590,375
143 AEP Pro Serv, Inc.	1,006,456	1,004,222	0	46,663	(58,750)	0	11,050	(1,037)
189 Central Coal Company	0	0	0	0	0	0	0	0
171 CSW Energy, Inc. Miscellaneous	2,513,719 \$3,520,175	2,569,938 \$3.574.160	0 \$0	116,712 \$1 63,375	(150,350) (\$209,100)	3 \$3	27,598 \$38,648	(6,037) (\$7,074)
270 Cook Coal Terminal AEP Generating Company	3,405,057 \$3,405,057	4,202,045 \$4,202,045	99,683 \$99,683	161,021 \$161,021	(245,834) (\$245,834)	9 \$9	37,384 \$37,384	52,263 \$52,263
404 Conding Counting County	70,000,000		4 200 020	2 504 407		475	044.204	
104 Cardinal Operating Company 181 Ohio Power Co - Generation	76,906,659 270,249,626	91,312,257 368,470,189	1,326,636 2,605,285	3,591,467 12,441,730	(5,342,084) (21,556,783)	175 768	844,361 2,967,081	420,555 (3,541,919)
AEP Generation Resources - FERC	\$347,156,285	\$459,782,446	\$3,931,921	\$16,033,197	(\$26,898,867)	\$943	\$3,811,442	(\$3,121,364)
290 Conesville Coal Preparation Company AEP Generation Resources - SEC	2,754,842 \$349,911,127	4,314,687 \$464,097,133	0 \$3,931,921	124,861 \$16,158,058	(252,424) (\$27,151,291)	7 \$950	30,246 \$3,841,688	(97,310) (\$3,218,674)
175 AEP Energy Partners	11,184,829	10,052,436	567,889	552,558	(588,102)	10	122,799	655,154
419 Onsite Partners AEP Energy Supply	154,031 \$361,249,987	51,619 \$474,201,188	8,426 \$4,508,236	7,700 \$16,718,31 6	(3,020) (\$27,742,413)	960 \$960	1,691 \$3,966, 178	14,797 (\$2,548,723)
245 Dolet Hills Dolet Hills	\$2,141,894 \$2,141,894	\$2,261,857 \$2,261,857	\$1,032,206 \$1,032,206	\$150,566 \$150,566	(\$132,326) (\$132,326)	\$0 \$0	\$23,516 \$23,516	\$1,073,962 \$1,073,962
Total	\$4,604,025,928	\$4,877,065,745	\$82,624,616	\$214,880,814	(\$285,325,253)	\$9,695	\$50,547,773	\$62,737,645

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AMERICAN ELECTRIC POWER QUALIFIED RETIREMENT PLAN ESTIMATED 2019 NET PERIODIC PENSION COST

Location	Projected Benefit Obligation	Market-Related Value of Assets	Service Cost	Interest Cost	Expected Return on Assets	Amortization of Prior Service Cost	Amortization of Gain/Loss	Net Periodic Pension Cost
Location	Obligation	UI Addeta	0031	0031	UII Addeld	0031	Oann/E033	COSI
140 Appalachian Power Co - Distribution	\$298,858,913	\$314,928,224	\$4,394,841	\$14,599,477	(\$18,408,604)	\$0 0	\$2,622,386	\$3,208,100
215 Appalachian Power Co - Generation 150 Appalachian Power Co - Transmission	246,894,359 26,204,931	266,092,533 27,427,638	3,457,736 17,569	12,063,125 1,253,912	(15,553,995) (1,603,237)	0	2,166,415 229,939	2,133,281 (101,817)
Appalachian Power Co FERC	\$571,958,203	\$608,448,395	\$7,870,146	\$27,916,514	(\$35,565,836)	\$0	\$5,018,740	\$5,239,564
225 Cedar Coal Co	2,396,220	4,563,550	0	113,123	(266,755)	0	21,026	(132,606)
Appalachian Power Co SEC	\$574,354,423	\$ 613,011,945	\$7,870,146	\$28,029,637	(\$35,832,591)	\$0	\$5,039,766	\$5,106,958
211 AEP Texas Central Company - Distribution	249,891,151	269,488,855	4,894,533	12,218,296	(15,752,522)	0	2,192,711	3,553,018
147 AEP Texas Central Company - Generation	2,249,271	12,316,927	0	104,985	(719,965)	Ö	19,737	(595,243)
169 AEP Texas Central Company - Transmission	25,383,048	26,869,381	656,610	1,252,820	(1,570,605)	0	222,728	561,553
AEP Texas Central Co.	\$277,523,470	\$308,675,163	\$5,551,143	\$13,576,101	(\$18,043,092)	\$0	\$2,435,176	\$3,519,328
170 Indiana Michigan Power Co - Distribution	149,921,276	162,012,141	2,464,666	7,319,791	(9,470,150)	0	1,315,509	1.629.816
132 Indiana Michigan Power Co - Generation	99,364,945	109,843,164	1,435,642	4,853,666	(6,420,699)	0	871,894	740,503
190 Indiana Michigan Power Co - Nuclear	236,298,495	253,033,381	6,448,537	11,788,620	(14,790,644)	0	2,073,440	5,519,953
120 Indiana Michigan Power Co - Transmission	34,852,445	36,164,643	548,637	1,709,055	(2,113,944)	0	305,818	449,566
280 Ind Mich River Transp Lakin Indiana Michigan Power Co FERC	33,457,473 \$553,894,634	36,820,097 \$597,873,426	835,330 \$11,732,812	1,656,992 \$27,328,124	(2,152,257) (\$34,947,694)	0 \$0	293,578 \$4,860,239	633,643 \$8,973,481
202 Price River Coal	0	0	0	0	0	0	0	0
Indiana Michigan Power Co SEC	\$553,894,634	\$597,873,426	\$11,732,812	\$27,328,124	(\$34,947,694)	\$0	\$4,860,239	\$8,973,481
110 Kentucky Power Co - Distribution	67,900,963	70,461,021	1,062,328	3,319,758	(4,118,682)	0	595,808	859,212
117 Kentucky Power Co - Generation	29,797,766	31,086,868	201,185	1,444,618	(1,817,131)	0	261,465	90,137
180 Kentucky Power Co - Transmission 600 Kentucky Power Co Kammer Actives	2,860,759 3,336,443	2,994,319 5,143,226	3,254 14,034	137,665 163,207	(175,028) (300,639)	0	25,102 29,276	(9,007)
701 Kentucky Power Co Mitchell Actives	35,136,526	40,040,407	1,107,886	1,773,188	(2,340,495)	0	308,311	(94,122) 848,890
702 Kentucky Power Co Mitchell Inactives	22,847,135	32,225,334	0	1,092,741	(1,883,678)	0	200,476	(590,461)
Kentucky Power Co.	\$161,879,592	\$181,951,175	\$2,388,687	\$7,931,177	(\$10,635,653)	\$0	\$1,420,438	\$1,104,649
250 Ohio Power Co - Distribution	390,666,210	422,253,198	6,290,900	19,062,208	(24 002 407)	0	2 427 004	4,098,965
160 Ohio Power Co - Distribution	37,109,676	38,817,249	43,232	1,759,751	(24,682,107) (2,268,998)	0	3,427,964 325,625	(140,390)
Ohio Power Co.	\$427,775,886	\$461,070,447	\$6,334,132	\$20,821,959	(\$26,951,105)	\$0	\$3,753,589	\$3,958,575
167 Public Service Co of Oklahoma - Distribution	143,317,920	158,297,151	3,363,429	7,032,162	(9,252,996)	0	1,257,566	2,400,161
198 Public Service Co of Oklahoma - Generation 114 Public Service Co of Oklahoma - Transmission	74,195,924 17,543,382	81,264,048 19,412,562	2,106,694 537,133	3,651,105 872,016	(4,750,154) (1,134,729)	0	651,044 153,937	1,658,689 428,357
Public Service Co. of Oklahoma	\$235,057,226	\$258,973,761	\$6,007,256	\$11,555,283	(\$15,137,879)	\$0	\$2,062,547	\$4,487,207
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159 Southwestern Electric Power Co - Distribution	95,904,274	102,919,049	2,684,825	4,735,645	(6,015,961)	0	841,528	2,246,037
168 Southwestern Electric Power Co - Generation 161 Southwestern Electric Power Co - Texas - Distribution	108,099,854 48,277,212	115,642,939 51,195,857	3,530,071 1,233,671	5,358,507 2,374,401	(6,759,715) (2,992,568)	0	948,540 423,616	3,077,403 1,039,120
111 Southwestern Electric Power Co - Texas - Distribution	77,130	80,998	1,233,071	3,454	(4,735)	0	677	(604)
194 Southwestern Electric Power Co - Transmission	14,262,067	16,474,353	456,222	712,106	(962,981)	0	125,145	330,492
Southwestern Electric Power Co.	\$266,620,537	\$286,313,196	\$7,904,789	\$13,184,113	(\$16,735,960)	\$0	\$2,339,506	\$6,692,448
119 AEP Texas North Company - Distribution	62,830,773	64,906,107	1,415,864	3,072,714	(3,793,978)	0	551,319	1,245,919
166 AEP Texas North Company - Generation	14,976,818	23,744,554	1,413,004	710,211	(1,387,948)	0	131,417	(546,320)
192 AEP Texas North Company - Transmission	10,277,276	10,987,174	347,488	511,955	(642,237)	0	90,180	307,386
AEP Texas North Co.	\$88,084,867	\$99,637,835	\$1,763,352	\$4,294,880	(\$5,824,163)	\$0	\$772,916	\$1,006,985
230 Kingsport Power Co - Distribution	12,626,855	13,320,303	216,919	618,470	(778,616)	0	110,796	167,569
260 Kingsport Power Co - Transmission	1,831,522	1,917,093	0	87,233	(112,060)	0	16,071	(8,756)
Kingsport Power Co.	\$14,458,377	\$15,237,396	\$216,919	\$705,703	(\$890,676)	\$0	\$126,867	\$158,813
040 MILLE BOOK OF BUILDING	44.054.474	45 440 420	022 270	745 200	(002.054)		400 550	474.000
210 Wheeling Power Co - Distribution 200 Wheeling Power Co - Transmission	14,651,171 396,081	15,449,139 721,847	233,379 0	715,396 18,059	(903,054) (42,194)	0	128,559 3,475	174,280 (20,660)
Wheeling Power Co.	\$15,047,252	\$16,170,986	\$233,379	\$733,455	(\$945,248)	\$0	\$132,034	\$153,620
103 American Electric Power Service Corporation 293 Elmwood	1,450,676,018 2.836.006	1,502,163,613 5.583.645	27,861,076 0	71,365,311 136,401	(87,806,467)	0	12,729,193 24,885	24,149,114
292 AEP River Operations LLC	33,128,376	52,988,717	0	1,612,341	(326,383)	0	290,690	(165,097) (1,194,336)
American Electric Power Service Corp	\$1,486,640,400	\$1,560,735,975	\$27,861,076	\$73,114,053	(\$91,230,217)	\$0	\$13,044,768	\$22,789,681
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143 AEP Pro Serv, Inc.	979,113	1,026,451	0	47,759	(59,999)	0	8,591	(3,649)
189 Central Coal Company 171 CSW Energy, Inc.	0 2,452,540	0 2,591,061	0	0 119,784	0 (151,456)	0	0 21,520	0 (10,152)
Miscellaneous	\$3,431,653	\$3,617,512	\$0	\$167,543	(\$211,455)	\$0	\$30,111	(\$13,801)
270 Cook Coal Terminal	3,347,031	4,232,320	100,821 \$100,821	166,632 \$166.632	(247,393)	0 \$0	29,369 \$29,369	49,429
AEP Generating Company	\$3,347,031	\$4,232,320	\$100,021	\$100,032	(\$247,393)	\$0	\$29,309	\$49,429
104 Cardinal Operating Company	74,591,176	91,315,021	1,341,786	3,663,495	(5,337,667)	0	654,512	322,126
181 Ohio Power Co - Generation	256,571,028	366,554,165	2,635,039	12,431,600	(21,426,313)	0	2,251,324	(4,108,350)
AEP Generation Resources - FERC	\$331,162,204	\$457,869,186	\$3,976,825 0	\$16,095,095	(\$26,763,980)	\$0	\$2,905,836	(\$3,786,224)
290 Conesville Coal Preparation Company AEP Generation Resources - SEC	2,558,338 \$333,720,542	4,282,706 \$462,151,892	\$3,976,825	121,733 \$16,216,828	(250,338) (\$27,014,318)	0 \$0	22,449 \$2,928,285	(106,156) (\$3,892,380)
175 AEP Energy Partners	11,759,152	11,971,115	574,374	610,118	(699,752)	0	103,183	587,923
419 Onsite Partners	165,198	168,410	8,522	8,661	(9,844)	0	1,450	8,789
AEP Energy Supply	\$345,644,892	\$474,291,417	\$4,559,721	\$16,835,607	(\$27,723,914)	\$0	\$3,032,918	(\$3,295,668)
245 Dolet Hills	\$3,232,580	\$3,841,777	\$1,043,994	\$207,877	(\$224,565)	\$0	\$28,365	\$1,055,671
Dolet Hills	\$3,232,580	\$3,841,777	\$1,043,994	\$207,877	(\$224,565)	\$0	\$28,365	\$1,055,671
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Total	\$4,456,992,820	\$4,885,634,331	\$83,568,227	\$218,652,144	(\$285,581,605)	\$0	\$39,108,609	\$55,747,376

