#### **American Electric Power**



1 Riverside Plaza Columbus, OH 43215 AEP.com

December 29, 2015

Honorable Kimberly D Bose Secretary Federal Energy Regulatory Commission 888 First St., N.E. Washington D.C. 20426

Re: American Electric Power Service Corporation

Docket No. ER16-646-000

#### Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act, 16 U.S.C. Section 824(d), and Section 35.13 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") regulations, American Electric Power Service Corporation ("AEPSC"), on behalf of its affiliates, Appalachian Power Company ("APCo"), Indiana Michigan Power Company ("I&M"), Kentucky Power Company ("KPCo"), Kingsport Power Company ("KgPCo"), Ohio Power Company ("OPCo"), and Wheeling Power Company ("WPCo"), (collectively referred to herein as "AEP East Operating Companies"), and on behalf of its subsidiaries AEP Appalachian Transmission Company Inc. ("APTCo"), AEP Indiana Michigan Transmission Company Inc. ("IMTCo"), AEP Kentucky Transmission Company Inc. ("KTCo"), AEP Ohio Transmission Company Inc. ("OHTCo"), and AEP West Virginia Transmission Company Inc ("WVTCo"). (collectively the "AEP East Transmission Companies") (AEPSC, the AEP East Operating Companies, and the AEP East Transmission Companies are collectively referred to herein as "AEP") submits for filing updated depreciation rates for APCo, WPCo, KPCo, WVTCo, KTCo and OHTCo approved by the Public Service Commission of West Virginia ("PSCWV") and the Kentucky Public Service Commission ("KPSC"), which will be reflected in the formula rate of the AEP Operating Companies, Attachment H-14 of the PJM Interconnection, L.L.C. ("PJM") Open Access Transmission Tariff ("PJM Tariff") and in the formula rate of the AEP East Transmission Companies, Attachment H-20A of the PJM Tariff. <sup>1</sup>

Pursuant to Order No. 714, this filing is submitted by PJM Interconnection, L.L.C. ("PJM") on behalf of AEPSC as part of an XML filing package that conforms with the Commission's regulations. PJM has agreed to make all filings on behalf of the PJM Transmission Owners in order to retain administrative control over the PJM Tariff. Thus, AEPSC has requested PJM submit this revised Attachment H-14B and H-20A in the eTariff system as part of PJM's electronic Intra PJM Tariff.

#### I. Background

In Docket No. ER08-1329, AEP submitted for filing a formula rate and implementation protocols for the AEP pricing zone under Attachment H-14 of the PJM Tariff. The Commission accepted AEP's rate filing subject to hearing and settlement judge procedures and a compliance filing.<sup>2</sup> AEP and the intervening parties in Docket No. ER08-1329 ultimately settled all issues raised with respect to the formula rate, and the settlement ("Attachment H-14 Settlement") was approved by the Commission on October 1, 2010.<sup>3</sup>

Attachment H-14 contains a formula rate for transmission service over the facilities of the AEP East Operating Companies, which is updated annually. As explained in the Attachment H-14 Formula Rate Implementation Protocols, the depreciation rates are "stated values to be used in the rate formula until changed pursuant to an FPA Section 205 or 206 filing." Those stated values are found in Attachment H-14B, Worksheet P. Appendix A to Attachment H-14 (Cost of Service and Formula Rate Settlement Principles) further provides that "AEP will make a Section 205 filing at FERC . . . . to reflect in the formula rate calculations any change in state commission-approved or FERC- approved depreciation rates."

In Docket No. ER10-355, AEP submitted for filing a formula rate and implementation protocols under Attachment H-20 of the PJM Tariff. AEP and the intervening parties in Docket No. ER10-355 ultimately settled all issues raised with respect to the formula rate, and the settlement ("Attachment H-20 Settlement") was approved by the Commission on April 21, 2011.<sup>5</sup>

Attachment H-20A contains a formula rate for transmission service over the facilities of the AEP East Transmission Companies, which is updated annually. As explained in Appendix A to Attachment H-20A Formula Rate Settlement Principles, "The AEP Transmission Companies will record depreciation expense using composites of the depreciation rates attached as Appendix A.1.2, which rates will not be changed absent an Order of the Commission approving such change in a Section 205 or 206 filing at FERC to seek a change in depreciation rates." As stated in the settlement, "the Settling Parties have agreed that the formula rate would use AEP's composite depreciation rates which are based on state commission-approved and FERC-approved depreciation rates."

<sup>&</sup>lt;sup>2</sup> See American Electric Power Service Corp., 124 FERC ¶ 61,306 (2008).

See American Electric Power Service Corp., 133 FERC ¶ 61,007 (2010). On March 14, 2012, in Docket No. ER12-1255 AEP filed amendments to Attachment H-14 to reflect an internal corporate reorganization under which Columbus Southern Power Company merged into Ohio Power Company. The Commission accepted the amendments by letter order. See PJM Interconnection, L.L.C. and American Electric Power Service Corp., Docket No. ER12-1255, Letter Order (May 3, 2012).

<sup>&</sup>lt;sup>4</sup> Attachment H-14 Formula Rate Implementation Protocols, Section 1(g)(i).

<sup>&</sup>lt;sup>5</sup> See AEP Appalachian Transmission Company, Inc., 135 FERC ¶ 61,066 (2011).

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#### **II.** Description of Proposed Changes

Due to recent orders by the PSCWV and the KPSC, the depreciation rates included in Attachment H-14 for APCo, WPCo, and KPCo are now outdated. Additionally, these orders trigger the need to update the depreciation rates included in Attachment H-20 for WVTCo, KTCo, and OHTCo. Descriptions of the proposed changes and underlying orders for each company are provided below.

#### APCo & WPCo

The depreciation rates for APCo and WPCo that generate the book expense included in the formula rate calculation approved as part of the Attachment H-14 Settlement were set in 2007. APCo's and WPCo's depreciation rates recently changed as a result of the Order by the PSCWV in Case No. 14-1151-E-D.. The Depreciation Study Report and PSCWV order approving the underlying depreciation rates can be viewed at the following links:

Depreciation Study Report:

http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=400 623&NotType=%27WebDocket%27

PSCWV Final Order in Case No. 14-1151-E-D:

http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=425 588&NotType=%27WebDocket%27

Consistent with Appendix A to Attachment H-14A of the PJM OATT, AEP seeks Commission authorization to update the depreciation rate inputs in its existing formula rate to reflect the new state-approved depreciation rates for APCo and WPCo. The updated depreciation rates are set forth in Attachment A to this transmittal letter and reflected in revised Worksheet - P – "Calculation of Total Weighted Average Depreciation Rates for Transmission Plant Property Account Effective as of 06/01/2015 for Multiple Jurisdiction Companies Appalachian Power Company" and "Transmission Depreciation Rates Effective 06/01/2015 for Single Jurisdiction Companies Wheeling Power Company." The changes in depreciation rates will result in increased annual transmission depreciation expenses for APCo and WPCo. For APCo, the depreciation rates for Transmission plant increased due to an increase in the net salvage ratio for account 352 and decreases in the average service life for four accounts (accounts 354, 356, 357 and 358). The increase was partially offset by a decrease in the net salvage ratio for account 356 and increases in the average service life for three accounts (accounts 352, 353 and 355). For WPCo the depreciation rates for Transmission plant decreased from 2.70% to 1.84%. Since the average service lives and net salvage values which are the bases for the current depreciation rates were not available at the time of the depreciation study, an analysis of the causes of the change in the depreciation rate was not performed. The annualized effect of the change in depreciation rates can be seen in the

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summaries of prior and new depreciation rates contained in Attachment A, pages 1 through 5

#### **KPCo**

The depreciation rates for KPCo that generate the book expense included in the formula rate calculation approved as part of the Attachment H-14 Settlement were set in 2007. KPCo's depreciation rates recently changed as a result of the Order by the KPSC in Case No. 2014-00396. The Depreciation Study Report and KPSC order approving the underlying depreciation rates can be viewed at the following links:

#### Depreciation Study Report:

http://psc.ky.gov/pscecf/2014-00396/slsharp%40aep.com/12232014121058/Section\_III\_-\_Testimony.pdf - (Exhibit DAD-2)

KPSC Final Order in Case No. 2014-00396:

http://psc.ky.gov/pscscf/2014%20Cases/2014-00396//20150720\_PSC\_ORDER.pdf

Consistent with Appendix A to Attachment H-14A of the PJM OATT, AEP seeks Commission authorization to update the depreciation rate inputs in its existing formula rate to reflect the new state-approved depreciation rates for APCo and WPCo. The updated depreciation rates are set forth in Attachment A to this transmittal letter and reflected in a revised Worksheet - P – "Transmission Depreciation Rates Effective as of 07/1/2015 for Single Jurisdiction Companies Kentucky Power Company." The changes in depreciation rates will result in increased annual transmission depreciation expenses for KPCo. The depreciation rates for Transmission plant increased from 1.71% to 2.66% due to increases in the net salvage ratio for five accounts (accounts 352, 353, 354, 355 and 356) and decreases in the average service life for two accounts (accounts 354, and 355). The increase was partially offset by an increase in the average service life for account 352. The annualized effect of the change in depreciation rates can be seen in the summaries of prior and new depreciation rates contained in Attachment A, page 6.

#### WVTCo, KTCo, and OHTCo

As previously noted, the formula rate for the AEP East Transmission Companies utilizes AEP's composite depreciation rates, which are based on state commission-approved and FERC-approved depreciation rates. Consequently, any updates to the depreciation rates for the AEP East Operating Companies trigger corresponding updates to the AEP East Transmission Companies. Therefore, AEP also proposes updated depreciation rates for the AEP East Transmission Companies, which are based on the new state-approved depreciation rates for APCo, WPCo, and KPCo. These new depreciation rates are set forth in Attachment B to this transmittal letter and reflected in a revised Appendix A.1.2 of Attachment H20A of the PJM OATT.

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#### **III.** Effective Date

AEP seeks approval to update the data inputs regarding depreciation rates in its formula rate to reflect the new state approved depreciation rates effective as of July 1, 2016. While implementation of AEP's request will result in an overall depreciation rate and expense increase, AEP notes that the inclusion of accurate depreciation rates based on state and FERC approvals was an agreed-upon aspect of both the Attachment H-14 and Attachment H-20 Settlements. Therefore, the request in this filing relates to the implementation of the formula rates as originally approved and is not a change to the design of the formula rates themselves. AEP further clarifies that it is not seeking a change in the manner in which the composite depreciation rate is calculated.

#### IV. Contents of this Filing

This filing consists of the following documents:

- a. This transmittal letter;
- b. A spreadsheet setting forth prior and revised state approved depreciation rates and twelve months ending October 31, 2015 for annualized depreciation expense for AEP East Companies (Attachment A, Pages 1-5);
- c. A spreadsheet setting forth prior and revised state approved depreciation rates and twelve months ending October 31, 2015 annualized depreciation expense for AEP East Transmission Companies (Attachment B, Pages 1-3);
- d. Revised Attachment H-14B and Attachment H-20A, Appendix A.1.2 tariff sheet in clean form (Attachment C); and
- f. Revised Attachment H-14B and Attachment H-20A, Appendix A.1.2 tariff sheet in marked form (Attachment D).

Pursuant to Section 35.7 of the Commission's regulations, the contents of this filing are being submitted as part of an XML filing package that conforms to the Commission's eTariff instructions.

#### V. Service

PJM has served a copy of this filing on all PJM Members and on all state utility regulatory commissions in the PJM Region by posting this filing electronically. In accordance with the Commission's regulations, <sup>6</sup> PJM will post a copy of this filing to the FERC filings section of its internet site, located at the following link:

<sup>6</sup> See 18C.F.R §§ 35.2(e) and 385.2010(f)(3).

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http://www.pjm.com/documents/ferc-manuals/ferc-filings.aspx with a specific link to the newly-filed document, and will send an e-mail on the same date as this filing to all PJM Members and all state utility regulatory commissions in the PJM Region<sup>7</sup> alerting them that this filing has been made by PJM and is available by following such link. If the document is not immediately available by using the referenced link, the document will be available through the referenced link within 24 hours of the filing. Also, a copy of this filing will be available on the Commission's eLibrary website located at the following link: <a href="http://www.ferc.gov/docs-filing/elibrary.asp">http://www.ferc.gov/docs-filing/elibrary.asp</a> in accordance with the Commission's regulations and Order No. 714.

Additionally, copies of this filing are also being made available on AEP's website at:

http://www.aep.com/about/codeofconduct/OASIS/TariffFilings/

#### VI. Correspondence

Correspondence relating to this filing should be addressed to:

Amanda Riggs Conner American Electric Power Service Corporation 801 Pennsylvania Ave NW, Suite 320 Washington, DC 20004-2615 Telephone: (202) 383-3436

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PJM already maintains, updates and regularly uses e-mail lists for all PJM members and affected state commissions.

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#### VII. Conclusion

Wherefore, AEP respectfully requests that the Commission accept these revised tariff sheets, effective July 1, 2016 for the AEP East Operating Companies and the AEP East Transmission Companies, and grant any applicable waivers.

Respectfully submitted,

/s/ Amanda R. Conner

Amanda R. Conner Senior Counsel American Electric Power Service Corporation

#### Attachment A

Spreadsheet setting forth prior and revised state approved depreciation rates, and twelve months annualized depreciation expense for AEP East Companies

## APPALACHIAN POWER COMPANY Worksheet - P CALCULATION OF ANNUALIZED DEPRECIATION EXPENSE FOR TRANSMISSION PLANT PROPERTY ACCOUNT

				Current		Prior
		<b>Original Cost</b>	Current	<b>Annual Dep</b>	Prior	<b>Annual Dep</b>
		10/31/2015	Rates (1)	Expense	Rates (2)	Expense
TRANSMISSION PLANT						
Land Improvements	350.1	105,084,795.38	0.66%	693,559.65	0.66%	693,559.65
Energy Storage Equipment	351.0	3,054,157.23	6.67%	203,712.29	0.00%	-
Structures & Improvements	352.0	46,776,533.27	1.60%	748,424.53	1.62%	757,779.84
Station Equipment	353.0	868,316,105.78	1.86%	16,150,679.57	1.98%	17,192,658.89
Towers & Fixtures	354.0	420,334,636.03	1.41%	5,926,718.37	1.25%	5,254,182.95
Poles & Fixtures	355.0	262,038,812.91	2.66%	6,970,232.42	2.71%	7,101,251.83
Overhead Conductors	356.0	499,418,137.64	1.19%	5,943,075.84	1.13%	5,643,424.96
Underground Conduit	357.0	255,431.13	1.41%	3,601.58	1.33%	3,397.23
Underground Conductors	358.0	7,223,822.42	4.86%	351,077.77	3.08%	222,493.73
		2,212,502,431.79		36,991,082.01		36,868,749.08

<sup>(1)</sup> See Worksheet - P Calculation of Total Weighted Average Depreciation Raes for Transmission Plant Property Account Effective as of June 1, 2015 (current rates) for multiple Jurisdiction Companies - Appalachian Power Company.

<sup>(2)</sup> See Worksheet - P Calculation of Total Weighted Average Depreciation Raes for Transmission Plant Property Account Effective as of February 1, 2012 (prior rates) for multiple Jurisdiction Companies - Appalachian Power Company.

#### **AEP EAST COMPANIES**

# Worksheet - P CALCULATION OF TOTAL WEIGHTED AVERAGE DEPRECIATION RATES FOR TRANSMISSION PLANT PROPERTY ACCOUNT EFFECTIVE AS OF June 1, 2015 [CURRENT RATES] FOR MULTIPLE JURISDICTION COMPANIES APPALACHIAN POWER COMPANY

			VIRGINIA			<b>WEST VIRGINIA</b>		F	ERC WHOLESAL	E	F	ERC KINGSPORT	Γ	COMPANY
	PLANT ACCT.	(1) VA SCC RATES	ALLOCATION FACTOR	WTD AVG. DEPREC. RATE	(2) PSC OF WV APPROVED RATES	ALLOCATION FACTOR	WTD AVG. DEPREC. RATE	(3) FERC RATES	ALLOCATION FACTOR	WTD AVG. DEPREC. RATE	(4) FERC RATES	ALLOCATION FACTOR	WTD AVG. DEPREC. RATE	WTD AVG. DEPREC. RATE
TRANSMISSION PLANT (5)														
Land Improvements (VA)	350.1	0.66%	1.000000	0.66%										0.66%
Energy Storage Equipment (WV)	351.0				6.67%	1.000000	6.67%							6.67%
Structures & Improvements	352.0	1.55%	0.469583	0.73%	1.52%	0.437847	0.67%	2.19%	0.036426	0.08%	2.19%	0.056144	0.12%	1.60%
Station Equipment	353.0	1.95%	0.469583	0.92%	1.68%	0.437847	0.74%	2.19%	0.036426	0.08%	2.19%	0.056144	0.12%	1.86%
Towers & Fixtures	354.0	1.14%	0.469583	0.54%	1.54%	0.437847	0.67%	2.19%	0.036426	0.08%	2.19%	0.056144	0.12%	1.41%
Poles & Fixtures	355.0	2.77%	0.469583	1.30%	2.64%	0.437847	1.16%	2.19%	0.036426	0.08%	2.19%	0.056144	0.12%	2.66%
Overhead Conductors	356.0	1.01%	0.469583	0.47%	1.19%	0.437847	0.52%	2.19%	0.036426	0.08%	2.19%	0.056144	0.12%	1.19%
Underground Conduit	357.0	1.23%	0.469583	0.58%	1.45%	0.437847	0.63%	2.19%	0.036426	0.08%	2.19%	0.056144	0.12%	1.41%
Underground Conductors	358.0	3.18%	0.469583	1.49%	7.23%	0.437847	3.17%	2.19%	0.036426	0.08%	2.19%	0.056144	0.12%	4.86%

- (1) As approved in VA Case No. PUE 2011-00037 on Nov. 30, 2011. Depreciation rates were made effective on February 1, 2012.
- (2) Approved by PSC of WV Order dated May 26, 2015 in Case No. 14-1151-E-D effective June 1, 2015.
- (3) Approved by FERC March 2, 1990 in Docket ER90-132
- (4) Approved by FERC March 2, 1990 in Docket ER90-133
- (5) Transmission allocation factors are changed annually in January based on September factors as per the PJM tariff approved in FERC Docket ER08-1329 Attachment H-14B, Part II, pg. 15 of 21.
- (6) Energy Storage Equipment is a new account established per FERC Order 784.

#### **GENERAL NOTES:**

The rates for each AEP company have been approved by their respective regulatory commissions.

APCo falls under the authority of Virginia, West Virginia, and the FERC. Therefore, APCo's rates are a composite of the jurisdictions under which it operates. Each jurisdictions' rate is multiplied by an allocation factor, and the product for each jurisdiction is added with the other jurisdictions to derive the composite rate for the company.

Per the terms of the settlement in this case, AEP will make a 205 filing whenever a company's rates are changed by their commission(s), or if the methodology to calculate the jurisdictional allocator in multiple-state companies changes. Changes in the allocation factors will not necessitate a 205 filing.

#### **AEP EAST COMPANIES**

# Worksheet - P CALCULATION OF TOTAL WEIGHTED AVERAGE DEPRECIATION RATES FOR TRANSMISSION PLANT PROPERTY ACCOUNT EFFECTIVE AS OF February 1, 2012 [PRIOR RATES] FOR MULTIPLE JURISDICTION COMPANIES

APPALACHIAN POWER COMPANY

			VIRGINIA			<b>WEST VIRGINIA</b>		F	ERC WHOLESAL	.E	F	FERC KINGSPOR	Г	COMPANY
	PLANT ACCT.	(1) VA SCC RATES	ALLOCATION FACTOR (5)	WTD AVG. DEPREC. RATE	(2) PSC OF WV APPROVED RATES	ALLOCATION FACTOR (5)	WTD AVG. DEPREC. RATE	(3) FERC RATES	ALLOCATION FACTOR (5)	WTD AVG. DEPREC. RATE	(4) FERC RATES	ALLOCATION FACTOR (5)	WTD AVG. DEPREC. RATE	WTD AVG. DEPREC. RATE
TRANSMISSION PLANT (6)														
Land Improvements (VA)	350.1	0.66%	1.000000	0.66%										0.66%
Structures & Improvements	352.0	1.55%	0.455791	0.71%	1.55%	0.444609	0.69%	2.19%	0.039062	0.09%	2.19%	0.060538	0.13%	1.62%
Station Equipment	353.0	1.95%	0.455791	0.89%	1.95%	0.444609	0.87%	2.19%	0.039062	0.09%	2.19%	0.060538	0.13%	1.98%
Towers & Fixtures	354.0	1.14%	0.455791	0.52%	1.14%	0.444609	0.51%	2.19%	0.039062	0.09%	2.19%	0.060538	0.13%	1.25%
Poles & Fixtures	355.0	2.77%	0.455791	1.26%	2.77%	0.444609	1.23%	2.19%	0.039062	0.09%	2.19%	0.060538	0.13%	2.71%
Overhead Conductors	356.0	1.01%	0.455791	0.46%	1.01%	0.444609	0.45%	2.19%	0.039062	0.09%	2.19%	0.060538	0.13%	1.13%
Underground Conduit	357.0	1.23%	0.455791	0.56%	1.24%	0.444609	0.55%	2.19%	0.039062	0.09%	2.19%	0.060538	0.13%	1.33%
Underground Conductors	358.0	3.18%	0.455791	1.45%	3.18%	0.444609	1.41%	2.19%	0.039062	0.09%	2.19%	0.060538	0.13%	3.08%

<sup>(1)</sup> As approved in VA Case No. PUE 2011-00037 on Nov. 30, 2011. Depreciation rates were made effective on February 1, 2012.

#### **GENERAL NOTES:**

The rates for each AEP company have been approved by their respective regulatory commissions.

APCo falls under the authority of Virginia, West Virginia, and the FERC. Therefore, APCo's rates are a composite of the jurisdictions under which it operates. Each jurisdictions' rate is multiplied by an allocation factor, and the product for each jurisdiction is added with the other jurisdictions to derive the composite rate for the company.

Per the terms of the settlement in this case, AEP will make a 205 filing whenever a company's rates are changed by their commission(s), or if the methodology to calculate the jurisdictional allocator in multiple-state companies changes. Changes in the allocation factors will not necessitate a 205 filing.

<sup>(2)</sup> Approved by PSC of WV Order dated July 26, 2006 in Case No. 05-1278-E-PC-PW-42T effective July 1, 2006.

<sup>(3)</sup> Approved by FERC March 2, 1990 in Docket ER90-132

<sup>(4)</sup> Approved by FERC March 2, 1990 in Docket ER90-133

<sup>(5)</sup> Allocation Factors updated by Regulated Pricing & Analysis in July 2010.

<sup>(6)</sup> Transmission allocation factors are changed annually in January based on September factors as per the PJM tariff approved in FERC Docket ER08-1329 Attachment H-14B, Part II, pg. 15 of 21.

## WHEELING POWER COMPANY Worksheet - P CALCULATION OF ANNUALIZED DEPRECIATION EXPENSE

## FOR TRANSMISSION PLANT PROPERTY ACCOUNT Using Current and Prior Depreciation Rates by Account and Plant Balance

**Twelve Months Ended October 31, 2015** 

				Current		Prior
		<b>Original Cost</b>	Current	Annual Dep	Prior	<b>Annual Dep</b>
		10/31/2015	Rates (1)	Expense	Rates (2)	Expense
TRANSMISSION PLANT						
Structures & Improvements	352.0	767,826.95	0.69%	5,298.01	2.70%	20,731.33
Station Equipment	353.0	54,597,632.95	1.70%	928,159.76	2.70%	1,474,136.09
Towers & Fixtures	354.0	5,234,981.50	0.04%	2,093.99	2.70%	141,344.50
Poles & Fixtures	355.0	42,325,117.56	2.65%	1,121,615.62	2.70%	1,142,778.17
Overhead Conductors	356.0	21,120,016.17	1.12%	236,544.18	2.70%	570,240.44
Underground Conduit	357.0	10,982.00	2.00%	219.64	2.70%	296.51
Underground Conductors	358.0	76,937.00	5.00%	3,846.85	2.70%	2,077.30
		124,133,494.13		2,297,778.05		3,351,604.34

<sup>(1)</sup> Approved by PSC of WV Order dated May 26, 2015 in Case No. 14-1151-E-D effective June 1, 2015.

<sup>(2)</sup> Approved by PSC of WV Order in Case No. PSC 90-243-E-42T.

## KENTUCKY POWER COMPANY Worksheet - P CALCULATION OF ANNUALIZED DEPRECIATION EXPENSE FOR TRANSMISSION PLANT PROPERTY ACCOUNT

				Current		Prior
		<b>Original Cost</b>	Current	<b>Annual Dep</b>	Prior	<b>Annual Dep</b>
		10/31/2015	Rates (1)	Expense	Rates (2)	Expense
TRANSMISSION PLANT						
Land Improvements	350.1	31,632,400.19	1.44%	455,506.56	1.71%	540,914.04
Structures & Improvements	352.0	6,611,300.35	2.08%	137,515.05	1.71%	113,053.24
Station Equipment	353.0	182,959,949.97	2.15%	3,933,638.92	1.71%	3,128,615.14
Towers & Fixtures	354.0	94,975,994.95	2.61%	2,478,873.47	1.71%	1,624,089.51
Poles & Fixtures	355.0	97,763,633.27	3.95%	3,861,663.51	1.71%	1,671,758.13
Overhead Conductors	356.0	136,393,608.17	2.91%	3,969,054.00	1.71%	2,332,330.70
Underground Conduit	357.0	11,590.00	2.99%	346.54	1.71%	198.19
Underground Conductors	358.0	106,066.00	2.62%	2,778.93	1.71%	1,813.73
		550,454,542.90		14,839,376.98		9,412,772.68

<sup>(1)</sup> As per the eettlement agreement in Kentucky Case No. 2014-00396, the Company's recommended depreciation rates were to be used for Transmission Plant effective July 1, 2015.

<sup>(2)</sup> As approved as a part of a settlement agreement in Kentucky Case No. 91-066 on October 28, 1991.

#### Attachment B

Spreadsheet setting forth
prior and revised state approved depreciation rates,
and twelve months ending October 31, 2015
annualized depreciation expense for
AEP East Transmission Companies

## AEP WEST VIRGINIA TRANSMISSION COMPANY Worksheet - P CALCULATION OF ANNUALIZED DEPRECIATION EXPENSE FOR TRANSMISSION PLANT PROPERTY ACCOUNT

				Current		Prior
		<b>Original Cost</b>	Current	<b>Annual Dep</b>	Prior	<b>Annual Dep</b>
		10/31/2015	Rates (1)	Expense	Rates	Expense
TRANSMISSION PLANT						
Structures & Improvements	352.0	-	1.52%	-	1.55%	-
Station Equipment	353.0	221,725,529.99	1.68%	3,724,988.90	1.95%	4,323,647.83
Towers & Fixtures	354.0	3,338,621.62	1.54%	51,414.77	1.14%	38,060.29
Poles & Fixtures	355.0	10,057,693.22	2.64%	265,523.10	2.77%	278,598.10
Overhead Conductors	356.0	7,257,873.94	1.19%	86,368.70	1.01%	73,304.53
Underground Conduit	357.0	-	1.45%	-	1.23%	-
Underground Conductors	358.0	-	7.23%	-	3.18%	-
		242,379,718.77		4,128,295.48		4,713,610.75

<sup>(1)</sup> For AEP West Virginia Transmission Company and AEP Appalachian Transmission Company the formula rates will use the most recently approved depreciation rates in either Virginia or West Virginia. Since depreciation rates were most recently approved by the Public Service Commission of West Virginia Order dated May 26, 2015 in Case No. 14-1151-E-D effective June 1, 2015, the West Virginia rates are used above.

## AEP KENTUCKY TRANSMISSION COMPANY Worksheet - P CALCULATION OF ANNUALIZED DEPRECIATION EXPENSE FOR TRANSMISSION PLANT PROPERTY ACCOUNT

				Current		Prior
		<b>Original Cost</b>	Current	<b>Annual Dep</b>	Prior	<b>Annual Dep</b>
		10/31/2015	Rates (1)	Expense	Rates	Expense
TRANSMISSION PLANT						
Land Improvements	350.1	-	1.44%	-	1.71%	-
Structures & Improvements	352.0	-	2.08%	-	1.71%	-
Station Equipment	353.0	15,570,033.02	2.15%	334,755.71	1.71%	266,247.56
Towers & Fixtures	354.0	-	2.61%	-	1.71%	-
Poles & Fixtures	355.0	-	3.95%	-	1.71%	-
Overhead Conductors	356.0	-	2.91%	-	1.71%	-
Underground Conduit	357.0	-	2.99%	-	1.71%	-
Underground Conductors	358.0	-	2.62%	-	1.71%	-
- -		15,570,033.02		334,755.71		266,247.56

<sup>(1)</sup> For AEP Kentucky Transmission Company the formula rates will use the most recently approved depreciation rates in Kentucky. The depreciation rates used above are based on the settlement approved by the Kentucky Public Service Commission on June 22, 2015 in Case No. 2014-00396 effective July 1, 2015.

## AEP OHIO TRANSMISSION COMPANY Worksheet - P CALCULATION OF ANNUALIZED DEPRECIATION EXPENSE FOR TRANSMISSION PLANT PROPERTY ACCOUNT

				Current		Prior
		<b>Original Cost</b>	Current	<b>Annual Dep</b>	Prior	<b>Annual Dep</b>
		10/31/2015	Rates (1)	Expense	Rates	Expense
TRANSMISSION PLANT						
Land Improvements	350.1	14,472,783.19	1.36%	196,829.85	1.49%	215,644.47
Structures & Improvements	352.0	1,670,279.45	1.64%	27,392.58	1.53%	25,555.28
Station Equipment	353.0	688,610,548.46	1.84%	12,670,434.09	1.78%	12,257,267.76
Towers & Fixtures	354.0	1,798.77	1.92%	34.54	1.48%	26.62
Poles & Fixtures	355.0	299,625,758.13	3.01%	9,018,735.32	2.30%	6,891,392.44
Overhead Conductors	356.0	271,842,616.94	1.88%	5,110,641.20	1.42%	3,860,165.16
Underground Conduit	357.0	14,980,460.80	2.00%	299,609.22	1.50%	224,706.91
Underground Conductors	358.0	17,964,572.41	3.80%	682,653.75	2.22%	398,813.51
Trails & Roads	359.0	-	1.49%	-	1.67%	-
		1,309,168,818.15		28,006,330.55		23,873,572.15

<sup>(1)</sup> For AEP Ohio Transmission Company the formula rates are composite rates calculated as the average of the depreciation rates for AEP Appalachian Transmission Company, AEP Indiana Michigan Transmission Company, and AEP Kentucky Transmission Company. For example, the AEP Ohio Transmission Company total depreciation rate for Plant Account 352 is calculated by dividing the sum of 1.52% + 1.32% + 2.08% by 3 which equals 1.64%.

### Attachment C

Revisions to Section(s) of the PJM Open Access Transmission Tariff

(Clean Format)

## Revisions to Attachment H-14B of the PJM OATT

(Clean Format)

## Cost of Service Formula Rate Using Historic Year FF1 Balances Worksheet G Supporting - Development of Composite State Income Tax Rate COMPANY NAME HERE

State #1 Tax Rate Apportionment Factor - Note 2 Effective State Tax Rate	0.00%
State #2 Tax Rate Apportionment Factor - Note 2	
Effective State Tax Rate	0.00%
State #3 Tax Rate Apportionment Factor - Note 2	
Effective State Tax Rate	0.00%
State #4 Tax Rate Apportionment Factor - Note 2	
Effective State Tax Rate	0.00%
Table 1	0.000/
Total Effective State Income Tax Rate	0.00%

Note 1

The Ohio State Income Tax is being phased-out pro rata over a 5 year period from 2005 through 2009. The taxable portion of income is 20% in 2009. The phase-out factors can be found in the Ohio Revised Code at 5733.01(G)2(a)(v). This tax has been replaced with a Commercial Activities Tax that is included in Schedule H and H-1.

Note 2 Apportionment Factors are determined as part of the Company's annual tax return for that jurisdiction.

