

AEPTCo subsidiaries in PJM
Transmission Cost of Service Formula Rate
Utilizing Historic Cost Data for 2016 with Year-End Rate Base Balances

AEP WEST VIRGINIA TRANSMISSION COMPANY

Line No.						Transmission Amount
178	REVENUE REQUIREMENT (w/o incentives)	(ln 313)				\$60,106,780
				Total		
179	REVENUE CREDITS	(Note A) (Worksheet E)		-	DA 1.00000	\$ -
180	REVENUE REQUIREMENT For All Company Facilities	(ln 178 less ln 179)				<u>\$ 60,106,780</u>

MEMO: The Carrying Charge Calculations on lines 183 to 188 below are used in calculating project revenue requirements billed through PJM Schedule 12, Transmission Enhancement Charges. The total non-incentive revenue requirements for these projects shown on line 181 is included in the total on line 180.

181	Not applicable on this template					
182	NET PLANT CARRYING CHARGE w/o intra-AEP charges or credits or ROE incentives (Note B)					
183	Annual Rate	((ln 178 - ln 279 - ln 280) / ln 225 x 100)				10.84%
184	Monthly Rate	(ln 183 / 12)				0.90%
185	NET PLANT CARRYING CHARGE ON LINE 183 , w/o depreciation or ROE incentives (Note B)					
186	Annual Rate	((ln 178 - ln 279 - ln 280 - ln 285) / ln 225 x 100)				9.64%
187	NET PLANT CARRYING CHARGE ON LINE 186, w/o Return, income taxes or ROE incentives (Note B)					
188	Annual Rate	((ln 178 - ln 279 - ln 280 - ln 285 - ln 308 - ln 309) / ln 225 x 100)				1.27%
189	Not applicable on this template					
190	REVENUE REQUIREMENT FOR SCHEDULE 1A CHARGES					
191	Total Load Dispatch & Scheduling (Account 561)	Line 262 Below				85,997
192	Less: Load Dispatch - Scheduling, System Control and Dispatch Services (321.88.b)					-
193	Less: Load Dispatch - Reliability, Planning & Standards Development Services (321.92.b)					-
194	Total 561 Internally Developed Costs	(Line 191 - Line 192 - Line 193)				<u>85,997</u>