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AMERICAN ELECTRIC POWER QUALIFIED RETIREMENT PLAN ESTIMATED 2020 NET PERIODIC PENSION COST

	Projected	Market-Related			Expected	Amortization of Prior		Net Periodic
Location	Benefit Obligation	Value of Assets	Service Cost	Interest Cost	Return on Assets	Service Cost	Amortization of Gain/Loss	Pension Cost
140 Appalachian Power Co - Distribution	\$295,046,642	\$310,460,306	\$4,677,619	\$14,416,920	(\$18,140,355)	\$0	\$2,784,589	\$3,738,773
215 Appalachian Power Co - Generation	244,011,569	262,967,450	3,680,217	11,919,264	(15,365,323)	0	2,302,930	2,537,088
150 Appalachian Power Co - Transmission	25,159,633 \$564,217,844	26,305,694 \$599,733,450	18,699 \$8,376,535	1,202,499 \$27,538,683	(1,537,055)	0 \$0	237,451	(78,406) \$6,197,455
Appalachian Power Co FERC 225 Cedar Coal Co	2.238.534	4,495,401	\$0,576,555	105,498	(\$35,042,733) (262,669)	0	\$5,324,970 21,127	(136,044)
Appalachian Power Co SEC	\$566,456,378	\$604,228,851	\$8,376,535	\$27,644,181	(\$35,305,402)	\$0	\$5,346,097	\$6,061,411
211 AEP Texas Central Company - Distribution	245,907,120	265,176,271	5,209,462	11,992,841	(15,494,386)	0	2,320,820	4,028,737
147 AEP Texas Central Company - Generation	2,051,414	12,586,646	0	95,564	(735,444)	0	19,361	(620,519)
169 AEP Texas Central Company - Transmission AEP Texas Central Co.	25,301,670 \$273,260,204	26,734,838 \$304,497,755	698,858 \$5,908,320	1,244,020 \$13,332,425	(1,562,130) (\$17,791,960)	0 \$0	238,792 \$2,578,973	619,540 \$4,027,758
170 Indiana Michigan Power Co - Distribution	147,577,548	159,507,845	2,623,250	7,219,196	(9,320,125)	0	1,392,806	1,915,127
132 Indiana Michigan Power Co - Generation	98,107,687	108,615,836	1,528,016	4,798,614	(6,346,479)	ő	925,920	906,071
190 Indiana Michigan Power Co - Nuclear	240,414,158	256,950,729	6,863,456	12,007,091	(15,013,763)	0	2,268,979	6,125,763
120 Indiana Michigan Power Co - Transmission 280 Ind Mich River Transp Lakin	34,640,052 33,615,403	35,855,597 36,986,202	583,938 889,077	1,698,837 1,661,310	(2,095,061) (2,161,123)	0	326,926 317,255	514,640 706,519
Indiana Michigan Power Co FERC	\$554,354,848	\$597,916,209	\$12,487,737	\$27,385,048	(\$34,936,551)	\$0	\$5,231,886	\$10,168,120
202 Price River Coal Indiana Michigan Power Co SEC	0 \$554,354,848	0 \$597,916,209	0 \$12,487,737	0 \$27,385,048	0 (\$34,936,551)	0 \$0	0 \$5,231,886	0 \$10,168,120
-								
110 Kentucky Power Co - Distribution 117 Kentucky Power Co - Generation	67,083,361 29,203,073	69,441,213 30,414,126	1,130,681 214,130	3,286,994 1,417,506	(4,057,486) (1,777,113)	0	633,119 275,613	993,308 130,136
180 Kentucky Power Co - Transmission	2,777,504	2,903,518	3,464	133,580	(169,654)	0	26,214	(6,396)
600 Kentucky Power Co Kammer Actives	3,338,871	5,219,446	14,936	156,405	(304,975)	0	31,512	(102,122)
701 Kentucky Power Co Mitchell Actives	36,437,024	41,444,897	1,179,171	1,836,263	(2,421,647)	0	343,885	937,672
702 Kentucky Power Co Mitchell Inactives Kentucky Power Co.	21,930,722 \$160,770,555	31,641,462 \$181,064,662	0 \$2,542,382	1,048,320 \$7,879,068	(1,848,827) (\$10,579,702)	0 \$0	206,978 \$1,517,321	(593,529) \$1,359,069
250 Ohio Power Co - Distribution 160 Ohio Power Co - Transmission	384,205,398 34.948.550	415,370,250	6,695,676	18,744,892 1.658.186	(24,270,297)	0	3,626,050	4,796,321
Ohio Power Co - Transmission	\$419,153,948	36,523,256 \$451,893,506	46,014 \$6,741,690	\$20,403,078	(2,134,073) (\$26,404,370)	0 \$0	329,837 \$3,955,887	(100,036) \$4,696,285
167 Public Service Co of Oklahoma - Distribution	141,488,185	156,451,773	3,579,842	6,961,101	(9,141,558)	0	1,335,336	2,734,721
198 Public Service Co of Oklahoma - Generation	73,311,693	80,326,373	2,242,245	3,606,896	(4,693,511)	0	691,900	1,847,530
114 Public Service Co of Oklahoma - Transmission	17,656,342	19,531,510	571,694	874,515	(1,141,236)	0	166,637	471,610
Public Service Co. of Oklahoma	\$232,456,220	\$256,309,656	\$6,393,781	\$11,442,512	(\$14,976,305)	\$0	\$2,193,873	\$5,053,861
159 Southwestern Electric Power Co - Distribution	95,476,639	102,346,811	2,857,575	4,716,680	(5,980,177)	0	901,089	2,495,167
168 Southwestern Electric Power Co - Generation 161 Southwestern Electric Power Co - Texas - Distribution	107,958,738 47,789,619	115,313,572 50,601,298	3,757,206 1,313,049	5,368,529 2,348,723	(6,737,831) (2,956,660)	0	1,018,892 451,028	3,406,796 1,156,140
111 Southwestern Electric Power Co - Texas - Distribution	64,266	67,588	1,313,043	2,340,723	(3,949)	0	451,020	(480)
194 Southwestern Electric Power Co - Transmission	14,466,296	16,720,617	485,577	717,238	(976,994)	0	136,530	362,351
Southwestern Electric Power Co.	\$265,755,558	\$285,049,886	\$8,413,407	\$13,154,032	(\$16,655,611)	\$0	\$2,508,146	\$7,419,974
119 AEP Texas North Company - Distribution	61,665,663	63,576,461	1,506,965	3,017,419	(3,714,805)	0	581,988	1,391,567
166 AEP Texas North Company - Generation 192 AEP Texas North Company - Transmission	14,122,753 10,355,880	23,225,454 11,050,057	0 369,846	668,272 512,072	(1,357,075) (645,661)	0	133,288 97,737	(555,515) 333,994
AEP Texas North Co.	\$86,144,296	\$97,851,972	\$1,876,811	\$4,197,763	(\$5,717,541)	\$0	\$813,013	\$1,170,046
230 Kingsport Power Co - Distribution	12,501,782	13,168,002	230,876	614,565	(769,413)	0	117,989	194,017
260 Kingsport Power Co - Transmission	1,742,894	1,822,655	0	82,898	(106,499)	0	16,449	(7,152)
Kingsport Power Co.	\$14,244,676	\$14,990,657	\$230,876	\$697,463	(\$875,912)	\$0	\$134,438	\$186,865
210 Wheeling Power Co - Distribution	14,432,454	15,196,478	248,396	705,496	(887,938)	0	136,210	202,164
200 Wheeling Power Co - Transmission Wheeling Power Co.	343,462 \$14,775,91 6	681,560 \$15,878,038	0 \$248,396	15,568 \$721,064	(39,824) (\$927,762)	0 \$0	3,242 \$139,452	(21,014) \$181,150
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103 American Electric Power Service Corporation	1,446,175,509	1,493,430,408 5,619,719	29,653,742	71,149,573	(87,261,908)	0	13,648,706	27,190,113 (167,760)
293 Elmwood 292 AEP River Operations LLC	2,753,783 32,955,826	53,638,227	0	134,613 1,613,645	(328,363)	0	25,990 311,030	(1,209,434)
American Electric Power Service Corp	\$1,481,885,118	\$1,552,688,354	\$29,653,742	\$72,897,831	(\$90,724,380)	\$0	\$13,985,726	\$25,812,919
143 AEP Pro Serv, Inc.	978,434	1,024,341	0	47,733	(59,853)	0	9,234	(2,886)
189 Central Coal Company	0	0	0	0	0	0	0	0
171 CSW Energy, Inc. Miscellaneous	2,457,207 \$3.435.641	2,593,318 \$3,617,659	0 \$0	118,963 \$166,69 6	(151,529) (\$211,382)	0 \$0	23,191 \$32,425	(9,375) (\$12,261)
270 Cook Coal Terminal AEP Generating Company	3,381,217 \$3,381,217	4,294,050 \$4,294,050	107,308 \$107,308	168,735 \$168,735	(250,904) (\$250,904)	0 \$0	31,911 \$31,911	57,050 \$57,050
. ,				\$100,133	(\$250,504)		. ,	
104 Cardinal Operating Company	74,204,584	91,384,098	1,428,121	3,645,171	(5,339,620)	0	700,327	433,999
181 Ohio Power Co - Generation AEP Generation Resources - FERC	250,228,393 \$324,432,977	364,200,936 \$455,585,034	2,804,585 \$4,232,706	12,122,193 \$15,767,364	(21,280,448) (\$26,620,068)	0 \$0	2,361,603 \$3,061,930	(3,992,067) (\$3,558,068)
290 Conesville Coal Preparation Company	2,429,664	4,222,710	0	115,606	(246,735)	0	22,931	(108, 198)
AEP Generation Resources - SEC	\$326,862,641	\$459,807,744	\$4,232,706	\$15,882,970	(\$26,866,803)	\$0	\$3,084,861	(\$3,666,266)
175 AEP Energy Partners 419 Onsite Partners	12,678,060 181,361	13,390,273 192,362	611,331 9,070	656,619 9,488	(782,401) (11,240)	0	119,653 1,712	605,202 9,030
AEP Energy Supply	\$339,722,062	\$473,390,379	\$4,853,107	\$16,549,077	(\$27,660,444)	\$0	\$3,206,226	(\$3,052,034)
245 Dolet Hills	\$4,243,437	\$5,369,788	\$1,111,168	\$256,455	(\$313,759)	\$0	\$40,049	\$1,093,913
Dolet Hills	\$4,243,437	\$5,369,788	\$1,111,168	\$256,455	(\$313,759)	\$0	\$40,049	\$1,093,913
Total	\$4,420,040,074	\$4,849,041,422	\$88,945,260	\$216,895,428	(\$283,331,985)	\$0	\$41,715,423	\$64,224,126