	(A)		<b>B</b> )	<b>(C)</b>	<b>(D)</b>	<b>(E)</b>	<b>(F)</b>
Line No.	Account		tal pany	Property	Labor	Other	Non-Allocable
110.	Account		ге 1	Troperty	Labor	Other	11011-Anocabic
1	Revenue Taxes						
2	List Individual Taxes Here	-					-
3	Real Estate and Personal Property Taxes						
4 5	Real and Personal Property - Jurisdiction #1 Real and Personal Property - Jurisdiction #2	-		-			
6	Real and Personal Property - Jurisdiction #3	-		-			
7	Real and Personal Property - Other Jurisdictions	-		-			
8	Payroll Taxes						
9	Federal Insurance Contribution (FICA)	-			-		
10 11	Federal Unemployment Tax State Unemployment Insurance	-			-		
12	Production Taxes	_			-		
13	List Individual Taxes Here	_					_
14		-					-
15	Miscellaneous Taxes						
16 17	List Individual Taxes Here	-					-
17		-				-	
19		-				-	
20		-				-	
21		-					-
22		-					-
23 24	Total Taxes by Allocable Basis						
24	(Total Company Amount Ties to FFI p.114, Ln 14,(c)						
	NOTE 1: The detail of each total company number an		e FERC Form 1 i	is shown on WS H-1.			
	<b>Functional Property Tax Allocation</b>						
2.5	To the Live Diversity of Transport of the Control o		<u>action</u>	<u>Transmsission</u>	<u>Distribution</u>	<u>General</u>	<u>Total</u>
25	Functionalized Net Plant (Hist. TCOS, Lns 212 thru 2 STATE JURISDICTION #1	(22)	-	-	-	-	-
26	Percentage of Plant in STATE JURISDICTION #1						
27	Net Plant in STATE JURISDICTION #1 (Ln 25 * Ln	26) -		-	-	-	-
28	Less: Net Value of Exempted Generation Plant						
29	Taxable Property Basis (Ln 27 - Ln 28)	-		-	-	-	-
30 31	Relative Valuation Factor Weighted Net Plant (Ln 29 * Ln 30)						
32	General Plant Allocator (Ln 31 / (Total - General Plan	_ nt))	0.00%	0.00%	0.00%	-100.00%	
33	Functionalized General Plant (Ln 32 * General Plant)		-	-	-	-	-
33a	Ohio Company Merger Mitigation adjustment (Note 2		31,000,000	(31,000,000)			-
34	Weighted STATE JURISDICTION #1 Plant (Ln 31 +	- 33 + 33a)	31,000,000	(31,000,000)	- 0.000/	-	-
35 36	Functional Percentage (Ln 34/Total Ln 34) Functionalized Expense in STATE JURISDICTION #	<del>1</del> 1	0.00%	0.00%	0.00%	Г	_
30	STATE JURISDICTION #2	71				Ŀ	
37	Percentage of Plant in STATE JURISDICTION #2						
38	Net Plant in STATE JURISDICTION #2 (Ln 25 * Ln	37)	-	-	-	-	-
39	Less: Net Value of Exempted Generation Plant						
40	Taxable Property Basis (Ln 38 - Ln 39)	-		-	_	-	-
41 42	Relative Valuation Factor Weighted Net Plant (Ln 40 * Ln 41)	_		_	_	_	
43	General Plant Allocator (Ln 42 / (Total - General Plant	nt))	0.00%	0.00%	0.00%	-100.00%	
44	Functionalized General Plant (Ln 43 * General Plant)		-	-	-	-	-
45	Weighted STATE JURISDICTION #2 Plant (Ln 42 +		-	-	-	-	-
46 47	Functional Percentage (Ln 45/Total Ln 45)	<del>4</del> 2	0.00%	0.00%	0.00%	г	
47	Functionalized Expense in STATE JURISDICTION # STATE JURISDICTION #3	<del>1</del> 2	-	-		L	-
48	Net Plant in STATE JURISDICTION #3 (Ln 25 - Ln	27 - Ln 38)	_	_	_	_	_
49	Less: Net Value Exempted Generation Plant	/					
50	Taxable Property Basis	-		-	-	-	-
51	Relative Valuation Factor						
52 53	Weighted Net Plant (Ln 50 * Ln 51) General Plant Allocator (Ln 52 / (Total - General Plan	- ht)	0.00%	0.00%	0.00%	-100.00%	
53 54	Functionalized General Plant (Ln 54 * General Plant)		- 0.00%	- 0.00%	- 0.00%	-100.00%	
55 56	Weighted STATE JURISDICTION #3 Plant (Ln 52 + Europianal Paragraphics (Ln 55/Total Ln 55)	54)	0.00%	0.00%	0.000/	-	-
56 57	Functional Percentage (Ln 55/Total Ln 55) Functionalized Expense in STATE JURISDICTION #	<del>‡</del> 3	- 0.00%	0.00%	0.00%	Г	_
58	Total Other Jurisdictions: (Line 7 * Net Plant Allocate		-	<del>-</del>		ŀ	_
59	Total Func. Property Taxes (Sum Lns 36, 47 57, 58)	- /	-	-	-	L	-
						=	

Note 2: This adjustment will apply to AEP Ohio only. This adjustment will be in effect for the Annual Updates prepared in 2012, 2013, 2014, 2015 and 2016.

#### Cost of Service Formula Rate Using 2008 FF1 Balances

Worksheet H-1 Form 1 Source Reference of Company Amounts on WS H  $\,$ 

 $\mathbf{(A)} \qquad \qquad \mathbf{(B)} \qquad \qquad \mathbf{(C)} \qquad \mathbf{(D)}$ 

Line		Total	FERC FORM 1	
No.	Annual Tax Expenses by Type (Note 1)	Company	Tie-Back	FERC FORM 1 Reference
1	Revenue Taxes			
2	Revenue Tax 1	-		
3	Real Estate and Personal Property Taxes			
4	Real and Personal Property - Jurisdiction 1	-		
5	Real and Personal Property - Other Jurisdictions	-		
6	Payroll Taxes			
7	Federal Insurance Contribution (FICA )	-		
0	F			
8	Federal Unemployment Tax	-		
0	Control Manual Control			
9	State Unemployment Insurance	-		
10	Payroll Taxes			
10	Taylon Taxes	-		
11	Production Taxes			
12	Production Tax 1	<del>-</del>		
13	Miscellaneous Taxes			
14	Miscellaneous Tax 1	-		
15	Miscellaneous Tax 2	-		
16	Miscellaneous Tax 3	-		
17	Miscellaneous Tax 4	-		
18	Miscellaneous Tax 5	-		
19	Miscellaneous Tax 6	-		
20				
20	Miscellaneous Tax 7	-		
21	Miggellaneous Tay 9			
21	Miscellaneous Tax 8	<del>-</del> 		
22	Total Taxes by Allocable Basis			
	(Total Company Amount Ties to FFI p.114, Ln 14,(c))			

Note 1: The taxes assessed on each operating company can differ from year to year and between operating companies by both the type of taxes and the states in which they were assessed. Therefore, for each company, the types and jurisdictions of tax expense recorded on this page could differ from the same page in the same company's prior year template or from this page in other operating companies' current year templates. For each update, this sheet will be revised to ensure that the total activity recorded hereon equals the total reported in account 408.1 on P. 114, Ln 14 of the FERC Form 1.

#### Cost of Service Formula Rate Using Historic Year FF1 Balances

						one real FF1 Dalan		
(A)	<b>(B) (C)</b>	(D)	(E)	(F)		ant in Service Additi ( G )	ons (H)	<b>(I)</b>
_			(12)	(1)		(3)	(11)	(1)
<b>I.</b> 1		posite Depreciation Rate	toria Dariad (Hist	orio Voor) (	D 206	In 50 (h)).		
2		n Plant @ Beginning of His n Plant @ End of Historic F						
3	Transmission	i Fiant @ End of Historic F	eriou (misioric 1)	ear) (F.207)	, 111 30,	(g)).	<u> </u>	
4	Average Rale	ance of Transmission Inves	tment				_	
5	_	eciation Expense, Historic					_	
6	-	Depreciation Rate	1005, iii 270				0.00%	
7		to Reflect a Composite Li	fe of 0 Years				0.00%	
II.		erty Placed in Service by		Related De	nreciat	tion Expense		
11,	Calculation of 1 1 op	erty raced in Service by	Composite	Aciated De	ргеста	tion Expense		
			Annual					First Year
	Month in		Depreciation	Annua	al	Monthly	No. Months	Depreciation
8	Service	<b>Capitalized Balance</b>	Rate	Deprecia	tion	Depreciation	Depreciation	Expense
9	January		0.00%	\$	-	\$ -	11	\$ -
10	February		0.00%	\$	-	\$ -	10	\$ -
11	March		0.00%	\$	-	\$ -	9	\$ -
12	April		0.00%	\$	-	\$ -	8	\$ -
13	May		0.00%	\$	-	\$ -	7	\$ -
14	June		0.00%	\$	-	\$ -	6	\$ -
15	July		0.00%	\$	-	\$ -	5	\$ -
16	August		0.00%	\$	-	\$ -	4	\$ -
17	September		0.00%	\$	-	\$ -	3	\$ -
18 19	October November		0.00% 0.00%	\$ \$	-	\$ - \$ -	2	\$ - \$ -
20	December		0.00%	\$ \$	-	\$ - \$ -	0	\$ - \$ -
21		\$ -	0.00%	φ	-	φ -	· -	\$ -
21	Investment	<u> </u>	=				Depreciation Expense	φ -
III.	Plant Transferred							
22			<== This input a					
23							at may be associated with ca	
2.4	(I 7 * I 00)	Φ.	_				and assets transferred from a	subsidiary.
24	(Ln 7 * Ln 22)	\$ -	<== 1 nis input a	area is for a	ıaaıtıoı	nal Depreciation Exp	ense	
IV.	List of Major Proje	cts Expected to be In-Ser	vice in 2009					
						Estimated Cost	35 9 1 9 1	
	Major Zonal					<u>(000's)</u>	Month in Service	
25	<u>Major Zonal</u> <u>Projects</u>							
26	<u> </u>							
30								
31				Suh	total	_	_	

Subtotal

32 PJM Socialized/Beneficiary Allocated Regional Projects

33 34

Cost of Service Formula Rate Using Historic Year FF1 Balances

Worksheet J Supporting Calculation of PROJECTED PJM RTEP Project Revenue Requirement Billed to Benefiting Zones COMPANY NAME HERE

#### I. Calculate Return and Income Taxes with basis point ROE increase for Projects Qualified for Regional Billing.

A. I	Determine 'F	R' with hypothetical	basis point increase in ROE for Identified Projects
------	--------------	----------------------	---

ROE w/o incentives (Projected TCOS, ln 164) Project ROE Incentive Adder

ROE with additional basis point incentive

Determine R	( cost of long t	term debt, cost of	preferred stock and	equity percentage is fi	rom the Projected	ICOS, Ins 162 through 164)
			%		Cost	Weighted cos

	<u>%</u>	Cost	Weighted cost
Long Term Debt	0.00%	0.00%	0.000%
Preferred Stock	0.00%	0.00%	0.000%
Common Stock	0.00%	0.00%	0.000%
		R =	0.000%

#### B. Determine Return using 'R' with hypothetical basis point ROE increase for Identified Projects.

Rate Base (Projected TCOS, ln 78)	-	
R (from A. above)		0.000%
Return (Rate Base x R)		-

#### C. Determine Income Taxes using Return with hypothetical basis point ROE increase for Identified Projects.

•	bettimme medine taxes using keturn with hypothetical basis point KOD mercase for facilitied rojects.	
	Return (from B. above)	
	Effective Tax Rate (Projected TCOS, ln 126)	
	Income Tax Calculation (Return x CIT)	-
	ITC Adjustment	-
	Income Taxes	-

#### II. Calculate Net Plant Carrying Charge Rate (Fixed Charge Rate or FCR) with hypothetical basis point ROE increase.

#### A. Determine Annual Revenue Requirement less return and Income Taxes.

Annual Revenue Requirement, Less TEA Charges, Return and Taxes

Annual Revenue Requirement (Projected TCOS, In 1) T.E.A. & Lease Payments (Projected TCOS, Lns 105 & 106) Return (Projected TCOS, ln 134) Income Taxes (Projected TCOS, In 133)

#### B. Determine Annual Revenue Requirement with hypothetical basis point increase in ROE.

Annual Revenue Requirement, Less TEA Charges, Return and Taxes	-
Return (from I.B. above)	-
Income Taxes (from I.C. above)	_
Annual Revenue Requirement, with Basis Point ROE increase	-
Depreciation (Projected TCOS, ln 111)	<u>=</u>
Annual Rev. Req, w/ Basis Point ROE increase, less Depreciation	-

Incremental FCR with Basis Point ROE increase, less Depreciation

Alinual Rev. Req, w/ basis Folin ROE increase, less Depreciation	-
C. Determine FCR with hypothetical basis point ROE increase.	
Net Transmission Plant (Projected TCOS, ln 48)	-
Annual Revenue Requirement, with Basis Point ROE increase	-
FCR with Basis Point increase in ROE	
Annual Rev. Req, w / Basis Point ROE increase, less Dep.	-
FCR with Basis Point ROE increase, less Depreciation	
FCR less Depreciation (Projected TCOS, ln 9)	

#### III Calculation of Composite Depreciation Rate

Transmission Plant @ Beginning of Historic Period (Historic Year) (P.206, ln 58,(b)): Transmission Plant @ End of Historic Period (Historic Year) (P.207, ln 58,(g)):

<==ROE Adder Cannot Exceed 125 Basis Points

0.00%

0.00%

0.00% 0.00%

0.00%

0.00% <== ROE Including Incentives Cannot Exceed 12.74% Until July 1, 2012

SUMMARY OF PROJECTED ANNUAL RTEP REVENUE REQUIREMENTS							
	Rev Require	W Incentives	Incentive Amounts				
PROJECTED YEAR	Projected `	Year -	- \$ -				

#### Worksheet J - ATRR PROJECTED Calculation for PJM Projects Charged to Benefiting Zones

#### Determine the Revenue Requirement, and Additional Revenue Requirement for facilities receiving incentives.

#### A. Base Plan Facilities (e.g. ER05-925-000) Facilities receiving incentives accepted by FERC in Docket No. **Project Description:** Details Current Year **Projected Year** Investment ROE increase accepted by FERC (Basis Points) REVENUE REQUIREMENTS: Service Year (yyyy) Service Month (1-12) FCR w/o incentives, less depreciation 0.00% Useful life FCR w/incentives approved for these facilities, less dep. 0.00% CIAC (Yes or No) PROJECT. Annual Depreciation Expense RTEP Rev. Req't. **Beginning Depreciation Ending** RTEP Rev. Req't. **Incentive Rev.** Investment with Incentives \*\* **Balance** Balance w/o Incentives Requirement ## Year **Expense**

Current Projected Year ARR	-		
Current Projected Year ARR w/ Incentive		-	
Current Projected Year Incentive ARR	-		

#### **CUMULATIVE HISTORY OF PROJECTED ANNUAL** REVENUE REQUIREMENTS:

CUMULATIVE HISTORY OF PROJECTED ANNUAL INPUT PROJECTED ARR (WITH & WITHOUT INCENTIVES) FROM EACH PRIOR YEAR TEMPLATE BELOW TO MAINTAIN HISTORY OF PROJECTED ARRS OVER THE LIFE OF THE

RTEP	RTEP	
Projected	Projected	
Rev.	Rev.	
Req't.From	Req't.From	
Prior Year	<b>Prior Year</b>	
Template	Template	
	with	
w/o	Incentives	
Incentives	**	

**Project Totals** 

## This is the calculation of additional incentive revenue on projects deemed by the FERC to be eligible for an incentive return. This additional incentive requirement is applicable for the life of this specific project. Each year the revenue requirement calculated for PJM should be incremented by the amount of the incentive revenue calculated for that year on this project.

In order to calculate the proper monthly RTEP billing amount, PJM requires a 12 month revenue requirement for each RTEP project. As a result, notwithstanding the fact that the project was in service for a partial year, the project revenue requirement in the year that the project goes into service has been annualized (shown at the full-year level) so that PJM will collect the correct monthly billings.

<sup>\*\*</sup> This is the total amount that needs to be reported to PJM for billing to all regions.

Annual Depreciation Rate (True-Up TCOS, ln 111)

Worksheet K Supporting Calculation of TRUE-UP PJM RTEP Project Revenue Requirement Billed to Benefiting Zones

COMPANY NAME HERE

I. Calculate Return and Income Taxes with basis point ROE increase for Projects Qualified for Regional Billing. Page 1 of 2 A. Determine 'R' with hypothetical basis point increase in ROE for Identified Projects ROE w/o incentives (True-Up TCOS, ln 164) 0.00% Project ROE Incentive Adder <==ROE Adder Cannot Exceed 100 Basis Points ROE with additional basis point incentive 0.00% <== ROE Including Incentives Cannot Exceed 12.5% Until July 1, 2012 Determine R (cost of long term debt, cost of preferred stock and equity percentage is from the True-Up TCOS, lns 162 through 164) Cost Weighted cost % Long Term Debt 0.00% 0.00% 0.000% Preferred Stock 0.00% 0.00% 0.000% 0.00% 0.00% 0.000% Common Stock R =0.000% B. Determine Return using 'R' with hypothetical basis point ROE increase for Identified Projects. Rate Base (True-Up TCOS, ln 78) 0.000% R (from A. above) Return (Rate Base x R) C. Determine Income Taxes using Return with hypothetical basis point ROE increase for Identified Projects. Return (from B. above) Effective Tax Rate (True-Up TCOS, ln 126) 0.00% Income Tax Calculation (Return x CIT) ITC Adjustment Income Taxes II. Calculate Net Plant Carrying Charge Rate (Fixed Charge Rate or FCR) with hypothetical basis point ROE increase. A. Determine Annual Revenue Requirement less return and Income Taxes. Annual Revenue Requirement (True-Up TCOS, ln 1) T.E.A. & Lease Payments (True-Up TCOS, Lns 105 & 106) Return (True-Up TCOS, ln 134) Income Taxes (True-Up TCOS, ln 133) Annual Revenue Requirement, Less TEA Charges, Return and Taxes B. Determine Annual Revenue Requirement with hypothetical basis point increase in ROE. Annual Revenue Requirement, Less TEA Charges, Return and Taxes Return (from I.B. above) Income Taxes (from I.C. above) SUMMARY OF TRUED-UP ANNUAL REVENUE REQUIREMENTS FOR RTEP PROJECTS W Incentives Incentive Amounts Annual Revenue Requirement, with Basis Point ROE increase Rev Require Depreciation (True-Up TCOS, ln 111) TRUE-UP YEAR Historic Year Annual Rev. Req, w/ Basis Point ROE increase, less Depreciation As Projected in Prior Year WS J C. Determine FCR with hypothetical basis point ROE increase. Actual after True-up \$ Net Transmission Plant (True-Up TCOS, ln 48) True-up of ARR For Historic Year Annual Revenue Requirement, with Basis Point ROE increase FCR with Basis Point increase in ROE 0.00% Annual Rev. Reg, w / Basis Point ROE increase, less Dep. FCR with Basis Point ROE increase, less Depreciation 0.00% FCR less Depreciation (True-Up TCOS, ln 9) 0.00% Incremental FCR with Basis Point ROE increase, less Depreciation 0.00% **Calculation of Composite Depreciation Rate** Transmission Plant @ Beginning of Historic Period () (P.206, ln 58,(b)): Transmission Plant @ End of Historic Period () (P.207, ln 58,(g)): Subtotal Average Transmission Plant Balance for

#### COMPANY NAME HERE Worksheet K - ATRR TRUE-UP Calculation for PJM Projects Charged to Benefiting Zones

IV. Determine the Revenue Requirement, and Additional Revenue Requirement for facilities receiving incentives.

A.	Base	Plan	Faci	lities
----	------	------	------	--------

Facilities receiving incentives accepted by FERC in Docket No.

(e.g. ER05-925-000)

### Project Description:

Details								
Investment		Current Year					Historic Year	
Service Year (yyyy)		ROE increase accepted by FERC (Basis Points)						
Service Month (1-12)		depreciation	R w/o incentives, less preciation					
Useful life	-	FCR w/incentives dep.	CR w/incentives approved for these facilities, less ep.					
CIAC (Yes or No)	No	Annual Depreciati	on Expense				-	
Investment	Beginning	Depreciation	Ending	Average	RTEP Rev. Req't.	RTEP Rev. Req't. with Incentives	Incentive Rev. Requirement	
Year	Balance	Expense	Balance	Balance	w/o Incentives	**	##	

Project Totals - - - -

## This is the calculation of additional incentive revenue on projects deemed by the FERC to be eligible for an incentive return. This

additional incentive requirement is applicable for the life of this specific project. Each year the revenue requirement calculated for PJM

should be incremented by the amount of the incentive revenue calculated for that year on this project.

Page 2 of 2

Historic Year	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	-	-	-
Prior Yr True-Up	-	-	-
True-Up			
Adjustment	-	-	-

#### TRUE UP OF PROJECT REVENUE REQUIREMENT FOR PRIOR YEAR:

CUMULATIVE HISTORY OF TRUED-UP ANNUAL REVENUE REQUIREMENTS:

INPUT TRUE-UP ARR (WITH & WITHOUT INCENTIVES) FROM EACH PRIOR YEAR TEMPLATE BELOW TO MAINTAIN HISTORY OF TRUED-UP ARRS OVER THE LIFE OF THE PROJECT.

RTEP Projected Rev. Req't.From Prior Year WS J w/o Incentives	RTEP Rev Req't True-up w/o Incentives	RTEP Projected Rev. Req't.From Prior Year WS J with Incentives **	RTEP Rev Req't True-up with Incentives **	True-up of Incentive with Incentives **
	\$		\$ -	\$ -
	_		Ψ	Ψ

<sup>\*\*</sup> This is the total amount that needs to be reported to PJM for billing to all regions.

#### AEP East Companies Cost of Service Formula Rate Using Historic Year FF1 Balances Worksheet L Supporting Projected Cost of Debt COMPANY NAME HERE

#### Calculation of Projected Interest Expense Based on Outstanding Debt at Year End

Lina	<b>(A)</b>	<b>(B)</b>	<b>(C)</b>	<b>(D)</b>	<b>(E)</b>
<u>Line</u> <b>Number</b>	<u>Issuance</u>	Principle Outstanding	Interest Rate	Annual Expense (See Note S on Projected Template)	<u>Notes</u>
1	Long Term Debt (FF1.p.			Template)	
2	<u>256-257.h)</u>			-	
3					
<b>4</b> 5	<b>Installment Purchase Cont</b>	racts (FF1.p. 256-257.h, a)		<u>-</u>	
6 7				-	
8				-	
9 10				- -	
11				-	
12 13				- -	
14				-	
15				-	
16 17				- -	
18 19				-	
20				-	
21 22				- -	
23 24				<u>-</u> -	
25				-	
26	Sale/Leaseback		0.000%		
27	Issuance Discount, Premium, & Expenses:				
28	Auction Fees	FF1.p. 256 & 257.Lines Des	scribed as Fees		
29 30	Allowable Hedge Amortizat Amort of Debt Discount	ion (See Ln 45 Below)			
31	and Expenses Amort of Debt	FF1.p. 117.63.c			
31	Premimums (Enter				
	Negative)	FF1.p. 117.65.c			
32 33	Reacquired Debt: Amortization of Loss	FF1.p. 117.64.c			
34	Amortization of Gain	FF1.p. 117.66.c			
35	Total Interest on Long		]		
	Term Debt	-	0.00%	-	
36	Preferred Stock (FF1.p. 250-251)	Preferred Shares Outstanding			
37 38				- -	
39				-	
40	Dividends on Preferred				
	Stock	-	0.00%	-	
41	Eligible Hedging Gains and 35, (E))	Losses (WS M, Ln			
42	Total Projected Capital Struc	cture Balance for Historic Year	r+1 (Projected TCOS, Ln		
43		imit - Five Basis Points of To	otal	-	
44	Capital Limit of Recoverable			0.0005	
	Amount			-	ı
45	Recoverable Hedge Amort of Ln 41 or Ln 44)	ization (Lesser		_	

Worksheet M Supporting Calculation of Capital Structure and Weighted Average Cost of Capital Based on Average of Balances At 12/31/Historic Year-1 & 12/31/Historic Year

(A) (B) (C) (D) (E)

. ,	,	Balances @	Balances @				
		12/31/Historic	12/31/Historic				
Line	2	Year	Year-1	Average			
Deve	lopment of Average Balance of Common						
<u>Equi</u>							
1	Proprietary Capital (112.16.c&d)			-			
2	Less Preferred Stock (Ln 55 Below)		0 -	-			
3	Less Account 216.1 (112.12.c&d)			0			
4	Less Account 219.1 (112.15.c&d)			0			
5	Average Balance of Common Equity	-	-	-			
	lopment of Cost of Long Term Debt Based or	<u>ı Average Outstandi</u>	ing Balance				
6	Bonds (112.18.c&d)			0			
7	Less: Reacquired Bonds (112.19.c&d)			0			
8	LT Advances from Assoc. Companies (112.2	20.c&d)		-			
9	Senior Unsecured Notes (112.21.c&d)			0			
10	Less: Fair Value Hedges (See Note on Ln 12	below)		0			
11	Total Average Debt	-	-	•			_
	NOTE: The balance of fair value hedges o		term debt are to be ex	xcluded from the bala	ance of long term	debt included	in the
12	formula's capital structure. (Column H of						
13	Annual Interest Expense for Historic Year						
14	Interest on Long Term Debt (256-257.33.i)	1.6	.1 (') . CEEDO E 1	1 . 1 . 1	1 .1	11.	
15	Less: Total Hedge Gain/Expense Accumulate		ol. (1) of FERC Form 1	included in Ln 14 an	a snown in Ln 34	below.	
16	Plus: Allowed Hedge Recovery From Ln 39			-			
17 18	Amort of Debt Discount & Expense (117.63.c Amort of Loss on Reacquired Debt (117.64.c						
19	Less: Amort of Premium on Debt (117.65.c)	)					
20	Less: Amort of Fremula on Best (117.03.c)  Less: Amort of Gain on Reacquired Debt (117.03.c)	7.66 c)					
21	Total Interest Expense (Ln 14 + Ln 17 + Ln		))				
	- · · · · · · · · · · · · · · · · · · ·		')	0.00%			
22	Average Cost of Debt for Historic Year (Li		EC	0.00%			
23	NOTE: The net amount of hedging gains or l			rad in this formula rate	should be limite	d to the effective	a portion
	of pre-issuance cash flow hedges that are amount will be limited to five basis points of the total fair value hedges issued on Long Term Debt,	ortized over the life of Capital Structure.	of the underlying debt i Amounts related to the	ssuances. The recover ineffective portion of	ry of a net loss or pre-issuance hedg	passback of a nees, cash settlem	et gain ents of
	this formula and are to be recorded in the "Ex	cludable" column be	elow.	-			
					Amor	tization Period	l
		al Hedge	Less Excludable		Remaining		
	` •	-	mounts (See NOTE	Net Includable	Unamortized		
		oric Year	on Line 23)	Hedge Amount	Balance	Beginning	Ending
24	Senior Unsecured Notes			-			
25	Senior Unsecured Notes			-			
26	Senior Unsecured Notes			-			
27	Senior Unsecured Notes			-			
28	Senior Unsecured Notes			-			
29	Senior Unsecured Notes			-			
30	Senior Unsecured Notes			-			
31	Senior Unsecured Notes			_			
32	Senior Unsecured Notes			_			
33	Senior Unsecured Notes			_			
34	Total Hedge Amortization	- T !! (O	- -fl: 24 (- 22)				
35	Hedge Gain or Loss Prior to Application of R	•		-			
36	Total Average Capital Structure Balance for I			-			
37	Financial Hedge Recovery Limit - Five Basis	s Points of Total Cap	oıtal	0.0005			
38	Limit of Recoverable Amount			-			
39	Recoverable Hedge Amortization (Lesser of	of Ln 35 or Ln 38)		-			
<u>Deve</u>	lopment of Cost of Preferred Stock						
	D 6 10/1			A viona co			
40	Preferred Stock			<u>Average</u>			
40	Preferred Stock 0% Series - Dividend Rate (p. 250-251. 7 &	z 10.a)		Average			
40		z 10.a)		Average			
	0% Series Dividend Rate (p. 250-251. 7 &			Average			

38	Limit of Recoverable Amount	•		-	_
39	Recoverable Hedge Amortization (Lesser of Ln 35 or Ln 3	38)		-	
Deve	lopment of Cost of Preferred Stock				
	Preferred Stock			<b>Average</b>	
40	0% Series Dividend Rate (p. 250-251. 7 & 10.a)				
41	0% Series Par Value (p. 250-251. 8.c)				
42	0% Series Shares O/S (p.250-251. 8 & 11.e)				
43	0% Series Monetary Value (Ln 41 * Ln 42)	-	-	-	
44	0% Series Dividend Amount (Ln 40 * Ln 43)	-	-	-	
45	0% Series Dividend Rate (p. 250-251.a)				
46	0% Series Par Value (p. 250-251.c)				
47	0% Series Shares O/S (p.250-251. e)				
48	0% Series Monetary Value (Ln 46 * Ln 47)	-	-	-	
49	0% Series Dividend Amount (Ln 45 * Ln 48)	-	-	-	
50	0% Series Dividend Rate (p. 250-251.a)				
51	0% Series Par Value (p. 250-251.c)				
52	0% Series Shares O/S (p.250-251.e)				
53	0% Series Monetary Value (Ln 51 * Ln 52)	-	-	-	
54	0% Series Dividend Amount (Ln 50 * Ln 53)	-	-	-	
55	Balance of Preferred Stock (Lns 43, 48, 53)			Year End Total	Agrees to FF1 p.112, Ln 3, col (c) & (d)
56	Dividends on Preferred Stock (Lns 44, 49, 54)		-	-	
57	Average Cost of Preferred Stock (Ln 56/55)	0.00%	0.00%	0.00%	

#### Cost of Service Formula Rate Using Historic Year FF1 Balances

#### Worksheet N - Gains (Losses) on Sales of Plant Held For Future Use

Note: Gain or loss on plant held for future are recorded in accounts 411.6 or 411.7 respectively. Sales will be functionalized based on the description of that asset. Sales of transmission assets will be direct assigned; sales of general assets will be functionalized on labor. Sales of plant held for future use related to generation or distribution will not be included in the formula.

g	(A)	(B)	(C)	(D)	(E)	(F)	(G) <b>Functional</b>	(H) <b>Functionalized</b>	(I) FERC
Line	Date	<b>Property Description</b>	Function (T) or (G) $T = Transmission$ $G = General$	Basis	Proceeds	(Gain) / Loss	Allocator	Proceeds (Gain) / Loss	Account
1						-	0.000%	-	
2						-	0.000%	-	
3						-	0.000%	-	
4				Net (Gain) or Loss t	for Historic Year	-	-	-	

8

Cost of Service Formula Rate Using Historic Year FF1 Balances

Sum of Lines 1 to 8

Worksheet O - Calculation of Postemployment Benefits Other than Pensions Expenses Allocable to Transmission Service COMPANY NAME HERE

#### Total AEP East Operating Company PBOP Settlement Amount

#### Allocation of PBOP Settlement Amount for Historic Year:

#### **Total Company Amount**

		<u>-</u>	our company minutes					
Line#	Company	Actual Expense (Including AEPSC Billed OPEB)	Ratio of Company Actual to Total	Allocation of PBOB Recovery Allowance	Labor Allocator for Historic Year	Actual Expense	Allowable Expense	One Year Functional Expense (Over)/Under
		(A) (Line 14)	(B)=(A)/Total (A)	(C)=(B) *	<b>(D)</b>	$(\mathbf{E})=(\mathbf{A})*(\mathbf{D})$	(F)=(C)*(D)	(G)=(E)-(F)
1	APCo		0.00%	-		-	-	-
2								
3	I&M		0.00%	-		-	-	-
4	KPCo		0.00%	-		-	-	-
5	KNGP		0.00%	-		-	-	-
6	OPCo		0.00%	-		-	-	-
7	WPCo		0.00%	-		-	-	

#### Detail of Actual PBOP Expenses to be Removed in Cost of Service

	<u>APCo</u>	<u>I&amp;M</u>	<u>KPCo</u>	<u>KNGSPT</u>	<u>OPCo</u>	<u>WPCo</u>	<u>Total</u>
9 Direct Charged PBOP Expense per Actuarial Report							-
Additional PBOP Ledger Entries							
10 (from Company Records)							
11 Medicare Subsidy							-
12 Net Company Expense (Ln 9 + Ln 10 + Ln 11)	-	-	-	-	-	-	-
13 PBOP Expenses From AEP Service Corporation (from							-
Company Records)							
14 Company PBOP Expense (Ln 12 + Ln 13)	-	-	-		-	<del>-</del>	

**AEP East** 

#### **AEP EAST COMPANIES**

#### Worksheet - P CALCULATION OF

#### TOTAL WEIGHTED AVERAGE DEPRECIATION RATES

#### FOR TRANSMISSION PLANT PROPERTY ACCOUNT

#### EFFECTIVE AS OF 6/1/2015

#### FOR MULTIPLE JURISDICTION COMPANIES

#### APPALACHIAN POWER COMPANY

		VII	RGINIA	_		WES	T VIRGINIA			FERC WHO	LESALE	FERC	KINGSPORT	PAN Y
		(1)				(2)			_	(3)		(4)		
			WTD AVG.	PSC OF WV			WTD AVG.			WTD $AVG$ .		WTD	AVG.	WTD AVG.
PLANT	VA SCC A	ALLOCATION	DEPREC.	APPROVED	ALLOC	CATION	DEPREC.	FERC	ALLOCATION	DEPREC.	FERC	ALLOCATIO	N DEPREC.	DEPREC.
ACCT.	RATES	FACTOR (5)	RATE	RATES	FACT	OR (5)	RATE	RATES	FACTOR (5)	RATE	RATES	FACTOR (S	) RATE	RATE
TRANSMISSION PLANT														
Land Rights - Va.	350.1 0.66%	1.000000	0.66%											0.66%
Energy Storage Equipment (6)	351.0			6.67%	1.000000	6.67%								6.67%
Structures & Improvements	352.0 1.55%	0.469583	0.73%	1.52%	0.437847	0.67%	2.19%	0.036426	0.08%		2.19%	0.056144	0.12%	1.60%
Station Equipment	353.0 1.95%	0.4695834	0. 92%	1.68%	0.437847	0.74%	2.199	6 0.036426	0.08%		2.19%	0.056144	0.12%	1.86%
Towers & Fixtures	354.0 1.14%	0.469583	0.54%	1.54%	0.437847	0.67%	2.199	% 0.03642	6 0.08%		2.19%	0.056144	0.12%	1.41%
Poles & Fixtures	355.0 2.77%	0.4695834	1.30%	2.64%	0.437847	1.16%	2.199	% 0.03642	6 0.08%		2.19%	0.056144	0.12%	2.66%
Overhead Conductor	356.0 1.01%	0.4695834	0.47%	1.19%	0.437847	0.52%	2.199	% 0.03642	6 0.08%		2.19%	0.056144	0.12%	1.19%
Underground Conduit	357.0 1.23%	0.469583	0.58%	1.45%	0.437847	0.63%	2.199	% 0.03642	6 0.08%		2.19%	0.056144	0.12%	1.41%
<b>Underground Conductors</b>	358.0 3.18%	0.469583	1.49%	7.23%	0.437847	3.17%	2.199	% 0.03642	6 0.08%		2.19%	0.056144	0.12%	4.86%
(1) As approved in VA Case No	. PUE 2011-00037 or	n Nov. 30, 2011		(3) Approved by	FERC March	2, 1990 in E	Oocket ER90-132							

(2) Approved by PSC of WV Order dated May 26, 2015in

Depreciation rates were made effective on February 1, 2012.