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	(1)	(2)	(3)	(4)	(5)
	<u>RATE BASE CALCULATION</u>	<u>Data Sources</u> <u>(See "General Notes")</u>	<u>TO Total</u> <u>NOTE C</u>	<u>Allocator</u>	<u>Total</u> <u>Transmission</u>
Line No.	GROSS PLANT IN SERVICE				
195	<i>Line Deliberately Left Blank</i>				
196	<i>Line Deliberately Left Blank</i>				
197	Transmission	(Worksheet A In 3.C & Ln 317)	565,270,816	DA	565,270,816
198	Less: Transmission ARO (Enter Negative)	(Worksheet A In 4.C& Ln 318)	-	TP	-
199	Plus: Transmission Plant-in-Service Additions (Worksheet I)		N/A	NA	N/A
200	Plus: Additional Trans Plant on Transferred Assets (Worksheet I)		N/A	NA	N/A
201	<i>Line Deliberately Left Blank</i>				
202	<i>Line Deliberately Left Blank</i>				
203	General Plant	(Worksheet A In 7.C)	-	W/S	-
204	Less: General Plant ARO (Enter Negative)	(Worksheet A In 8.C)	-	W/S	-
205	Intangible Plant	(Worksheet A In 9.C)	2,976,059	W/S	2,960,650
206	TOTAL GROSS PLANT	(Sum of Lines: 197 to 200 & 203 to 205)	568,246,875	GP(h)=	568,231,466
				GTD=	1.00000
207	ACCUMULATED DEPRECIATION AND AMORTIZATION				
208	<i>Line Deliberately Left Blank</i>				
209	<i>Line Deliberately Left Blank</i>				
210	Transmission	(Worksheet A In 14.C & 28.C)	10,534,889	TP1=	10,534,889
211	Less: Transmission ARO (Enter Negative)	(Worksheet A In 15.C)	-	TP1=	-
212	Plus: Transmission Plant-in-Service Additions (Worksheet I)		N/A	DA	N/A
213	Plus: Additional Projected Deprec on Transferred Assets (Worksheet I)		N/A	DA	N/A
214	Plus: Additional Transmission Depreciation for 2017 (In 285)		N/A	TP1	N/A
215	Plus: Additional General & Intangible Depreciation for 2017 (In 284 + In 285)		N/A	W/S	N/A
216	Plus: Additional Accum Deprec on Transferred Assets (Worksheet I)		N/A	DA	N/A
217	<i>Line Deliberately Left Blank</i>				
218	<i>Line Deliberately Left Blank</i>				
219	General Plant	(Worksheet A In 18.C)	-	W/S	-
220	Less: General Plant ARO (Enter Negative)	(Worksheet A In 19.C)	-	W/S	-
221	Intangible Plant	(Worksheet A In 20.C)	437,139	W/S	434,876
222	TOTAL ACCUMULATED DEPRECIATION	(Sum of Lines: 210 to 216 & 219 to 221)	10,972,028		10,969,765
223	NET PLANT IN SERVICE				
224	<i>Line Deliberately Left Blank</i>				
225	Transmission	(In 197 + In 198 - In 210 - In 211)	554,735,927		554,735,927
226	Plus: Transmission Plant-in-Service Additions (In 199 - In 212)		N/A		N/A
227	Plus: Additional Trans Plant on Transferred Assets (In 200 - In 213)		N/A		N/A
228	Plus: Additional Transmission Depreciation for 2017 (-In 214)		N/A		N/A
229	Plus: Additional General & Intangible Depreciation for 2017 (-In 215)		N/A		N/A
230	Plus: Additional Accum Deprec on Transferred Assets (Worksheet I) (-In 216)		N/A		N/A
231	<i>Line Deliberately Left Blank</i>				
232	General Plant	(In 203 + In 204 - In 219 - In 220)	-		-
233	Intangible Plant	(In 205 - In 221)	2,538,920		2,525,774
234	TOTAL NET PLANT IN SERVICE	(Sum of Lines: 225 to 230 & 232, 233)	557,274,847	NP(h)=	557,261,701
				0.999976	
235	DEFERRED TAX ADJUSTMENTS TO RATE BASE	(Note D)			
236	Account No. 281.1 (enter negative)	(Worksheet B, In 2 & In 5.C)	-	NA	-
237	Account No. 282.1 (enter negative)	(Worksheet B, In 7 & In 10.C)	(103,890,429)	DA	(103,890,429)
238	Account No. 283.1 (enter negative)	(Worksheet B, In 12 & In 15.C)	(21,612,126)	DA	(21,612,126)
239	Account No. 190.1	(Worksheet B, In 17 & In 20.C)	10,960,041	DA	10,960,041
240	Account No. 255 (enter negative)	(Worksheet B, In 24 & In 25.C)	-	DA	-
241	TOTAL ADJUSTMENTS	(sum Ins 236 to 240)	(114,542,514)		(114,542,514)
242	PLANT HELD FOR FUTURE USE	(Worksheet A In 29.C & In 30.C)	-	DA	-
243	REGULATORY ASSETS	(Worksheet A In 41. (C))	-	DA	-
244	WORKING CAPITAL	(Note E)			
245	Cash Working Capital	(1/8 * In 265)	464,344		464,344
246	Transmission Materials & Supplies	(Worksheet C, In 2.(D))	-	TP	-
247	A&G Materials & Supplies	(Worksheet C, In 3.(D))	-	W/S	-
248	Stores Expense	(Worksheet C, In 4.(D))	-	GP(h)	-
249	Prepayments (Account 165) - Labor Allocated	(Worksheet C, In 6.G)	570,051	W/S	567,100
250	Prepayments (Account 165) - Gross Plant	(Worksheet C, In 6.F)	67,348	GP(h)	67,346
251	Prepayments (Account 165) - Transmission Only	(Worksheet C, In 6.E)	-	DA	-
252	Prepayments (Account 165) - Unallocable	(Worksheet C, In 6.D)	-	NA	-
253	TOTAL WORKING CAPITAL	(sum Ins 245 to 252)	1,101,743		1,098,790
254	IPP CONTRIBUTIONS FOR CONSTRUCTION	(Note F) (Worksheet D, In 7.B)	-	DA	-
255	RATE BASE (sum Ins 234, 241, 242, 243, 253, 254)		443,834,076		443,817,977