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AMERICAN ELECTRIC POWER QUALIFIED RETIREMENT PLAN ESTIMATED 2021 NET PERIODIC PENSION COST

Location	Projected Benefit Obligation	Market-Related Value of Assets	Service Cost	Interest Cost	Expected Return on Assets	Amortization of Prior Service Cost	Amortization of Gain/Loss	Net Periodic Pension Cost
Location	Obligation	Of Assets	COSI	Cost	on Assets	COST	Gairi/L088	Cost
140 Appalachian Power Co - Distribution	\$291,088,288	\$309,599,635	\$4,870,107	\$14,214,553	(\$18,074,664)	\$0	\$2,575,006	\$3,585,002
215 Appalachian Power Co - Generation 150 Appalachian Power Co - Transmission	240,768,200 24,096,263	262,663,665 25,481,568	3,831,661 19,469	11,747,294 1,141,117	(15,334,506) (1,487,633)	0	2,129,868 213,159	2,374,317 (113,888)
Appalachian Power Co FERC	\$555,952,751	\$597,744,868	\$8,721,237	\$27,102,964	(\$34,896,803)	\$0	\$4,918,033	\$5,845,431
225 Cedar Coal Co	2,083,701	4,489,016	0	97,993	(262,072)	0	18,433	(145,646)
Appalachian Power Co SEC	\$558,036,452	\$602,233,884	\$8,721,237	\$27,200,957	(\$35,158,875)	\$0	\$4,936,466	\$5,699,785
211 AEP Texas Central Company - Distribution	240,311,820	262,433,502	5,423,836	11,701,603	(15,321,069)	0	2,125,831	3,930,201
147 AEP Texas Central Company - Generation	1,863,238	13,040,666	0	86,622	(761,324)	0	16,482	(658,220)
169 AEP Texas Central Company - Transmission AEP Texas Central Co.	24,976,629 \$267,151,687	26,674,936 \$302,149,104	727,617 \$6,151,453	1,233,478 \$13,021,703	(1,557,303) (\$17,639,696)	0 \$0	220,947 \$2,363,260	624,739 \$3,896,720
TEL TOTAL CONTROL CO.	4201,101,001	4002,110,101	40,101,100	\$10,021,100	(411,000,000)	•	42,000,200	40,000,120
170 Indiana Michigan Power Co - Distribution	145,642,581	159,369,054	2,731,199	7,125,914	(9,304,088)	0	1,288,374	1,841,399
132 Indiana Michigan Power Co - Generation 190 Indiana Michigan Power Co - Nuclear	97,017,009 244,836,882	108,886,338 264,319,294	1,590,895 7,145,893	4,738,790 12,213,768	(6,356,868) (15,431,163)	0	858,226 2,165,860	831,043 6,094,358
120 Indiana Michigan Power Co - Transmission	34,397,538	35,947,918	607,967	1,685,320	(2,098,667)	Ö	304,285	498,905
280 Ind Mich River Transp Lakin	33,577,644	37,403,010	925,664	1,666,293	(2,183,616)	0	297,032	705,373
Indiana Michigan Power Co FERC 202 Price River Coal	\$555,471,654 0	\$605,925,614 0	\$13,001,618 0	\$27,430,085 0	(\$35,374,402) 0	\$0 0	\$4,913,777 0	\$9,971,078 0
Indiana Michigan Power Co SEC	\$555,471,654	\$605,925,614	\$13,001,618	\$27,430,085	(\$35,374,402)	\$0	\$4,913,777	\$9,971,078
110 Kentucky Power Co - Distribution	66,491,630	69,494,151	1,177,210	3,251,013	(4,057,122)	0	588,194	959,295
117 Kentucky Power Co - Generation	28,674,179	30,174,575	222,941	1,382,713	(1,761,615)	0	253,656	97,695
180 Kentucky Power Co - Transmission	2,693,129	2,846,100	3,606	129,392	(166, 158)	0	23,824	(9,336)
600 Kentucky Power Co Kammer Actives 701 Kentucky Power Co Mitchell Actives	3,053,215 37,648,593	5,063,904 43,267,888	15,551 1,227,695	148,526 1,895,827	(295,635) (2,526,012)	0	27,009 333,045	(104,549) 930,555
701 Kentucky Power Co Mitchell Inactives 702 Kentucky Power Co Mitchell Inactives	21,026,592	31,469,236	1,227,035	1,004,286	(1,837,198)	0	186.004	(646,908)
Kentucky Power Co.	\$159,587,338	\$182,315,854	\$2,647,003	\$7,811,757	(\$10,643,740)	\$0	\$1,411,732	\$1,226,752
250 Ohio Power Co - Distribution	377,244,281	413,029,784	6,971,209	18.422.829	(24,112,996)	0	3.337.154	4.618.196
160 Ohio Power Co - Transmission	32,945,832	34,832,706	47,908	1,563,190	(2,033,560)	0	291,443	(131,019)
Ohio Power Co.	\$410,190,113	\$447,862,490	\$7,019,117	\$19,986,019	(\$26,146,556)	\$0	\$3,628,597	\$4,487,177
167 Public Service Co of Oklahoma - Distribution	140,192,746	157,081,680	3,727,156	6,862,322	(9,170,549)	0	1,240,164	2.659.093
198 Public Service Co of Oklahoma - Generation	72,244,441	80,188,283	2,334,515	3,559,150	(4,681,453)	0	639,084	1,851,296
114 Public Service Co of Oklahoma - Transmission	17,608,860	19,725,737	595,220	876,798	(1,151,604)	0	155,770	476,184
Public Service Co. of Oklahoma	\$230,046,047	\$256,995,700	\$6,656,891	\$11,298,270	(\$15,003,606)	\$0	\$2,035,018	\$4,986,573
159 Southwestern Electric Power Co - Distribution	94,950,877	102,927,536	2,975,166	4,693,726	(6,008,989)	0	839,948	2,499,851
168 Southwestern Electric Power Co - Generation	108,286,431	116,884,940	3,911,818	5,355,300	(6,823,832)	0	957,916	3,401,202
161 Southwestern Electric Power Co - Texas - Distribution	47,142,406	50,459,855	1,367,082	2,328,263	(2,945,885)	0	417,028	1,166,488
111 Southwestern Electric Power Co - Texas - Transmission 194 Southwestern Electric Power Co - Transmission	52,890 14,439,886	56,548 16,935,463	505,559	2,340 721,854	(3,301) (988,705)	0	468 127,737	(493) 366,445
Southwestern Electric Power Co.	\$264,872,490	\$287,264,342	\$8,759,625	\$13,101,483	(\$16,770,712)	\$0	\$2,343,097	\$7,433,493
119 AEP Texas North Company - Distribution	60,471,823	62,924,891	1,568,978	2,951,389	(3,673,603)	0	534,942	1,381,706
166 AEP Texas North Company - Generation	13,257,716	22,992,848	0,500,570	626,109	(1,342,340)	0	117,280	(598,951)
192 AEP Texas North Company - Transmission	10,257,281	11,065,527	385,066	511,661	(646,014)	0	90,737	341,450
AEP Texas North Co.	\$83,986,820	\$96,983,266	\$1,954,044	\$4,089,159	(\$5,661,957)	\$0	\$742,959	\$1,124,205
230 Kingsport Power Co - Distribution	12,453,595	13,255,241	240,377	612,347	(773,851)	0	110,166	189,039
260 Kingsport Power Co - Transmission	1,653,815	1,749,651	0	77,853	(102,146)	0	14,630	(9,663)
Kingsport Power Co.	\$14,107,410	\$15,004,892	\$240,377	\$690,200	(\$875,997)	\$0	\$124,796	\$179,376
210 Wheeling Power Co - Distribution	14,230,371	15,145,279	258,617	691,043	(884, 193)	0	125,884	191,351
200 Wheeling Power Co - Transmission	294,034	653,533	0	13,241	(38,154)	0	2,601	(22,312)
Wheeling Power Co.	\$14,524,405	\$ 15,798,812	\$258,617	\$704,284	(\$922,347)	\$0	\$128,485	\$1 69,039
103 American Electric Power Service Corporation	1,439,998,395	1,501,018,705	30,874,019	70,791,203	(87,630,627)	0	12,738,420	26,773,014
293 Elmwood 292 AEP River Operations LLC	2,763,821	5,824,668 55,389,045	0	131,934 1,588,325	(340,049)	0	24,449 293,574	(183,666)
American Electric Power Service Corp	33,186,735 \$1,475,948,951	\$1,562,232,418	\$30,874,019	\$72,511,462	(3,233,655) (\$91,204,331)	\$0	\$13,056,443	(1,351,756) \$25,237,592
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143 AEP Pro Serv, Inc. 189 Central Coal Company	978,051 0	1,034,763 0	0	47,723 0	(60,410) 0	0	8,652 0	(4,035) 0
171 CSW Energy, Inc.	2,418,335	2,581,521	0	118,073	(150,711)	0	21,393	(11,245)
Miscellaneous	\$3,396,386	\$3,616,284	\$0	\$165,796	(\$211,121)	\$0	\$30,045	(\$15,280)
270 Cook Coal Terminal	3,426,807	4,420,690	111,724	171,369	(258,083)	0	30,314	55,324
AEP Generating Company	\$3,426,807	\$4,420,690	\$111,724	\$171,369	(\$258,083)	\$0	\$30,314	\$55,324
404.0 5 10 5 0	70 754 044	00 500 472	4 400 000	2 000 274	/F 404 200\	0	050.440	200,000
104 Cardinal Operating Company 181 Ohio Power Co - Generation	73,751,914 243,715,417	92,520,173 366,287,538	1,486,889 2,919,996	3,622,371 11,799,282	(5,401,399) (21,384,147)	0	652,419 2,155,939	360,280 (4,508,930)
AEP Generation Resources - FERC	\$317,467,331	\$458,807,711	\$4,406,885	\$15,421,653	(\$26,785,546)	\$0	\$2,808,358	(\$4,148,650)
290 Conesville Coal Preparation Company	2,307,294	4,223,671	0	110,321	(246,581)	0	20,411	(115,849)
AEP Generation Resources - SEC 175 AEP Energy Partners	\$319,774,625 13,628,125	\$463,031,382 14,503,986	\$4,406,885 636,488	\$15,531,974 704,475	(\$27,032,127) (846,754)	\$0 0	\$2,828,769 120,556	(\$4,264,499) 614,765
419 Onsite Partners	198,560	211,997	9,443	10,358	(12,377)	0	1,756	9,180
AEP Energy Supply	\$333,601,310	\$477,747,365	\$5,052,816	\$16,246,807	(\$27,891,258)	\$0	\$2,951,081	(\$3,640,554)
245 Dolet Hills	\$5,154,463	\$6,385,512	\$1,156,893	\$306,096	(\$372,791)	\$0	\$45,597	\$1,135,795
Dolet Hills	\$5,154,463	\$6,385,512	\$1,156,893	\$306,096	(\$372,791)	\$0	\$45,597	\$1,135,795
Total	\$4,379,502,333	\$4,866,936,227	\$92,605,434	\$214,735,447	(\$284 135 472)	\$0	\$38,741,667	\$61,947,075
. 300	,c. c,cc2,c33	- 1,000,000,221	402,000,404	,. 55,741	(220 1, 100, 41 2)	40	400,. 71,001	\$0.,0 TI,010