Case No. 14-1151-E-D effective June 1, 2015.

2009 Allocation factors based on APCo's 12 monthly Coincident Peaks for twelve months ended September 30, 2008 as provided by AEPSC Regulated Pricing. The demand allocation factors are updated annually as of January 1, based on

- (5) the 12 monthly CP's as of the previous September 30th.
- (6) Energy Storage Equipment is a new account established per FERC Order 784.

#### **GENERAL NOTES:**

The rates for each AEP company have been approved by their respective regulatory commissions.

APCo falls under the authority of Virginia, West Virginia and the FERC. Therefore, APCo's rates are a composite of the jurisdictions under which it operates. Each jurisdictions' rate is multiplied by an allocation factor, and the product for each jurisdiction is added with the other jurisdictions to derive the composite rate for the company.

Per the terms of the settlement in this case, AEP will make a 205 filing whenever a company's rates are changed by their commission(s), or if the methodology to calculate the jurisdictional allocator in multiple-state companies changes. Changes in the allocation factors will not necessitate a 205 filing.

COM

<sup>(4)</sup> Approved by FERC March 2, 1990 in Docket ER90-133

#### **AEP EAST COMPANIES**

#### Worksheet - P CALCULATION OF

#### TOTAL WEIGHTED AVERAGE DEPRECIATION RATES

#### FOR TRANSMISSION PLANT PROPERTY ACCOUNT

#### EFFECTIVE AS OF July 1, 2014

#### FOR MULTIPLE JURISDICTION COMPANIES

#### INDIANA MICHIGAN POWER COMPANY

	INDIANA					MICHIGAN			FERC WHOLESALE			COMPANY
		(1)				(2)			(3)			
					WTD AVG.	MPSC	WTD	AVG.		WTD AVO	$\tilde{g}$ .	WTD AVG.
	PLANT	IURC	ALLOCA'	TION	DEPREC.	APPROVED	ALLOCATION	DEPREC.	<i>FERC</i>	ALLOCATION	DEPREC.	DEPREC.
	ACCT.	RATES	FACTOR	? (4)	RATE	RATES	FACTOR (4)	RATE	RATES	FACTOR (4)	RATE	RATE
TRANSMISSION PLANT												
Land Improvements	350.1		1.27%	.646552	.8211%	1.1700%	.139381	.1631%	1.1700%	.214067	.2505%	1.23%
Structures & Improvements	352.0		1.32%	.646552	.8534%	1.2700%	.139381	.1770%	1.2700%	.214067	.2719%	1.30%
Station Equipment	353.0		1.69%	.646552	1.0927%	1.6500%	.139381	.2300%	1.6500%	.214067	.3532%	1.68%
Towers & Fixtures	354.0		1.60%	.646552	1.0345%	1.4400%	.139381	.2007%	1.4400%	.214067	.3083%	1.54%
Poles & Fixtures	355.0		2.43%	.646552	1.5711%	2.3900%	.139381	.3331%	2.3900%	.214067	.5116%	2.42%
Overhead Conductors	356.0		1.53%	.646552	.9892%	1.4500%	.139381	.2021%	1.4500%	.214067	.3104%	1.50%
Underground Conduit	357.0		1.56%	.646552	1.0086%	1.3900%	.139381	.1937%	1.3900%	.214067	.2976%	1.50%
<b>Underground Conductors</b>	358.0		1.55%	.646552	1.0022%	1.4600%	.139381	.2035%	1.4600%	.214067	.3125%	1.52%
Trails & Roads	359.0		1.49%	.646552	.9634%	1.4700%	.139381	.2049%	1.4700%	.214067	.3147%	1.48%

<sup>(1)</sup> As approved in Indiana Case No.44075.

#### **GENERAL NOTES:**

The rates for each AEP company have been approved by their respective regulatory commissions.

I&M falls under the authority of Indiana, Michigan and the FERC. Therefore, I&M's rates are a composite of the jurisdictions under which it operates. Each jurisdictions to derive the composite rate for the company.

Per the terms of the settlement in this case, AEP will make a 205 filing whenever a company's rates are changed by their commission(s), or if the methodology to calculate the jurisdictional allocator in multiple-state companies changes. Changes in the allocation factors will not necessitate a 205 filing.

<sup>(2)</sup> As approved in Michigan Case No. U16801.

<sup>(3)</sup> FERC wholesale formula rate agreements specify that the depreciation rates in the formula rates change upon approval of MPSC rates in the Michigan jurisdiction.

<sup>(4)</sup> The rates approved for each jurisdiction are updated when approved by that commission. These demand-based allocation factors for all jurisdictions are updated when new rates are approved in one of the jurisdictions. These allocation factors reflect I&M's 12 monthly Coincident Peaks during test year of the most recent rate case.

### AEP EAST COMPANIES PJM FORMULA RATE

#### WORKSHEET P - TRANSMISSION DEPRECIATION RATES

#### EFFECTIVE AS OF 1/1/2009

#### FOR SINGLE JURISDICTION COMPANIES

#### KINGSPORT POWER COMPANY

	PLANT		
	ACCT.	RATES	
		Note 1	
TRANSMISSION PLANT			
Structures & Improvements	352.0	2.10%	
Station Equipment	353.0	2.57%	
Towers & Fixtures	354.0	1.91%	
Poles & Fixtures	355.0	4.20%	
Overhead Conductors	356.0	2.50%	
Underground Conduit	357.0	Note 2	
Underground Conductors	358.0	Note 2	
Composite Transmission Depreciation Rate		2.59%	

#### Reference:

Note 1: Rates Approved In Tennessee Regulatory Authority Case No. U-84-7308.

Note 2: Kingsport Power Company does not have investment in plant accounts 357 or 358. Therefore, there are no depreciation rates approved for these plant accounts.

#### **General Note**

Per the terms of the settlement in this case, AEP will make a 205 filing whenever a company's rates are changed by their commission(s), or if the methodology to calculate the jurisdictional allocator in multiple-state companies changes. Changes in the allocation factors will not necessitate a 205 filing.

#### AEP EAST COMPANIES

#### PJM FORMULA RATE

#### WORKSHEET P - TRANSMISSION DEPRECIATION RATES

#### EFFECTIVE AS OF 7/1/2015

#### FOR SINGLE JURISDICTION COMPANIES

#### KENTUCKY POWER COMPANY

	PLANT	
	ACCT.	RATES
		Note 1
TRANSMISSION PLANT		
Land Rights	350.1	1.44%
Structures & Improvements	352.0	2.08%
Station Equipment	353.0	2.15%
Towers & Fixtures	354.0	2.61%
Poles & Fixtures	355.0	3.95%
Overhead Conductors	356.0	2.91%
Underground Conduit	357.0	2.99%
Underground Conductors	358.0	2.62%

Reference:

Note 1: Rates Approved in Kentucky Public Service Commission Case No. 2014-00396.

#### **General Note:**

Per the terms of the settlement in this case, AEP will make a 205 filing whenever a company's rates are changed by their commission(s), or if the methodology to calculate the jurisdictional allocator in multiple-state companies changes. Changes in the allocation factors will not necessitate a 205 filing.

#### AEP EAST COMPANIES

#### PJM FORMULA RATE

#### $\ \, WORKSHEET \, P \, \hbox{-} \, TRANSMISSION \, DEPRECIATION \, RATES \, \\$

#### **EFFECTIVE AS OF 1/1/2012**

#### FOR SINGLE JURISDICTION COMPANIES

#### OHIO POWER COMPANY

PLANT ACCT.	RATES Note 1
352.0	2.02%
353.0	2.29%
354.0	1.88%
354.0	1.88%
355.0	3.52%
355.0	3.52%
356.0	1.91%
356.0	1.91%
356.0	1.91%
356.0	1.91%
356.0	1.91%
357.0	2.26%
358.0	3.27%
	352.0 353.0 354.0 354.0 355.0 355.0 356.0 356.0 356.0 356.0 356.0

#### Reference:

Note 1: These are the weighted average of the depreciation rates in effect for Columbus Southern Power and Ohio Power prior to the merger of Columbus Southern into Ohio Power.

### **General Note:**

Per the terms of the settlement in this case, AEP will make a 205 filing whenever a company's rates are changed by their commission(s), or if the methodology to calculate the jurisdictional allocator in multiple-state companies changes. Changes in the allocation factors will not necessitate a 205 filing.

#### AEP EAST COMPANIES

#### PJM FORMULA RATE

#### WORKSHEET P - TRANSMISSION DEPRECIATION RATES

#### EFFECTIVE AS OF 6/1/2015

#### FOR SINGLE JURISDICTION COMPANIES

#### WHEELING POWER COMPANY

	PLANT	
	ACCT.	RATES
		Note 1
TRANSMISSION PLANT		
Structures & Improvements	352.0	0.69%
Station Equipment	353.0	1.70%
Towers & Fixtures	354.0	0.04%
Poles & Fixtures	355.0	2.65%
Overhead Conductors	356.0	1.12%
Underground Conduit	357.0	2.00%
Underground Conductors	358.0	5.00%
Trails & Roads	359.0	-

Note 1: Rates Approved in WV Public Service Commission Case No. 14-1151-E-D.

#### **General Note:**

Per the terms of the settlement in this case, AEP will make a 205 filing whenever a company's rates are changed by their commission(s), or if the methodology to calculate the jurisdictional allocator in multiple-state companies changes. Changes in the allocation factors will not necessitate a 205 filing.

## Revisions to Attachment H-20A Appendix of the PJM OATT

(Clean Format)

#### Appendix A to Attachment H-20A

#### American Electric Power Service Corporation Docket No. ER10-355

## Transmission Formula Rate Settlement For

AEP Appalachian Transmission Company Inc., AEP Indiana Michigan Transmission Company Inc., AEP Kentucky Transmission Company Inc., AEP Ohio Transmission Company Inc., and AEP West Virginia Transmission Company Inc.

(collectively "AEP" or "the AEP East Transmission Companies")

#### **Cost of Service and Formula Rate Settlement Principles**

The following Cost of Service and Formula Rate Settlement Principles are a part of the Settlement Agreement being filed \_\_\_\_\_\_, 2010 in Docket No. ER10-355 ("the Settlement"):

#### I. Transmission Formula Rate Design.

- A. Applicability of Wholesale Ratemaking Practices.
  - 1. Only those costs that are recoverable pursuant to FERC accounting and/or ratemaking practices may be recovered by the AEP East Transmission Companies through its FERC transmission formula rate.
  - 2. Adjustments to the AEP cost of service formula rate templates AEP shall take steps to have PJM include in the rate template used to calculate charges to transmission customers all of the adjustments, modifications, and corrections identified in the new formula rate templates included with this Statement of Settlement Principles.
  - 3. Costs of transmission studies
    - a. All costs of transmission studies (*e.g.*, studies of requested new or modified delivery or interconnection points, System Impact Studies and Facilities Studies) associated with service to affiliated (*e.g.*, AEP East Transmission Companies) and non-affiliated customers shall be allocated and charged to customers on a comparable and consistent basis.
    - b. The costs of such studies shall be accounted for in one of the following ways:

- i. The study costs are not included in the formula rate, expressly or otherwise; or
- ii. If the costs are included in the formula rate but also are directly assigned to the entity requesting the study, then the formula rate also will include a revenue credit equal to the amount of study costs that are directly assignable to the requesting entity. Such revenue credit shall be reflected in the formula rate regardless of the specific accounting applied to the costs and revenues.
- iii. Study costs that are not directly assigned to the requesting entity may be treated as a system-wide cost in applying the formula rate, but only if that treatment is applied to all such study costs incurred for any requesting entity.
- c. Transmission service base rate charges under the formula shall be calculated in a manner that allocates the costs of transmission studies to, and recovers those costs from, transmission customers (including the AEP East Operating Companies) on a comparable basis, without regard to whether the costs of those studies are directly assigned or rolled-in, and without regard to whether any particular studies are performed for affiliated or non-affiliated customers.

#### B. Rate Base

- 1. The transmission Rate Base used in the annual update shall be based upon the end-of-year net transmission plant balance from the prior calendar year FERC Form 1 ("FF1"). The true-up of the formula rate, however, shall utilize a Transmission Rate Base that incorporates the arithmetic average of the most recent actual values for beginning-of-year and end-of-year net transmission plant (that is, the average of beginning and end of calendar year balances for plant in service and accumulated depreciation).
  - a. The revenue requirements billed each July and running through June of the next year will be based on a test-year-end rate base style annual transmission revenue requirement ("ATRR") calculation. The initial revenue requirements will be billed July 1, 2010, through June 30, 2011, and will be based on the 2009 expenses and year-end rate base plus projected 2010 calendar transmission plant in service (TPIS) additions. The following year

- the projected revenue requirements will be based on the 2010 expenses and year-end TPIS balances obtained from the 2010 FF1 plus projected 2011 calendar year TPIS additions.
- b. In 2011, the estimated ATRR that was effective during 2010 will be reconciled ("trued-up") with an ATRR that is calculated based on actual 2010 calendar year expenses and rate base reflecting the arithmetic average of the beginning-of-year and end-of-year balances for TPIS and accumulated depreciation. The actual 2010 ATRR ("true-up") to be used for such reconciliation will be posted or otherwise provided to customers in May 2011 at the same time that the projected ATRR to be used for billing purposes during the second half of 2011 (and the first half of 2012) is posted or otherwise provided to customers.
- c. For the true-up of prior year charges, AEP East Transmission Companies will calculate the difference between the estimated ATRR for the prior calendar year that was used for billing purposes and the actual ATRR for that prior calendar year, calculated as described in paragraph B.1.b. above. The difference between the two values (plus interest at the applicable FERC refund interest rates) shall be reflected as an addition to or offset against billed charges for transmission service July 1<sup>st</sup> of the current year through June 30 of the following year. The interest rate will be calculated as per section 35.19a of the Commission's regulations.
- d. The sequence outlined in paragraphs B.1.a, B.1.b and B.1.c above will be repeated each year.
- 2. Cash working capital for each AEP East Transmission Company will be calculated as 1/8 of transmission-related O&M expense not including any portion of A&G expense allocated to transmission.
- 3. AEP will provide as a part of its informational filing each May detail regarding ADIT balances for the historical year that is no less detailed, and selectively more detailed as described in this section, than what is included in FERC Standard Filing Requirements for Period I Statement AF (Accts. 281, 282, and 283) and Statement AG (Acct. 190). In addition, AEP's information on ADIT will distinguish between utility and non-utility ADIT in order to ensure compliance with Section I.D.2.c.i., below.
- 4. AEP will be permitted to include in Rate Base in the formula rate such portion of AEP's FAS 87 cash investment in Pre-Paid Pension cost recorded in FERC Account 165 as may be incurred for AEP System

employees providing service to the AEP Transmission Companies. If AEP elects to include such costs in Rate Base, it will use a labor expense allocation factor to allocate the total company amount to the transmission cost of service ("TCOS").

#### C. Expenses

- 1. The formula rate shall allocate property tax expense based on the methodology of Worksheet Sheet H using the as-filed methodology.
- 2. The formula rate shall reflect the applicable state and federal statutory tax rates in effect during the period the calculated estimated unit charges are applicable. If statutory tax rates change during such period, the effective tax rates used in the formula shall be weighted by the number of days the pre-change rate and the post-change rate each is in effect (*e.g.*, if a 40% rate is in effect nine months and a 32% rate is in effect 3 months, the weighted rate for the 12-month period would be 38%, which reflects 40%  $\times$  0.75 + 32%  $\times$  0.25 = 38%).
- 3. The formula shall include only expenses that are directly related to or properly allocable to transmission service.
- 4. Expenses recorded in FERC Accounts 928 (Regulatory Commission Expense), 930.1 (Safety Related Advertising) and 930.2 (Miscellaneous General Expenses) that are not directly related to or properly allocable to transmission service will be removed from the TCOS. If AEP includes any expenses booked to these accounts in future ATRR updates, AEP must provide supporting information demonstrating that the underlying activities are directly related to providing transmission service.
- 5. The AEP Transmission Companies will record depreciation expense using composites of the depreciation rates attached as Appendix A.1.2, which rates will not be changed absent an Order of the Commission approving such change in a Section 205 or 206 filing at FERC to seek a change in depreciation rates.

#### 6. PBOP Expense

i. Post employment benefit expenses other than pensions (PBOP) included in each update of the AEP Transmission Companies' formula rate will be fixed based on a rate reflecting the ratio of the AEP System-wide PBOP expense divided by the AEP System-wide total employee direct labor expense (PBOP Rate). The initial PBOP Rate shall be \$0.094 per dollar cost of each AEP Transmission Company's direct labor expense.

- ii. The calculation of PBOP expense includable in each Annual Update of the formula rate shall be made pursuant to Worksheet O, which is included in Attachment F to the Settlement Agreement, and which will be included in the formula rate. Using Worksheet O, each AEP Transmission Company will, as part of each Annual Update, compare the allowable PBOP expense, based on the PBOP Rate, to its actual PBOP expense in the prior calendar year in order to determine the adjustment required to increase or decrease the actual PBOP expense to the allowable amount.
- iii. As part of the annual update process, AEP will provide to transmission customers, and include in its informational filing, an independently prepared actuarial report ("Annual Actuarial Report") that includes a ten (10) year forecast of PBOP expenses when that report becomes available. The Settling Parties anticipate that the Annual Actuarial Report normally will be received by the time the annual update is posted or otherwise provided to customers each year.
- iv. During the annual update process conducted in 2014, and every four years thereafter, Worksheet O will be used to determine whether, and if so by what amount, the PBOP allowance rate (\$PBOP per \$ Direct O&M Labor) should be adjusted going forward for the next four years (PBOP Rate Review). If the Annual Actuarial Report issued during the year of any PBOP Rate Review projects PBOP costs during the next four years that, when allocated to the AEP Transmission Companies based on their projected direct labor expenses over that same projected four-year period, absent a change in the PBOP Rate, will likely cause the AEP East Transmission Companies to over or under collect their cumulative PBOP expenses by more than 20% of the projected next four year's total PBOP expense, taking into account the net over or under collection of such expenses during the previous four years, the PBOP Rate shall be adjusted. In order to determine whether continued use of the then approved PBOP Rate is likely to result in the AEP Companies' incurrence of a cumulative allowance of PBOP costs under the formula rate will result in a cumulative over or under-recovery of actual PBOP expenses exceeding 20% over the subsequent four year period, Worksheet O will be used to determine the following PBOB expense metrics:
  - (a) the level of cumulative over or under collections of PBOP expense during the time since the PBOP allowance rate was last set, including carrying costs based on the weighted average cost of capital ("WACC") each year from the

- Formula rate True-Up transmission cost-of-service ("TCOS") analyses;
- (b) the cumulative net present value ("CNPV") of projected PBOP costs during the next four years, as estimated by the then current Actuarial Report, assuming a discount rate equal to the True-Up TCOS WACC for the immediately prior calendar year ("Prior Year WACC"); and
- (c) the CNPV of continued collections over the next four years based on the projected AEP Transmission Companies' direct labor expenses and the then effective PBOP allowance rate, assuming a discount rate equal to the Prior Year WACC.

If the absolute value of (a) + (b) - (c) exceeds 20% of (b), then the PBOP allowance rate used in the formula rate calculation shall be changed to the value that will cause the projected result of

- (a) + (b) (c) to equal zero. If the projected over or under collection during the next four years, (a) + (b) (c), is less than 20% of (b), then the PBOP Rate will continue in effect for the next four years at the then effective rate.
- v. If it is determined through the foregoing procedure that the AEP Companies' cumulative PBOP Rate will over-recover or under-recover actual PBOP expenses by more than 20% over the subsequent four-year period, AEP shall make a filing under FPA § 205 to change the PBOP Rate stated in the formula rate. No other changes to the formula rate may be included in that filing. Neither AEP nor any Settling Party may raise in connection with such filing any issue affecting the formula rate other than the level of allowable PBOP Rate.
- vi. The foregoing procedure for required updating of the formula rate's stated PBOP Rate shall not affect either: (i) AEP's right to make filings under FPA § 205 to address aspects of the formula rate other than PBOP expense, or (ii) customers' rights to make filings under FPA § 206 to address aspects of the formula rate other than the PBOP expense.

#### 7. Formation Costs

a. One half of the AEP Transmission Companies' Formation costs incurred before June 30, 2010 will be included in the formula rate, with such amount to be allocated equally among the AEP Transmission Companies and amortized over four years. There will be no carrying charges on the unamortized balance of

recoverable Formation costs. Formation costs incurred after June 30, 2010 shall not be included in the transmission formula rates of the AEP Transmission Companies (or the AEP Operating Companies) and shall not be otherwise recoverable in FERCregulated rates. For purposes of such rate exclusion, post-June 30, 2010 formation costs include, but are not limited to, all costs associated with obtaining any necessary federal, state or local approvals for formation/operation of the AEP Transmission Companies, all costs associated with establishment of the AEP Transmission Companies and the evaluation of how to accomplish same, and any other category of cost that AEP treated as a formation cost for purposes of its request to recover pre-June 30, 2010 formation costs. In its Annual Update filings, AEP Transmission Companies shall provide information sufficient to permit verification that such formation costs have been excluded from the formula rates. AEP reserves the right to seek recovery of post-June 30, 2010 formation costs associated with obtaining necessary state or local approvals (regarding state-related costs) from the applicable state regulatory commission.

#### D. Capital Structure, Cost of Capital and Return on Equity

#### 1. Return on Equity

- a. The Settlement shall establish on a non-precedential basis a base return on common equity ("Base ROE") used in the OATT transmission formula rates applicable to the AEP East zone of 10.99%, plus a 50 basis point adder for continued RTO participation (for a total of 11.49% ROE). This ROE shall remain in effect for a period of at least 36 months.
- b. The Settlement shall not establish a lower or upper end of the zone of reasonableness, but for a period of 36 months from the effective date of the formula rate, AEP will limit any request for an incentive ROE pursuant to Order No. 679 and Order No. 679-A to not more than the total ROE plus 125 basis points, (i.e., 12.74% total incentive ROE). Such incentive ROE must be within the then-applicable zone of reasonableness as determined in a Section 205 or 206 proceeding. Settling Parties reserve the right to protest any request by AEP for incentive rates including any request for an incentive ROE.

#### 2. Capital Structure / Cost of Capital:

a. In the annual true-up calculations, AEP shall use the arithmetic average of the beginning-of-year and end-of-year balances of long-

term debt, common and preferred equity, and shall use actual calendar year long term debt interest expenses, preferred dividends, and approved ROE. The long term debt balances and long term debt cost rate shall not include any amounts related to hedging activity.

- h. AEP shall use the most recent available FF1 actual end-of-year balances of outstanding long term debt (less the balance of any hedges), preferred equity, and common equity, in the projected ATRR used for billing purposes. The estimated cost rate for long term debt for the Projected Rate Year shall reflect the prior calendar year actual cost of long term debt (including periodic expenses such as remarketing and letter of credit fees, and related amortizations, as applicable, of issuance/reacquisition cost and discount or premium amortizations) for debt outstanding during the full year and the annualized cost of any issuances that occur after January 1 of the prior calendar year for a full twelve months coupon interest expense. However, any amortization of gains or losses on interest rate derivative hedging shall be excluded from long-term-debt cost annual and annualized expenses. AEP will reflect the calculation of its debt cost in Worksheets L and M.
- c. AEP is not restricted from hedging at its discretion, and all interest rate hedge gains and losses will be excluded from the formula rate for both the Projected and True-Up rates.
- d. AEP East Transmission Companies will establish LTD and Equity investments in the AEP East Transmission Companies as soon as is practicable (actual capital structure and long term debt costs and preferred equity costs). Until that time, the AEP East Transmission Companies will use the actual consolidated (weighted composite) capital structure and LTD cost rate of the AEP Operating Companies in PJM {The AEP Operating Companies in PJM are: Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, and Wheeling Power Company} subject to a 50% equity ratio cap, as further explained below. Appendix A-1.1 to this Attachment A-1 describes the manner in which the weighted average composite capital structure and cost of long term debt and preferred equity costs of the AEP East Operating Companies in PJM shall be calculated.
- e. In transitioning from the use of the proxy composite capital cost of the East Operating Companies in PJM to an actual capital structure, long term debt cost and preferred equity cost, a transitioning East Transmission Company's actual capital structure

and cost rates will be implemented for the Projected TCOS in the first formula rate Annual Update after the issuance of long-term debt or allocation of debt financing from an associated company establishing the transitioning East Company's actual capital structure and cost of debt. The True-Up TCOS in that Annual Update will continue to be based on the East Operating Companies' composite capital structure and LTD cost, and preferred equity costs.

- f. The first long term debt in the actual capital structure of an AEP Transmission Company is expected to be an allocation of proceeds from a debt issuance of AEP Transmission Company LLC or AEP Transmission Holding Company LLC (refer to page 7 of Exhibit AEP 100 for the AEPTCo Corporate Structure). The AEP Transmission Companies {The AEP Transmission Companies include the AEP East Transmission Companies and AEP Southwestern Transmission Company Inc., and AEP Oklahoma Transmission Co., Inc.} would draw debt financing from this issuance, as well as equity infusions from AEP Transmission Company LLC or AEP Transmission Holding Company LLC, based on their individual expenditure levels to establish their actual capital structure. The interest rate of this debt financing, along with any associated issuance costs incurred (not to include any costs related to any hedging activities), would define the initial cost of debt for the affected AEP Transmission Companies. This initial debt financing and all subsequent allocations of associated company (AEP Transmission Company LLC or AEP Transmission Holding Company LLC or a higher affiliate in AEP, Inc.) long term debt shall be recorded in Account 430 Advances from Associated Companies in the FERC Form No. 1 reports of the affected AEP Transmission Companies. However, long term debt issuances and equity of the AEP Operating Companies shall not be used to finance debt or equity in the actual capital structure of the AEP Transmission Companies. The debt cost rate of long term debt issuances allocated from associated companies to the AEP Transmission Companies shall be at cost.
- g. In the event there is a construction draw down loan, the Companies will adopt the yield to maturity (YTM) approach filed in the PATH Settlement Agreement Docket No. ER08-386-000 in determining the cost of debt for such draw down loan[s], and illustrated in Attachment A.1.3. There is an annual and final (at end of loan) true-up of YTM, consistent with actual debt cost experience. Workpapers showing the calculation of the yield to maturity cost and true-up shall be included in the Annual Update(s) in which such charges are proposed to be included in the Projected rate.

- h. When an individual East Transmission Company has an actual capital structure, which is first achieved when the Transmission Company issues its own first long term debt issuance in its own name, or the individual Transmission Company has debt financing specifically allocated from an issuance by AEP Transmission Company LLC or AEP Transmission Holding Company LLC or a higher AEP corporate entity as described in (f) above, the actual long term debt cost and capital structure of that individual East Transmission Company shall be used in the Projected and True Up formula rates for that individual company, subject to a 50% Equity Ratio cap described below and subject to transition year treatment as described in (e) of this section. The True-up and Projected ATRR of the remaining East Transmission Companies which have not yet issued their own long term debt, or received a specific allocation of debt financing by an associated company for the purpose of rate making, shall continue to be based on the consolidated (composite) actual weighted average capital structure, long term debt cost, and preferred equity cost of all the East Operating Companies in PJM (including the costs of the operating company geographically associated with the individual transmission company which has established an actual capital structure and long-term debt cost).
- i. In applying the formula rate, the balance amounts of common equity, used in determining the weighted average cost of capital to be used for the AEP East Transmission Companies, shall not exceed 50% percent of the total projected and true-up capitalization ("Equity Cap"), regardless of the actual amounts of common equity capital outstanding. The Equity Cap applies to both the implementation of the consolidated East Operating Company's actual capital structure and to the implementation of an individual East Transmission Company actual capital structure. The Equity Cap can be removed or adjusted only after June 30, 2013 and only through a filing under section 205 or 206 of the Federal Power Act. When applied to the consolidated East Operating Companies' actual capital structure, the individual Operating Company equity caps pursuant to the East Operating Companies' settlement in Docket ER08-1329 shall be applied first before the 50% Equity Cap pursuant to the instant settlement is applied to the weighted composite East Operating Companies' capital structure. The composite weighted average long term debt cost rate of the East Operating Companies, exclusive of hedging costs and Indiana-Michigan Operating Company's spent nuclear fuel disposal funding costs, shall apply.
- j. If the percentage of common equity in the East Operating

Companies' composite (consolidated) capitalization or any AEP East Transmission Company's actual capitalization exceeds the applicable Equity Cap, the amount of common equity exceeding the Equity Cap shall be assigned the same cost rate as long-term debt in the formula rate cost of capital calculations.

- E. Revenue Credits-- The following principles shall be stated in the formula rate:
  - 1. If the AEP East Transmission Companies have any directly assigned transmission facilities, the revenue credits in the AEP East formula rate shall include all revenues associated with those directly assigned transmission facilities, irrespective of whether the loads of the customer are included in the formula rate divisor; provided, however, such addition to revenue credits shall not be reflected if the costs of such directly assigned transmission facilities are not included in the transmission plant balances on which the formula rate ATRR is based.
  - 2. All transmission services revenues not credited to customers in monthly PJM billings shall be included in the formula rate calculation as reductions to the ATRR. Such amounts shall include transmission revenues received from PJM or other PJM Transmission Owners where the associated loads are not in the AEP Zone divisor, unless the revenues are attributable to AEP's base transmission rate charges for Network Integration Transmission Service ("Network Service") or long-term firm Point-to-Point Transmission Service.