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AMERICAN ELECTRIC POWER QUALIFIED RETIREMENT PLAN ESTIMATED 2022 NET PERIODIC PENSION COST

	Projected	Market-Related			Expected	Amortization of Prior		Net Periodic
Location	Benefit Obligation	Value of Assets	Service Cost	Interest Cost	Return on Assets	Service Cost	Amortization of Gain/Loss	Pension Cost
140 Appalachian Power Co - Distribution 215 Appalachian Power Co - Generation 150 Appalachian Power Co - Transmission	\$286,550,151 236,800,790 22,638,122	\$309,174,717 262,510,970 24,323,650	\$5,021,036 3,950,408 20,072	\$13,993,006 11,528,537 1,077,725	(\$18,006,896) (15,289,115) (1,416,653)	\$0 0 0	\$2,379,967 1,966,770 188,023	\$3,387,113 2,156,600 (130,833)
Appalachian Power Co FERC 225 Cedar Coal Co Appalachian Power Co SEC	\$545,989,063 1,930,954 \$547,920,017	\$596,009,337 4,505,356 \$600,514,693	\$8,991,516 0 \$8,991,516	\$26,599,268 90,535 \$26,689,803	(\$34,712,664) (262,400) (\$34,975,064)	\$0 0 \$0	\$4,534,760 16,038 \$4,550,798	\$5,412,880 (155,827) \$5,257,053
211 AEP Texas Central Company - Distribution 147 AEP Texas Central Company - Generation	233,741,065 1,685,039	259,547,042 13,580,973	5,591,925 0	11,402,317 78,169	(15,116,490) (790,980)	0	1,941,357 13,995	3,819,109 (698,816)
169 AEP Texas Central Company - Transmission AEP Texas Central Co.	24,842,819 \$260,268,923	26,902,856 \$300,030,871	750,166 \$6,342,091	1,225,050 \$12,705,536	(1,566,871) (\$17,474,341)	0 \$0	206,334 \$2,161,686	614,679 \$3,734,972
170 Indiana Michigan Power Co - Distribution 132 Indiana Michigan Power Co - Generation	143,644,094 95,587,865	159,712,245 109,191,416	2,815,842 1,640,198	7,029,341 4,657,549	(9,301,931) (6,359,506)	0	1,193,049 793,913	1,736,301 732,154
190 Indiana Michigan Power Co - Nuclear 120 Indiana Michigan Power Co - Transmission	248,591,383 34,060,526	271,984,038 36,063,476	7,367,350 626,809	12,367,344 1,668,610	(15,840,843) (2,100,402)	0	2,064,698 282,893	5,958,549 477,910
280 Ind Mich River Transp Lakin Indiana Michigan Power Co FERC	33,785,630 \$555,669,498	38,210,215 \$615,161,390	954,351 \$13,404,550	1,675,362 \$27,398,206	(2,225,432) (\$35,828,114)	0 \$0	280,610 \$4,615,163	684,891 \$9,589,805
202 Price River Coal Indiana Michigan Power Co SEC	0 \$555,669,498	0 \$615,161,390	0 \$13,404,550	\$27,398,206	0 (\$35,828,114)	0 \$0	0 \$4,615,163	9,589,805
110 Kentucky Power Co - Distribution	65,557,291	69,424,049	1,213,693	3,213,323	(4,043,382)	0	544,492	928,126
117 Kentucky Power Co - Generation 180 Kentucky Power Co - Transmission	27,763,404 2,605,648	29,638,047 2,795,324	229,851 3,718	1,344,476 124,203	(1,726,174) (162,805)	0	230,591 21,641	78,744 (13,243)
600 Kentucky Power Co Kammer Actives	3,018,393	5,188,597 45,234,344	16,033 1,265,742	146,887 1,952,161	(302, 193)	0	25,070	(114,203)
701 Kentucky Power Co Mitchell Actives 702 Kentucky Power Co Mitchell Inactives	38,828,905 20,125,918	31,427,286	1,205,742	960,578	(2,634,530) (1,830,382)	0	322,497 167,158	905,870 (702,646)
Kentucky Power Co.	\$157,899,559	\$183,707,647	\$2,729,037	\$7,741,628	(\$10,699,466)	\$0	\$1,311,449	\$1,082,648
250 Ohio Power Co - Distribution	370,731,313	412,549,737	7,187,253	18,086,583	(24,027,644)	0	3,079,142	4,325,334
160 Ohio Power Co - Transmission Ohio Power Co.	31,054,328 \$401,785,641	33,355,282 \$445,905,019	49,392 \$7,236,645	1,470,784 \$19,557,367	(1,942,672) (\$25,970,316)	0 \$0	257,924 \$3,337,066	(164,572) \$4,160,762
167 Public Service Co of Oklahoma - Distribution	137,270,494	156,578,925	3,842,664	6,744,522	(9,119,440)	0	1,140,112	2,607,858
198 Public Service Co of Oklahoma - Generation 114 Public Service Co of Oklahoma - Transmission	71,262,342 17,728,145	80,414,521 20,163,326	2,406,864 613,666	3,512,159 882,163	(4,683,487) (1,174,349)	0	591,876 147,243	1,827,412 468,723
Public Service Co. of Oklahoma	\$226,260,981	\$257,156,772	\$6,863,194	\$11,138,844	(\$14,977,276)	\$0	\$1,879,231	\$4,903,993
159 Southwestern Electric Power Co - Distribution	94,416,671	103,856,121	3,067,369	4,657,359	(6,048,769)	0	784,186	2,460,145 3,391,917
168 Southwestern Electric Power Co - Generation 161 Southwestern Electric Power Co - Texas - Distribution	107,243,291 46,901,273	117,449,129 50,908,263	4,033,049 1,409,449	5,308,599 2,309,828	(6,840,450) (2,964,990)	0	890,719 389,543	1,143,830
111 Southwestern Electric Power Co - Texas - Transmission	42,890	46,993	0	1,882	(2,737)	0	356	(499)
194 Southwestern Electric Power Co - Transmission Southwestern Electric Power Co.	14,638,008 \$263,242,133	17,446,444 \$289,706,950	521,226 \$9,031,093	724,975 \$13,002,643	(1,016,113) (\$16,873,059)	\$0	121,577 \$2,186,381	351,665 \$7,347,058
119 AEP Texas North Company - Distribution 166 AEP Texas North Company - Generation	58,891,754 12,394,598	62,073,082 22,858,675	1,617,602 0	2,883,467 582,027	(3,615,249) (1,331,331)	0	489,131 102,944	1,374,951 (646,360)
192 AEP Texas North Company - Transmission AEP Texas North Co.	10,325,656 \$81,612,008	11,291,559 \$96,223,316	396,999 \$2,014,601	515,334 \$3,980,828	(657,641) (\$5,604,221)	0 \$0	85,761 \$677,836	340,453 \$1,069,044
230 Kingsport Power Co - Distribution	12,401,235	13,383,546	247,826	609,283	(779,482)	0	103,000	180,627
260 Kingsport Power Co - Transmission Kingsport Power Co.	1,535,763 \$13,936,998	1,651,647 \$15,035,193	9 \$247,826	72,785 \$682,068	(96,195) (\$875,677)	0 \$0	12,755 \$115,755	(10,655) \$169,972
210 Wheeling Power Co - Distribution	13.827.290	14,936,987	266.632	676,166	(869,957)	0	114,844	187,685
200 Wheeling Power Co - Transmission	248,130	631,842	0	11,093	(36,800)	0	2,061	(23,646)
Wheeling Power Co.	\$14,075,420	\$15,568,829	\$266,632	\$687,259	(\$906,757)	\$0	\$116,905	\$164,039
103 American Electric Power Service Corporation 293 Elmwood	1,430,207,487 2,642,372	1,509,947,198 5,922,372	31,830,833 0	70,332,948 129,826	(87,942,059) (344,930)	0	11,878,715 21,946	26,100,437 (193,158)
292 AEP River Operations LLC	31,899,516	55,822,715	0	1,539,238	(3,251,216)	0	264,944	(1,447,034)
American Electric Power Service Corp	\$1,464,749,375	\$1,571,692,285	\$31,830,833	\$72,002,012	(\$91,538,205)	\$0	\$12,165,605	\$24,460,245
143 AEP Pro Serv, Inc. 189 Central Coal Company	978,008 0	1,049,195 0	0	47,491 0	(61,107) 0	0	8,123 0	(5,493) 0
171 CSW Energy, Inc. Miscellaneous	2,421,234 \$3,399,242	2,621,769 \$3,670,964	0 \$0	118,231 \$165,722	(152,697) (\$213,804)	0 \$0	20,110 \$28,233	(14,356) (\$19,849)
						0		
270 Cook Coal Terminal AEP Generating Company	3,484,834 \$3,484,834	4,579,086 \$4,579,086	115,186 \$115,186	173,884 \$173,884	(266,694) (\$266,694)	\$0	28,944 \$28,944	51,320 \$51,320
104 Cardinal Operating Company	73,209,492	93,923,402	1,532,969	3,593,936	(5,470,269)	0	608,048	264,684
181 Ohio Power Co - Generation AEP Generation Resources - FERC	236,872,132 \$310,081,624	369,552,365 \$463,475,767	3,010,489 \$4,543,458	11,476,317 \$15,070,253	(21,523,400) (\$26,993,669)	0 \$0	1,967,362 \$2,575,410	(5,069,232) (\$4,804,548)
290 Conesville Coal Preparation Company	2,213,394 \$312,295,018	4,272,743	0	106,257	(248,852)	0 \$0	18,384	(124,211)
AEP Generation Resources - SEC 175 AEP Energy Partners	14,614,525	\$467,748,510 15,717,248	\$4,543,458 656,214	\$15,176,510 754,335	(\$27,242,521) (915,401)	0	\$2,593,794 121,382	(\$4,928,759) 616,530
419 Onsite Partners AEP Energy Supply	216,646 \$327,126,189	233,103 \$483,698,861	9,736 \$5,209,408	11,267 \$15,942,112	(13,576) (\$28,171,498)	0 \$0	1,799 \$2,716,975	9,226 (\$4,303,003)
245 Dolet Hills Dolet Hills	\$6,233,913 \$6,233,913	\$7,610,213 \$7,610,213	\$1,192,747 \$1,192,747	\$361,313 \$361,313	(\$443,233) (\$443,233)	\$0 \$0	\$51,776 \$51,776	\$1,162,603 \$1,162,603
Total	\$4,327,664,731	\$4,890,262,089	\$95,475,359	\$212,229,225	(\$284,817,725)	\$0	\$35,943,803	\$58,830,662

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AMERICAN ELECTRIC POWER QUALIFIED RETIREMENT PLAN ESTIMATED 2023 NET PERIODIC PENSION COST

	Projected	Market-Related			Expected	Amortization of Prior		Net Periodic
Location	Benefit	Value	Service	Interest	Return	Service	Amortization of	Pension
	Obligation	of Assets	Cost	Cost	on Assets	Cost	Gain/Loss	Cost
140 Appalachian Power Co - Distribution 215 Appalachian Power Co - Generation 150 Appalachian Power Co - Transmission Appalachian Power Co FERC 225 Cedar Coal Co Appalachian Power Co SEC	\$281,852,869 231,667,418 21,501,288 \$535,021,575 1,778,015 \$536,799,590	\$307,191,285 259,986,062 23,378,430 \$590,555,777 4,507,083 \$595,062,860	\$5,121,567 4,029,503 20,474 \$9,171,544 0 \$9,171,544	\$13,757,418 11,275,073 1,017,024 \$26,049,515 83,124 \$26,132,639	(\$17,928,867) (15,173,789) (1,364,455) (\$34,467,111) (263,051) (\$34,730,162)	\$0 0 \$0 0 \$0	\$2,201,348 1,809,386 167,931 \$4,178,665 13,887 \$4,192,552	\$3,151,466 1,940,173 (159,026) \$4,932,613 (166,040) \$4,766,573
211 AEP Texas Central Company - Distribution 147 AEP Texas Central Company - Generation 169 AEP Texas Central Company - Transmission AEP Texas Central Co.	227,883,294	256,217,334	5,703,887	11,121,132	(14,953,831)	0	1,779,831	3,651,019
	1,516,895	14,103,260	0	70,204	(823,121)	0	11,847	(741,070)
	24,607,081	26,905,646	765,186	1,210,295	(1,570,317)	0	192,188	597,352
	\$254,007,270	\$297,226,240	\$6,469,073	\$12,401,631	(\$17,347,269)	\$0	\$1,983,866	\$3,507,301
170 Indiana Michigan Power Co - Distribution 132 Indiana Michigan Power Co - Generation 190 Indiana Michigan Power Co - Nuclear 120 Indiana Michigan Power Co - Transmission 280 Ind Mich River Transp Lakin Indiana Michigan Power Co FERC 202 Price River Coal	141,597,995 93,630,775 250,889,720 33,693,184 33,919,405 \$553,731,079	159,302,370 108,476,118 276,996,964 35,985,202 38,779,447 \$619,540,101 0	2,872,221 1,673,038 7,514,860 639,359 973,459 \$13,672,937	6,915,322 4,561,313 12,495,079 1,649,987 1,682,729 \$27,304,430 0	(9,297,500) (6,331,084) (16,166,610) (2,100,235) (2,263,318) (\$36,158,747)	0 0 0 0 0 \$0	1,105,919 731,282 1,959,517 263,153 264,920 \$4,324,791	1,595,962 634,549 5,802,846 452,264 657,790 \$9,143,411
Indiana Michigan Power Co SEC	\$553,731,079	\$619,540,101	\$13,672,937	\$27,304,430	(\$36,158,747)	\$0	\$4,324,791	\$9,143,411
110 Kentucky Power Co - Distribution 117 Kentucky Power Co - Generation 180 Kentucky Power Co - Transmission 600 Kentucky Power Co - Kammer Actives 701 Kentucky Power Co - Mitchell Actives 702 Kentucky Power Co - Mitchell Inactives Kentucky Power Co - Mitchell Inactives	64,913,428	69,339,184	1,237,993	3,177,110	(4,046,902)	0	506,992	875,193
	27,103,014	29,222,010	234,453	1,301,206	(1,705,509)	0	211,682	41,832
	2,479,880	2,691,810	3,792	118,902	(157,104)	0	19,369	(15,041)
	2,985,552	5,297,303	16,354	131,467	(309,171)	0	23,318	(138,032)
	39,917,982	46,928,945	1,291,085	2,000,596	(2,738,954)	0	311,770	864,497
	19,235,194	31,277,156	0	917,414	(1,825,455)	0	150,232	(757,809)
	\$156,635,050	\$184,756,408	\$2,783,677	\$7,646,695	(\$10,783,095)	\$	\$1,223,363	\$870,640
250 Ohio Power Co - Distribution	363,231,589	409,217,058	7,331,156	17,741,990	(23,883,485)	0	2,836,938	4,026,599
160 Ohio Power Co - Transmission	29,156,743	31,707,227	50,381	1,376,132	(1,850,556)	0	227,722	(196,321)
Ohio Power Co.	\$392,388,332	\$440,924,285	\$7,381,537	\$19,118,122	(\$25,734,041)	\$0	\$3,064,660	\$3,830,278
167 Public Service Co of Oklahoma - Distribution	135,258,586	156,326,764	3,919,602	6,627,406	(9,123,832)	0	1,056,407	2,479,583
198 Public Service Co of Oklahoma - Generation	70,244,696	80,250,251	2,455,054	3,459,502	(4,683,714)	0	548,630	1,779,472
114 Public Service Co of Oklahoma - Transmission	17,809,614	20,477,823	625,953	887,006	(1,195,165)	0	139,098	456,892
Public Service Co. of Oklahoma	\$223,312,896	\$257,054,838	\$7,000,609	\$10,973,914	(\$15,002,711)	\$0	\$1,744,135	\$4,715,947
159 Southwestern Electric Power Co - Distribution 168 Southwestern Electric Power Co - Generation 161 Southwestern Electric Power Co - Texas - Distribution 111 Southwestern Electric Power Co - Texas - Transmission 194 Southwestern Electric Power Co - Transmission Southwestern Electric Power Co.	93,360,573	103,788,485	3,128,784	4,618,983	(6,057,496)	0	729,172	2,419,443
	106,250,156	117,542,187	4,113,799	5,255,800	(6,860,215)	0	829,843	3,339,227
	46,340,007	50,800,099	1,437,669	2,280,549	(2,964,890)	0	361,928	1,115,256
	34,146	38,436	0	1,483	(2,243)	0	267	(493)
	14,548,451	17,588,937	531,662	723,786	(1,026,558)	0	113,627	342,517
	\$260,533,333	\$289,758,144	\$9,211,914	\$12,880,601	(\$16,911,402)	\$0	\$2,034,837	\$7,215,950
119 AEP Texas North Company - Distribution	57,642,668	61,272,231	1,649,990	2,803,750	(3,576,084)	0	450,205	1,327,861
166 AEP Texas North Company - Generation	11,449,904	22,558,416	0	538,296	(1,316,596)	0	89,427	(688,873)
192 AEP Texas North Company - Transmission	10,395,777	11,470,854	404,948	510,934	(669,483)	0	81,194	327,593
AEP Texas North Co.	\$79,488,349	\$95,301,501	\$2,054,938	\$3,852,980	(\$5,562,163)	\$0	\$620,826	\$966,581
230 Kingsport Power Co - Distribution	12,320,088	13,423,677	252,788	602,443	(783,458)	0	96,223	167,996
260 Kingsport Power Co - Transmission	1,446,444	1,575,031	0	68,440	(91,925)	0	11,297	(12,188)
Kingsport Power Co.	\$13,766,532	\$14,998,708	\$252,788	\$670,883	(\$875,383)	\$0	\$107,520	\$155,808
210 Wheeling Power Co - Distribution	13,614,774	14,856,710	271,971	665,334	(867,095)	0	106,335	176,545
200 Wheeling Power Co - Transmission	206,024	611,879	0	9,134	(35,712)	0	1,609	(24,969)
Wheeling Power Co.	\$13,820,798	\$15,468,589	\$271,971	\$674,468	(\$902,807)	\$0	\$107,944	\$151,576
103 American Electric Power Service Corporation	1,420,244,953	1,511,911,462	32,468,151	69,811,730	(88,240,981)	0	11,092,505	25,131,405
293 Elmwood	2,679,366	6,165,591	0	126,983	(359,848)	0	20,927	(211,938)
292 AEP River Operations LLC	31,181,716	56,649,701	0	1,494,225	(3,306,295)	0	243,538	(1,568,532)
American Electric Power Service Corp	\$1,454,106,035	\$1,574,726,754	\$32,468,151	\$71,432,938	(\$91,907,124)	\$0	\$11,356,970	\$23,350,935
143 AEP Pro Serv, Inc.	968,433	1,049,209	0	46,788	(61,236)	0	7,564	(6,884)
189 Central Coal Company	0	0	0	0	0	0	0	0
171 CSW Energy, Inc.	2,424,849	2,651,477	0	117,207	(154,750)	0	18,939	(18,604)
Miscellaneous	\$3,393,282	\$3,700,686	\$0	\$163,995	(\$215,986)	\$0	\$26,503	(\$25,488)
270 Cook Coal Terminal AEP Generating Company	3,526,194	4,702,524	117,493	176,893	(274,457)	0	27,541	47,470
	\$3,526,194	\$4,702,524	\$117,493	\$176,893	(\$274,457)	\$0	\$27,541	\$47,470
104 Cardinal Operating Company 181 Ohio Power Co - Generation AEP Generation Resources - FERC 290 Conesville Coal Preparation Company AEP Generation Resources - SEC 175 AEP Energy Partners 419 Onsite Partners AEP Energy Supply	72,538,213	94,818,924	1,563,662	3,561,397	(5,533,998)	0	566,543	157,604
	230,390,620	371,828,346	3,070,765	11,144,496	(21,701,335)	0	1,799,414	(5,686,660)
	\$302,928,833	\$466,647,270	\$4,634,427	\$14,705,893	(\$27,235,333)	\$0	\$2,365,957	(\$5,529,056)
	2,140,957	4,329,745	0	102,724	(252,701)	0	16,721	(133,256)
	\$305,069,790	\$470,977,015	\$4,634,427	\$14,808,617	(\$27,488,034)	\$0	\$2,382,678	(\$5,662,312)
	15,652,432	16,924,453	669,352	805,684	(987,776)	0	122,250	609,510
	235,558	254,937	9,931	12,212	(14,879)	0	1,840	9,104
	\$320,957,780	\$488,156,405	\$5,313,710	\$15,626,513	(\$28,490,689)	0	\$2,506,768	(\$5,043,698)
245 Dolet Hills Dolet Hills	\$7,382,209	\$8,884,049	\$1,216,628	\$416,422	(\$518,507)	\$0	\$57,657	\$1,172,200
	\$7,382,209	\$8,884,049	\$1,216,628	\$416,422	(\$518,507)	\$0	\$57,657	\$1,172,200
Total	\$4,273,848,729	\$4,890,262,092	\$97,386,970		(\$285,414,543)	\$0	\$33,379,933	\$54,825,484

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AMERICAN ELECTRIC POWER QUALIFIED RETIREMENT PLAN ESTIMATED 2024 NET PERIODIC PENSION COST