#### F. Allocators.

- 1. The allocations of Administrative & General (A&G) expenses identified by three-digit FERC account in the Formula Rate Template and Worksheet F, Supporting Allocation of Specific O&M or A&G Expenses, may not be changed except through a filing under FPA § 205 or 206. If AEP wishes to reflect new O&M or A&G expenses or accounts in future updates, it must include in such § 205 filing: (i) a specification of the basis on which it proposes to allocate a portion of such costs as is properly assignable to wholesale transmission service, and (ii) documentation sufficient to demonstrate the reasonableness of its proposed allocation factor consistent with applicable Commission precedent.
- 2. No Account 565 costs other than inter-company charges that net out (such as lease arrangements and transmission equalization payments/receipts between AEP companies) will be included in the TCOS, unless first approved by FERC following a separate FPA § 205 filing by AEP.
- 3. AEP will include in the Annual Update to the formula rate, notification of any change in the use of established allocation factors (change from one

factor to another established allocation factor for a cost applicable to AEP Transmission Companies). Any new allocation factor (not previously approved by the Securities and Exchange Commission or the FERC) will be filed with the FERC for approval in a Section 205 proceeding before being implemented, and AEP will provide notification in the Annual Update of the implementation of a newly created allocation factor that may affect costs allocated to the AEP Transmission Companies. In addition, AEP shall include notification in the Annual Updates of the establishment of any new regulated and un-regulated income-producing affiliates or operating divisions with new income-producing operations.

#### II. Application of Interest Rate Calculation in True-Up

AEP shall include an interest rate worksheet as Attachment C to the Settlement Agreement specifying its procedure for applying interest to true-up over or under recoveries.

#### **III.** Formula Implementation Protocols

The Formula Rate Implementation Protocols shall be adopted as set forth in Attachment A-2.

## Appendix A-1.1

**AEP East Consolidated Utility Capital Structure** 

## Consolidation of Operating Companies' Capital Structure @ 12-31-2009 Worksheet Q Page 1

	elopment of Long Term Debt Balances ear End	Appalachian Power Company	Indiana Michigan Power Company	Kentucky Power Company	Kingsport Power Company	Ohio Power Company	Wheeling Power Company	Operating Companies' Consolidated Capital Structure
1	Bonds (112.18.c&d)	-	-	-	-	-	-	-
2	Less: Reacquired Bonds (112.19.c&d) LT Advances from Assoc. Companies	17,500,000	-	-	-	303,000,000	-	320,500,000
3	(112.20.c&d) Senior Unsecured Notes (112.21.c&d)	100,000,000	25,000,000	20,000,000	20,000,000	200,000,000	25,000,000	490,000,000
4	Excludes Spent Nuc Fuel Disp Fund Less: Fair Value Hedges (See Note on	3,419,099,201	1,692,000,000	530,000,000	-	3,351,580,000	-	10,435,424,201
5	Ln 7 below)	-	-	-	-	-	-	
6	Total Long Term Debt Balance	3,501,599,201	1,717,000,000	550,000,000	20,000,000	3,248,580,000	25,000,000	10,604,924,201

NOTE: The balance of fair value hedges on outstanding long term debt are to be excluded from the balance of long term debt included in the formula's capital structure. (page 257, Column H of the FF1)

#### <u>Development of Long Term Debt Interest</u> <u>Expense</u>

	Interest on Long Term Debt (256-							
8	257.33.i)	201,508,637	100,346,371	30,323,070	1,075,000	129,578,994	1,312,500	547,990,827
	Amort of Debt Discount & Expense							
9	(117.63.c)	3,232,592	3,157,632	457,098	-	3,354,846	-	12,043,656
	Amort of Loss on Reacquired Debt							
10	(117.64.c)	991,540	1,596,824	33,649	-	626,793	-	3,992,302
	Less: Amort of Premium on Debt							
11	(117.65.c)	-	-	-	-	-	-	-
	Less: Amort of Gain on Reacquired							
12	Debt (117.66.c)	-	1,712	-	-	-	-	1,712
40		0.500.005	4 554 540	00.050		(7.405.404)		(0.074.000)
13	Less: Hedge Interest on pp 256-257(i)	2,569,395	1,551,518	92,956	-	(7,185,191)	-	(2,971,322)
14	LTD Interest Expense	203,163,374	103,547,597	30,720,861	1,075,000	140,745,824	1,312,500	566,996,395

Development of Cost of Preferred Stock and Preferred Dividends									
15	Dividend Rate (p. 250-251. 7.a)	4.50%		4.125%			4.08%		
16	Par Value (p. 250-251. 8.c)	\$ 100.00	\$	100.00			\$ 100.00		
17	Shares Outstanding (p.250-251. 8.e)	177,518		55,301			14,595		
18	Monetary Value (Ln 16 * Ln 17)	17,751,800		5,530,100	-	-	1,459,500	-	24,741,400
19	Dividend Amount (Ln 15 * Ln 18)	798,831		228,117	-	-	59,548	-	1,086,495
20	Dividend Rate (p. 250-251. 7.a)			4.12%			4.20%		
21	Par Value (p. 250-251. 8.c)		\$	100.00			\$ 100.00		
22	Shares Outstanding (p.250-251. 8.e)			11,055			22,824		
23	Monetary Value (Ln 21 * Ln 22)	-		1,105,500	-	-	2,282,400	-	3,387,900
24	Dividend Amount (Ln 20 * Ln 23)	-		45,547	-	-	95,861	-	141,407
25	Dividend Rate (p. 250-251. 7.a)			4.56%			4.40%		
26	Par Value (p. 250-251. 8.c)		\$	100.00			\$ 100.00		
27	Shares Outstanding (p.250-251. 8.e)			14,412			31,482		
28	Monetary Value (Ln 26 * Ln 27)	-		1,441,200	-	-	3,148,200	-	4,589,400
29	Dividend Amount (Ln 25 * Ln 28)	-		65,719	-	-	138,521	-	204,240
30	Dividend Rate (p. 250-251. 7.a)						4.50%		
31	Par Value (p. 250-251. 8.c)						\$ 100.00		
32	Shares Outstanding (p.250-251. 8.e)						97,363		
33	Monetary Value (Ln 31 * Ln 32)	-		-	-	-	9,736,300	-	9,736,300
34	Dividend Amount (Ln 30 * Ln 33)	-		-	-	-	438,134	-	438,134
35	Preferred Stock (Lns 18, 23, 28,33) Preferred Dividends (Lns 19, 24,	17,751,800		8,076,800	-	-	16,626,400	-	42,455,000
36	29,34)	798,831		339,382	-	-	732,063	-	1,870,276
<u>Deve</u>	lopment of Common Equity								
37	Proprietary Capital (112.16.c)	2,789,329,067	1,68	0,859,984	431,783,697	21,335,470	3,251,321,953	43,904,852	9,578,370,175
38	Less: Preferred Stock (Ln 35 Above)	17,751,800		8,076,800			16,626,400		42,455,000
39	Less: Account 216.1 (112.12.c)	2,593,528	(581	,331)	_	_	_	_	4,076,997
00	2000	2,000,020	(001	,001)					.,57 0,007

40	Less: Account 219.1 (112.15.c)	(50,254,363)	(21,700,504)	(600,942)	5,560	(118,458,118)	(1,749,500)	(242,751,398)
41	Balance of Common Equity	2,819,238,102	1,695,065,019	432,384,639	21,329,910	3,353,153,671	45,654,352	9,774,589,576
<u>Calcu</u>	ulation of Capital Shares							
42	Long Term Debt (Ln 6 Above)	3,501,599,201	1,717,000,000	550,000,000	20,000,000	3,248,580,000	25,000,000	10,604,924,201
43	Preferred Stock (Ln 35 Above)	17,751,800	8,076,800	-	-	16,626,400	-	42,455,000
44	Common Equity (Ln 41 Above)	2,819,238,102	1,695,065,019	432,384,639	21,329,910	3,353,153,671	45,654,352	9,774,589,576
45	Total Company Structure	6,338,589,103	3,420,141,819	982,384,639	41,329,910	6,618,360,071	70,654,352	20,421,968,777
46	LTD Capital Shares (Ln 42 / Ln 45) Preferred Stock Capital Shares (Ln 43 /	55.24%	50.20%	55.99%	48.39%	49.08%	35.38%	51.93%
47	Ln 45)	0.28%	0.24%	0.00%	0.00%	0.25%	0.00%	0.21%
48	Common Equity Capital Shares (Ln 44 / Ln 45)	44.48%	49.56%	44.01%	51.61%	50.66%	64.62%	47.86%
49	Equity Capital Share Limit LTD Capital Shares with Capital Equity	50.00%	50.00%	50.00%	100.00%	51.00%	100.00%	50.00%
50	Cap	55.24%	50.20%	55.99%	48.39%	49.08%	35.38%	51.93%
51	Preferred Stock Capital Shares	0.28%	0.24%	0.00%	0.00%	0.25%	0.00%	0.21%
52	Common Equity Capital Shares with Capital Equity Cap	44.48%	49.56%	44.01%	51.61%	50.66%	64.62%	47.86%
Calcu	ulation of Capital Cost Rate							
53	LTD Capital Cost Rate (Ln 14 / Ln 6) Preferred Stock Capital Cost Rate (Ln	5.80%	6.03%	5.59%	5.38%	4.33%	5.25%	5.35%
54	36 / Ln 35)	4.50%	4.20%	0.00%	0.00%	4.40%	0.00%	4.41%
55	Common Equity Capital Cost Rate	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%
Calcu	ulation of Weighted Capital Cost Rate							
56	LTD Weighted Capital Cost Rate (Ln 50 * Ln 53)	3.21%	3.03%	3.13%	2.60%	2.13%	1.86%	2.78%
30	Preferred Stock Capital Cost Rate (Ln	3.2170	3.0376	3.1370	2.00 /0	2.1370	1.0076	2.1070
57	51 * Ln 54) Common Equity Capital Cost Rate (Ln	0.01%	0.01%	0.00%	0.00%	0.01%	0.00%	0.01%
58	52 * Ln 55)	5.11%	5.69%	5.06%	5.93%	5.82%	7.42%	5.50%
59	Total Company Structure	8.33%	8.73%	8.18%	8.53%	7.96%	9.28%	8.29%

## **Appendix A-1.1**

## AEP East Consolidated Utility Capital Structure Consolidation of Operating Companies' Capital Structure @ 12-31-2008 Worksheet Q Page 2

Line <u>Develoj</u> <u>End</u>	oment of Long Term Debt Balances at Year	Appalachian Power Company	Indiana Michigan Power Company	Kentucky Power Company	Kingsport Power Company	Ohio Power Company	Wheeling Power Company	Operating Companies' Consolidated Capital Structure
60	Bonds (112.18.c&d)	-	-	-	-	-	-	-
61	Less: Reacquired Bonds (112.19.c&d) LT Advances from Assoc. Companies	17,500,000	100,000,000	-	-	85,000,000	-	294,745,000
62	(112.20.c&d)	100,000,000	-	20,000,000	20,000,000	200,000,000	25,000,000	465,000,000
63	Senior Unsecured Notes (112.21.c&d) Excludes Spent Nuc Fuel Disp Fund Less: Fair Value Hedges (See Note on Ln	3,114,740,790	1,217,000,000	400,000,000	-	2,594,450,000	-	8,768,935,790
64	66 below)	-	-	-	-	-	-	-
65	Total Long Term Debt Balance	3,197,240,790	1,117,000,000	420,000,000	20,000,000	2,709,450,000	25,000,000	8,939,190,790

NOTE: The balance of fair value hedges on outstanding long term debt are to be excluded from the balance of long term debt included in the formula's capital structure. (p. 257, Column H of the FF1)

#### **Development of Long Term Debt Interest Expense**

67 68 69	Interest on Long Term Debt (256-257.33.i) Amort of Debt Discount & Expense (117.63.c) Amort of Loss on Reacquired Debt (117.64.c)	181,193,862 2,539,613 1,440,062	69,755,551 2,467,181 2,142,335	26,429,625 451,645 33,648	1,075,000 - -	134,040,796 2,211,243 1,618,264	1,312,500 - -	491,905,445 8,755,819 5,991,748
70 71	Less: Amort of Premium on Debt (117.65.c) Less: Amort of Gain on Reacquired Debt (117.66.c)	-	-		-	-	-	-
72	Less: Hedge Interest on pp 256-257(i)	5,001,679	1,547,947	92,956	-	(1,250,297)	-	5,392,285
73	LTD Interest Expense	180,171,858	72,817,120	26,821,962	1,075,000	139,120,600	1,312,500	501,260,727

**AEP East** 

<u>Develo</u>	Development of Cost of Preferred Stock and Preferred Dividends									
74	Dividend Rate (p. 250-251. 7.a)	4.50%	4.125%			4.08%				
75	Par Value (p. 250-251. 8.c)	\$ 100.00	\$ 100.00			\$ 100.00				
76	Shares Outstanding (p.250-251. 8.e)	177,520	55,335			14,595				
77	Monetary Value (Ln 75 * Ln 76)	17,752,000	5,533,500	-	-	1,459,500	-	24,745,000		
78	Dividend Amount (Ln 74 * Ln 77)	798,840	228,257	-	-	59,548	-	1,086,644		
79	Dividend Rate (p. 250-251. 7.a)		4.12%			4.20%				
80	Par Value (p. 250-251. 8.c)		\$ 100.00			\$ 100.00				
81	Shares Outstanding (p.250-251. 8.e)		11,055			22,824				
82	Monetary Value (Ln 80 * Ln 81)	-	1,105,500	-	-	2,282,400	-	3,387,900		
83	Dividend Amount (Ln 79 * Ln 82)	-	45,547	-	-	95,861	-	141,407		
84	Dividend Rate (p. 250-251. 7.a)		4.56%			4.40%				
85	Par Value (p. 250-251. 8.c)		\$ 100.00			\$ 100.00				
86	Shares Outstanding (p.250-251. 8.e)		14,412			31,482				
87	Monetary Value (Ln 85 * Ln 86)	-	1,441,200	-	-	3,148,200	-	4,589,400		
88	Dividend Amount (Ln 84 * Ln 87)	-	65,719	-	-	138,521	-	204,240		
89	Dividend Rate (p. 250-251. 7.a)					4.50%				
90	Par Value (p. 250-251. 8.c)					\$ 100.00				
91	Shares Outstanding (p.250-251. 8.e)					97,373				
92	Monetary Value (Ln 90 * Ln 91)	-	-	-	-	9,737,300	-	9,737,300		
93	Dividend Amount (Ln 89 * Ln 92)	-	-	-	-	438,179	-	438,179		
94	Preferred Stock (Lns 77, 82, 87,92)	17,752,000	8,080,200	-	-	16,627,400	-	42,459,600		
95	Preferred Dividends (Lns 78, 83, 88,93)	798,840	339,522	-	-	732,108	=	1,870,470		
<u>Develo</u>	oment of Common Equity									
96	Proprietary Capital (112.16.c)	2,394,342,663	1,444,357,731	398,008,673	25,031,105	2,438,571,961	37,950,872	7,987,702,880		
97	Less: Preferred Stock (Ln 94 Above)	17,752,000	8,080,200	-	-	16,627,400	-	42,459,600		

98	Less: Account 216.1 (112.12.c)	2,462,578	(1,510,668)	-		-	-	11,153,901
99	Less: Account 219.1 (112.15.c)	(60,225,378)	(20,233,842)	59,584	-	(133,858,575)	(2,464,181)	(263,573,252)
100	Balance of Common Equity	2,434,353,463	1,458,022,041	397,949,089	25,031,105	2,555,803,136	40,415,053	8,197,662,631
<u>Calcula</u>	ntion of Capital Shares							
101	Long Term Debt (Ln 65 Above)	3,197,240,790	1,117,000,000	420,000,000	20,000,000	2,709,450,000	25,000,000	8,939,190,790
102	Preferred Stock (Ln 94 Above)	17,752,000	8,080,200	-	-	16,627,400	-	42,459,600
103	Common Equity (Ln 100 Above)	2,434,353,463	1,458,022,041	397,949,089	25,031,105	2,555,803,136	40,415,053	8,197,662,631
104	Total Company Structure	5,649,346,253	2,583,102,241	817,949,089	45,031,105	5,281,880,536	65,415,053	17,179,313,021
105	LTD Capital Shares (Ln 101 / Ln 104) Preferred Stock Capital Shares (Ln 102 / Ln	56.59%	43.24%	51.35%	44.41%	51.30%	38.22%	52.03%
106	104) Common Equity Capital Shares (Ln 103 / Ln	0.31%	0.31%	0.00%	0.00%	0.31%	0.00%	0.25%
107	104)	43.09%	56.44%	48.65%	55.59%	48.39%	61.78%	47.72%
108	<b>Equity Capital Share Limit</b>	50.00%	50.00%	50.00%	100.00%	51.00%	100.00%	50.00%
109	LTD Capital Shares with Capital Equity Cap	56.59%	49.69%	51.35%	44.41%	51.30%	38.22%	53.00%
110	Preferred Stock Capital Shares Common Equity Capital Shares with Capital	0.31%	0.31%	0.00%	0.00%	0.31%	0.00%	0.25%
111	Equity Cap	43.09%	50.00%	48.65%	55.59%	48.39%	61.78%	46.75%
<u>Calcula</u>	tion of Capital Cost Rate							
112	LTD Capital Cost Rate (Ln 73 / Ln 65) Preferred Stock Capital Cost Rate (Ln 95 /	5.64%	6.52%	6.39%	5.38%	5.13%	5.25%	5.61%
113	Ln 94)	4.50%	4.20%	0.00%	0.00%	4.40%	0.00%	4.41%
114	Common Equity Capital Cost Rate	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%
Calcula	ntion of Weighted Capital Cost Rate  LTD Weighted Capital Cost Rate (Ln 109 *							
115	Ln 112) Preferred Stock Capital Cost Rate (Ln 110 *	3.19%	3.24%	3.28%	2.39%	2.63%	2.01%	2.97%
116	Ln 113)	0.01%	0.01%	0.00%	0.00%	0.01%	0.00%	0.01%
117	Common Equity Capital Cost Rate (Ln 111 * Ln 114)	4.95%	5.75%	5.59%	6.39%	5.56%	7.10%	5.37%
118	Total Company Structure	8.15%	9.00%	8.87%	8.77%	8.21%	9.11%	8.35%

## Appendix A-1.1

# AEP East Consolidated Utility Capital Structure Consolidation of Operating Companies' Average Capital Structure Worksheet Q Page 3

	pment of Average Long Term	Appalachian Power Company	Indiana Michigan Power Company	Kentucky Power Company	Kingsport Power Company	Ohio Power Company	Wheeling Power Company	AEP East Operating Companies' Consolidated Capital Structure
<u>Debt</u>	Average Bonds (Ln 1 + Ln 60) /							
119	2 Less: Average Reacquired	-	-	-	-	-	-	-
120	Bonds (Ln 2 + Ln 61) / 2 Average LT Advances from Assoc. Companies (Ln 3 + Ln	17,500,000	50,000,000	-	-	194,000,000	-	307,622,500
121	62) / 2 Average Senior Unsecured	100,000,000	12,500,000	20,000,000	20,000,000	200,000,000	25,000,000	477,500,000
122	Notes (Ln 4 + Ln 63) / 2 Less: Average Fair Value Hedges (See Note on Ln 125	3,266,919,996	1,454,500,000	465,000,000	-	2,973,015,000	-	9,602,179,996
123	below)		-	-	-	-	-	-
124	Average Balance of Long Term Debt	3,349,419,996	1,417,000,000	485,000,000	20,000,000	2,979,015,000	25,000,000	9,772,057,496

NOTE: The balance of fair value hedges on outstanding long term debt are to be excluded from the balance of long term debt included in the formula's capital structure. (p. 257, Column H of the FF1)

#### **Development of 2009 Long Term Debt**

Develo	pilient of 2009 Long Term Debt							
Interes	t Expense							
	Interest on Long Term Debt							
126	(256-257.33.i)	201,508,637	100,346,371	30,323,070	1,075,000	129,578,994	1,312,500	547,990,827
	Amort of Debt Discount &							
127	Expense (117.63.c)	3,232,592	3,157,632	457,098	-	3,354,846	-	12,043,656
	Amort of Loss on Reacquired							
128	Debt (117.64.c)	991,540	1,596,824	33,649	-	626,793	-	3,992,302
	Less: Amort of Premium on							
129	Debt (117.65.c)	-	-	-	-	-	-	-
	Less: Amort of Gain on							
130	Reacquired Debt (117.66.c)	-	1,712	-	-	-	-	1,712

131	Less: Hedge Interest on pp 256-257(i)	2,569,395	1,551,518	92,956	-	(7,185,191)	-	(2,971,322)
132	2009 LTD Interest Expense	203,163,374	103,547,597	30,720,861	1,075,000	140,745,824	1,312,500	566,996,395
	ost of Preferred Stock and ed Dividends Average Balance of Preferred							
133	Stock (Ln 35 + Ln 94) / 2 2009 Preferred Dividends (Ln	17,751,900	8,078,500	-	-	16,626,900	-	42,457,300
134	36)	798,831	339,382	-	-	732,063	-	1,870,276
<u>Develo</u> <u>Equity</u>	pment of Average Common							
135	Average Proprietary Capital (Ln 37 + Ln 96) / 2 Less: Average Preferred Stock	2,591,835,865	1,562,608,858	414,896,185	23,183,288	2,844,946,957	40,927,862	8,783,036,528
136	(Ln 133 Above) Less: Average Account 216.1	17,751,900	8,078,500	-	-	16,626,900	-	42,457,300
137	(Ln 39 + Ln 98) / 2	2,528,053	(1,046,000)	-	-	-	-	7,615,449
138	Less: Average Account 219.1 (Ln 40 + Ln 99) / 2	(55,239,871)	(20,967,173)	(270,679)	2,780	(126,158,347)	(2,106,841)	(253,162,325)
139	Average Balance of Common Equity	2,626,795,783	1,576,543,530	415,166,864	23,180,508	2,954,478,404	43,034,703	8,986,126,104
<u>Calcula</u>	ation of Capital Shares  Average Balance of Long Term							
140	Debt (Ln 124 Above)	3,349,419,996	1,417,000,000	485,000,000	20,000,000	2,979,015,000	25,000,000	9,772,057,496
141	Average Balance of Preferred Stock (Ln 133 Above)	17,751,900	8,078,500	-	-	16,626,900	-	42,457,300
142	Average Balance of Common Equity (Ln 139 Above)	2,626,795,783	1,576,543,530	415,166,864	23,180,508	2,954,478,404	43,034,703	8,986,126,104
143	Average of Total Company Structure	5,993,967,678	3,001,622,030	900,166,864	43,180,508	5,950,120,304	68,034,703	18,800,640,899
144	Average Balance of LTD Capital Shares (Ln 140 / Ln 143)	55.88%	47.21%	53.88%	46.32%	50.07%	36.75%	51.98%
144	Average Balance of Preferred	33.00 /6	47.2170	33.00 /6	40.32 /0	30.07 /6	30.7376	31.90%
145	Stock Capital Shares (Ln 141 / Ln 143)	0.30%	0.27%	0.00%	0.00%	0.28%	0.00%	0.23%
	Average Balance of Common Equity Capital Shares (Ln 142 /							
146	Ln 143)	43.82%	52.52%	46.12%	53.68%	49.65%	63.25%	47.80%
147	Equity Capital Share Limit LTD Capital Shares with Capital	50.00%	50.00%	50.00%	100.00%	51.00%	100.00%	50.00%
148	Equity Cap	55.88%	49.73%	53.88%	46.32%	50.07%	36.75%	52.38%
149	Preferred Stock Capital Shares	0.30%	0.27%	0.00%	0.00%	0.28%	0.00%	0.23%

150	Common Equity Capital Shares with Capital Equity Cap	43.82%	50.00%	46.12%	53.68%	49.65%	63.25%	47.39%
Calcula	ation of Capital Cost Rate							
	LTD Capital Cost Rate (Ln 132 /							
151	Ln 124)	6.07%	7.31%	6.33%	5.38%	4.72%	5.25%	5.80%
	Preferred Stock Capital Cost							
152	Rate (Ln 134 / Ln 133)	4.50%	4.20%	0.00%	0.00%	4.40%	0.00%	4.41%
	Common Equity Capital Cost							
153	Rate	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%
<u>Calcula</u> <u>Rate</u>	ation of Weighted Capital Cost  LTD Weighted Capital Cost							
154	Rate (Ln 148 * Ln 151)	3.39%	3.63%	3.41%	2.49%	2.37%	1.93%	3.04%
101	Preferred Stock Capital Cost	0.0070	0.0070	0.1170	2.1070	2.01 70	1.0070	0.0170
155	Rate (Ln 149 * Ln 152)	0.01%	0.01%	0.00%	0.00%	0.01%	0.00%	0.01%
	Common Equity Capital Cost							
156	Rate (Ln 150 * Ln 153)	5.04%	5.75%	5.30%	6.17%	5.71%	7.27%	5.45%
	ACTUAL WEIGHTED AVG							
157	COST OF CAPITAL	8.44%	9.39%	8.71%	8.66%	8.08%	9.20%	8.49%

### Appendix A.1.2

		AEP Appalachian Transmission Co	AEP Indiana Michigan Transmission Co	AEP Kentucky Transmission Co	AEP Ohio Transmission Co
350	Land Rights		1.27%	1.44%	1.36%
352	Structures & Improvements	1.52%	1.32%	2.08%	1.64%
353	Station Equipment	1.68%	1.69%	2.15%	1.84%
354	Towers & Fixtures	1.54%	1.60%	2.61%	1.92%
355	Poles & Fixtures	2.64%	2.43%	3.95%	3.01%
356	OH Conductors & Devices	1.19%	1.53%	2.91%	1.88%
357	Underground Conduit	1.45%	1.56%	2.99%	2.00%
358	Underground Conductor	7.23%	1.55%	2.62%	3.80%
359	Roads & Trails		1.49%	-	1.49%

\*For the states of Kentucky, West Virginia, Virginia, Indiana and Michigan, the formula rate will use rates based on the last approved depreciation study for the applicable jurisdiction (KPCo, APCo, or I&M). For example, rates for the 2004 I&M depreciation study will be used for Indiana and Michigan.

Ohio's rates are a composite rate calculated as the average of the APCo, I&M and KPCo rates. AEP's rates may only be changed in a Section 205/206 proceeding based on new studies. This filing may be a single issue proceeding.

## Appendix A.1.3

#### Illustration of Construction Draw Down Loan

#### Appendix A.1.3 - Financing Costs for Long Term Debt using the Internal Rate of Return Methodology – AEP Transco

HYPOTHETICAL EXAMPLE

AEP Transco anticipates its financing will be a 7 year loan, where by AEP Transco pays Origination Fees of \$7.9 million and a Commitments Fee of 0.375% on the undrawn principle. Consistent with GAAP, AEP Transco will amortize the Origination Fees and Commitments Fees using the standard Internal Rate of Return formula below.

Each year, AEP Transco will true up the amounts withdrawn, the interest paid in the year, Origination Fees, Commitments Fees, and total loan amount on this attachment.

Total Loan Amount \$ 600,000,000

Internal Rate of Return¹ Based on following Financi	al Formula <sup>2</sup> :			6.65%				
NPV = 0 =								
Origination Fees Underwriting Discount Arrangement Fee Upfront Fee Rating Agency Fee Legal Fees Total Issuance Expense				2,000,000 4,400,000 200,000 1,250,000 <b>7,850,00</b> 0				
Annual Rating Agency Fee Annual Bank Agency Fee Revolving Credit Commitme	ent Fee			200,000 75,000 0.375%	0			
LIDOD D-1-	2008	2009	2010	2011	2012	2013	2014	
LIBOR Rate Spread	4.0610% 1.875%	4.0610% 1.875%	4.0610% 1.875%	4.0610% 1.875%	4.0610% 1.875%	4.0610% 1.875%	4.0610% 1.875%	
Interest Rate	5.94%	5.94%	5.94%	5.94%	5.94%	5.94%	5.94%	

(A) Year	(B)	( C) Capital Expenditures ( \$000's)	(D) Principle Drawn In Quarter (\$000's)	(E) Principle Drawn To Date (\$000's)	(F) Interest Expense (\$000's)	(G) Origination Fees (\$000's)	(H) Commitment & Utilization Fee (\$000's)	(I) Net Cash Flows (\$000's) (D-F-G-H)
Prior to 11/2008 30/11/2008 15/02/2009 15/05/2009	Q4 Q1 Q2	16,529 8,923 14,636 17,119	20,044 8,560	20,044 28,604	- - 297	125		19,919 8,262

15/08/2009	Q3	46,132	23,066	51,670	424			22,642
15/11/2009	Q4	62,740	31,370	83,040	767			30,603
15/02/2010	Q1	132,393	66,197	149,236	1,232	7,725	553	56,686
15/05/2010	Q2	132,393	66,197	215,433	2,215		491	63,490
15/08/2010	Q3	132,393	66,197	281,629	3,197		429	62,570
15/11/2010	Q4	132,393	66,197	347,826	4,179		367	61,650
15/02/2011	Q1	70,588	35,294	383,120	5,162		305	29,827
15/05/2011	Q2	70,588	35,294	418,414	5,685		272	29,336
15/08/2011	Q3	70,588	35,294	453,708	6,209		239	28,846
15/11/2011	Q4	70,588	35,294	489,002	6,733		206	28,355
15/022012	Q1	51,885	25,943	514,944	7,257		173	18,513
15/05/2012	Q2	51,885	25,943	540,887	7,642		148	18,152
15/08/2012	Q3	51,885	25,943	566,829	8,027		124	17,792
15/11/2012	Q4	51,885	25,943	592,772	8,412		100	17,431
15/02/2013	Q1	11,122	7,228	600,000	8,797		76	(1,644)
15/05/2013	Q2	,	- ,	600,000	8,904		69	(8,973)
15/08/2013	Q3			600,000	8,904		69	(8,973)
15/11/2013	Q4			600,000	8,904		69	(8,973)
15/02/2014	Q1			600,000	8,904		69	(8,973)
15/05/2014	Q2			600,000	8,904		69	(8,973)
15/08/2014	Q3			600,000	8,904		69	(8,973)
15/11/2014	Q4			600,000	8,904		69	(8,973)
15/02/2015	Q1			600,000	8,904		-	(608,903)
.0,02,20.0	~.			333,333	0,00.			(555,555)

 <sup>&</sup>lt;sup>1</sup> The IRR is the Debt Cost shown on Page 5, Line 118 of Rate Formula Template <sup>2</sup> The IRR is a discount rate that makes the net present value of a series of cash flows equal to zero. The IRR equation can only be solved through iterations performed by a computer program (i.e.NPV function with goal seek in a spreadsheet program).

### Appendix A.1.3

## Hypothetical Example of Final True-Up of Interest Rates and Interest Calculations for the Construction Loan

To be Prepared on 8/15/2013 (hypothetical date)

SUMMARY	(		Hypothetical Revenue Requir	rement			
YEAR	Estimated Effective cost of debt used in forecast/true up	Final Effective cost of debt for the construction loan:	Based on Estimated Effective cost of debt	Based on Actual Effective cost of debt	Over (Under) Recovery	Hypothetical Monthly Interest Rate applicable over the ATRR period	Total Amount of Construction Loan Related True-Up included in rates effective Jan 2014 (Refund)/Owed
2008	7.18%	7.00%	\$ 2,500,000.00	\$ 2,400,000.00	\$ 100,000.00	0.550%	\$ (148,288.33)
2009	6.8%	7.00%	\$5,000,000.00	\$5,150,000.00	\$ (150,000.00)	0.560%	\$ 209,670.43
2010	7.2%	7.00%	\$8,300,000.00	\$8,200,000.00	\$ 100,000.00	0.540%	\$ (131,109.09)
2011	7.3%	7.00%	\$12,300,000.00	\$12,000,000.00	\$ 300,000.00	0.580%	\$ (368,656.73)
2012*	7.1%	6.83%	\$18,000,000.00	\$17,900,000.00	\$ 100,000.00	0.570%	\$ (114,946.28)
2013**	6.50%	6.50%	\$25,000,000.00	\$25,000,000.00	\$ -		,
2014**	6.50%	6.50%					\$ (553,329.99)

<sup>\*</sup> Assumes that the construction loan is retired on Sept 1, 2012

Note: True-Up period is 2008 - 2012, with the true-up amount included in 2014 forecasted ATRR. Final effective cost of debt for 2012 is computed as follows: ((7%\*243days)+(6.5%\*122days))/365days

Calculation of Applicable Interest Expense for each ATRR period

Interest Rate on Amount of Refunds

Over (Under) Recovery Plus Interest

Hypothetical Months Calculated Amortization Surcharge
or Surcharges from 35.19a

Monthly Interest Interest (Refund) Owed

	est for 2008 True-Up Period ollection will be recovered prorat	a over 2008, held for 2009, 2010, 2	011, 2012, 2013 and returned pro	rate over 2014	Monthly	
January	Year 2008	-	0.5500%	12.00	-	-
February	Year 2008	-	0.5500%	11.00	-	-
March	Year 2008	10,000	0.5500%	10.00	(550)	(10,550)
April	Year 2008	10,000	0.5500%	9.00	(495)	
·					` '	(10,495)
May	Year 2008	10,000	0.5500%	8.00	(440)	(10,440)
June	Year 2008	10,000	0.5500%	7.00	(385)	(10,385)
July	Year 2008	10,000	0.5500%	6.00	(330)	(10,330)
August	Year 2008	10,000	0.5500%	5.00	(275)	(10,275)
September	Year 2008	10,000	0.5500%	4.00	(220)	(10,220)
October	Year 2008	10,000	0.5500%	3.00	(165)	(10,165)

<sup>\*\*</sup> Assumes permanent debt structure is put in place on Sept 1, 2012 with effective rate of 6.5%

November December	Year 2008 Year 2008	10,000 10,000	0.5500% 0.5500%	2.00 1.00	(110) (55) (3,025)		(10,110) (10,055) <b>(103,025)</b>
					Annual		
January through	Year 2009	(400.005)	0.5600%	12.00	(6,923)		(400.040)
December January through	Year 2010	(103,025)	0.5400%	12.00	(7,125)		(109,948)
December January through	Year 2011	(109,948)	0.5800%	12.00	(8,148)		(117,073)
December January through	Year 2012	(117,073)	0.5700%	12.00	(8,565)		(125,221)
December January through December	Year 2013	(125,221) (133,786)	0.5700%	12.00	(9,151)		(133,786) (142,937)
Over (Under) Recover	y Plus Interest Amortized and	Recovered Over 12 Months			Monthly		
January	Year 2014	142,937	0.5700%		(815)	(12,357)	(131,395)
February	Year 2014	131,395	0.5700%		(749)	(12,357)	(119,786)
March	Year 2014	119,786	0.5700%		(683)	(12,357)	(108,112)
April	Year 2014	108,112	0.5700%		, ,	(12,357)	(96,371)
May	Year 2014	96,371	0.5700%		(616)	(12,357)	(84,563)
June	Year 2014	84,563	0.5700%		(549)	(12,357)	
July	Year 2014	72,687	0.5700%		(482)	(12,357)	(72,687)
August	Year 2014	60,744	0.5700%		(414)	(12,357)	(60,744)
September	Year 2014	48,733	0.5700%		(346)	(12,357)	(48,733) (36,653)
October	Year 2014	36,653	0.5700%		(278)	(12,357)	(55,555)
					(209)		(24,505)
November	Year 2014	24,505	0.5700%		(140)	(12,357)	(12,287)
December	Year 2014	12,287	0.5700%		(70)	(12,357)	0
					(5,351)		
Total Amount of True-U Less Over (Under) Reco Total Interest	lp Adjustment for 2008 ATRR overy			\$ \$	(148,288) 100,000		

 ${\bf Appendix} \ {\bf A.1.3}$  Hypothetical Example of Final True-Up of Interest Rates and Interest Calculations for the Construction Loan

Calculation of Interest for An over or under collect	or 2009 True-Up Period ion will be recovered prorat	a over 2009, held for 2010, 2	011, 2012, 2013 and ı	returned prorate	over 2014 Monthly	
January	Year 2009	(12,500)	0.5600%	12.00	840	13,340
February	Year 2009	(12,500)	0.5600%	11.00	770	13,270
March	Year 2009	(12,500)	0.5600%	10.00	700	13,200
April	Year 2009	(12,500)	0.5600%	9.00	630	13,130
May	Year 2009	(12,500)	0.5600%	8.00	560	13,060
June	Year 2009	(12,500)	0.5600%	7.00	490	12,990
July	Year 2009	(12,500)	0.5600%	6.00	420	12,920
August	Year 2009	(12,500)	0.5600%	5.00	350	12,850
September	Year 2009	(12,500)	0.5600%	4.00	280	12,780
October	Year 2009	(12,500)	0.5600%	3.00	210	12,710
November	Year 2009	(12,500)	0.5600%	2.00	140	12,640
December	Year 2009	(12,500)	0.5600%	1.00	70	12,570
					5,460	155,460
					Annual	
January through December	Year 2010	155,460	0.5400%	12.00	10,074	165,534
January through December	Year 2011	165,534	0.5800%	12.00	11,521	177,055
January through December	Year 2012	177,055	0.5700%	12.00	12,111	189,166
January through December	Year 2013	189,166	0.5700%	12.00	12,939	202,104

Over (Under) Recovery	Plus Interest Amortized and	Recovered Over 12 Months		Monthly		
January	Year	(202,104)	0.5700%	1,152	17,473	185,784
	2014	(405 =0.4)	0.55000/	4.050	4= 4=0	400.070
February	Year	(185,784)	0.5700%	1,059	17,473	169,370
March	2014 Year	(169,370)	0.5700%	965	17,473	152,863
IVIGI GIT	2014	(100,070)	0.57 00 70	300	11,410	102,000
April	Year	(152,863)	0.5700%	871	17,473	136,262
	2014					
May	Year	(136,262)	0.5700%	777	17,473	119,566
luna	2014 Year	(110 EGG)	0.5700%	682	17 179	100 775
June	2014	(119,566)	0.5700%	002	17,473	102,775
July	Year	(102,775)	0.5700%	586	17,473	85,888
,	2014	( - , /			, -	
August	Year	(85,888)	0.5700%	490	17,473	68,905
0 1 1	2014	(00.005)	0.57000/	000	47.470	54.000
September	Year 2014	(68,905)	0.5700%	393	17,473	51,826
October	Year	(51,826)	0.5700%	295	17,473	34,649
0010001	2014	(01,020)	0.01 00 /0	200	11,110	01,010
November	Year	(34,649)	0.5700%	197	17,473	17,374
	2014					4-1
December	Year	(17,374)	0.5700%	99	17,473	(0)
	2014			7,566		
				1,500		
Total Amount of True-Up	Adjustment for 2009 ATRR				\$ 209,670	0
Less Over (Under)	,				\$ (150,000)	
Recovery						
Total Interest					\$ 59,670	0

	t for 2010 True-Up Period ection will be recovered prora	ta over 2010, held for 2011,	2012, 2013 and return	ed prorate over	Monthly	
January	Year 2010	8,333	0.5400%	12.00	(540)	(8,873)
February	2010 Year 2010	8,333	0.5400%	11.00	(495)	(8,828)
March	2010 Year 2010	8,333	0.5400%	10.00	(450)	(8,783)
April	Year	8,333	0.5400%	9.00	(405)	(8,738)

	2010							
May	Year 2010	8,333	0.5400%	8.00		(360)		(8,693)
June	Year	8,333	0.5400%	7.00		(315)		(8,648)
July	2010 Year	8,333	0.5400%	6.00		(270)		(8,603)
July	2010	0,000	0.540070	0.00		(210)		(0,003)
August	Year	8,333	0.5400%	5.00		(225)		(8,558)
Contombor	2010 Year	8,333	0.5400%	4.00		(180)		(0.513)
September	2010	0,333	0.5400%	4.00		(100)		(8,513)
October	Year 2010	8,333	0.5400%	3.00		(135)		(8,468)
November	Year 2010	8,333	0.5400%	2.00		(90)		(8,423)
December	Year 2010	8,333	0.5400%	1.00		(45)		(8,378)
	2010				Ammal	(3,510)		(103,510)
					Annual			
January through	Year	(103,510)	0.5800%	12.00		(7,204)		(110,714)
December	2011							
January through	Year	(110,714)	0.5700%	12.00		(7,573)		(118,287)
December	2012							
January through	Year	(118,287)	0.5700%	12.00		(8,091)		(126,378)
December	2013							
-	us Interest Amortized and Red		0 ==000/		Monthly	(700)	(40.000)	(440.470)
January	Year 2014	126,378	0.5700%			(720)	(10,926)	
February	Year 2014	116,173	0.5700%			(662)	(10,926)	
March	Year 2014	105,909	0.5700%			(604)	(10,926)	
April	Year 2014	95,587	0.5700%			(545)	(10,926)	
May	Year 2014	85,206	0.5700%			(486)	(10,926)	
June	Year 2014	74,766	0.5700%			(426)	(10,926)	
July	Year 2014	64,266	0.5700%			(366)	(10,926)	
August	Year 2014	53,707	0.5700%			(306)	(10,926)	
September	Year 2014	43,087	0.5700%			(246)	(10,926)	
October	Year 2014	32,407	0.5700%			(185)	(10,926)	
November	Year 2014	21,666	0.5700%			(123)	(10,926)	
December	Year 2014	10,864	0.5700%			(62) (4,731)	(10,926)	0
Total Amount of True-Up Ac Less Over (Under) Recover						(4,731)	\$ \$	(131,109) 100,000
Total Interest	J						Ψ	\$ (31,109)

					lix A.1.3		
Calculation of Interest	for 2011 True-Up Period	est Rates and Interest Calc					_
An over or under colle January	ection will be recovered p Year 2011	rorata over 2011, held for 2	2012, 2013 and returne 25,000	d prorate over 2014 0.5800%	12.00	<b>Monthly</b> (1,740)	
February	Year 2011		25,000	0.5800%	11.00	(1,595)	(26,740)
March	Year 2011		25,000	0.5800%	10.00	(1,450)	(26,595)
			,			,	(26,450)
April	Year 2011		25,000	0.5800%	9.00	(1,305)	(26,305)
May	Year 2011		25,000	0.5800%	8.00	(1,160)	(26,160)
June	Year 2011		25,000	0.5800%	7.00	(1,015)	(26,015)
July	Year 2011		25,000	0.5800%	6.00	(870)	(25,870)
August	Year 2011		25,000	0.5800%	5.00	(725)	
September	Year 2011		25,000	0.5800%	4.00	(580)	(25,725)
October	Year 2011		25,000	0.5800%	3.00	(435)	(25,580)
November	Year 2011		25,000	0.5800%	2.00	(290)	(25,435)
December	Year 2011		25,000	0.5800%	1.00	(145)	(25,290)
December	10di 2011		25,000	0.300070	1.00		(25,145)
						(11,310)	(311,310)
						Annual	
January through	Year 2012	(311,310)		0.5700%	12.00	(21,294)	
December January through	Year 2013	(332,604)		0.5700%	12.00	(22,750)	(332,604)
	y Plus Interest Amortized	and Recovered				Monthly	(355,354)
Over 12 Months January	Year 2014	355,354	0.570	00%		(30,721)	(326,658)
February	Year 2014	326,658	0.570	00%	(2,026)	(30,721)	(297,798)
March	Year 2014	297,798	0.570		(1,862)	(30,721)	(268,774)
INIGI OI I	1601 2014	231,130	0.570	/U /U		(50,721)	(200,114)

	V 0044	000 774	0.57000/	(1,697)	(00.704)	(000 505)
April	Year 2014	268,774	0.5700%	(1,532)	(30,721)	(239,585)
May	Year 2014	239,585	0.5700%		(30,721)	(210,229)
June	Year 2014	210,229	0.5700%	(1,366)	(30,721)	(180,706)
July	Year 2014	180,706	0.5700%	(1,198)	(30,721)	(151,015)
				(1,030)		
August	Year 2014	151,015	0.5700%	(861)	(30,721)	(121,154)
September	Year 2014	121,154	0.5700%		(30,721)	(91,123)
October	Year 2014	91,123	0.5700%	(691)	(30,721)	(60,921)
November	Year 2014	60,921	0.5700%	(519)	(30,721)	(30,547)
				(347)		
December	Year 2014	30,547	0.5700%	(174)	(30,721)	0 (13,303)
Total Amount of True-	Up Adjustment		\$ (368,657)			(10,000)
for 2011 ATRR Less Over			\$ 300,000			
(Under) Recovery						
Total Interest			\$ (68,657)			

Calculation of Interest for 2012 True-Up Period An over or under collection over 2012, held for 2013 and			Monthly			
January	Year 2012	8,333	0.5700%	12.00	(570)	(8,903)
February	Year 2012	8,333	0.5700%	11.00	(523)	(8,856)
March	Year 2012		0.5700%	10.00	(475)	
April	Year 2012	8,333 8,333	0.5700%	9.00	(428)	(8,808)
May	Year 2012	8,333	0.5700%	8.00	(380)	(8,761)
June	Year 2012	8,333	0.5700%	7.00	(333)	(8,713)
July	Year 2012		0.5700%	6.00	(285)	(8,666)
August	Year 2012	8,333	0.5700%	5.00	(238)	(8,618)
Ĭ		8,333			( /	(8,571)

September	Year 2012	8,333	0.5700%	4.00	(190)	(8,523)	
October	Year 2012		0.5700%	3.00	(143)		
November	Year 2012	8,333	0.5700%	2.00	(95)	(8,476)	
December	Year 2012	8,333	0.5700%	1.00	(48)	(8,428)	
		8,333			(3,705)	(8,381)	
					Annual	(103,705)	
January through December	Year 2013	(103,705)	0.5700%	12.00	(7,093)		
Over (Under) Recovery Plus Intere	est Amortized and Reco	vered Over 12		Monthly	(110,798)	l	
<u>Months</u> January	Year 2014		0.5700%	(632)	(9,579)	(101,851)	
February	Year 2014	110,798	0.5700%	(581)	(9,579)	(92,853)	
March	Year 2014	101,851	0.5700%	(529)	(9,579)	(83,803)	
April	Year 2014	92,853	0.5700%	(478)	(9,579)	(74,702)	
May	Year 2014	83,803	0.5700%	(426)	(9,579)	(65,549)	
June	Year 2014	74,702	0.5700%	(374)	(9,579)	(56,344)	
July	Year 2014	65,549	0.5700%	(321)	(9,579)	(47,086)	
		56,344					
August	Year 2014	47,086	0.5700%	(268)	(9,579)	(37,776)	
September	Year 2014	37,776	0.5700%	(215)	(9,579)	(28,412)	
October	Year 2014	28,412	0.5700%	(162)	(9,579)	(18,995)	
November	Year 2014	18,995	0.5700%	(108)	(9,579)	(9,525)	
December	Year 2014	9,525	0.5700%	(54)	(9,579)	0	
Total Amount of True-Up Adjustmen Less Over (Under) Recovery Total Interest	nt for 2012 ATRR	J,JZJ			3) (114,946) 100,000 (14,946)		

# Attachment D

Revisions to Section(s) of the PJM Open Access Transmission Tariff

(Marked / Redline Format)

# Revisions to Attachment H-14B of the PJM OATT

(Marked Format)

# Cost of Service Formula Rate Using Historic Year FF1 Balances Worksheet G Supporting - Development of Composite State Income Tax Rate COMPANY NAME HERE

State #1 Tax Rate Apportionment Factor - Note 2 Effective State Tax Rate	0.00%
State #2 Tax Rate Apportionment Factor - Note 2	
Effective State Tax Rate	0.00%
State #3 Tax Rate Apportionment Factor - Note 2	
Effective State Tax Rate	0.00%
State #4 Tax Rate Apportionment Factor - Note 2	
Effective State Tax Rate	0.00%
Table 1	0.000/
Total Effective State Income Tax Rate	0.00%

Note 1

The Ohio State Income Tax is being phased-out pro rata over a 5 year period from 2005 through 2009. The taxable portion of income is 20% in 2009. The phase-out factors can be found in the Ohio Revised Code at 5733.01(G)2(a)(v). This tax has been replaced with a Commercial Activities Tax that is included in Schedule H and H-1.

Note 2 Apportionment Factors are determined as part of the Company's annual tax return for that jurisdiction.

	(A)		<b>B</b> )	<b>(C)</b>	<b>(D)</b>	<b>(E)</b>	<b>(F)</b>
Line No.	Account		tal pany	Property	Labor	Other	Non-Allocable
110.	Account		ге 1	Troperty	Labor	Other	11011-Anocabic
1	Revenue Taxes						
2	List Individual Taxes Here	-					-
3	Real Estate and Personal Property Taxes						
4 5	Real and Personal Property - Jurisdiction #1 Real and Personal Property - Jurisdiction #2	-		-			
6	Real and Personal Property - Jurisdiction #3	-		-			
7	Real and Personal Property - Other Jurisdictions	-		-			
8	Payroll Taxes						
9	Federal Insurance Contribution (FICA)	-			-		
10 11	Federal Unemployment Tax State Unemployment Insurance	-			-		
12	Production Taxes	_			-		
13	List Individual Taxes Here	_					_
14		-					-
15	Miscellaneous Taxes						
16 17	List Individual Taxes Here	-					-
17		-				-	
19		-				-	
20		-				-	
21		-					-
22		-					-
23 24	Total Taxes by Allocable Basis						
24	(Total Company Amount Ties to FFI p.114, Ln 14,(c)						
	NOTE 1: The detail of each total company number an		e FERC Form 1 i	is shown on WS H-1.			
	<b>Functional Property Tax Allocation</b>						
2.5	To the Live Diversity of Transport of the Control o		<u>action</u>	<u>Transmsission</u>	<u>Distribution</u>	<u>General</u>	<u>Total</u>
25	Functionalized Net Plant (Hist. TCOS, Lns 212 thru 2 STATE JURISDICTION #1	(22)	-	-	-	-	-
26	Percentage of Plant in STATE JURISDICTION #1						
27	Net Plant in STATE JURISDICTION #1 (Ln 25 * Ln	26) -		-	-	-	-
28	Less: Net Value of Exempted Generation Plant						
29	Taxable Property Basis (Ln 27 - Ln 28)	-		-	-	-	-
30 31	Relative Valuation Factor Weighted Net Plant (Ln 29 * Ln 30)						
32	General Plant Allocator (Ln 31 / (Total - General Plan	_ nt))	0.00%	0.00%	0.00%	-100.00%	
33	Functionalized General Plant (Ln 32 * General Plant)		-	-	-	-	-
33a	Ohio Company Merger Mitigation adjustment (Note 2		31,000,000	(31,000,000)			-
34	Weighted STATE JURISDICTION #1 Plant (Ln 31 +	- 33 + 33a)	31,000,000	(31,000,000)	- 0.000/	-	-
35 36	Functional Percentage (Ln 34/Total Ln 34) Functionalized Expense in STATE JURISDICTION #	<del>4</del> 1	0.00%	0.00%	0.00%	Г	_
30	STATE JURISDICTION #2	71				Ŀ	
37	Percentage of Plant in STATE JURISDICTION #2						
38	Net Plant in STATE JURISDICTION #2 (Ln 25 * Ln	37)	-	-	-	-	-
39	Less: Net Value of Exempted Generation Plant						
40	Taxable Property Basis (Ln 38 - Ln 39)	-		-	_	-	-
41 42	Relative Valuation Factor Weighted Net Plant (Ln 40 * Ln 41)	_		_	_	_	
43	General Plant Allocator (Ln 42 / (Total - General Plant	nt))	0.00%	0.00%	0.00%	-100.00%	
44	Functionalized General Plant (Ln 43 * General Plant)		-	-	-	-	-
45	Weighted STATE JURISDICTION #2 Plant (Ln 42 +		-	-	-	-	-
46 47	Functional Percentage (Ln 45/Total Ln 45)	<del>4</del> 2	0.00%	0.00%	0.00%	г	1
47	Functionalized Expense in STATE JURISDICTION # STATE JURISDICTION #3	<del>1</del> 2	-	-		L	-
48	Net Plant in STATE JURISDICTION #3 (Ln 25 - Ln	27 - Ln 38)	_	_	_	_	_
49	Less: Net Value Exempted Generation Plant	/					
50	Taxable Property Basis	-		-	-	-	-
51	Relative Valuation Factor						
52 53	Weighted Net Plant (Ln 50 * Ln 51) General Plant Allocator (Ln 52 / (Total - General Plan	- ht)	0.00%	0.00%	0.00%	-100.00%	
53 54	Functionalized General Plant (Ln 54 * General Plant)		- 0.00%	- 0.00%	- 0.00%	-100.00%	
55 56	Weighted STATE JURISDICTION #3 Plant (Ln 52 + Europianal Paragraphics (Ln 55/Total Ln 55)	54)	0.00%	0.00%	0.000/	-	-
56 57	Functional Percentage (Ln 55/Total Ln 55) Functionalized Expense in STATE JURISDICTION #	<del>‡</del> 3	- 0.00%	0.00%	0.00%	Г	_
58	Total Other Jurisdictions: (Line 7 * Net Plant Allocate		-	<del>-</del>		ŀ	_
59	Total Func. Property Taxes (Sum Lns 36, 47 57, 58)	- /	-	-	-	L	-
						=	

Note 2: This adjustment will apply to AEP Ohio only. This adjustment will be in effect for the Annual Updates prepared in 2012, 2013, 2014, 2015 and 2016.

# Cost of Service Formula Rate Using 2008 FF1 Balances

Worksheet H-1 Form 1 Source Reference of Company Amounts on WS H  $\,$ 

 $\mathbf{(A)} \qquad \qquad \mathbf{(B)} \qquad \qquad \mathbf{(C)} \qquad \mathbf{(D)}$ 

Line		Total	FERC FORM 1	
No.	Annual Tax Expenses by Type (Note 1)	Company	Tie-Back	FERC FORM 1 Reference
1	Revenue Taxes			
2	Revenue Tax 1	-		
3	Real Estate and Personal Property Taxes			
4	Real and Personal Property - Jurisdiction 1	-		
5	Real and Personal Property - Other Jurisdictions	-		
6	Payroll Taxes			
7	Federal Insurance Contribution (FICA )	-		
0	F			
8	Federal Unemployment Tax	-		
0	Control Manual Control			
9	State Unemployment Insurance	-		
10	Payroll Taxes			
10	Taylon Taxes	-		
11	Production Taxes			
12	Production Tax 1	<del>-</del>		
13	Miscellaneous Taxes			
14	Miscellaneous Tax 1	-		
15	Miscellaneous Tax 2	-		
16	Miscellaneous Tax 3	-		
17	Miscellaneous Tax 4	-		
18	Miscellaneous Tax 5	-		
19	Miscellaneous Tax 6	-		
20				
20	Miscellaneous Tax 7	-		
21	Miggellaneous Tay 9			
21	Miscellaneous Tax 8	<del>-</del> 		
22	Total Taxes by Allocable Basis			
	(Total Company Amount Ties to FFI p.114, Ln 14,(c))			

Note 1: The taxes assessed on each operating company can differ from year to year and between operating companies by both the type of taxes and the states in which they were assessed. Therefore, for each company, the types and jurisdictions of tax expense recorded on this page could differ from the same page in the same company's prior year template or from this page in other operating companies' current year templates. For each update, this sheet will be revised to ensure that the total activity recorded hereon equals the total reported in account 408.1 on P. 114, Ln 14 of the FERC Form 1.

# Cost of Service Formula Rate Using Historic Year FF1 Balances

						A C C A LIVE		
(A)	<b>(B) (C)</b>	worksne (D)	et 1 Supporting ( (E)	Transmı ( H		ant in Service Addition (G)	ons (H)	<b>(I)</b>
_			(E)	(1	: <b>)</b>	(0)	(11)	(1)
I.	_	osite Depreciation Rate		,	\ (D 20)	1 50 (1))		
1		Plant @ Beginning of His						
2	Transmission I	Plant @ End of Historic P	eriod (Historic Y	ear) (P.20	J/, In 58	,(g)):		
3	Avamana Dalam	an of Transmission Inves	tmont				-	
4 5	_	nce of Transmission Investigation Expense, Historic					<del>-</del>	
6	-	preciation Rate	1COS, III 270				0.00%	
7		o Reflect a Composite Lit	fe of 0 Vears				0.00%	
		•					0.0070	
II.	Calculation of Prope	rty Placed in Service by		Kelated L	<b>Deprecia</b>	tion Expense		
			Composite					T1 . T7
	Month in		Annual Depreciation	Ann	mal	Monthly	No. Months	First Year Depreciation
8	Service	Capitalized Balance	Rate	Depre		Depreciation 1	Depreciation	Expense
9	January	cupitunzeu Bulunce	0.00%	\$	-	\$ -	11	\$ -
10	February		0.00%	\$	_	\$ -	10	\$ -
11	March		0.00%	\$	_	\$ -	9	\$ -
12	April		0.00%	\$	-	\$ -	8	\$ -
13	May		0.00%	\$	-	\$ -	7	\$ -
14	June		0.00%	\$	-	\$ -	6	\$ -
15	July		0.00%	\$	-	\$ -	5	\$ -
16	August		0.00%	\$	-	\$ -	4	\$ -
17	September		0.00%	\$	-	\$ -	3	\$ -
18	October		0.00%	\$	-	\$ -	2	\$ -
19	November		0.00%	\$	-	\$ -	1	\$ -
20	December		0.00%	\$	-	\$ -	0 _	\$ -
21	Investment	\$ -	•				Depreciation Expense	\$ -
III.	Plant Transferred							
22			<== This input a	area is fo	r origina	l cost plant		
23			<== This input a	area is fo	r accumi	ulated depreciation tha	t may be associated with ca	apital
			_				ad assets transferred from a	subsidiary.
24	(Ln 7 * Ln 22)	\$ -	<== This input a	area is fo	r additio	nal Depreciation Expe	ense	
IV.	List of Major Project	ts Expected to be In-Serv	vice in 2009					
		-				<b>Estimated Cost</b>		
						(000's)	<b>Month in Service</b>	
25	Major Zonal							
25	<b>Projects</b>							
26 30								
				c	ubtotol		-	
31				2	ubtotal	-		

Subtotal

32 PJM Socialized/Beneficiary Allocated Regional Projects

33 34

Cost of Service Formula Rate Using Historic Year FF1 Balances

Worksheet J Supporting Calculation of PROJECTED PJM RTEP Project Revenue Requirement Billed to Benefiting Zones COMPANY NAME HERE

#### I. Calculate Return and Income Taxes with basis point ROE increase for Projects Qualified for Regional Billing.

ROE w/o incentives (Projected TCOS, ln 164) Project ROE Incentive Adder

ROE with additional basis point incentive

Determine R	( cost of long term debt	, cost of preferred st	ock and equity percentage is fro	om the Projected TCOS	S, lns 162 through 164)
-------------	--------------------------	------------------------	----------------------------------	-----------------------	-------------------------

<u>%</u>	<u>Cost</u>	Weighted cost
0.00%	0.00%	0.000%
0.00%	0.00%	0.000%
0.00%	0.00%	<u>0.000%</u>
	R =	0.000%
	0.00%	0.00%       0.00%         0.00%       0.00%         0.00%       0.00%

#### B. Determine Return using 'R' with hypothetical basis point ROE increase for Identified Projects.

Rate Base (Projected TCOS, ln 78)	-	
R (from A. above)		0.000%
Return (Rate Base x R)		-
C. Determine Income Taxes using Peturn with hypothetical basis point POF increase for Identified Projects		

#### C. Determine Income Taxes using Return with hypothetical basis point ROE increase for Identified Projects.

	0	· I	-	9	
Return (from B. above)					
Effective Tax Rate (Projected	d TCOS, ln 126)	)			
Income Tax Calculation (Ret	turn x CIT)				-
ITC Adjustment					-
Income Taxes					-

#### II. Calculate Net Plant Carrying Charge Rate (Fixed Charge Rate or FCR) with hypothetical basis point ROE increase.

#### A. Determine Annual Revenue Requirement less return and Income Taxes.

Annual Revenue Requirement, Less TEA Charges, Return and Taxes

Annual Revenue Requirement (Projected TCOS, In 1) T.E.A. & Lease Payments (Projected TCOS, Lns 105 & 106) Return (Projected TCOS, ln 134) Income Taxes (Projected TCOS, In 133)

# B. Determine Annual Revenue Requirement with hypothetical basis point increase in ROE.

D. Determine in	musi ite venue itedun ement with ny pometreur busis pome mereuse in ite 2.	
Annual Revenue	Requirement, Less TEA Charges, Return and Taxes	-
Return (from I.I	B. above)	-
Income Taxes (f	rom I.C. above)	=
Annual Revenue	Requirement, with Basis Point ROE increase	-
Depreciation (Pr	rojected TCOS, ln 111)	Ξ
Annual Rev. Req	, w/ Basis Point ROE increase, less Depreciation	-

Depreciation (Projected TCOS, ln 111)	_
Annual Rev. Req, w/ Basis Point ROE increase, less Depreciation	-
C. Determine FCR with hypothetical basis point ROE increase.	
Net Transmission Plant (Projected TCOS, ln 48)	-
Annual Revenue Requirement, with Basis Point ROE increase	-
FCR with Basis Point increase in ROE	
Annual Rev. Req, w / Basis Point ROE increase, less Dep.	-
FCR with Basis Point ROE increase, less Depreciation	
FCR less Depreciation (Projected TCOS, ln 9)	
Incremental FCR with Basis Point ROE increase, less Depreciation	

#### **III** Calculation of Composite Depreciation Rate

Transmission Plant @ Beginning of Historic Period (Historic Year) (P.206, ln 58,(b)): Transmission Plant @ End of Historic Period (Historic Year) (P.207, ln 58,(g)):

<==ROE Adder Cannot Exceed 125 Basis Points

0.00%

0.00%

0.00%

0.00% 0.00%

0.00%

0.00% <== ROE Including Incentives Cannot Exceed 12.74% Until July 1, 2012

SUMMARY OF PROJECTED ANNUAL RTEP REVENUE REQUIREMENTS							
	Rev Require	W Incentives	Incentive Amounts				
PROJECTED YEAR	Projected `	Year -	- \$ -				

#### Worksheet J - ATRR PROJECTED Calculation for PJM Projects Charged to Benefiting Zones

#### Determine the Revenue Requirement, and Additional Revenue Requirement for facilities receiving incentives.

#### A. Base Plan Facilities (e.g. ER05-925-000) Facilities receiving incentives accepted by FERC in Docket No. **Project Description:** Details Current Year **Projected Year** Investment ROE increase accepted by FERC (Basis Points) REVENUE REQUIREMENTS: Service Year (yyyy) Service Month (1-12) FCR w/o incentives, less depreciation 0.00% Useful life FCR w/incentives approved for these facilities, less dep. 0.00% CIAC (Yes or No) PROJECT. Annual Depreciation Expense RTEP Rev. Req't. **Beginning Depreciation Ending** RTEP Rev. Req't. **Incentive Rev.** Investment with Incentives \*\* **Balance** Balance w/o Incentives Requirement ## Year **Expense**

Current Projected Year ARR	-	
<b>Current Projected Year ARR w/ Incentive</b>		-
Current Projected Year Incentive ARR	_	

# **CUMULATIVE HISTORY OF PROJECTED ANNUAL** REVENUE REQUIREMENTS:

CUMULATIVE HISTORY OF PROJECTED ANNUAL INPUT PROJECTED ARR (WITH & WITHOUT INCENTIVES) FROM EACH PRIOR YEAR TEMPLATE BELOW TO MAINTAIN HISTORY OF PROJECTED ARRS OVER THE LIFE OF THE

RTEP	RTEP	
Projected	Projected	
Rev.	Rev.	
Req't.From	Req't.From	
Prior Year	Prior Year	
Template	Template	
	with	
w/o	Incentives	
Incentives	**	

**Project Totals** 

## This is the calculation of additional incentive revenue on projects deemed by the FERC to be eligible for an incentive return. This additional incentive requirement is applicable for the life of this specific project. Each year the revenue requirement calculated for PJM should be incremented by the amount of the incentive revenue calculated for that year on this project.

In order to calculate the proper monthly RTEP billing amount, PJM requires a 12 month revenue requirement for each RTEP project. As a result, notwithstanding the fact that the project was in service for a partial year, the project revenue requirement in the year that the project goes into service has been annualized (shown at the full-year level) so that PJM will collect the correct monthly billings.

<sup>\*\*</sup> This is the total amount that needs to be reported to PJM for billing to all regions.