	Projected	Market-Related			Expected	Amortization of Prior		Net Periodic
Location	Benefit	Value	Service	Interest	Return	Service	Amortization of	Pension
	Obligation	of Assets	Cost	Cost	on Assets	Cost	Gain/Loss	Cost
140 Appalachian Power Co - Distribution 215 Appalachian Power Co - Generation 150 Appalachian Power Co - Transmission Appalachian Power Co - FERC 225 Cedar Coal Co Appalachian Power Co - SEC	\$276,787,638	\$305,769,500	\$5,183,309	\$13,509,592	(\$17,849,029)	\$0	\$2,041,665	\$2,885,537
	226,329,278	258,058,638	4,078,080	11,022,535	(15,063,949)	0	1,669,470	1,706,136
	20,147,041	22,274,164	20,721	954,656	(1,300,235)	0	148,610	(176,248)
	\$523,263,957	\$586,102,302	\$9,282,110	\$25,486,783	(\$34,213,213)	\$0	\$3,859,745	\$4,415,425
	1,627,196	4,530,989	0	75,905	(264,493)	0	12,003	(176,585)
	\$524,891,153	\$590,633,291	\$9,282,110	\$25,562,688	(\$34,477,706)	\$ 0	\$3,871,748	\$4,238,840
211 AEP Texas Central Company - Distribution 147 AEP Texas Central Company - Generation 169 AEP Texas Central Company - Transmission AEP Texas Central Co.	222,103,523	253,756,999	5,772,649	10,838,042	(14,812,844)	0	1,638,299	3,436,146
	1,358,677	14,712,113	0	62,717	(858,807)	0	10,022	(786,068)
	24,221,006	26,836,266	774,411	1,196,872	(1,566,544)	0	178,661	583,400
	\$247,683,206	\$295,305,378	\$6,547,060	\$12,097,631	(\$17,238,195)	\$0	\$1,826,982	\$3,233,478
170 Indiana Michigan Power Co - Distribution 132 Indiana Michigan Power Co - Generation 190 Indiana Michigan Power Co - Nuclear 120 Indiana Michigan Power Co - Transmission 280 Ind Mich River Transp Lakin Indiana Michigan Power Co FERC 202 Price River Coal Indiana Michigan Power Co SEC	138,905,780 91,609,321 253,683,661 33,283,995 34,068,427 \$551,551,184	158,727,323 108,041,646 283,425,461 35,972,783 39,492,766 \$625,659,979 \$625,659,979	2,906,846 1,693,207 7,605,454 647,067 985,194 \$13,837,768 0 \$13,837,768	6,792,158 4,457,825 12,639,876 1,624,269 1,687,798 \$27,201,926 0 \$27,201,926	(9,265,570) (6,306,837) (16,544,715) (2,099,830) (2,305,356) (\$36,522,358) 0 (\$36,522,358)	0 0 0 0 \$0 \$0	1,024,609 675,737 1,871,243 245,512 251,298 \$4,068,399 0 \$4,068,399	1,458,043 519,932 5,571,858 416,968 618,934 \$8,585,735 0 \$8,585,735
110 Kentucky Power Co - Distribution 117 Kentucky Power Co - Generation 180 Kentucky Power Co - Transmission 600 Kentucky Power Co - Kammer Actives 701 Kentucky Power Co - Mitchell Actives 702 Kentucky Power Co - Mitchel	64,045,666	69,234,250	1,252,918	3,134,078	(4,041,489)	0	472,419	817,926
	25,979,542	28,413,770	237,279	1,254,597	(1,658,629)	0	191,633	24,880
	2,388,698	2,631,692	3,838	114,380	(153,623)	0	17,620	(17,785)
	2,379,031	4,834,016	16,551	113,780	(282,181)	0	17,548	(134,302)
	40,785,801	48,559,608	1,306,649	2,028,656	(2,834,625)	0	300,848	801,528
	18,356,878	31,260,370	0	874,571	(1,824,797)	0	135,406	(814,820)
	\$153,935,616	\$184,933,706	\$2,817,235	\$7,520,062	(\$10,795,344)	\$0	\$1,135,474	\$677,427
250 Ohio Power Co - Distribution	356,470,568	407,927,898	7,419,536	17,434,861	(23,812,437)	0	2,629,429	3,671,389
160 Ohio Power Co - Transmission	27,172,690	30,056,999	50,989	1,283,300	(1,754,551)	0	200,434	(219,828)
Ohio Power Co.	\$383,643,258	\$437,984,897	\$7,470,525	\$18,718,161	(\$25,566,988)	\$0	\$2,829,863	\$3,451,561
167 Public Service Co of Oklahoma - Distribution	132,381,711	155,682,303	3,966,854	6,498,481	(9,087,819)	0	976,485	2,354,001
198 Public Service Co of Oklahoma - Generation	69,053,146	80,160,884	2,484,651	3,406,844	(4,679,322)	0	509,356	1,721,529
114 Public Service Co of Oklahoma - Transmission	17,914,513	20,884,263	633,499	889,092	(1,219,101)	0	132,143	435,633
Public Service Co. of Oklahoma	\$219,349,370	\$256,727,450	\$7,085,004	\$10,794,417	(\$14,986,242)	\$0	\$1,617,984	\$4,511,163
159 Southwestern Electric Power Co - Distribution 168 Southwestern Electric Power Co - Generation 161 Southwestern Electric Power Co - Texas - Distribution 111 Southwestern Electric Power Co - Texas - Transmission 194 Southwestern Electric Power Co - Transmission Southwestern Electric Power Co.	92,787,449	104,546,096	3,166,503	4,576,671	(6,102,788)	0	684,427	2,324,813
	104,994,256	117,730,433	4,163,392	5,205,146	(6,872,412)	0	774,468	3,270,594
	45,671,337	50,738,607	1,455,000	2,251,746	(2,961,822)	0	336,885	1,081,809
	26,541	31,119	0	1,137	(1,817)	0	196	(484)
	14,580,196	17,916,861	538,072	723,447	(1,045,881)	0	107,548	323,186
	\$258,059,779	\$290,963,116	\$9,322,967	\$12,758,147	(\$16,984,720)	\$0	\$1,903,524	\$6,999,918
119 AEP Texas North Company - Distribution	55,581,643	59,811,043	1,669,881	2,710,473	(3,491,418)	0	409,986	1,298,922
166 AEP Texas North Company - Generation	10,603,343	22,451,189	0	491,444	(1,310,569)	0	78,213	(740,912)
192 AEP Texas North Company - Transmission	10,133,209	11,342,888	409,830	499,432	(662,131)	0	74,745	321,876
AEP Texas North Co.	\$76,318,195	\$93,605,120	\$2,079,711	\$3,701,349	(\$5,464,118)	\$0	\$562,944	\$879,886
230 Kingsport Power Co - Distribution	12,114,346	13,376,947	255,836	594,146	(780,868)	0	89,359	158,473
260 Kingsport Power Co - Transmission	1,357,695	1,503,391	0	64,130	(87,759)	0	10,015	(13,614)
Kingsport Power Co.	\$13,472,041	\$14,880,338	\$255,836	\$658,27 6	(\$868,627)	\$0	\$99,374	\$144,859
210 Wheeling Power Co - Distribution 200 Wheeling Power Co - Transmission Wheeling Power Co.	13,377,626	14,796,269	275,249	653,882	(863,719)	0	98,677	164,089
	167,898	598,688	0	7,372	(34,948)	0	1,238	(26,338)
	\$13,545,524	\$15,394,957	\$275,249	\$661,254	(\$898,667)	\$0	\$99,915	\$137,751
103 American Electric Power Service Corporation	1,408,173,087	1,516,317,637	32,859,566	69,130,980	(88,513,725)	0	10,387,087	23,863,908
293 Elmwood	2,523,499	6,237,719	0	117,297	(364,121)	0	18,614	(228,210)
292 AEP River Operations LLC	30,049,474	57,283,115	0	1,460,859	(3,343,852)	0	221,654	(1,661,339)
American Electric Power Service Corp	\$1,440,746,060	\$1,579,838,471	\$32,859,566	\$70,709,136	(\$92,221,698)	\$0	\$10,627,355	\$21,974,359
143 AEP Pro Serv, Inc.	949,049	1,042,354	0	45,835	(60,847)	0	7,000	(8,012)
189 Central Coal Company	0	0	0	0	0	0	0	0
171 CSW Energy, Inc.	2,378,663	2,638,217	0	111,609	(154,004)	0	17,546	(24,849)
Miscellaneous	\$3,327,712	\$3,680,571	\$0	\$157,444	(\$214,851)	\$0	\$24,546	(\$32,861)
270 Cook Coal Terminal AEP Generating Company	3,606,313	4,883,158	118,909	180,834	(285,050)	0	26,601	41,294
	\$3,606,313	\$4,883,158	\$118,909	\$180,834	(\$285,050)	\$0	\$26,601	\$41,294
104 Cardinal Operating Company 181 Ohio Power Co - Generation AEP Generation Resources - FERC 290 Conesville Coal Preparation Company AEP Generation Resources - SEC 175 AEP Energy Partners 419 Onsite Partners AEP Energy Supply	71,844,450 223,201,897 \$295,046,347 2,068,594 \$297,114,941 16,706,139 255,179 \$314,076,259	96,028,951 374,825,955 \$470,854,906 4,405,361 \$475,260,267 18,208,416 278,251 \$493,746,934	1,582,513 3,107,785 \$4,690,298 0 \$4,690,298 677,422 10,051 \$5,377,771	3,520,936 10,795,523 \$14,316,459 99,191 \$14,415,650 855,354 13,187 \$15,284,191	(5,605,607) (21,880,140) (\$27,485,747) (257,159) (\$27,742,906) (1,062,900) (16,243) (\$28,822,049)	0 \$0 0 \$0 0 \$0 0 0 \$0	529,945 1,646,401 \$2,176,346 15,259 \$2,191,605 123,229 1,882 \$2,316,716	27,787 (6,330,431) (\$6,302,644) (142,709) (\$6,445,353) 593,105 8,877 (\$5,843,371)
245 Dolet Hills	\$8,467,775	\$10,130,140	\$1,231,295	\$469,528	(\$591,338)	\$0	\$62,461	\$1,171,946
Dolet Hills	\$8,467,775	\$10,130,140	\$1,231,295	\$469,528	(\$591,338)	\$0	\$62,461	\$1,171,946
Total	\$4,212,673,445	\$4,898,367,506	\$98,561,006	\$206,475,044	(\$285,937,951)	\$0	\$31,073,886	\$50,171,985

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AMERICAN ELECTRIC POWER QUALIFIED RETIREMENT PLAN ESTIMATED 2025 NET PERIODIC PENSION COST