Annual Depreciation Rate (True-Up TCOS, ln 111)

Worksheet K Supporting Calculation of TRUE-UP PJM RTEP Project Revenue Requirement Billed to Benefiting Zones

COMPANY NAME HERE

I. Calculate Return and Income Taxes with basis point ROE increase for Projects Qualified for Regional Billing. Page 1 of 2 A. Determine 'R' with hypothetical basis point increase in ROE for Identified Projects ROE w/o incentives (True-Up TCOS, ln 164) 0.00% Project ROE Incentive Adder <==ROE Adder Cannot Exceed 100 Basis Points ROE with additional basis point incentive 0.00% <== ROE Including Incentives Cannot Exceed 12.5% Until July 1, 2012 Determine R (cost of long term debt, cost of preferred stock and equity percentage is from the True-Up TCOS, lns 162 through 164) Cost Weighted cost % Long Term Debt 0.00% 0.00% 0.000% Preferred Stock 0.00% 0.00% 0.000% 0.00% 0.00% 0.000% Common Stock R =0.000% B. Determine Return using 'R' with hypothetical basis point ROE increase for Identified Projects. Rate Base (True-Up TCOS, ln 78) 0.000% R (from A. above) Return (Rate Base x R) C. Determine Income Taxes using Return with hypothetical basis point ROE increase for Identified Projects. Return (from B. above) Effective Tax Rate (True-Up TCOS, ln 126) 0.00% Income Tax Calculation (Return x CIT) ITC Adjustment Income Taxes II. Calculate Net Plant Carrying Charge Rate (Fixed Charge Rate or FCR) with hypothetical basis point ROE increase. A. Determine Annual Revenue Requirement less return and Income Taxes. Annual Revenue Requirement (True-Up TCOS, ln 1) T.E.A. & Lease Payments (True-Up TCOS, Lns 105 & 106) Return (True-Up TCOS, ln 134) Income Taxes (True-Up TCOS, ln 133) Annual Revenue Requirement, Less TEA Charges, Return and Taxes B. Determine Annual Revenue Requirement with hypothetical basis point increase in ROE. Annual Revenue Requirement, Less TEA Charges, Return and Taxes Return (from I.B. above) Income Taxes (from I.C. above) SUMMARY OF TRUED-UP ANNUAL REVENUE REQUIREMENTS FOR RTEP PROJECTS W Incentives Incentive Amounts Annual Revenue Requirement, with Basis Point ROE increase Rev Require Depreciation (True-Up TCOS, ln 111) TRUE-UP YEAR Historic Year Annual Rev. Req, w/ Basis Point ROE increase, less Depreciation As Projected in Prior Year WS J C. Determine FCR with hypothetical basis point ROE increase. Actual after True-up \$ Net Transmission Plant (True-Up TCOS, ln 48) True-up of ARR For Historic Year Annual Revenue Requirement, with Basis Point ROE increase FCR with Basis Point increase in ROE 0.00% Annual Rev. Reg, w / Basis Point ROE increase, less Dep. FCR with Basis Point ROE increase, less Depreciation 0.00% FCR less Depreciation (True-Up TCOS, ln 9) 0.00% Incremental FCR with Basis Point ROE increase, less Depreciation 0.00% **Calculation of Composite Depreciation Rate** Transmission Plant @ Beginning of Historic Period () (P.206, ln 58,(b)): Transmission Plant @ End of Historic Period () (P.207, ln 58,(g)): Subtotal Average Transmission Plant Balance for

#### COMPANY NAME HERE Worksheet K - ATRR TRUE-UP Calculation for PJM Projects Charged to Benefiting Zones

IV. Determine the Revenue Requirement, and Additional Revenue Requirement for facilities receiving incentives.

A. Base Plan Facilities

Facilities receiving	incentives accepted	. by	FERC in	Docket	No.
		- 5			

(e.g. ER05-925-000)

# Project Description:

Details								
Investment		Current Year					Historic Year	
Service Year (yyyy)		ROE increase acce	epted by FERC (Bas	is Points)			_	
Service Month (1-			v/o incentives, less					
12)		depreciation					0.00%	
Useful life	_	FCR w/incentives dep.	w/incentives approved for these facilities, less					
CIAC (Yes or No)	No	Annual Depreciati	on Expense				-	
Investment Year	Beginning Balance	Depreciation  Expense	Ending Balance	Average Balance	RTEP Rev. Req't. w/o Incentives	RTEP Rev. Req't. with Incentives **	Incentive Rev. Requirement ##	
					5 ===601101 ( 65		\$	

Project Totals - - - -

## This is the calculation of additional incentive revenue on projects deemed by the FERC to be eligible for an incentive return. This

additional incentive requirement is applicable for the life of this specific project. Each year the revenue requirement calculated for PJM

should be incremented by the amount of the incentive revenue calculated for that year on this project.

Page 2 of 2

Historic Year	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	-	-	-
Prior Yr True-Up		-	-
True-Up Adjustment			
Aujustinent	-	-	-

#### TRUE UP OF PROJECT REVENUE REQUIREMENT FOR PRIOR YEAR:

CUMULATIVE HISTORY OF TRUED-UP ANNUAL REVENUE REQUIREMENTS:

INPUT TRUE-UP ARR (WITH & WITHOUT INCENTIVES) FROM EACH PRIOR YEAR TEMPLATE BELOW TO MAINTAIN HISTORY OF TRUED-UP ARRS OVER THE LIFE OF THE PROJECT.

RTEP Projected Rev. Req't.From Prior Year WS J	RTEP Rev Req't True-up w/o Incentives	RTEP Projected Rev. Req't.From Prior Year WS J with Incentives **	RTEP Rev Req't True-up with Incentives	True-up of Incentive with Incentives **
	\$		\$ -	\$ -

<sup>\*\*</sup> This is the total amount that needs to be reported to PJM for billing to all regions.

# AEP East Companies Cost of Service Formula Rate Using Historic Year FF1 Balances Worksheet L Supporting Projected Cost of Debt COMPANY NAME HERE

# Calculation of Projected Interest Expense Based on Outstanding Debt at Year End

T *	(A)	<b>(B)</b>	<b>(C)</b>	<b>(D)</b>	<b>(E)</b>
<u>Line</u> <b>Number</b>	<u>Issuance</u>	Principle Outstanding	Interest Rate	Annual Expense (See Note S on Projected	<u>Note</u>
1	Long Term Debt (FF1.p. 256-257.h)			Template)	
2 3				-	
4 5	Installment Purchase Cont	tracts (FF1.p. 256-257.h, a)			
6				- -	
7				-	
8 9				<del>-</del> -	
10				- -	
11				-	
12 13				-	
13				- -	
15 16				- -	
17				-	
18				-	
19 20				- -	
21				-	
22				-	
23 24				- -	
25				-	
26	Sale/Leaseback		0.000%		
27	Issuance Discount, Premium, & Expenses:				
28	Auction Fees	FF1.p. 256 & 257.Lines Des	cribed as Fees		
29	Allowable Hedge Amortizat	ion (See Ln 45 Below)			
30	Amort of Debt Discount and Expenses				
31	Amort of Debt	FF1.p. 117.63.c			
	Premimums (Enter				
	Negative)	FF1.p. 117.65.c			
32	Reacquired Debt:				
33	Amortization of Loss	FF1.p. 117.64.c			
34	Amortization of Gain	FF1.p. 117.66.c			
35	<b>Total Interest on Long</b>		0.000		
	Term Debt	-	0.00%	-	
36	Preferred Stock (FF1.p.	Preferred Shares			
37	<u>250-251)</u>	Outstanding		_	
38				-	
39				-	
40	Dividends on Preferred				
	Stock	-	0.00%	-	
41	Eligible Hedging Gains and	Losses (WS M, Ln			
42	35, (E)) Total Projected Capital Struct 165)	cture Balance for Historic Year	+1 (Projected TCOS, Ln	_	
43		Limit - Five Basis Points of Tot	tal	0.0005	
44	Limit of Recoverable				
45	Amount Recoverable Hedge Amort	ization (Lesser		<del>-</del>	
<b>4</b> 3	of Ln 41 or Ln 44)	Manui (Lessei		-	

Worksheet M Supporting Calculation of Capital Structure and Weighted Average Cost of Capital Based on Average of Balances At 12/31/Historic Year-1 & 12/31/Historic Year

(A) (B) (C) (D) (E)

` '	,	Balances @	Balances @				
		12/31/Historic	12/31/Historic				
Line	2	Year	Year-1	Average			
Deve	lopment of Average Balance of Common						
<u>Equi</u>							
1	Proprietary Capital (112.16.c&d)			-			
2	Less Preferred Stock (Ln 55 Below)		0 -	-			
3	Less Account 216.1 (112.12.c&d)			0			
4	Less Account 219.1 (112.15.c&d)			0			
5	Average Balance of Common Equity	-	-	-			
	lopment of Cost of Long Term Debt Based or	<u>ı Average Outstandi</u>	ing Balance				
6	Bonds (112.18.c&d)			0			
7	Less: Reacquired Bonds (112.19.c&d)			0			
8	LT Advances from Assoc. Companies (112.2	20.c&d)		-			
9	Senior Unsecured Notes (112.21.c&d)			0			
10	Less: Fair Value Hedges (See Note on Ln 12	below)		0			
11	Total Average Debt	-	-	-			
	NOTE: The balance of fair value hedges o		term debt are to be ex	xcluded from the bala	ance of long term	debt included	in the
12	formula's capital structure. (Column H of						
13	Annual Interest Expense for Historic Year						
14	Interest on Long Term Debt (256-257.33.i)	1.6	.1 (') . CEED C E 1		1 .1	11.	
15	Less: Total Hedge Gain/Expense Accumulate		ol. (1) of FERC Form 1	included in Ln 14 an	a snown in Ln 34	below.	
16	Plus: Allowed Hedge Recovery From Ln 39 Amort of Debt Discount & Expense (117.63.0			-			
17 18	Amort of Loss on Reacquired Debt (117.64.c						
19	Less: Amort of Premium on Debt (117.65.c)	)					
20	Less: Amort of Gain on Reacquired Debt (117.03.c)	7.66 c)					
21	Total Interest Expense (Ln 14 + Ln 17 + Ln		))				
	- · · · · · · · · · · · · · · · · · · ·		')	0.00%			
22	Average Cost of Debt for Historic Year (Li		EC	0.00%			
23	NOTE: The net amount of hedging gains or l			rad in this formula rate	should be limite	d to the effective	a portion
	of pre-issuance cash flow hedges that are amount will be limited to five basis points of the total fair value hedges issued on Long Term Debt,	ortized over the life of Capital Structure.	of the underlying debt i Amounts related to the	ssuances. The recover ineffective portion of	ry of a net loss or pre-issuance hedg	passback of a nees, cash settlem	et gain ents of
	this formula and are to be recorded in the "Ex	cludable" column be	elow.	-			
					Amor	tization Period	l
		al Hedge	Less Excludable		Remaining		
	` •	-	mounts (See NOTE	Net Includable	Unamortized		
		oric Year	on Line 23)	Hedge Amount	Balance	Beginning	Ending
24	Senior Unsecured Notes			-			
25	Senior Unsecured Notes			-			
26	Senior Unsecured Notes			-			
27	Senior Unsecured Notes			-			
28	Senior Unsecured Notes			-			
29	Senior Unsecured Notes			-			
30	Senior Unsecured Notes			-			
31	Senior Unsecured Notes			_			
32	Senior Unsecured Notes			_			
33	Senior Unsecured Notes			_			
34	Total Hedge Amortization	- T !! (O	- -fl: 24 (- 22)				
35	Hedge Gain or Loss Prior to Application of R	•		-			
36	Total Average Capital Structure Balance for I			-			
37	Financial Hedge Recovery Limit - Five Basis	s Points of Total Cap	oıtal	0.0005			
38	Limit of Recoverable Amount			-			
39	Recoverable Hedge Amortization (Lesser of	of Ln 35 or Ln 38)		-			
<u>Deve</u>	lopment of Cost of Preferred Stock						
	D 6 10/1			A viono co			
40	Preferred Stock			<u>Average</u>			
40	Preferred Stock 0% Series - Dividend Rate (p. 250-251. 7 &	z 10.a)		Average			
40		z 10.a)		Average			
	0% Series Dividend Rate (p. 250-251. 7 &			Average			

38	Limit of Recoverable Amount	•		-	_
39	Recoverable Hedge Amortization (Lesser of Ln 35 or Ln 3	38)		-	
Deve	lopment of Cost of Preferred Stock				
	Preferred Stock			<b>Average</b>	
40	0% Series Dividend Rate (p. 250-251. 7 & 10.a)				
41	0% Series Par Value (p. 250-251. 8.c)				
42	0% Series Shares O/S (p.250-251. 8 & 11.e)				
43	0% Series Monetary Value (Ln 41 * Ln 42)	-	-	-	
44	0% Series Dividend Amount (Ln 40 * Ln 43)	-	-	-	
45	0% Series Dividend Rate (p. 250-251.a)				
46	0% Series Par Value (p. 250-251.c)				
47	0% Series Shares O/S (p.250-251. e)				
48	0% Series Monetary Value (Ln 46 * Ln 47)	-	-	-	
49	0% Series Dividend Amount (Ln 45 * Ln 48)	-	-	-	
50	0% Series Dividend Rate (p. 250-251.a)				
51	0% Series Par Value (p. 250-251.c)				
52	0% Series Shares O/S (p.250-251.e)				
53	0% Series Monetary Value (Ln 51 * Ln 52)	-	-	-	
54	0% Series Dividend Amount (Ln 50 * Ln 53)	-	-	-	
55	Balance of Preferred Stock (Lns 43, 48, 53)			Year End Total	Agrees to FF1 p.112, Ln 3, col (c) & (d)
56	Dividends on Preferred Stock (Lns 44, 49, 54)		-	-	
57	Average Cost of Preferred Stock (Ln 56/55)	0.00%	0.00%	0.00%	

#### Cost of Service Formula Rate Using Historic Year FF1 Balances

#### Worksheet N - Gains (Losses) on Sales of Plant Held For Future Use

Note: Gain or loss on plant held for future are recorded in accounts 411.6 or 411.7 respectively. Sales will be functionalized based on the description of that asset. Sales of transmission assets will be direct assigned; sales of general assets will be functionalized on labor. Sales of plant held for future use related to generation or distribution will not be included in the formula.

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Line	Date	<b>Property Description</b>	Function (T) or (G) T = Transmission	Basis	Proceeds	(Gain) / Loss	Functional Allocator	Functionalized Proceeds (Gain) / Loss	FERC Account
1			G = General			<del>-</del>	0.000%	-	
2						-	0.000%	-	
3						-	0.000%	-	
4				Net (Gain) or Loss fo	or Historic Year	-	<del>-</del>	-	

8

Cost of Service Formula Rate Using Historic Year FF1 Balances

Sum of Lines 1 to 8

Worksheet O - Calculation of Postemployment Benefits Other than Pensions Expenses Allocable to Transmission Service COMPANY NAME HERE

Total AEP East Operating Company PBOP Settlement Amount

# Allocation of PBOP Settlement Amount for Historic Year:

#### **Total Company Amount**

Line#	Company	Actual Expense (Including AEPSC Billed OPEB)  (A)	Ratio of Company Actual to Total  (B)=(A)/Total (A)	Allocation of PBOB Recovery Allowance (C)=(B)*	Labor Allocator for Historic Year  (D)	Actual Expense (E)=(A) * (D)	Allowable Expense (F)=(C) * (D)	One Year Functional Expense (Over)/Under (G)=(E) - (F)
		(Line 14)	( <b>D</b> )=(11)/ 10tal (11)	(C)=(D)	<b>(D)</b>	$(\mathbf{L})$ - $(\mathbf{R})$ $(\mathbf{D})$	(r)=(c) (b)	( <b>G</b> )=( <b>L</b> ) - ( <b>T</b> )
1	APCo		0.00%	-		-	-	-
2								
3	I&M		0.00%	-		=	-	-
4	KPCo		0.00%	-		-	-	-
5	KNGP		0.00%	-		-	-	-
6	OPCo		0.00%	-		-	-	-
7	WPCo		0.00%	=		=	=	<u> </u>

# Detail of Actual PBOP Expenses to be Removed in Cost of Service

	<u>APCo</u>	<u>I&amp;M</u>	<u>KPCo</u>	<u>KNGSPT</u>	<u>OPCo</u>	<u>WPCo</u>	<u>Total</u>
9 Direct Charged PBOP Expense per Actuarial Report							-
Additional PBOP Ledger Entries							
10 (from Company Records)							
11 Medicare Subsidy							-
12 Net Company Expense (Ln 9 + Ln 10 + Ln 11)	-	-	-	-	-	-	-
13 PBOP Expenses From AEP Service Corporation (from							-
Company Records)							
14 Company PBOP Expense (Ln 12 + Ln 13)	-	-	-	-	-	-	

AEP East

#### Worksheet - P CALCULATION OF

#### TOTAL WEIGHTED AVERAGE DEPRECIATION RATES

#### FOR TRANSMISSION PLANT PROPERTY ACCOUNT

EFFECTIVE AS OF <u>16</u>/1/<u>2009</u>2015

#### FOR MULTIPLE JURISDICTION COMPANIES

#### APPALACHIAN POWER COMPANY

			VII	RGINIA				WES	T VIRGINIA				FERC WHO	LESALE	FER(	C KINGSPORT	PAN Y
			(1)					(2)					(3)		(4)		
				WTD AVG.		PSC OF WV			WTD AVG.				WTD AVG.		WTI	D AVG.	WTD AVG.
PLANT	VA SCC	ALI	LOCATION	DEPREC.	1	APPROVED	ALLO	CATION	DEPREC.		FERC	ALLOCATION	DEPREC.	FERC	ALLOCAT	ION DEPREC.	DEPREC.
ACCT.	RATES	FA	ACTOR (5)	RATE		RATES	FACT	TOR (5)	RATE		RATES	FACTOR (5)	RATE	RATES	FACTOR	(5) RATE	RATE
TRANSMISSION PLANT												· ·					
Land Rights - Va.	350.1 0	0.66%	1.000000	0.66%													0.66%
Energy Storage Equipment (6)	<u>351.0</u>		0.4605024		<u>6.67%</u>	<u>1</u>	1.000000	<u>6.67%</u>			0.0264260				2.0561.440		6.67%
Structures & Improvements	352.0	1.55%	0. <u>469583</u> 4 <del>61344</del>	0. <del>72</del> 73%	1. <del>55</del> <u>52</u> %	0.43784	<u>7</u> 451517	0. <del>70</del> 67%	2	2.19%	0. <u>036426</u> 0 <del>29810</del>	0. <del>07</del> 08%		2.19%	). <u>056144</u> 0 <del>57329</del>	0. <del>13</del> <u>12</u> %	1. <del>61</del> <u>60</u> %
Structures & Improvements	332.0		0.4695834	0.72 <u>75</u> 70	1.55 <u>52</u> 70	0. <u>43704</u>	<u></u> +31317	0.70 <u>07</u> 70	2	17/0	0.0364260	0.07 <u>00</u> 70		2.1770	0.0561440	0.13 <u>12</u> 70	1. <del>97</del> <u>86</u>
Station Equipment	353.0	1.95%	<del>6134</del> 4	0. <del>90</del> <u>92</u> %	1. <del>95</del> <u>68</u> %	0. <u>43784</u>	<u>7</u> 451517	0. <del>88</del> <u>74</u> %	2	2.19%	<del>29810</del>	0. <del>07</del> 08%		2.19%	<del>57329</del>	0. <del>13</del> <u>12</u> %	%
			0.4695834					0. <del>51</del> <u>67</u>			0. <u>036426</u> 0				0. <u>056144</u> 0		1. <del>23<u>41</u></del>
Towers & Fixtures	354.0	1.14%	61344 0.4605934	0. <del>53</del> <u>54</u> %	1. <del>14<u>54</u>%</del>	0. <u>43784</u>	<u>17</u> 451517	%	<u>.</u>	2.19%	29810			2.19%	57329 0.0561440	0. <del>13</del> <u>12</u> %	2.7266
Poles & Fixtures	355.0	2.77%	0. <u>469583</u> 4 <del>6134</del> 4	1. <del>28</del> <u>30</u> %	2. <del>77<u>64</u>%</del>	0.43784	1 <u>7</u> 4 <u>51517</u>	1. <del>25</del> <u>16</u> %		2.19%	0. <u>036426</u> 0 <del>29810</del>			2.19%	0. <u>0301440</u> 57329	0. <del>13</del> <u>12</u> %	2. <del>72<u>66</u> %</del>
1 0100 00 1 111002 00	200.0		0.4695834	1. <u>20<u>20</u>,0</u>	<u> </u>	0. <u>,</u>	<u>.,</u> .0 10 1 ,	7.20 <u>70</u> 70	•	_,,,,	0. <u>036426</u> 0			2.12 70	0. <u>056144</u> 0	0.10 <u>12</u> ,0	1. <del>12</del> 19
Overhead Conductor	356.0	1.01%	<del>6134</del> 4	0.47%	1. <del>01</del> <u>19</u> %	0. <u>43784</u>	<u>17</u> 451517	0. <del>46</del> <u>52</u> %	:	2.19%	<del>2981</del> 0			2.19%	<del>57329</del>	0. <del>13</del> <u>12</u> %	%
			0.4695834								0. <u>036426</u> 0			- 40	0. <u>056144</u> 0	0.4040	1. <del>32</del> 41
Underground Conduit	357.0	1.23%	61344	0. <del>57</del> <u>58</u> %	1. <del>24<u>45</u>%</del>	0. <u>43784</u>	<u>17</u> 451517	0. <del>56</del> <u>63</u> %	<u>.</u>	2.19%	29810			2.19%	57329 0.0561440	0. <del>13</del> <u>12</u> %	2 104 8
Underground Conductors	358.0	3.18%	0. <u>469583</u> 4 <del>61344</del>	1. <del>47<u>49</u>%</del>	<del>3.18</del> <u>7.23</u> %	0 43784	1 <u>7</u> 4 <u>51517</u>	1.44 <u>3.17</u> %		2.19%	0. <u>036426</u> 0 <del>29810</del>			2.19%	0. <u>0561440</u> <del>57329</del>	0. <del>13</del> <u>12</u> %	3.10 <u>4.8</u> <u>6</u> %
(1) As approved in VA Case No						0. <u>15701</u>	<u>.,</u> .01017	70	•	17/0	2,010	0.07 <u>50</u> 70		2.1770	5,52)	5.15 <u>12</u> /0	<u>5</u> ,0

(3) Approved by FERC March 2, 1990 in Docket ER90-132

(4) Approved by FERC March 2, 1990 in Docket ER90-133

(2) Approved by PSC of WV Order dated May 26, 2015 July 26, 2006 in

Case No. <u>14-1151-E-D effective June 1, 2015</u>05 1278 E PC PW 42T effective July 1, 2006.

Depreciation rates were made effective on February 1, 2012 January 1, 2006.

2009 Allocation factors based on APCo's 12 monthly Coincident Peaks for twelve months ended September 30, 2008 as provided by AEPSC Regulated Pricing. The demand allocation factors are updated annually as of January 1, based on

- (5) the 12 monthly CP's as of the previous September 30th.
- (6) Energy Storage Equipment is a new account established per FERC Order 784.

#### **GENERAL NOTES:**

The rates for each AEP company have been approved by their respective regulatory commissions.

APCo falls under the authority of Virginia, West Virginia and the FERC. Therefore, APCo's rates are a composite of the jurisdictions under which it operates. Each jurisdictions' rate is multiplied by an allocation factor, and

COM

the product for each jurisdiction is added with the other jurisdictions to derive the composite rate for the company.

#### Worksheet - P CALCULATION OF

#### TOTAL WEIGHTED AVERAGE DEPRECIATION RATES

#### FOR TRANSMISSION PLANT PROPERTY ACCOUNT

#### EFFECTIVE AS OF July 1, 2014

#### FOR MULTIPLE JURISDICTION COMPANIES

#### INDIANA MICHIGAN POWER COMPANY

			INDIANA	L			MICHIGAN			FERC WHOLESA	LE	COMPANY
		(1)				(2)			(3)			
					WTD AVG.	MPSC	WTD	AVG.		WTD AVO	$\tilde{g}$ .	WTD AVG.
	PLANT	IURC	ALLOCA'	TION	DEPREC.	APPROVED	ALLOCATION	DEPREC.	<i>FERC</i>	ALLOCATION	DEPREC.	DEPREC.
	ACCT.	RATES	FACTOR	? (4)	RATE	RATES	FACTOR (4)	RATE	RATES	FACTOR (4)	RATE	RATE
TRANSMISSION PLANT												
Land Improvements	350.1		1.27%	.646552	.8211%	1.1700%	.139381	.1631%	1.1700%	.214067	.2505%	1.23%
Structures & Improvements	352.0		1.32%	.646552	.8534%	1.2700%	.139381	.1770%	1.2700%	.214067	.2719%	1.30%
Station Equipment	353.0		1.69%	.646552	1.0927%	1.6500%	.139381	.2300%	1.6500%	.214067	.3532%	1.68%
Towers & Fixtures	354.0		1.60%	.646552	1.0345%	1.4400%	.139381	.2007%	1.4400%	.214067	.3083%	1.54%
Poles & Fixtures	355.0		2.43%	.646552	1.5711%	2.3900%	.139381	.3331%	2.3900%	.214067	.5116%	2.42%
Overhead Conductors	356.0		1.53%	.646552	.9892%	1.4500%	.139381	.2021%	1.4500%	.214067	.3104%	1.50%
Underground Conduit	357.0		1.56%	.646552	1.0086%	1.3900%	.139381	.1937%	1.3900%	.214067	.2976%	1.50%
<b>Underground Conductors</b>	358.0		1.55%	.646552	1.0022%	1.4600%	.139381	.2035%	1.4600%	.214067	.3125%	1.52%
Trails & Roads	359.0		1.49%	.646552	.9634%	1.4700%	.139381	.2049%	1.4700%	.214067	.3147%	1.48%

<sup>(1)</sup> As approved in Indiana Case No.44075.

#### **GENERAL NOTES:**

The rates for each AEP company have been approved by their respective regulatory commissions.

I&M falls under the authority of Indiana, Michigan and the FERC. Therefore, I&M's rates are a composite of the jurisdictions under which it operates. Each jurisdictions to derive the composite rate for the company.

<sup>(2)</sup> As approved in Michigan Case No. U16801.

<sup>(3)</sup> FERC wholesale formula rate agreements specify that the depreciation rates in the formula rates change upon approval of MPSC rates in the Michigan jurisdiction.

<sup>(4)</sup> The rates approved for each jurisdiction are updated when approved by that commission. These demand-based allocation factors for all jurisdictions are updated when new rates are approved in one of the jurisdictions. These allocation factors reflect I&M's 12 monthly Coincident Peaks during test year of the most recent rate case.

# AEP EAST COMPANIES PJM FORMULA RATE

#### WORKSHEET P - TRANSMISSION DEPRECIATION RATES

#### EFFECTIVE AS OF 1/1/2009

#### FOR SINGLE JURISDICTION COMPANIES

#### KINGSPORT POWER COMPANY

	PLANT	RATES	
	ACCT.		
		Note 1	
TRANSMISSION PLANT			
Structures & Improvements	352.0	2.10%	
Station Equipment	353.0	2.57%	
Towers & Fixtures	354.0	1.91%	
Poles & Fixtures	355.0	4.20%	
Overhead Conductors	356.0	2.50%	
Underground Conduit	357.0	Note 2	
Underground Conductors	358.0	Note 2	
Composite Transmission Depreciation Rate		2.59%	

#### Reference:

Note 1: Rates Approved In Tennessee Regulatory Authority Case No. U-84-7308.

Note 2: Kingsport Power Company does not have investment in plant accounts 357 or 358. Therefore, there are no depreciation rates approved for these plant accounts.

# **General Note**

#### PJM FORMULA RATE

# WORKSHEET P - TRANSMISSION DEPRECIATION RATES

# **EFFECTIVE AS OF 17**/1/**20092015**

# FOR SINGLE JURISDICTION COMPANIES

#### KENTUCKY POWER COMPANY

	PLANT	
	ACCT.	RATES
		Note 1
TRANSMISSION PLANT		
<u>Land Rights</u>	<u>350.1</u>	<u>1.44%</u>
Structures & Improvements	352.0	<del>1.71</del> 2.08%
Station Equipment	353.0	<del>1.71</del> 2.15%
Towers & Fixtures	354.0	<del>1.71</del> <u>2.61</u> %
Poles & Fixtures	355.0	<del>1.71</del> <u>3.95</u> %
Overhead Conductors	356.0	<del>1.71</del> 2.91%
Underground Conduit	357.0	<del>1.71</del> 2.99%
Underground Conductors	358.0	<del>1.71</del> 2.62%
Trails & Roads	359.0	1.71%

Reference:

Note 1: Rates Approved in Kentucky Public Service Commission Case No. 2014-0039691-066.

# **General Note:**

#### PJM FORMULA RATE

# $\ \, WORKSHEET \, P \, \hbox{-} \, TRANSMISSION \, DEPRECIATION \, RATES \, \\$

#### **EFFECTIVE AS OF 1/1/2012**

# FOR SINGLE JURISDICTION COMPANIES

#### OHIO POWER COMPANY

PLANT ACCT.	RATES Note 1
352.0	2.02%
353.0	2.29%
354.0	1.88%
354.0	1.88%
355.0	3.52%
355.0	3.52%
356.0	1.91%
356.0	1.91%
356.0	1.91%
356.0	1.91%
356.0	1.91%
357.0	2.26%
358.0	3.27%
•	352.0 353.0 354.0 354.0 355.0 355.0 356.0 356.0 356.0 356.0 356.0

#### Reference:

Note 1: These are the weighted average of the depreciation rates in effect for Columbus Southern Power and Ohio Power prior to the merger of Columbus Southern into Ohio Power.

# **General Note:**

#### PJM FORMULA RATE

# WORKSHEET P - TRANSMISSION DEPRECIATION RATES

# **EFFECTIVE AS OF 16/1/20092015**

# FOR SINGLE JURISDICTION COMPANIES

#### WHEELING POWER COMPANY

	PLANT	
	ACCT.	RATES
		Note 1
TRANSMISSION PLANT		
Structures & Improvements	352.0	<del>2.70</del> <u>0.69</u> %
Station Equipment	353.0	<del>2</del> 1.70%
Towers & Fixtures	354.0	<del>2.70</del> <u>0.04</u> %
Poles & Fixtures	355.0	2. <del>70</del> <u>65</u> %
Overhead Conductors	356.0	<del>2.70</del> 1.12%
Underground Conduit	357.0	2. <del>70</del> <u>00</u> %
Underground Conductors	358.0	<del>2.70</del> <u>5.00</u> %
Trails & Roads	359.0	<del>2.70%_</del>

Note 1: Rates Approved in WV Public Service Commission Case No. <u>14-1151-E-DPSC 90 243 E 42T</u>.

# **General Note:**

# Revisions to Attachment H-20A Appendix of the PJM OATT

(Marked Format)

#### Appendix A to Attachment H-20A

#### American Electric Power Service Corporation Docket No. ER10-355

# Transmission Formula Rate Settlement For

AEP Appalachian Transmission Company Inc., AEP Indiana Michigan Transmission Company Inc., AEP Kentucky Transmission Company Inc., AEP Ohio Transmission Company Inc., and AEP West Virginia Transmission Company Inc.

(collectively "AEP" or "the AEP East Transmission Companies")

#### **Cost of Service and Formula Rate Settlement Principles**

The following Cost of Service and Formula Rate Settlement Principles are a part of the Settlement Agreement being filed \_\_\_\_\_\_, 2010 in Docket No. ER10-355 ("the Settlement"):

#### I. Transmission Formula Rate Design.

- A. Applicability of Wholesale Ratemaking Practices.
  - 1. Only those costs that are recoverable pursuant to FERC accounting and/or ratemaking practices may be recovered by the AEP East Transmission Companies through its FERC transmission formula rate.
  - 2. Adjustments to the AEP cost of service formula rate templates AEP shall take steps to have PJM include in the rate template used to calculate charges to transmission customers all of the adjustments, modifications, and corrections identified in the new formula rate templates included with this Statement of Settlement Principles.
  - 3. Costs of transmission studies
    - a. All costs of transmission studies (*e.g.*, studies of requested new or modified delivery or interconnection points, System Impact Studies and Facilities Studies) associated with service to affiliated (*e.g.*, AEP East Transmission Companies) and non-affiliated customers shall be allocated and charged to customers on a comparable and consistent basis.
    - b. The costs of such studies shall be accounted for in one of the following ways:

- i. The study costs are not included in the formula rate, expressly or otherwise; or
- ii. If the costs are included in the formula rate but also are directly assigned to the entity requesting the study, then the formula rate also will include a revenue credit equal to the amount of study costs that are directly assignable to the requesting entity. Such revenue credit shall be reflected in the formula rate regardless of the specific accounting applied to the costs and revenues.
- iii. Study costs that are not directly assigned to the requesting entity may be treated as a system-wide cost in applying the formula rate, but only if that treatment is applied to all such study costs incurred for any requesting entity.
- c. Transmission service base rate charges under the formula shall be calculated in a manner that allocates the costs of transmission studies to, and recovers those costs from, transmission customers (including the AEP East Operating Companies) on a comparable basis, without regard to whether the costs of those studies are directly assigned or rolled-in, and without regard to whether any particular studies are performed for affiliated or non-affiliated customers.

#### B. Rate Base

- 1. The transmission Rate Base used in the annual update shall be based upon the end-of-year net transmission plant balance from the prior calendar year FERC Form 1 ("FF1"). The true-up of the formula rate, however, shall utilize a Transmission Rate Base that incorporates the arithmetic average of the most recent actual values for beginning-of-year and end-of-year net transmission plant (that is, the average of beginning and end of calendar year balances for plant in service and accumulated depreciation).
  - a. The revenue requirements billed each July and running through June of the next year will be based on a test-year-end rate base style annual transmission revenue requirement ("ATRR") calculation. The initial revenue requirements will be billed July 1, 2010, through June 30, 2011, and will be based on the 2009 expenses and year-end rate base plus projected 2010 calendar transmission plant in service (TPIS) additions. The following year

- the projected revenue requirements will be based on the 2010 expenses and year-end TPIS balances obtained from the 2010 FF1 plus projected 2011 calendar year TPIS additions.
- b. In 2011, the estimated ATRR that was effective during 2010 will be reconciled ("trued-up") with an ATRR that is calculated based on actual 2010 calendar year expenses and rate base reflecting the arithmetic average of the beginning-of-year and end-of-year balances for TPIS and accumulated depreciation. The actual 2010 ATRR ("true-up") to be used for such reconciliation will be posted or otherwise provided to customers in May 2011 at the same time that the projected ATRR to be used for billing purposes during the second half of 2011 (and the first half of 2012) is posted or otherwise provided to customers.
- c. For the true-up of prior year charges, AEP East Transmission Companies will calculate the difference between the estimated ATRR for the prior calendar year that was used for billing purposes and the actual ATRR for that prior calendar year, calculated as described in paragraph B.1.b. above. The difference between the two values (plus interest at the applicable FERC refund interest rates) shall be reflected as an addition to or offset against billed charges for transmission service July 1<sup>st</sup> of the current year through June 30 of the following year. The interest rate will be calculated as per section 35.19a of the Commission's regulations.
- d. The sequence outlined in paragraphs B.1.a, B.1.b and B.1.c above will be repeated each year.
- 2. Cash working capital for each AEP East Transmission Company will be calculated as 1/8 of transmission-related O&M expense not including any portion of A&G expense allocated to transmission.
- 3. AEP will provide as a part of its informational filing each May detail regarding ADIT balances for the historical year that is no less detailed, and selectively more detailed as described in this section, than what is included in FERC Standard Filing Requirements for Period I Statement AF (Accts. 281, 282, and 283) and Statement AG (Acct. 190). In addition, AEP's information on ADIT will distinguish between utility and non-utility ADIT in order to ensure compliance with Section I.D.2.c.i., below.
- 4. AEP will be permitted to include in Rate Base in the formula rate such portion of AEP's FAS 87 cash investment in Pre-Paid Pension cost recorded in FERC Account 165 as may be incurred for AEP System

employees providing service to the AEP Transmission Companies. If AEP elects to include such costs in Rate Base, it will use a labor expense allocation factor to allocate the total company amount to the transmission cost of service ("TCOS").

#### C. Expenses

- 1. The formula rate shall allocate property tax expense based on the methodology of Worksheet Sheet H using the as-filed methodology.
- 2. The formula rate shall reflect the applicable state and federal statutory tax rates in effect during the period the calculated estimated unit charges are applicable. If statutory tax rates change during such period, the effective tax rates used in the formula shall be weighted by the number of days the pre-change rate and the post-change rate each is in effect (*e.g.*, if a 40% rate is in effect nine months and a 32% rate is in effect 3 months, the weighted rate for the 12-month period would be 38%, which reflects 40%  $\times$  0.75 + 32%  $\times$  0.25 = 38%).
- 3. The formula shall include only expenses that are directly related to or properly allocable to transmission service.
- 4. Expenses recorded in FERC Accounts 928 (Regulatory Commission Expense), 930.1 (Safety Related Advertising) and 930.2 (Miscellaneous General Expenses) that are not directly related to or properly allocable to transmission service will be removed from the TCOS. If AEP includes any expenses booked to these accounts in future ATRR updates, AEP must provide supporting information demonstrating that the underlying activities are directly related to providing transmission service.
- 5. The AEP Transmission Companies will record depreciation expense using composites of the depreciation rates attached as Appendix A.1.2, which rates will not be changed absent an Order of the Commission approving such change in a Section 205 or 206 filing at FERC to seek a change in depreciation rates.

#### 6. PBOP Expense

i. Post employment benefit expenses other than pensions (PBOP) included in each update of the AEP Transmission Companies' formula rate will be fixed based on a rate reflecting the ratio of the AEP System-wide PBOP expense divided by the AEP System-wide total employee direct labor expense (PBOP Rate). The initial PBOP Rate shall be \$0.094 per dollar cost of each AEP Transmission Company's direct labor expense.

- ii. The calculation of PBOP expense includable in each Annual Update of the formula rate shall be made pursuant to Worksheet O, which is included in Attachment F to the Settlement Agreement, and which will be included in the formula rate. Using Worksheet O, each AEP Transmission Company will, as part of each Annual Update, compare the allowable PBOP expense, based on the PBOP Rate, to its actual PBOP expense in the prior calendar year in order to determine the adjustment required to increase or decrease the actual PBOP expense to the allowable amount.
- iii. As part of the annual update process, AEP will provide to transmission customers, and include in its informational filing, an independently prepared actuarial report ("Annual Actuarial Report") that includes a ten (10) year forecast of PBOP expenses when that report becomes available. The Settling Parties anticipate that the Annual Actuarial Report normally will be received by the time the annual update is posted or otherwise provided to customers each year.
- iv. During the annual update process conducted in 2014, and every four years thereafter, Worksheet O will be used to determine whether, and if so by what amount, the PBOP allowance rate (\$PBOP per \$ Direct O&M Labor) should be adjusted going forward for the next four years (PBOP Rate Review). If the Annual Actuarial Report issued during the year of any PBOP Rate Review projects PBOP costs during the next four years that, when allocated to the AEP Transmission Companies based on their projected direct labor expenses over that same projected four-year period, absent a change in the PBOP Rate, will likely cause the AEP East Transmission Companies to over or under collect their cumulative PBOP expenses by more than 20% of the projected next four year's total PBOP expense, taking into account the net over or under collection of such expenses during the previous four years, the PBOP Rate shall be adjusted. In order to determine whether continued use of the then approved PBOP Rate is likely to result in the AEP Companies' incurrence of a cumulative allowance of PBOP costs under the formula rate will result in a cumulative over or under-recovery of actual PBOP expenses exceeding 20% over the subsequent four year period, Worksheet O will be used to determine the following PBOB expense metrics:
  - (a) the level of cumulative over or under collections of PBOP expense during the time since the PBOP allowance rate was last set, including carrying costs based on the weighted average cost of capital ("WACC") each year from the

- Formula rate True-Up transmission cost-of-service ("TCOS") analyses;
- (b) the cumulative net present value ("CNPV") of projected PBOP costs during the next four years, as estimated by the then current Actuarial Report, assuming a discount rate equal to the True-Up TCOS WACC for the immediately prior calendar year ("Prior Year WACC"); and
- (c) the CNPV of continued collections over the next four years based on the projected AEP Transmission Companies' direct labor expenses and the then effective PBOP allowance rate, assuming a discount rate equal to the Prior Year WACC.

If the absolute value of (a) + (b) - (c) exceeds 20% of (b), then the PBOP allowance rate used in the formula rate calculation shall be changed to the value that will cause the projected result of

- (a) + (b) (c) to equal zero. If the projected over or under collection during the next four years, (a) + (b) (c), is less than 20% of (b), then the PBOP Rate will continue in effect for the next four years at the then effective rate.
- v. If it is determined through the foregoing procedure that the AEP Companies' cumulative PBOP Rate will over-recover or under-recover actual PBOP expenses by more than 20% over the subsequent four-year period, AEP shall make a filing under FPA § 205 to change the PBOP Rate stated in the formula rate. No other changes to the formula rate may be included in that filing. Neither AEP nor any Settling Party may raise in connection with such filing any issue affecting the formula rate other than the level of allowable PBOP Rate.
- vi. The foregoing procedure for required updating of the formula rate's stated PBOP Rate shall not affect either: (i) AEP's right to make filings under FPA § 205 to address aspects of the formula rate other than PBOP expense, or (ii) customers' rights to make filings under FPA § 206 to address aspects of the formula rate other than the PBOP expense.

#### 7. Formation Costs

a. One half of the AEP Transmission Companies' Formation costs incurred before June 30, 2010 will be included in the formula rate, with such amount to be allocated equally among the AEP Transmission Companies and amortized over four years. There will be no carrying charges on the unamortized balance of

recoverable Formation costs. Formation costs incurred after June 30, 2010 shall not be included in the transmission formula rates of the AEP Transmission Companies (or the AEP Operating Companies) and shall not be otherwise recoverable in FERCregulated rates. For purposes of such rate exclusion, post-June 30, 2010 formation costs include, but are not limited to, all costs associated with obtaining any necessary federal, state or local approvals for formation/operation of the AEP Transmission Companies, all costs associated with establishment of the AEP Transmission Companies and the evaluation of how to accomplish same, and any other category of cost that AEP treated as a formation cost for purposes of its request to recover pre-June 30, 2010 formation costs. In its Annual Update filings, AEP Transmission Companies shall provide information sufficient to permit verification that such formation costs have been excluded from the formula rates. AEP reserves the right to seek recovery of post-June 30, 2010 formation costs associated with obtaining necessary state or local approvals (regarding state-related costs) from the applicable state regulatory commission.

#### D. Capital Structure, Cost of Capital and Return on Equity

#### 1. Return on Equity

- a. The Settlement shall establish on a non-precedential basis a base return on common equity ("Base ROE") used in the OATT transmission formula rates applicable to the AEP East zone of 10.99%, plus a 50 basis point adder for continued RTO participation (for a total of 11.49% ROE). This ROE shall remain in effect for a period of at least 36 months.
- b. The Settlement shall not establish a lower or upper end of the zone of reasonableness, but for a period of 36 months from the effective date of the formula rate, AEP will limit any request for an incentive ROE pursuant to Order No. 679 and Order No. 679-A to not more than the total ROE plus 125 basis points, (i.e., 12.74% total incentive ROE). Such incentive ROE must be within the then-applicable zone of reasonableness as determined in a Section 205 or 206 proceeding. Settling Parties reserve the right to protest any request by AEP for incentive rates including any request for an incentive ROE.

#### 2. Capital Structure / Cost of Capital:

a. In the annual true-up calculations, AEP shall use the arithmetic average of the beginning-of-year and end-of-year balances of long-

term debt, common and preferred equity, and shall use actual calendar year long term debt interest expenses, preferred dividends, and approved ROE. The long term debt balances and long term debt cost rate shall not include any amounts related to hedging activity.

- h. AEP shall use the most recent available FF1 actual end-of-year balances of outstanding long term debt (less the balance of any hedges), preferred equity, and common equity, in the projected ATRR used for billing purposes. The estimated cost rate for long term debt for the Projected Rate Year shall reflect the prior calendar year actual cost of long term debt (including periodic expenses such as remarketing and letter of credit fees, and related amortizations, as applicable, of issuance/reacquisition cost and discount or premium amortizations) for debt outstanding during the full year and the annualized cost of any issuances that occur after January 1 of the prior calendar year for a full twelve months coupon interest expense. However, any amortization of gains or losses on interest rate derivative hedging shall be excluded from long-term-debt cost annual and annualized expenses. AEP will reflect the calculation of its debt cost in Worksheets L and M.
- c. AEP is not restricted from hedging at its discretion, and all interest rate hedge gains and losses will be excluded from the formula rate for both the Projected and True-Up rates.
- d. AEP East Transmission Companies will establish LTD and Equity investments in the AEP East Transmission Companies as soon as is practicable (actual capital structure and long term debt costs and preferred equity costs). Until that time, the AEP East Transmission Companies will use the actual consolidated (weighted composite) capital structure and LTD cost rate of the AEP Operating Companies in PJM {The AEP Operating Companies in PJM are: Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, and Wheeling Power Company} subject to a 50% equity ratio cap, as further explained below. Appendix A-1.1 to this Attachment A-1 describes the manner in which the weighted average composite capital structure and cost of long term debt and preferred equity costs of the AEP East Operating Companies in PJM shall be calculated.
- e. In transitioning from the use of the proxy composite capital cost of the East Operating Companies in PJM to an actual capital structure, long term debt cost and preferred equity cost, a transitioning East Transmission Company's actual capital structure

and cost rates will be implemented for the Projected TCOS in the first formula rate Annual Update after the issuance of long-term debt or allocation of debt financing from an associated company establishing the transitioning East Company's actual capital structure and cost of debt. The True-Up TCOS in that Annual Update will continue to be based on the East Operating Companies' composite capital structure and LTD cost, and preferred equity costs.

- f. The first long term debt in the actual capital structure of an AEP Transmission Company is expected to be an allocation of proceeds from a debt issuance of AEP Transmission Company LLC or AEP Transmission Holding Company LLC (refer to page 7 of Exhibit AEP 100 for the AEPTCo Corporate Structure). The AEP Transmission Companies {The AEP Transmission Companies include the AEP East Transmission Companies and AEP Southwestern Transmission Company Inc., and AEP Oklahoma Transmission Co., Inc.} would draw debt financing from this issuance, as well as equity infusions from AEP Transmission Company LLC or AEP Transmission Holding Company LLC, based on their individual expenditure levels to establish their actual capital structure. The interest rate of this debt financing, along with any associated issuance costs incurred (not to include any costs related to any hedging activities), would define the initial cost of debt for the affected AEP Transmission Companies. This initial debt financing and all subsequent allocations of associated company (AEP Transmission Company LLC or AEP Transmission Holding Company LLC or a higher affiliate in AEP, Inc.) long term debt shall be recorded in Account 430 Advances from Associated Companies in the FERC Form No. 1 reports of the affected AEP Transmission Companies. However, long term debt issuances and equity of the AEP Operating Companies shall not be used to finance debt or equity in the actual capital structure of the AEP Transmission Companies. The debt cost rate of long term debt issuances allocated from associated companies to the AEP Transmission Companies shall be at cost.
- g. In the event there is a construction draw down loan, the Companies will adopt the yield to maturity (YTM) approach filed in the PATH Settlement Agreement Docket No. ER08-386-000 in determining the cost of debt for such draw down loan[s], and illustrated in Attachment A.1.3. There is an annual and final (at end of loan) true-up of YTM, consistent with actual debt cost experience. Workpapers showing the calculation of the yield to maturity cost and true-up shall be included in the Annual Update(s) in which such charges are proposed to be included in the Projected rate.

- h. When an individual East Transmission Company has an actual capital structure, which is first achieved when the Transmission Company issues its own first long term debt issuance in its own name, or the individual Transmission Company has debt financing specifically allocated from an issuance by AEP Transmission Company LLC or AEP Transmission Holding Company LLC or a higher AEP corporate entity as described in (f) above, the actual long term debt cost and capital structure of that individual East Transmission Company shall be used in the Projected and True Up formula rates for that individual company, subject to a 50% Equity Ratio cap described below and subject to transition year treatment as described in (e) of this section. The True-up and Projected ATRR of the remaining East Transmission Companies which have not yet issued their own long term debt, or received a specific allocation of debt financing by an associated company for the purpose of rate making, shall continue to be based on the consolidated (composite) actual weighted average capital structure, long term debt cost, and preferred equity cost of all the East Operating Companies in PJM (including the costs of the operating company geographically associated with the individual transmission company which has established an actual capital structure and long-term debt cost).
- i. In applying the formula rate, the balance amounts of common equity, used in determining the weighted average cost of capital to be used for the AEP East Transmission Companies, shall not exceed 50% percent of the total projected and true-up capitalization ("Equity Cap"), regardless of the actual amounts of common equity capital outstanding. The Equity Cap applies to both the implementation of the consolidated East Operating Company's actual capital structure and to the implementation of an individual East Transmission Company actual capital structure. The Equity Cap can be removed or adjusted only after June 30, 2013 and only through a filing under section 205 or 206 of the Federal Power Act. When applied to the consolidated East Operating Companies' actual capital structure, the individual Operating Company equity caps pursuant to the East Operating Companies' settlement in Docket ER08-1329 shall be applied first before the 50% Equity Cap pursuant to the instant settlement is applied to the weighted composite East Operating Companies' capital structure. The composite weighted average long term debt cost rate of the East Operating Companies, exclusive of hedging costs and Indiana-Michigan Operating Company's spent nuclear fuel disposal funding costs, shall apply.
- j. If the percentage of common equity in the East Operating

Companies' composite (consolidated) capitalization or any AEP East Transmission Company's actual capitalization exceeds the applicable Equity Cap, the amount of common equity exceeding the Equity Cap shall be assigned the same cost rate as long-term debt in the formula rate cost of capital calculations.

- E. Revenue Credits-- The following principles shall be stated in the formula rate:
  - 1. If the AEP East Transmission Companies have any directly assigned transmission facilities, the revenue credits in the AEP East formula rate shall include all revenues associated with those directly assigned transmission facilities, irrespective of whether the loads of the customer are included in the formula rate divisor; provided, however, such addition to revenue credits shall not be reflected if the costs of such directly assigned transmission facilities are not included in the transmission plant balances on which the formula rate ATRR is based.
  - 2. All transmission services revenues not credited to customers in monthly PJM billings shall be included in the formula rate calculation as reductions to the ATRR. Such amounts shall include transmission revenues received from PJM or other PJM Transmission Owners where the associated loads are not in the AEP Zone divisor, unless the revenues are attributable to AEP's base transmission rate charges for Network Integration Transmission Service ("Network Service") or long-term firm Point-to-Point Transmission Service.

#### F. Allocators.

- 1. The allocations of Administrative & General (A&G) expenses identified by three-digit FERC account in the Formula Rate Template and Worksheet F, Supporting Allocation of Specific O&M or A&G Expenses, may not be changed except through a filing under FPA § 205 or 206. If AEP wishes to reflect new O&M or A&G expenses or accounts in future updates, it must include in such § 205 filing: (i) a specification of the basis on which it proposes to allocate a portion of such costs as is properly assignable to wholesale transmission service, and (ii) documentation sufficient to demonstrate the reasonableness of its proposed allocation factor consistent with applicable Commission precedent.
- 2. No Account 565 costs other than inter-company charges that net out (such as lease arrangements and transmission equalization payments/receipts between AEP companies) will be included in the TCOS, unless first approved by FERC following a separate FPA § 205 filing by AEP.
- 3. AEP will include in the Annual Update to the formula rate, notification of any change in the use of established allocation factors (change from one

factor to another established allocation factor for a cost applicable to AEP Transmission Companies). Any new allocation factor (not previously approved by the Securities and Exchange Commission or the FERC) will be filed with the FERC for approval in a Section 205 proceeding before being implemented, and AEP will provide notification in the Annual Update of the implementation of a newly created allocation factor that may affect costs allocated to the AEP Transmission Companies. In addition, AEP shall include notification in the Annual Updates of the establishment of any new regulated and un-regulated income-producing affiliates or operating divisions with new income-producing operations.

# II. Application of Interest Rate Calculation in True-Up

AEP shall include an interest rate worksheet as Attachment C to the Settlement Agreement specifying its procedure for applying interest to true-up over or under recoveries.

#### **III.** Formula Implementation Protocols

The Formula Rate Implementation Protocols shall be adopted as set forth in Attachment A-2.

## Appendix A-1.1

**AEP East Consolidated Utility Capital Structure** 

## Consolidation of Operating Companies' Capital Structure @ 12-31-2009 Worksheet Q Page 1

Lin  e  Development of Long Term Debt Balances at Year End		Appalachian Power Company	Indiana Michigan Power Company	Kentucky Power Company	Kingsport Power Company	Ohio Power Company	Wheeling Power Company	Operating Companies' Consolidated Capital Structure
1	Bonds (112.18.c&d)	-	-	-	-	-	-	-
2	Less: Reacquired Bonds (112.19.c&d) LT Advances from Assoc. Companies	17,500,000	-	-	-	303,000,000	-	320,500,000
3	(112.20.c&d) Senior Unsecured Notes (112.21.c&d)	100,000,000	25,000,000	20,000,000	20,000,000	200,000,000	25,000,000	490,000,000
4	Excludes Spent Nuc Fuel Disp Fund Less: Fair Value Hedges (See Note on	3,419,099,201	1,692,000,000	530,000,000	-	3,351,580,000	-	10,435,424,201
5	Ln 7 below)	-	-	-	-	-	-	-
6	Total Long Term Debt Balance	3,501,599,201	1,717,000,000	550,000,000	20,000,000	3,248,580,000	25,000,000	10,604,924,201

NOTE: The balance of fair value hedges on outstanding long term debt are to be excluded from the balance of long term debt included in the formula's capital structure. (page 257, Column H of the FF1)

### <u>Development of Long Term Debt Interest</u>

<u>Expense</u>									
	Interest on Long Term Debt (256-								
8	257.33.i)	201,508,637	100,346,371	30,323,070	1,075,000	129,578,994	1,312,500	547,990,827	
	Amort of Debt Discount & Expense								
9	(117.63.c)	3,232,592	3,157,632	457,098	-	3,354,846	-	12,043,656	
	Amort of Loss on Reacquired Debt								
10	(117.64.c)	991,540	1,596,824	33,649	-	626,793	-	3,992,302	
	Less: Amort of Premium on Debt								
11	(117.65.c)	-	-	-	-	-	-	-	
	Less: Amort of Gain on Reacquired								
12	Debt (117.66.c)	-	1,712	-	-	-	-	1,712	
13	Less: Hedge Interest on pp 256-257(i)	2,569,395	1,551,518	92,956	-	(7,185,191)	-	(2,971,322)	
14	LTD Interest Expense	203,163,374	103,547,597	30,720,861	1,075,000	140,745,824	1,312,500	566,996,395	

Development of Cost of Preferred Stock and Preferred Dividends										
15	Dividend Rate (p. 250-251. 7.a)	4.50%		4.125%			4.08%			
16	Par Value (p. 250-251. 8.c)	\$ 100.00	\$	100.00			\$ 100.00			
17	Shares Outstanding (p.250-251. 8.e)	177,518		55,301			14,595			
18	Monetary Value (Ln 16 * Ln 17)	17,751,800		5,530,100	-	-	1,459,500	-	24,741,400	
19	Dividend Amount (Ln 15 * Ln 18)	798,831		228,117	-	-	59,548	-	1,086,495	
20	Dividend Rate (p. 250-251. 7.a)			4.12%			4.20%			
21	Par Value (p. 250-251. 8.c)		\$	100.00			\$ 100.00			
22	Shares Outstanding (p.250-251. 8.e)			11,055			22,824			
23	Monetary Value (Ln 21 * Ln 22)	-		1,105,500	-	-	2,282,400	-	3,387,900	
24	Dividend Amount (Ln 20 * Ln 23)	-		45,547	-	-	95,861	-	141,407	
25	Dividend Rate (p. 250-251. 7.a)			4.56%			4.40%			
26	Par Value (p. 250-251. 8.c)		\$	100.00			\$ 100.00			
27	Shares Outstanding (p.250-251. 8.e)			14,412			31,482			
28	Monetary Value (Ln 26 * Ln 27)	-		1,441,200	-	-	3,148,200	-	4,589,400	
29	Dividend Amount (Ln 25 * Ln 28)	-		65,719	-	-	138,521	-	204,240	
30	Dividend Rate (p. 250-251. 7.a)						4.50%			
31	Par Value (p. 250-251. 8.c)						\$ 100.00			
32	Shares Outstanding (p.250-251. 8.e)						97,363			
33	Monetary Value (Ln 31 * Ln 32)	-		-	-	-	9,736,300	-	9,736,300	
34	Dividend Amount (Ln 30 * Ln 33)	-		-	-	-	438,134	-	438,134	
35	Preferred Stock (Lns 18, 23, 28,33) Preferred Dividends (Lns 19, 24,	17,751,800		8,076,800	-	-	16,626,400	-	42,455,000	
36	29,34)	798,831		339,382	-	-	732,063	-	1,870,276	
<u>Deve</u>	lopment of Common Equity									
37	Proprietary Capital (112.16.c)	2,789,329,067	1,68	0,859,984	431,783,697	21,335,470	3,251,321,953	43,904,852	9,578,370,175	
38	Less: Preferred Stock (Ln 35 Above)	17,751,800		8,076,800			16,626,400		42,455,000	
39	Less: Account 216.1 (112.12.c)	2,593,528	(581	,331)	_	_	_	_	4,076,997	
00		2,000,020	(001	,001)					.,57 0,007	

40	Less: Account 219.1 (112.15.c)	(50,254,363)	(21,700,504)	(600,942)	5,560	(118,458,118)	(1,749,500)	(242,751,398)
41	Balance of Common Equity	2,819,238,102	1,695,065,019	432,384,639	21,329,910	3,353,153,671	45,654,352	9,774,589,576
<u>Calcu</u>	ulation of Capital Shares							
42	Long Term Debt (Ln 6 Above)	3,501,599,201	1,717,000,000	550,000,000	20,000,000	3,248,580,000	25,000,000	10,604,924,201
43	Preferred Stock (Ln 35 Above)	17,751,800	8,076,800	-	-	16,626,400	-	42,455,000
44	Common Equity (Ln 41 Above)	2,819,238,102	1,695,065,019	432,384,639	21,329,910	3,353,153,671	45,654,352	9,774,589,576
45	Total Company Structure	6,338,589,103	3,420,141,819	982,384,639	41,329,910	6,618,360,071	70,654,352	20,421,968,777
46	LTD Capital Shares (Ln 42 / Ln 45) Preferred Stock Capital Shares (Ln 43 /	55.24%	50.20%	55.99%	48.39%	49.08%	35.38%	51.93%
47	Ln 45)	0.28%	0.24%	0.00%	0.00%	0.25%	0.00%	0.21%
48	Common Equity Capital Shares (Ln 44 / Ln 45)	44.48%	49.56%	44.01%	51.61%	50.66%	64.62%	47.86%
49	Equity Capital Share Limit LTD Capital Shares with Capital Equity	50.00%	50.00%	50.00%	100.00%	51.00%	100.00%	50.00%
50	Cap	55.24%	50.20%	55.99%	48.39%	49.08%	35.38%	51.93%
51	Preferred Stock Capital Shares	0.28%	0.24%	0.00%	0.00%	0.25%	0.00%	0.21%
52	Common Equity Capital Shares with Capital Equity Cap	44.48%	49.56%	44.01%	51.61%	50.66%	64.62%	47.86%
Calcu	ulation of Capital Cost Rate							
53	LTD Capital Cost Rate (Ln 14 / Ln 6) Preferred Stock Capital Cost Rate (Ln	5.80%	6.03%	5.59%	5.38%	4.33%	5.25%	5.35%
54	36 / Ln 35)	4.50%	4.20%	0.00%	0.00%	4.40%	0.00%	4.41%
55	Common Equity Capital Cost Rate	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%
Calcu	ulation of Weighted Capital Cost Rate							
56	LTD Weighted Capital Cost Rate (Ln 50 * Ln 53)	3.21%	3.03%	3.13%	2.60%	2.13%	1.86%	2.78%
30	Preferred Stock Capital Cost Rate (Ln	3.2170	3.0376	3.1370	2.00 /0	2.1370	1.0076	2.1070
57	51 * Ln 54) Common Equity Capital Cost Rate (Ln	0.01%	0.01%	0.00%	0.00%	0.01%	0.00%	0.01%
58	52 * Ln 55)	5.11%	5.69%	5.06%	5.93%	5.82%	7.42%	5.50%
59	Total Company Structure	8.33%	8.73%	8.18%	8.53%	7.96%	9.28%	8.29%

## Appendix A-1.1

## AEP East Consolidated Utility Capital Structure Consolidation of Operating Companies' Capital Structure @ 12-31-2008 Worksheet Q Page 2

Line <u>Development of Long Term Debt Balances at Year</u> <u>End</u>		Appalachian Power Company	Indiana Michigan Power Company	Kentucky Power Company	Kingsport Power Company	Ohio Power Company	Wheeling Power Company	Operating Companies' Consolidated Capital Structure
60	Bonds (112.18.c&d)	-	-	-	-	-	-	-
61	Less: Reacquired Bonds (112.19.c&d)	17,500,000	100,000,000	-	-	85,000,000	-	294,745,000
62	LT Advances from Assoc. Companies (112.20.c&d)	100,000,000	_	20,000,000	20,000,000	200,000,000	25,000,000	465,000,000
63	Senior Unsecured Notes (112.21.c&d) Excludes Spent Nuc Fuel Disp Fund Less: Fair Value Hedges (See Note on Ln	3,114,740,790	1,217,000,000	400,000,000	-	2,594,450,000	-	8,768,935,790
64	66 below)	-	-	-	-	-	-	
65	Total Long Term Debt Balance	3,197,240,790	1,117,000,000	420,000,000	20,000,000	2,709,450,000	25,000,000	8,939,190,790

NOTE: The balance of fair value hedges on outstanding long term debt are to be excluded from the balance of long term debt included in the formula's capital structure. (p. 257, Column H of the FF1)

#### **Development of Long Term Debt Interest Expense**

67 68 69	Interest on Long Term Debt (256-257.33.i) Amort of Debt Discount & Expense (117.63.c) Amort of Loss on Reacquired Debt (117.64.c)	181,193,862 2,539,613 1,440,062	69,755,551 2,467,181 2,142,335	26,429,625 451,645 33,648	1,075,000 - -	134,040,796 2,211,243 1,618,264	1,312,500 - -	491,905,445 8,755,819 5,991,748
70 71	Less: Amort of Premium on Debt (117.65.c) Less: Amort of Gain on Reacquired Debt (117.66.c)	-	-	-	-	-	-	-
72	Less: Hedge Interest on pp 256-257(i)	5,001,679	1,547,947	92,956	-	(1,250,297)	-	5,392,285
73	LTD Interest Expense	180,171,858	72,817,120	26,821,962	1,075,000	139,120,600	1,312,500	501,260,727

**AEP East** 

<u>Develo</u>	Development of Cost of Preferred Stock and Preferred Dividends											
74	Dividend Rate (p. 250-251. 7.a)	4.50%	4.125%			4.08%						
75	Par Value (p. 250-251. 8.c)	\$ 100.00	\$ 100.00			\$ 100.00						
76	Shares Outstanding (p.250-251. 8.e)	177,520	55,335			14,595						
77	Monetary Value (Ln 75 * Ln 76)	17,752,000	5,533,500	-	-	1,459,500	-	24,745,000				
78	Dividend Amount (Ln 74 * Ln 77)	798,840	228,257	-	-	59,548	-	1,086,644				
79	Dividend Rate (p. 250-251. 7.a)		4.12%			4.20%						
80	Par Value (p. 250-251. 8.c)		\$ 100.00			\$ 100.00						
81	Shares Outstanding (p.250-251. 8.e)		11,055			22,824						
82	Monetary Value (Ln 80 * Ln 81)	-	1,105,500	-	-	2,282,400	-	3,387,900				
83	Dividend Amount (Ln 79 * Ln 82)	-	45,547	-	-	95,861	-	141,407				
84	Dividend Rate (p. 250-251. 7.a)		4.56%			4.40%						
85	Par Value (p. 250-251. 8.c)		\$ 100.00			\$ 100.00						
86	Shares Outstanding (p.250-251. 8.e)		14,412			31,482						
87	Monetary Value (Ln 85 * Ln 86)	-	1,441,200	-	-	3,148,200	-	4,589,400				
88	Dividend Amount (Ln 84 * Ln 87)	-	65,719	-	-	138,521	-	204,240				
89	Dividend Rate (p. 250-251. 7.a)					4.50%						
90	Par Value (p. 250-251. 8.c)					\$ 100.00						
91	Shares Outstanding (p.250-251. 8.e)					97,373						
92	Monetary Value (Ln 90 * Ln 91)	-	-	-	-	9,737,300	-	9,737,300				
93	Dividend Amount (Ln 89 * Ln 92)	-	-	-	-	438,179	-	438,179				
94	Preferred Stock (Lns 77, 82, 87,92)	17,752,000	8,080,200	-	-	16,627,400	-	42,459,600				
95	Preferred Dividends (Lns 78, 83, 88,93)	798,840	339,522	-	-	732,108	=	1,870,470				
<u>Develo</u>	oment of Common Equity											
96	Proprietary Capital (112.16.c)	2,394,342,663	1,444,357,731	398,008,673	25,031,105	2,438,571,961	37,950,872	7,987,702,880				
97	Less: Preferred Stock (Ln 94 Above)	17,752,000	8,080,200	-	-	16,627,400	-	42,459,600				