	Projected	Market-Related			Francis d	Amortization of		Net
Location	Benefit Obligation	Value of Assets	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Amortization of Gain/Loss	Periodic Pension Cost
140 Appalachian Power Co - Distribution	\$271,631,428	\$304,418,204	\$5,245,796	\$13,255,727	(\$17,786,995)	\$0	\$1,895,366	\$2,609,894
215 Appalachian Power Co - Generation	221,270,711	256,570,759	4,127,243	10,790,947	(14,991,294)	0	1,543,963	1,470,859
150 Appalachian Power Co - Transmission	18,946,601	21,332,649	20,970	896,398	(1,246,455)	0	132,204	(196,883)
Appalachian Power Co FERC 225 Cedar Coal Co	\$511,848,740 1,482,195	\$582,321,612 4,570,023	\$9,394,009 0	\$24,943,072 68,973	(\$34,024,744) (267,024)	\$0	\$3,571,533 10,342	\$3,883,870 (187,709)
Appalachian Power Co SEC	\$513,330,935	\$586,891,635	\$9,394,009	\$25,012,045	(\$34,291,768)	\$0	\$3,581,875	\$3,696,161
211 AEP Texas Central Company - Distribution	216,209,055	251,319,380	5,842,241	10,577,926	(14,684,459)	0	1,508,644	3,244,352
147 AEP Texas Central Company - Generation	1,210,142	15,375,447	0	55,695	(898,379)	0	8,444	(834,240)
169 AEP Texas Central Company - Transmission	24,050,217	27,004,169	783,746	1,190,558	(1,577,839)	0	167,815	564,280
AEP Texas Central Co.	\$241,469,414	\$293,698,996	\$6,625,987	\$11,824,179	(\$17,160,677)	\$0	\$1,684,903	\$2,974,392
170 Indiana Michigan Power Co - Distribution	136,518,424	158,567,041	2,941,889	6,681,871	(9,264,989)	0	952,586	1,311,357
132 Indiana Michigan Power Co - Generation 190 Indiana Michigan Power Co - Nuclear	89,365,929 256,736,090	107,451,904 290,352,989	1,713,619 7,697,140	4,368,335 12,752,213	(6,278,358) (16,965,172)	0	623,570 1,791,430	427,166 5,275,611
120 Indiana Michigan Power Co - Transmission	32,628,269	35,724,676	654,867	1,597,289	(2,087,374)	0	227,671	392,453
280 Ind Mich River Transp Lakin	34,114,060	40,133,179	997,071	1,686,582	(2,344,961)	0	238,038	576,730
Indiana Michigan Power Co FERC 202 Price River Coal	\$549,362,772 0	\$632,229,789 0	\$14,004,586 0	\$27,086,290 0	(\$36,940,854) 0	\$0 0	\$3,833,295 0	\$7,983,317 0
Indiana Michigan Power Co SEC	\$549,362,772	\$ 632,229,789	\$14,004,586	\$27,086,290	(\$36,940,854)	\$0	\$3,833,295	\$7,983,317
110 Kentucky Power Co - Distribution	63,134,005	69,120,044	1,268,022	3,087,016	(4,038,648)	0	440,531	756,921
117 Kentucky Power Co - Generation	25,193,890	27,963,750	240,140	1,215,681	(1,633,907)	0	175,796	(2,290)
180 Kentucky Power Co - Transmission 600 Kentucky Power Co Kammer Actives	2,294,454 2,266,428	2,569,367 4,885,996	3,884 16,751	109,714 109,833	(150,127) (285,486)	0	16,010 15,814	(20,519) (143,088)
701 Kentucky Power Co Mitchell Actives	41,044,927	49,612,399	1,322,401	2,050,917	(2,898,826)	0	286,400	760,892
702 Kentucky Power Co Mitchell Inactives	17,479,158	31,287,685	0	830,166	(1,828,123)	0	121,965	(875,992)
Kentucky Power Co.	\$151,412,862	\$ 185,439,241	\$2,851,198	\$7,403,327	(\$10,835,117)	\$0	\$1,056,516	\$475,924
250 Ohio Power Co - Distribution	350,564,019	407,781,002	7,508,981	17,146,885	(23,826,429)	0	2,446,135	3,275,572
160 Ohio Power Co - Transmission	25,353,149	28,579,630	51,603	1,195,177	(1,669,893)	0	176,907	(246,206)
Ohio Power Co.	\$375,917,168	\$436,360,632	\$7,560,584	\$18,342,062	(\$25,496,322)	\$0	\$2,623,042	\$3,029,366
167 Public Service Co of Oklahoma - Distribution	129,931,639	155,583,265	4,014,676	6,379,473	(9,090,648)	0	906,625	2,210,126
198 Public Service Co of Oklahoma - Generation	68,058,803	80,329,073	2,514,604	3,356,599	(4,693,585)	0	474,895	1,652,513
114 Public Service Co of Oklahoma - Transmission Public Service Co. of Oklahoma	17,885,857 \$215,876,299	21,170,170 \$257,082,508	641,136 \$7,170,416	888,491 \$10,624,563	(1,236,962) (\$15,021,195)	0 \$0	124,802 \$1,506,322	417,467 \$4,280,10 6
		\$231,002,300		\$10,024,303	(\$13,021,133)			
159 Southwestern Electric Power Co - Distribution	91,580,403	104,719,182	3,204,676	4,529,758	(6,118,687)	0	639,022	2,254,769
168 Southwestern Electric Power Co - Generation 161 Southwestern Electric Power Co - Texas - Distribution	104,128,526 45,143,601	118,393,272 50,851,502	4,213,583 1,472,541	5,176,777 2,225,671	(6,917,656) (2,971,226)	0	726,579 314,999	3,199,283 1,041,985
111 Southwestern Electric Power Co - Texas - Transmission	19,966	24,818	0	838	(1,450)	0	139	(473)
194 Southwestern Electric Power Co - Transmission	14,527,008	18,173,880	544,558	727,433	(1,061,890)	0	101,365	311,466
Southwestern Electric Power Co.	\$255,399,504	\$292,162,654	\$9,435,358	\$12,660,477	(\$17,070,909)	\$0	\$1,782,104	\$6,807,030
119 AEP Texas North Company - Distribution	53,802,736	58,658,092	1,690,012	2,616,036	(3,427,361)	0	375,420	1,254,107
166 AEP Texas North Company - Generation 192 AEP Texas North Company - Transmission	9,526,716 9,919,971	22,142,534 11,271,491	0 414,771	444,972 492,104	(1,293,777)	0	66,475 69,219	(782,330) 317,507
AEP Texas North Co.	\$73,249,423	\$92,072,117	\$2,104,783	\$3,553,112	(658,587) (\$5,379,725)	\$0	\$511,114	\$789,284
020 IC	44 077 755	42 400 007	050.000	500.000	(702.405)		02.577	445.070
230 Kingsport Power Co - Distribution 260 Kingsport Power Co - Transmission	11,977,755 1,269,780	13,409,067 1,432,839	258,920 0	586,966 59,866	(783,485) (83,720)	0	83,577 8,860	145,978 (14,994)
Kingsport Power Co.	\$13,247,535	\$14,841,906	\$258,920	\$646,832	(\$867,205)	\$0	\$92,437	\$130,984
210 Wheeling Power Co - Distribution	13,142,099	14,745,301	278,567	641,075	(861,560)	0	91,702	149,784
200 Wheeling Power Co - Transmission	133,829	590,853	0	5,806	(34,523)	0	934	(27,783)
Wheeling Power Co.	\$13,275,928	\$15,336,154	\$278,567	\$646,881	(\$896,083)	\$0	\$92,636	\$122,001
103 American Electric Power Service Corporation	1,391,895,004	1,517,207,414	33,255,700	68,428,158	(88,649,632)	0	9,712,243	22,746,469
293 Elmwood	2,281,274	6,232,705	0	109,674	(364,174)	0	15,918	(238,582)
292 AEP River Operations LLC American Electric Power Service Corp	29,825,173 \$1,424,001,451	58,951,146 \$1,582,391,265	0 \$33,255,700	1,446,114 \$69,983,946	(3,444,484) (\$92,458,290)	0 \$0	208,111 \$9,936,272	(1,790,259) \$20,717,628
·			\$33,233,100		, ,	•••		
143 AEP Pro Serv, Inc.	929,393	1,035,776 0	0	44,673	(60,520)	0	6,485 0	(9,362)
189 Central Coal Company 171 CSW Energy, Inc.	0 2,193,672	2,482,825	0	0 102,277	0 (145,070)	0	15,307	(27,486)
Miscellaneous	\$3,123,065	\$3,518,601	\$0	\$146,950	(\$205,590)	\$0	\$21,792	(\$36,848)
270 Cook Coal Terminal	3,686,311	5,070,851	120,342	184,570	(296,287)	0	25,722	34,347
AEP Generating Company	\$3,686,311	\$5,070,851	\$120,342	\$184,570	(\$296,287)	\$0	\$25,722	\$34,347
104 Cardinal Operating Company	70,857,106	97,040,790	1,601,591	2 470 426	(E 670 042)	0	494,420	(DE EDE)
181 Ohio Power Co - Generation	216,049,971	378,402,013	3,145,250	3,478,436 10,441,346	(5,670,042) (22,109,830)	0	1,507,534	(95,595) (7,015,700)
AEP Generation Resources - FERC	\$286,907,077	\$475,442,803	\$4,746,841	\$13,919,782	(\$27,779,872)	\$0	\$2,001,954	(\$7,111,295)
290 Conesville Coal Preparation Company	1,996,154	4,489,069	0 \$4.746.944	95,652 \$14,015,434	(262,294)	0	13,929	(152,713)
AEP Generation Resources - SEC 175 AEP Energy Partners	\$288,903,231 17,679,132	\$479,931,872 19,430,932	\$4,746,841 685,588	\$14,015,434 903,879	(\$28,042,166) (1,135,339)	\$0 0	\$2,015,883 123,360	(\$7,264,008) 577,488
419 Onsite Partners	275,408	302,447	10,172	14,192	(17,672)	0	1,922	8,614
AEP Energy Supply	\$306,857,771	\$499,665,251	\$5,442,601	\$14,933,505	(\$29,195,177)	\$0	\$2,141,165	(\$6,677,906)
245 Dolet Hills	\$9,543,967	\$11,384,118	\$1,246,138	\$524,033	(\$665,168)	\$0	\$66,595	\$1,171,598
Dolet Hills	\$9,543,967	\$11,384,118	\$1,246,138	\$524,033	(\$665,168)	\$0	\$66,595	\$1,171,598
Total	\$4,149,754,405	\$4,908,145,718	\$99,749,189	\$203,572,772	(\$286,780,367)	\$0	\$28,955,790	\$45,497,384

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AMERICAN ELECTRIC POWER QUALIFIED RETIREMENT PLAN ESTIMATED 2026 NET PERIODIC PENSION COST