98	Less: Account 216.1 (112.12.c)	2,462,578	(1,510,668)	-	-	-	-	11,153,901
99	Less: Account 219.1 (112.15.c)	(60,225,378)	(20,233,842)	59,584	-	(133,858,575)	(2,464,181)	(263,573,252)
100	Balance of Common Equity	2,434,353,463	1,458,022,041	397,949,089	25,031,105	2,555,803,136	40,415,053	8,197,662,631
<u>Calcula</u>	ation of Capital Shares							
101	Long Term Debt (Ln 65 Above)	3,197,240,790	1,117,000,000	420,000,000	20,000,000	2,709,450,000	25,000,000	8,939,190,790
102	Preferred Stock (Ln 94 Above)	17,752,000	8,080,200	-	-	16,627,400	-	42,459,600
103	Common Equity (Ln 100 Above)	2,434,353,463	1,458,022,041	397,949,089	25,031,105	2,555,803,136	40,415,053	8,197,662,631
104	Total Company Structure	5,649,346,253	2,583,102,241	817,949,089	45,031,105	5,281,880,536	65,415,053	17,179,313,021
105	LTD Capital Shares (Ln 101 / Ln 104)	56.59%	43.24%	51.35%	44.41%	51.30%	38.22%	52.03%
106	Preferred Stock Capital Shares (Ln 102 / Ln 104)	0.31%	0.31%	0.00%	0.00%	0.31%	0.00%	0.25%
107	Common Equity Capital Shares (Ln 103 / Ln 104)	43.09%	56.44%	48.65%	55.59%	48.39%	61.78%	47.72%
108	Equity Capital Share Limit	50.00%	50.00%	50.00%	100.00%	51.00%	100.00%	50.00%
109	LTD Capital Shares with Capital Equity Cap	56.59%	49.69%	51.35%	44.41%	51.30%	38.22%	53.00%
110	Preferred Stock Capital Shares Common Equity Capital Shares with Capital	0.31%	0.31%	0.00%	0.00%	0.31%	0.00%	0.25%
111	Equity Capital Shares with Capital	43.09%	50.00%	48.65%	55.59%	48.39%	61.78%	46.75%
Calcula	ation of Capital Cost Rate							
112	LTD Capital Cost Rate (Ln 73 / Ln 65)	5.64%	6.52%	6.39%	5.38%	5.13%	5.25%	5.61%
113	Preferred Stock Capital Cost Rate (Ln 95 / Ln 94)	4.50%	4.20%	0.00%	0.00%	4.40%	0.00%	4.41%
114	Common Equity Capital Cost Rate	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%
Calcula	ation of Weighted Capital Cost Rate							
115	LTD Weighted Capital Cost Rate (Ln 109 * Ln 112) Preferred Stock Capital Cost Rate (Ln 110 *	3.19%	3.24%	3.28%	2.39%	2.63%	2.01%	2.97%
116	Ln 113)	0.01%	0.01%	0.00%	0.00%	0.01%	0.00%	0.01%
117	Common Equity Capital Cost Rate (Ln 111 * Ln 114)	4.95%	5.75%	5.59%	6.39%	5.56%	7.10%	5.37%
118	Total Company Structure	8.15%	9.00%	8.87%	8.77%	8.21%	9.11%	8.35%

## **Appendix A-1.1**

# AEP East Consolidated Utility Capital Structure Consolidation of Operating Companies' Average Capital Structure Worksheet Q Page 3

	oment of Average Long Term	Appalachian Power Company	Indiana Michigan Power Company	Kentucky Power Company	Kingsport Power Company	Ohio Power Company	Wheeling Power Company	AEP East Operating Companies' Consolidated Capital Structure
<u>Debt</u>	A D I (I A I 00) (							
440	Average Bonds (Ln 1 + Ln 60) /							
119	Least Average Decembered	-	-	-	-	-	-	-
120	Less: Average Reacquired Bonds (Ln 2 + Ln 61) / 2	17.500.000	50,000,000			194,000,000		307,622,500
120	Average LT Advances from Assoc. Companies (Ln 3 + Ln	17,500,000	50,000,000	-	<del>-</del>	194,000,000	-	307,622,300
121	62) / 2	100.000.000	12,500,000	20.000.000	20.000.000	200,000,000	25,000,000	477,500,000
	Average Senior Unsecured	, ,	-,,	,,,,,,,				,,
122	Notes (Ln 4 + Ln 63) / 2 Less: Average Fair Value Hedges (See Note on Ln 125	3,266,919,996	1,454,500,000	465,000,000	-	2,973,015,000	-	9,602,179,996
123	below)	_	_	-	_	_	-	-
0	Average Balance of Long							
124	Term Debt	3,349,419,996	1,417,000,000	485,000,000	20,000,000	2,979,015,000	25,000,000	9,772,057,496

NOTE: The balance of fair value hedges on outstanding long term debt are to be excluded from the balance of long term debt included in the formula's capital structure. (p. 257, Column H of the FF1)

### **Development of 2009 Long Term Debt**

DEVEIU	evelopment of 2003 Long Term Debt										
Interes	t Expense										
	Interest on Long Term Debt										
126	(256-257.33.i)	201,508,637	100,346,371	30,323,070	1,075,000	129,578,994	1,312,500	547,990,827			
	Amort of Debt Discount &										
127	Expense (117.63.c)	3,232,592	3,157,632	457,098	-	3,354,846	-	12,043,656			
	Amort of Loss on Reacquired										
128	Debt (117.64.c)	991,540	1,596,824	33,649	-	626,793	-	3,992,302			
	Less: Amort of Premium on										
129	Debt (117.65.c)	-	-	-	-	-	-	-			
	Less: Amort of Gain on										
130	Reacquired Debt (117.66.c)	-	1,712	-	-	-	-	1,712			

131	Less: Hedge Interest on pp 256-257(i)	2,569,395	1,551,518	92,956	-	(7,185,191)	-	(2,971,322)		
132	2009 LTD Interest Expense	203,163,374	103,547,597	30,720,861	1,075,000	140,745,824	1,312,500	566,996,395		
	ost of Preferred Stock and ed Dividends Average Balance of Preferred									
133	Stock (Ln 35 + Ln 94) / 2 2009 Preferred Dividends (Ln	17,751,900	8,078,500	-	-	16,626,900	-	42,457,300		
134	36) oment of Average Common	798,831	339,382	-	-	732,063	-	1,870,276		
<u>Equity</u>	·									
135	Average Proprietary Capital (Ln 37 + Ln 96) / 2 Less: Average Preferred Stock	2,591,835,865	1,562,608,858	414,896,185	23,183,288	2,844,946,957	40,927,862	8,783,036,528		
136	(Ln 133 Above) Less: Average Account 216.1	17,751,900	8,078,500	-	-	16,626,900	-	42,457,300		
137	(Ln 39 + Ln 98) / 2	2,528,053	(1,046,000)	-	-	-	-	7,615,449		
138	Less: Average Account 219.1 (Ln 40 + Ln 99) / 2	(55,239,871)	(20,967,173)	(270,679)	2,780	(126,158,347)	(2,106,841)	(253,162,325)		
139	Average Balance of Common Equity	2,626,795,783	1,576,543,530	415,166,864	23,180,508	2,954,478,404	43,034,703	8,986,126,104		
Calculation of Capital Shares  Average Balance of Long Term										
140	Debt (Ln 124 Above)	3,349,419,996	1,417,000,000	485,000,000	20,000,000	2,979,015,000	25,000,000	9,772,057,496		
141	Average Balance of Preferred Stock (Ln 133 Above)	17,751,900	8,078,500	-	-	16,626,900	-	42,457,300		
142	Average Balance of Common Equity (Ln 139 Above)	2,626,795,783	1,576,543,530	415,166,864	23,180,508	2,954,478,404	43,034,703	8,986,126,104		
143	Average of Total Company Structure	5,993,967,678	3,001,622,030	900,166,864	43,180,508	5,950,120,304	68,034,703	18,800,640,899		
144	Average Balance of LTD Capital Shares (Ln 140 / Ln 143)	55.88%	47.21%	53.88%	46.32%	50.07%	36.75%	51.98%		
	Average Balance of Preferred Stock Capital Shares (Ln 141 /	00.0070	,	33.3373	10.0270	30.01 70	00070	0.110070		
145	Ln 143)	0.30%	0.27%	0.00%	0.00%	0.28%	0.00%	0.23%		
	Average Balance of Common Equity Capital Shares (Ln 142 /									
146	Ln 143)	43.82%	52.52%	46.12%	53.68%	49.65%	63.25%	47.80%		
147	Equity Capital Share Limit LTD Capital Shares with Capital	50.00%	50.00%	50.00%	100.00%	51.00%	100.00%	50.00%		
148	Equity Cap	55.88%	49.73%	53.88%	46.32%	50.07%	36.75%	52.38%		
149	Preferred Stock Capital Shares	0.30%	0.27%	0.00%	0.00%	0.28%	0.00%	0.23%		

150	Common Equity Capital Shares with Capital Equity Cap	43.82%	50.00%	46.12%	53.68%	49.65%	63.25%	47.39%
Calcula	ation of Capital Cost Rate							
	LTD Capital Cost Rate (Ln 132 /							
151	Ln 124)	6.07%	7.31%	6.33%	5.38%	4.72%	5.25%	5.80%
	Preferred Stock Capital Cost							
152	Rate (Ln 134 / Ln 133)	4.50%	4.20%	0.00%	0.00%	4.40%	0.00%	4.41%
	Common Equity Capital Cost							
153	Rate	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%
<u>Calcula</u> <u>Rate</u>	ation of Weighted Capital Cost  LTD Weighted Capital Cost							
154	Rate (Ln 148 * Ln 151)	3.39%	3.63%	3.41%	2.49%	2.37%	1.93%	3.04%
101	Preferred Stock Capital Cost	0.0070	0.0070	0.1170	2.1070	2.01 70	1.0070	0.0170
155	Rate (Ln 149 * Ln 152)	0.01%	0.01%	0.00%	0.00%	0.01%	0.00%	0.01%
	Common Equity Capital Cost							
156	Rate (Ln 150 * Ln 153)	5.04%	5.75%	5.30%	6.17%	5.71%	7.27%	5.45%
	ACTUAL WEIGHTED AVG							
157	COST OF CAPITAL	8.44%	9.39%	8.71%	8.66%	8.08%	9.20%	8.49%

## Appendix A.1.2

AEP	AEP Indiana	AEP	
Appalachian	Michigan	Kentucky	AEP Ohio
Transmission	Transmission	Transmission	Transmission
Co	Co	Co	Co

35	50	Land Rights
35	52	Structures & Improvements
35	3	Station Equipment
35	54	Towers & Fixtures
35	55	Poles & Fixtures
35	6	OH Conductors & Devices
35	7	Underground Conduit
35	8	Underground Conductor
35	9	Roads & Trails

	1.27%	1. <del>71<u>44</u>%</del>	1. <del>49</del> <u>36</u> %
1. <del>55</del> <u>52</u> %	1.32%	<del>1.71</del> 2.08%	1. <del>53</del> <u>64</u> %
1. <del>95</del> 68%	1.69%	<del>1.71</del> 2.15%	1. <del>78</del> <u>84</u> %
1. <del>14<u>54</u>%</del>	1.60%	<del>1.71</del> 2.61%	1. <del>48</del> <u>92</u> %
2. <del>77</del> <u>64</u> %	2.43%	<del>1.71</del> 3.95%	<del>2.30</del> 3.01%
1. <del>01</del> <u>19</u> %	1.53%	<del>1.71</del> 2.91%	1. <del>42</del> 88%
1. <del>23<u>45</u>%</del>	1.56%	<del>1.71</del> 2.99%	<del>1.50</del> 2.00%
<del>3.18</del> 7.23%	1.55%	<del>1.71</del> <u>2.62</u> %	<del>2.15</del> 3.80%
	1.49%	<del>1.71%</del> -	1. <del>60</del> <u>49</u> %

\*For the states of Kentucky, West Virginia, Virginia, Indiana and Michigan, the formula rate will use rates based on the last approved depreciation study for the applicable jurisdiction (KPCo, APCo, or I&M). For example, rates for the 2004 I&M depreciation study will be used for Indiana and Michigan.

Ohio's rates are a composite rate calculated as the average of the APCo, I&M and KPCo rates. AEP's rates may only be changed in a Section 205/206 proceeding based on new studies. This filing may be a single issue proceeding.

## Appendix A.1.3

#### Illustration of Construction Draw Down Loan

#### Appendix A.1.3 - Financing Costs for Long Term Debt using the Internal Rate of Return Methodology – AEP Transco

HYPOTHETICAL EXAMPLE

AEP Transco anticipates its financing will be a 7 year loan, where by AEP Transco pays Origination Fees of \$7.9 million and a Commitments Fee of 0.375% on the undrawn principle. Consistent with GAAP, AEP Transco will amortize the Origination Fees and Commitments Fees using the standard Internal Rate of Return formula below.

Each year, AEP Transco will true up the amounts withdrawn, the interest paid in the year, Origination Fees, Commitments Fees, and total loan amount on this attachment.

Total Loan Amount	\$ 600.000,000
Total Edali Allidalit	Ψ 000,000,000

Internal Rate of Return <sup>1</sup> Based on following Finance	cial Formula <sup>2</sup> :			6.65%				
NPV = 0 =								
Origination Fees Underwriting Discount Arrangement Fee Upfront Fee Rating Agency Fee Legal Fees				2,000,000 4,400,000 200,000 1,250,000				
Total Issuance Expense				7,850,000				
Annual Rating Agency Fee Annual Bank Agency Fee Revolving Credit Commitn				200,000 75,000 0.375%				
_	2008	2009	2010	2011	2012	2013	2014	
LIBOR Rate	4.0610%	4.0610%	4.0610%	4.0610%	4.0610%	4.0610%	4.0610%	
Spread	1.875%	1.875%	1.875%	1.875%	1.875%	1.875%	1.875%	
Interest Rate	5.94%	5.94%	5.94%	5.94%	5.94%	5.94%	5.94%	

(A) Year	(B)	( C) Capital Expenditures ( \$000's)	(D) Principle Drawn In Quarter (\$000's)	(E) Principle Drawn To Date (\$000's)	(F) Interest Expense (\$000's)	(G) Origination Fees (\$000's)	(H) Commitment & Utilization Fee (\$000's)	(I) Net Cash Flows (\$000's) (D-F-G-H)
Prior to 11/2008 30/11/2008 15/02/2009 15/05/2009	Q4 Q1 Q2	16,529 8,923 14,636 17,119	20,044 8,560	20,044 28,604	- - 297	125		- 19,919 8,262

 <sup>&</sup>lt;sup>1</sup> The IRR is the Debt Cost shown on Page 5, Line 118 of Rate Formula Template
 <sup>2</sup> The IRR is a discount rate that makes the net present value of a series of cash flows equal to zero. The IRR equation can only be solved through iterations performed by a computer program (i.e.NPV function with goal seek in a spreadsheet program).

## Appendix A.1.3

## Hypothetical Example of Final True-Up of Interest Rates and Interest Calculations for the Construction Loan

To be Prepared on 8/15/2013 (hypothetical date)

SUMMARY	(		Hypothetical Revenue Requir	rement			
YEAR	Estimated Effective cost of debt used in forecast/true up	Final Effective cost of debt for the construction loan:	Based on Estimated Effective cost of debt	Based on Actual Effective cost of debt	Over (Under) Recovery	Hypothetical Monthly Interest Rate applicable over the ATRR period	Total Amount of Construction Loan Related True-Up included in rates effective Jan 2014 (Refund)/Owed
2008	7.18%	7.00%	\$ 2,500,000.00	\$ 2,400,000.00	\$ 100,000.00	0.550%	\$ (148,288.33)
2009	6.8%	7.00%	\$5,000,000.00	\$5,150,000.00	\$ (150,000.00)	0.560%	\$ 209,670.43
2010	7.2%	7.00%	\$8,300,000.00	\$8,200,000.00	\$ 100,000.00	0.540%	\$ (131,109.09)
2011	7.3%	7.00%	\$12,300,000.00	\$12,000,000.00	\$ 300,000.00	0.580%	\$ (368,656.73)
2012*	7.1%	6.83%	\$18,000,000.00	\$17,900,000.00	\$ 100,000.00	0.570%	\$ (114,946.28)
2013**	6.50%	6.50%	\$25,000,000.00	\$25,000,000.00	\$ -		,
2014**	6.50%	6.50%					\$ (553,329.99)

<sup>\*</sup> Assumes that the construction loan is retired on Sept 1, 2012

Note: True-Up period is 2008 - 2012, with the true-up amount included in 2014 forecasted ATRR. Final effective cost of debt for 2012 is computed as follows: ((7%\*243days)+(6.5%\*122days))/365days

Calculation of Applicable Interest Expense for each ATRR period

Interest Rate on Amount of Refunds
Over (Under) Recovery Plus Interest
Over (Under) Recovery Plus Interest
Over (Under) Recovery Plus Interest
Hypothetical
Months
Calculated
Interest
Interest
(Refund) Owed
Rate

Calculation of Inter	est for 2008 True-Up Period								
An over or under collection will be recovered prorata over 2008, held for 2009, 2010, 2011, 2012, 2013 and returned prorate over 2014  Monthly									
January	Year 2008	-	0.5500%	12.00	-	-			
February	Year 2008	-	0.5500%	11.00	-	-			
March	Year 2008	10,000	0.5500%	10.00	(550)	(10,550)			
April	Year 2008	10,000	0.5500%	9.00	(495)	,			
					` '	(10,495)			
May	Year 2008	10,000	0.5500%	8.00	(440)	(10,440)			
June	Year 2008	10,000	0.5500%	7.00	(385)	(10,385)			
July	Year 2008	10,000	0.5500%	6.00	(330)	(10,330)			
August	Year 2008	10,000	0.5500%	5.00	(275)	(10,275)			
September	Year 2008	10,000	0.5500%	4.00	(220)	(10,220)			
October	Year 2008	10,000	0.5500%	3.00	(165)	(10,165)			

<sup>\*\*</sup> Assumes permanent debt structure is put in place on Sept 1, 2012 with effective rate of 6.5%

November December	Year 2008 Year 2008	10,000 10,000	0.5500% 0.5500%	2.00 1.00	(110) (55) (3,025)		(10,110) (10,055) <b>(103,025)</b>
					Annual		
January through	Year 2009	(402.005)	0.5600%	12.00	(6,923)		(400.040)
December January through	Year 2010	(103,025)	0.5400%	12.00	(7,125)		(109,948)
December January through	Year 2011	(109,948)	0.5800%	12.00	(8,148)		(117,073)
December January through	Year 2012	(117,073)	0.5700%	12.00	(8,565)		(125,221)
December January through December	Year 2013	(125,221) (133,786)	0.5700%	12.00	(9,151)		(133,786) (142,937)
Over (Under) Recover	ry Plus Interest Amortized and				Monthly		
January	Year 2014	142,937	0.5700%		(815)	(12,357)	(131,395)
February	Year 2014	131,395	0.5700%		(749)	(12,357)	(119,786)
March	Year 2014	119,786	0.5700%		(683)	(12,357)	(108,112)
April	Year 2014	108,112	0.5700%		(616)	(12,357)	(96,371)
May	Year 2014	96,371	0.5700%		(549)	(12,357)	(84,563)
June	Year 2014	84,563	0.5700%			(12,357)	(70.607)
July	Year 2014	72,687	0.5700%		(482)	(12,357)	(72,687)
August	Year 2014	60,744	0.5700%		(414)	(12,357)	(60,744)
September	Year 2014	48,733	0.5700%		(346)	(12,357)	(48,733) (36,653)
October	Year 2014	36,653	0.5700%		(278)	(12,357)	
November	Year 2014	24,505	0.5700%		(209)	(12,357)	(24,505)
December	Year 2014	12,287	0.5700%		(140)		(12,287)
					_ (70)	(12,357)	
					(5,351)		
Total Amount of True-U Less Over (Under) Rec Total Interest	Jp Adjustment for 2008 ATRR covery			\$ \$	(148,288) 100,000 (48,288)		

 ${\bf Appendix} \ {\bf A.1.3}$  Hypothetical Example of Final True-Up of Interest Rates and Interest Calculations for the Construction Loan

Calculation of Interest for An over or under collect	or 2009 True-Up Period ion will be recovered prorat	a over 2009, held for 2010, 2	011, 2012, 2013 and ı	returned prorate	over 2014 Monthly	
January	Year 2009	(12,500)	0.5600%	12.00	840	13,340
February	Year 2009	(12,500)	0.5600%	11.00	770	13,270
March	Year 2009	(12,500)	0.5600%	10.00	700	13,200
April	Year 2009	(12,500)	0.5600%	9.00	630	13,130
May	Year 2009	(12,500)	0.5600%	8.00	560	13,060
June	Year 2009	(12,500)	0.5600%	7.00	490	12,990
July	Year 2009	(12,500)	0.5600%	6.00	420	12,920
August	Year 2009	(12,500)	0.5600%	5.00	350	12,850
September	Year 2009	(12,500)	0.5600%	4.00	280	12,780
October	Year 2009	(12,500)	0.5600%	3.00	210	12,710
November	Year 2009	(12,500)	0.5600%	2.00	140	12,640
December	Year 2009	(12,500)	0.5600%	1.00	70	12,570
					5,460	155,460
					Annual	
January through December	Year 2010	155,460	0.5400%	12.00	10,074	165,534
January through December	Year 2011	165,534	0.5800%	12.00	11,521	177,055
January through December	Year 2012	177,055	0.5700%	12.00	12,111	189,166
January through December	Year 2013	189,166	0.5700%	12.00	12,939	202,104

Over (Under) Recovery	Plus Interest Amortized and	Recovered Over 12 Months		Monthly		
January	Year	(202,104)	0.5700%	1,152	17,473	185,784
	2014	(405 =0.4)	0.55000/	4.050	4= 4=0	400.070
February	Year	(185,784)	0.5700%	1,059	17,473	169,370
March	2014 Year	(169,370)	0.5700%	965	17,473	152,863
IVIGI GIT	2014	(100,070)	0.57 00 70	300	11,410	102,000
April	Year	(152,863)	0.5700%	871	17,473	136,262
	2014					
May	Year	(136,262)	0.5700%	777	17,473	119,566
luna	2014 Year	(110 EGG)	0.5700%	682	17 179	100 775
June	2014	(119,566)	0.5700%	002	17,473	102,775
July	Year	(102,775)	0.5700%	586	17,473	85,888
,	2014	( - , /			, -	
August	Year	(85,888)	0.5700%	490	17,473	68,905
0 1 1	2014	(00.005)	0.57000/	000	47.470	54.000
September	Year 2014	(68,905)	0.5700%	393	17,473	51,826
October	Year	(51,826)	0.5700%	295	17,473	34,649
0010001	2014	(01,020)	0.01 00 /0	200	11,110	01,010
November	Year	(34,649)	0.5700%	197	17,473	17,374
	2014					4-1
December	Year	(17,374)	0.5700%	99	17,473	(0)
	2014			7,566		
				1,500		
Total Amount of True-Up	Adjustment for 2009 ATRR				\$ 209,670	0
Less Over (Under)	,				\$ (150,000)	
Recovery						
Total Interest					\$ 59,670	0

	st for 2010 True-Up Period lection will be recovered prora	ta over 2010, held for 2011,	2012, 2013 and return	ed prorate over	Monthly	
January	Year 2010	8,333	0.5400%	12.00	(540)	(8,873)
February	Year	8,333	0.5400%	11.00	(495)	(8,828)
March	2010 Year 2010	8,333	0.5400%	10.00	(450)	(8,783)
April	Year	8,333	0.5400%	9.00	(405)	(8,738)

	2010							
May	Year	8,333	0.5400%	8.00		(360)		(8,693)
	2010	0.000	0.54000/	7.00		(0.45)		(0.040)
June	Year	8,333	0.5400%	7.00		(315)		(8,648)
halo.	2010 Year	8,333	0.5400%	6.00		(270)		(0.603)
July	2010	0,333	0.5400%	6.00		(270)		(8,603)
August	Year	8,333	0.5400%	5.00		(225)		(8,558)
August	2010	0,000	0.040070	0.00		(220)		(0,000)
September	Year	8.333	0.5400%	4.00		(180)		(8,513)
	2010	-,				( /		(-)/
October	Year	8,333	0.5400%	3.00		(135)		(8,468)
	2010							
November	Year	8,333	0.5400%	2.00		(90)		(8,423)
	2010							
December	Year	8,333	0.5400%	1.00		(45)		(8,378)
	2010							
					A	(3,510)		(103,510)
					Annual			
January through	Year	(103,510)	0.5800%	12.00		(7,204)		(110,714)
December	2011							
January through	Year	(110,714)	0.5700%	12.00		(7,573)		(118,287)
December	2012							
January through	Year	(118,287)	0.5700%	12.00		(8,091)		(126,378)
December	2013				Manufal.			
	us Interest Amortized and Red Year 2014		0.5700%		Monthly	(720)	(10.026)	(116 172)
January February	Year 2014	<b>126,378</b> 116,173	0.5700%			(720) (662)	(10,926) (10,926)	(116,173) (105,909)
March	Year 2014	105,909	0.5700%			(604)	(10,926)	(95,587)
April	Year 2014	95,587	0.5700%			(545)	(10,926)	(85,206)
May	Year 2014	85,206	0.5700%			(486)	(10,926)	(74,766)
June	Year 2014	74,766	0.5700%			(426)	(10,926)	(64,266)
July	Year 2014	64,266	0.5700%			(366)	(10,926)	(53,707)
August	Year 2014	53,707	0.5700%			(306)	(10,926)	(43,087)
September	Year 2014	43,087	0.5700%			(246)	(10,926)	(32,407)
October	Year 2014	32,407	0.5700%			(185)	(10,926)	(21,666)
November	Year 2014	21,666	0.5700%			(123)	(10,926)	(10,864)
December	Year 2014	10,864	0.5700%			(62)	(10,926)	0
Total Amount of True-Up A	djustment for 2010 ATRR					(4,731)	\$ (131,109	)
Less Over (Under) Recover	У						\$ 100,00	
Total Interest							\$	(31,109)

					lix A.1.3		
Calculation of Interest	for 2011 True-Up Period	est Rates and Interest Calc					
An over or under colle January	ction will be recovered p Year 2011	rorata over 2011, held for	<b>2012, 2013 and returne</b> 25,000	d prorate over 2014 0.5800%	12.00	<b>Monthly</b> (1,740)	
February	Year 2011		25,000	0.5800%	11.00	(1,595)	(26,740)
March	Year 2011		25,000	0.5800%	10.00	(1,450)	(26,595)
April	Year 2011		25,000	0.5800%	9.00	(1,305)	(26,450)
							(26,305)
May	Year 2011		25,000	0.5800%	8.00	(1,160)	(26,160)
June	Year 2011		25,000	0.5800%	7.00	(1,015)	(26,015)
July	Year 2011		25,000	0.5800%	6.00	(870)	(25,870)
August	Year 2011		25,000	0.5800%	5.00	(725)	
September	Year 2011		25,000	0.5800%	4.00	(580)	(25,725)
October	Year 2011		25,000	0.5800%	3.00	(435)	(25,580)
November	Year 2011		25,000	0.5800%	2.00	(290)	(25,435)
December	Year 2011		25,000	0.5800%	1.00	(145)	(25,290)
200020.	. 33. 23		20,000	0.000070		(11,310)	(25,145)
						(11,310)	(311,310)
						Annual	
January through	Year 2012	(311,310)		0.5700%	12.00	(21,294)	<b>,,,,,</b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
December January through	Year 2013	(332,604)		0.5700%	12.00	(22,750)	(332,604)
	Plus Interest Amortized	and Recovered				Monthly	(355,354)
Over 12 Months January	Year 2014	355,354	0.570	0%		(30,721)	(326,658)
February	Year 2014	326,658	0.570	0%	(2,026)	(30,721)	(297,798)
March	Year 2014	297,798	0.570	0%	(1,862)	(30,721)	(268,774)
INICI OI	1001 2017	201,100	0.570	<b>U</b> /U		(00,721)	(200,114)

April	Year 2014	268,774	0.5700%	(1,697)	(30,721)	(239,585)
May	Year 2014	239,585	0.5700%	(1,532)	(30,721)	(210,229)
June	Year 2014	210,229	0.5700%	(1,366)	(30,721)	(180,706)
July	Year 2014	180,706	0.5700%	(1,198)	(30,721)	(151,015)
August	Year 2014	151,015	0.5700%	(1,030)	(30,721)	(121,154)
				(861)		
September	Year 2014	121,154	0.5700%	(691)	(30,721)	(91,123)
October	Year 2014	91,123	0.5700%	(519)	(30,721)	(60,921)
November	Year 2014	60,921	0.5700%	(347)	(30,721)	(30,547)
December	Year 2014	30,547	0.5700%	(174)	_ (30,721)	0 (13,303)
Total Amount of True for 2011 ATRR Less Over (Under) Recovery	-Up Adjustment		\$ (368,657) \$ 300,000			
Total Interest			\$ (68,657)			

Calculation of Interest for 2012 True-Up Period An over or under collection will over 2012, held for 2013 and re			Monthly			
January	Year 2012	8,333	0.5700%	12.00	(570)	(8,903)
February	Year 2012	8,333	0.5700%	11.00	(523)	(8,856)
March	Year 2012		0.5700%	10.00	(475)	
April	Year 2012	8,333	0.5700%	9.00	(428)	(8,808)
May	Year 2012	8,333	0.5700%	8.00	(380)	(8,761)
June	Year 2012	8,333	0.5700%	7.00	(333)	(8,713)
July	Year 2012	8,333	0.5700%	6.00	(285)	(8,666)
August	Year 2012	8,333	0.5700%	5.00	(238)	(8,618)
•		8,333			( /	(8,571)

September	Year 2012	8,333	0.5700%	4.00	(190)	(8,523)	
October	Year 2012		0.5700%	3.00	(143)		
November	Year 2012	8,333	0.5700%	2.00	(95)	(8,476)	
December	Year 2012	8,333	0.5700%	1.00	(48)	(8,428)	
		8,333			(3,705)	(8,381)	
					Annual	(103,705)	
January through December	Year 2013	(103,705)	0.5700%	12.00	(7,093)		
Over (Under) Recovery Plus Intere	est Amortized and Reco	vered Over 12		Monthly	(110,798)	l	
<u>Months</u> January	Year 2014		0.5700%	(632)	(9,579)	(101,851)	
February	Year 2014	110,798	0.5700%	(581)	(9,579)	(92,853)	
March	Year 2014	101,851	0.5700%	(529)	(9,579)	(83,803)	
April	Year 2014	92,853	0.5700%	(478)	(9,579)	(74,702)	
May	Year 2014	83,803	0.5700%	(426)	(9,579)	(65,549)	
June	Year 2014	74,702	0.5700%	(374)	(9,579)	(56,344)	
July	Year 2014	65,549	0.5700%	(321)	(9,579)	(47,086)	
		56,344					
August	Year 2014	47,086	0.5700%	(268)	(9,579)	(37,776)	
September	Year 2014	37,776	0.5700%	(215)	(9,579)	(28,412)	
October	Year 2014	28,412	0.5700%	(162)	(9,579)	(18,995)	
November	Year 2014	18,995	0.5700%	(108)	(9,579)	(9,525)	
December	Year 2014	9,525	0.5700%	(54)	(9,579)	0	
Total Amount of True-Up Adjustmen Less Over (Under) Recovery Total Interest	nt for 2012 ATRR	J,JZJ			3) (114,946) 100,000 (14,946)		