						Amortization of		Net
	Projected Benefit	Market-Related Value	Service	Interest	Expected Return	Prior Service	Amortization of	Periodic Pension
Location	Obligation	of Assets	Cost	Cost	on Assets	Cost	Gain/Loss	Cost
140 Appalachian Power Co - Distribution	\$266,317,121	\$303,064,120	\$5,309,036	\$12,975,765	(\$17,710,396)	\$0	\$1,753,432	\$2,327,837
215 Appalachian Power Co - Generation	216,794,329	255,836,150	4,176,998	10,582,330	(14,950,498)	0	1,427,374	1,236,204
150 Appalachian Power Co - Transmission Appalachian Power Co FERC	17,759,093 \$500,870,543	20,408,000 \$579,308,270	21,223 \$9,507,257	838,909 \$24,397,004	(1,192,598) (\$33,853,492)	0 \$0	116,926 \$3,297,732	(215,540) \$3,348,501
225 Cedar Coal Co	1,343,178	4,624,750	0	62,337	(270,260)	0	8,843	(199,080)
Appalachian Power Co SEC	\$502,213,721	\$583,933,020	\$9,507,257	\$24,459,341	(\$34,123,752)	\$0	\$3,306,575	\$3,149,421
211 AEP Texas Central Company - Distribution	211,384,550	250,125,222	5,912,671	10,337,664	(14,616,764)	0	1,391,756	3,025,327
147 AEP Texas Central Company - Generation	1,070,976	16,094,928	0	49,121	(940,552)	0	7,051	(884,380)
169 AEP Texas Central Company - Transmission AEP Texas Central Co.	23,953,677 \$236,409,203	27,266,229 \$293,486,379	793,195 \$6,705,866	1,189,467 \$11,576,252	(1,593,378) (\$17,150,694)	0 \$0	157,711 \$1,556,518	546,995 \$2,687,942
ALI TEXAS CERTIFICO.	\$230,403,203	\$233,400,313	\$0,103,000	\$11,510,252	(\$11,130,034)	30	\$1,550,510	\$2,001,342
170 Indiana Michigan Power Co - Distribution	134,352,609	158,736,667	2,977,355	6,570,580	(9,276,219)	0	884,578	1,156,294
132 Indiana Michigan Power Co - Generation 190 Indiana Michigan Power Co - Nuclear	87,930,484 258,175,643	107,770,538 295,846,440	1,734,278 7,789,932	4,294,439 12,830,378	(6,297,871) (17,288,610)	0	578,934 1,699,829	309,780 5,031,529
120 Indiana Michigan Power Co - Transmission	32,172,683	35,699,899	662,762	1,574,352	(2,086,223)	0	211,825	362,716
280 Ind Mich River Transp Lakin	34,004,648	40,646,093	1,009,091	1,692,182	(2,375,268)	0	223,887	549,892
Indiana Michigan Power Co FERC 202 Price River Coal	\$546,636,067 0	\$638,699,637 0	\$14,173,418 0	\$26,961,931 0	(\$37,324,191) 0	\$0 0	\$3,599,053 0	\$7,410,211 0
Indiana Michigan Power Co SEC	\$546,636,067	\$638,699,637	\$14,173,418	\$26,961,931	(\$37,324,191)	\$0	\$3,599,053	\$7,410,211
110 Kentucky Power Co - Distribution	62,099,918	68,913,607	1,283,309	3,032,970	(4,027,158)	0	408,866	697,987
117 Kentucky Power Co - Generation	24,381,237	27,497,249	243,034	1,171,149	(1,606,878)	0	160,526	(32,169)
180 Kentucky Power Co - Transmission	2,197,378	2,504,987	3,931	104,982	(146,386)	0	14,468	(23,005)
600 Kentucky Power Co Kammer Actives 701 Kentucky Power Co Mitchell Actives	2,217,839 41,686,937	5,012,576 51,106,347	16,953 1,338,343	106,227 2,084,059	(292,924) (2,986,542)	0	14,602 274,467	(155,142) 710,327
702 Kentucky Power Co Mitchell Inactives	16,536,038	31,291,969	0	775,956	(1,828,633)	0	108,873	(943,804)
Kentucky Power Co.	\$149,119,347	\$186,326,735	\$2,885,570	\$7,275,343	(\$10,888,521)	\$0	\$981,802	\$254,194
250 Ohio Power Co - Distribution	344,575,532	407,811,791	7,599,505	16,842,390	(23,831,617)	0	2.268.686	2,878,964
160 Ohio Power Co - Transmission	23,560,422	27,133,351	52,225	1,107,334	(1,585,613)	0	155,122	(270,932)
Ohio Power Co.	\$368,135,954	\$434,945,142	\$7,651,730	\$17,949,724	(\$25,417,230)	\$0	\$2,423,808	\$2,608,032
167 Public Service Co of Oklahoma - Distribution	127,455,098	155,564,568	4,063,074	6,282,520	(9,090,849)	0	839.165	2,093,910
198 Public Service Co of Oklahoma - Generation	66,962,152	80,446,042	2,544,918	3,308,911	(4,701,088)	0	440,879	1,593,620
114 Public Service Co of Oklahoma - Transmission	17,882,453	21,499,461	648,865	885,222	(1,256,381)	0	117,738	395,444
Public Service Co. of Oklahoma	\$212,299,703	\$257,510,071	\$7,256,857	\$10,476,653	(\$15,048,318)	\$0	\$1,397,782	\$4,082,974
159 Southwestern Electric Power Co - Distribution	90,831,534	105,429,984	3,243,310	4,488,168	(6,161,095)	0	598,035	2,168,418
168 Southwestern Electric Power Co - Generation	103,787,067	119,673,730	4,264,380	5,145,495	(6,993,468)	0	683,334	3,099,741
161 Southwestern Electric Power Co - Texas - Distribution 111 Southwestern Electric Power Co - Texas - Transmission	44,584,434 14,320	50,962,081 19,438	1,490,293 0	2,203,340 583	(2,978,111) (1,136)	0	293,544 94	1,009,066 (459)
194 Southwestern Electric Power Co - Transmission	14,740,286	18,723,834	551,123	738,746	(1,094,179)	0	97,050	292,740
Southwestern Electric Power Co.	\$253,957,641	\$294,809,067	\$9,549,106	\$12,576,332	(\$17,227,989)	\$0	\$1,672,057	\$6,569,506
119 AEP Texas North Company - Distribution	51,686,389	57,173,375	1,710,386	2,521,481	(3,341,085)	0	340,303	1,231,085
166 AEP Texas North Company - Generation	8,701,637	22,129,574	0	403,315	(1,293,203)	0	57,292	(832,596)
192 AEP Texas North Company - Transmission AEP Texas North Co.	9,829,365 \$70,217,391	11,332,784 \$90,635,733	419,771 \$2,130,157	490,079 \$3,414,875	(662,263) (\$5,296,551)	0 \$0	64,717 \$462,312	312,304 \$710,793
ALF Texas Notal Co.	\$10,211,331	\$50,033,733	\$2,130,137	\$3,414,013	(\$3,230,331)	30	\$402,512	\$110,133
230 Kingsport Power Co - Distribution	11,816,630	13,423,598	262,041	578,483	(784,445)	0	77,801	133,880
260 Kingsport Power Co - Transmission Kingsport Power Co.	1,182,918 \$12,999,548	1,363,564 \$14,787,162	0 \$262,041	55,657 \$634,140	(79,684) (\$864,129)	0 \$0	7,788 \$85,589	(16,239) \$117,641
210 Wheeling Power Co - Distribution	12,848,611	14,642,971	281,926	628,359	(855,703)	0	84,595	139,177 (29,271)
200 Wheeling Power Co - Transmission Wheeling Power Co.	103,766 \$12,952,377	588,409 \$15,231,380	0 \$281,926	4,431 \$632,790	(34,385) (\$890,088)	\$0	683 \$85,278	\$109,906
-					, , ,			
103 American Electric Power Service Corporation 293 Elmwood	1,379,006,367 2,213,177	1,522,371,825 6,419,621	33,656,609 0	67,756,102 100,268	(88,964,037) (375,148)	0	9,079,378 14,572	21,528,053 (260,308)
292 AEP River Operations LLC	29.443,210	60,563,561	0	1,426,783	(3,539,200)	0	193,854	(1,918,563)
American Electric Power Service Corp	\$1,410,662,754	\$1,589,355,007	\$33,656,609	\$69,283,153	(\$92,878,385)	\$0	\$9,287,804	\$19,349,182
143 AEP Pro Serv, Inc.	901,320	1,021,029	0	43,095	(59,667)	0	5,934	(10,638)
189 Central Coal Company	0	0	0	0	0	0	0	0
171 CSW Energy, Inc. Miscellaneous	1,996,030 \$2,897,350	2,314,363	0	97,074	(135,246)	0	13,142	(25,030)
Miscellaneous	\$2,897,330	\$3,335,392	\$0	\$140,169	(\$194,913)	\$0	\$19,076	(\$35,668)
270 Cook Coal Terminal	3,757,858	5,256,076	121,793	188,721	(307, 153)	0	24,742	28,103
AEP Generating Company	\$3,757,858	\$5,256,076	\$121,793	\$188,721	(\$ 307,153)	\$0	\$24,742	\$28,103
104 Cardinal Operating Company	70,085,824	98,380,161	1,620,899	3,435,486	(5,749,119)	0	461,445	(231,289)
181 Ohio Power Co - Generation	208,643,923	382,269,864	3,183,167	10,107,853	(22,339,004)	0	1,373,712	(7,674,272)
AEP Generation Resources - FERC 290 Conesville Coal Preparation Company	\$278,729,747 1,923,539	\$480,650,025 4,581,039	\$4,804,066 0	\$13,543,339 92,104	(\$28,088,123) (267,706)	\$0 0	\$1,835,157 12,665	(\$7,905,561) (162,937)
AEP Generation Resources - SEC	\$280,653,286	\$485,231,064	\$4,804,066	\$13,635,443	(\$28,355,829)	\$0	\$1,847,822	(\$8,068,498)
175 AEP Energy Partners	18,687,228	20,712,235	693,853	955,182	(1,210,377)	0	123,037	561,695
419 Onsite Partners AEP Energy Supply	296,249 \$299,636,763	327,532 \$506,270,831	10,294 \$5,508,213	15,227 \$14,605,852	(19,140) (\$29,585,346)	0 \$0	1,951 \$1,972,810	8,332 (\$7,498,471)
245 Dolet Hills Dolet Hills	\$10,687,609	\$12,726,638 \$12,726,638	\$1,261,161 \$1,261,161	\$578,441 \$578,441	(\$743,717) (\$743,717)	\$0 \$0	\$70,367 \$70,367	\$1,166,252
Polet tills	\$10,687,609	\$12,726,638	\$1,261,161	\$578,441	(\$743,717)	\$0	\$70,367	\$1,166,252
Total	\$4,092,583,286	\$4,927,308,270	\$100,951,704	\$200,753,717	(\$287,940,977)	\$0	\$26,945,573	\$40,710,018

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Appendix E: Descriptions of funded status measures

Calculations for Funding Ratios Chart in Section 1: Summary of Results

Prior Year Ratios

	Purpose of Ratio	Asset Measure	Obligation Measure
1	Test ability to apply funding balances to current year MRC	AVA - PFB	FTO
2	Quarterly contribution exemption test for current	AVA – FSCB - PFB	FT
	year		
3	At-risk Prong 1 Test for current year	AVA – FSCB - PFB	FTO
4	At-risk Prong 2 Test for current year	AVA – FSCB - PFB	FTAR, but without loads

Current Year Ratios

	Purpose of Ratio	Asset Measure	Obligation Measure
1	Test ability to apply funding balances to next year's		
	MRC		
2	Quarterly contribution exemption test for next year	Same as for analog	gous Prior Year Ratio
3	At-risk Prong 1 Test for next year		
4	At-risk Prong 2 Test for next year		
5	PBGC 4010 filing gateway test (PBGC FTAP)	AVA – FSCB - PFB	FTO pre-HATFA
	(to determine whether a filing is required next year		
	for the current plan year)		
6	Exemption from establishing SAB in current year:		
	 If PFB applied to current year MRC 	AVA - PFB	FT
	 If PFB not applied to current year MRC 	AVA	FT
7	Eliminate SABs in current year	AVA – FSCB – PFB	FT

Benefit Restriction Ratios

Purpose of Ratio for Plan Year	Assets	Obligations	Year Ratio is Determined
Adjusted Funding Target Attainment Percentage (AFTAP) – Application of Benefit Restrictions under IRC 436	[AVA if AVA/FTO >= 100%; AVA – FSCB – PFB otherwise] + annuity purchases for NHCEs in previous 2 years	FTO + annuity purchases for NHCEs in previous 2 years	Current

Definitions of terms

Term	Short for	Definition
FTAP	Funding target attainment percentage	(AVA – FSCB – PFB) / FTO
PBGC FTAP	FTAP for exemption from ERISA 4010	(AVA – FSCB – PFB) / (FTO pre- HATFA)
FSCB	Funding standard carryover balance	Accumulated contributions in excess of those required in pre-PPA plan years, less amounts applied to MRC or forfeited
PFB	Prefunding balance	Accumulated contributions in excess of those required since PPA applied to the plan, to the extent the plan sponsor elected to create PFB, less amounts subsequently applied to MRC or forfeited
Funding balance	FSCB + PFB	
FTO	Ongoing funding target	Funding target as described in IRC 430, ignoring at-risk assumptions; equals FT for a plan that is not at-risk.
FTO ignoring stabilization	FTO calculated ignoring interest rate stabilization	Same as FTO if the full yield curve is used, or stabilized segment rates fall within the corridors
FTAR	At-risk funding target	Funding target reflecting at-risk assumptions and any applicable loads, as described in IRC 430(i), with no phase-in
FT	Funding target	 Funding target used to calculate MRC. Equals: FTO if the plan is not at-risk. FTAR if the plan has been at risk for at least 5 consecutive plan years. Otherwise, FTO + 20% * (# of consecutive years at-risk) * (the excess, if any, of FTAR over FTO).
FS	Funding shortfall (surplus)	FT – (AVA – funding balances)
PBGC 4010 FS	Funding shortfall for determining whether a controlled group is exempt from an ERISA 4010 filing	FT - AVA See PBGC reporting requirements section of the report for more information.
SAB	Shortfall amortization base	An SAB is established each year equal to the FS less the present value of the SAIs related to SABs established in earlier years. A plan may be exempt from establishing an SAB for a plan year in accordance with the test in the Funding Ratios chart in section 1.

Term	Short for	Definition
TNC	Target normal cost	Present value of benefits expected to accrue, and expenses expected to be paid from plan assets, for the year. Reflects at-risk assumptions if the plan is at-risk (phased-in if plan has been at-risk for fewer than 5 consecutive years as described above)
SAI	Shortfall amortization installment	Amortization for an SAB established in a particular year. SAIs are eliminated if FS is less than or equal to \$0.
MRC	Minimum required contribution	TNC plus SAIs as of the valuation date (assumes no funding waivers and plan is not fully funded). See section 2.4 for more details on this calculation.
AVA	Actuarial value of assets	"Plan assets" under PPA, including discounted receivables and reflecting any smoothing. See section 2.3 for more details.