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	(1)	(2)	(3)		(4)	(5)
	EXPENSE, TAXES, RETURN & REVENUE REQUIREMENTS CALCULATION	Data Sources (See "General Notes")	TO Total	Allocator	Total Transmission	
Line No.	OPERATION & MAINTENANCE EXPENSE					
256	Line Deliberately Left Blank					
257	Line Deliberately Left Blank					
258	Customer Related Expense	322 & 323.164,171,178.b	-			
259	Regional Marketing Expenses	322.131.b	-			
				Per Settlement in FERC Docket No. ER10-355-000 , Attachment A-1 to Appendix B, pg. 26, C, 7a.		
260	Transmission	321.112.b	3,800,749			
261	TOTAL O&M EXPENSES	(sum Ins 258 to 260)	3,800,749			
262	Less: Total Account 561	(Note G) (Worksheet F, In 14.C)	85,997			
263	Less: Account 565	(Note H) 321.96.b	-			
264	Less: Regulatory Deferrals & Amortizations	(Note I) (Worksheet F, In 4.C)	-			
265	Total O&M Allocable to Transmission	(Ins 260 - 262 - 263 - 264)	3,714,752	TP 1.00000	3,714,752	
				Per Settlement in FERC Docket No. ER10-355-000 , Attachment A-1 to Appendix B, pg. 26, C, 7a.		
266	Administrative and General	323.197.b (Note J)	2,054,139			
267	Less: Acct. 924, Property Insurance	323.185.b	102,253			
268	Acct. 928, Reg. Com. Exp.	323.189.b	14,832			
269	Acct. 930.1, Gen. Advert. Exp.	323.191.b	-			
270	Acct. 930.2, Misc. Gen. Exp.	323.192.b	38,966			
271	Balance of A & G	(In 266 - sum In 267 to In 270)	1,898,088	W/S 0.99482	1,888,260	
272	Plus: Acct. 924, Property Insurance	(In 267)	102,253	GP(h) 0.99997	102,250	
273	Acct. 928 - Transmission Specific	Worksheet F In 20.(E) (Note L)	14,832	TP 1.00000	14,832	
274	Acct 930.1 - Only safety related ads -Direct	Worksheet F In 37.(E) (Note L)	-	TP 1.00000	-	
275	Acct 930.2 - Misc Gen. Exp. - Trans	Worksheet F In 42.(E) (Note L)	-	DA 1.00000	-	
276	PBOP Adjustment	Worksheet O Ln 16 (B), (Note K & M)	229,969	W/S 0.99482	228,778	
277	A & G Subtotal	(sum Ins 271 to 276)	2,245,141		2,234,120	
278	O & M EXPENSE SUBTOTAL	(In 265 + In 277)	5,959,893		5,948,872	
279	Plus: TEA Settlement in Account 565	Company Records (Note H)	-	DA 1.00000	-	
280	Plus: Transmission Lease Payments To Affiliates in Acct 565 (Company Records) (Note H)		-	DA 1.00000	-	
281	TOTAL O & M EXPENSE	(In 278 + In 279 + In 280)	5,959,893		5,948,872	
282	DEPRECIATION AND AMORTIZATION EXPENSE					
283	Line Deliberately Left Blank					
284	Line Deliberately Left Blank					
285	Transmission	336.7.f	6,625,971	TP1 1.00000	6,625,971	
286	Plus: Transmission Plant-in-Service Additions (Worksheet I)		N/A		N/A	
287	Plus: Formation Costs Amortization	(Worksheet A In 35.C)	-	TP1 1.00000	-	
288	General	336.10.f	-	W/S 0.99482	-	
289	Intangible	336.1.f	363,428	W/S 0.99482	361,546	
290	TOTAL DEPRECIATION AND AMORTIZATION	(Ln 285+286+288+289)	6,989,399		6,987,517	
291	TAXES OTHER THAN INCOME	(Note N)				
292	Labor Related					
293	Payroll	Worksheet H In 23.(D)	-	W/S 0.99482	-	
294	Plant Related					
295	Property	Worksheet H In 23.(C) & In 58.(C)	733,410	DA	733,410	
296	Gross Receipts/Sales & Use	Worksheet H In 23.(F)	-	NA 0.00000	-	
297	Other	Worksheet H In 23.(E)	-	GP(h) 0.99997	-	
298	TOTAL OTHER TAXES	(sum Ins 293 to 297)	733,410		733,410	
299	INCOME TAXES	(Note O)				
300	T=1 - {[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)} =		39.23%			
301	EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =		47.46%			
302	where WCLTD=(In 350) and WACC = (In 353)					
303	and FIT, SIT & p are as given in Note O.					
304	GRCF=1 / (1 - T) = (from In 300)		1.6454			
305	Amortized Investment Tax Credit (enter negative)	(FF1 p.114, In 19.c)	-			
306	Income Tax Calculation	(In 301 * In 309)	14,946,261		14,945,719	
307	ITC adjustment	(In 304 * In 305)	-	NP(h) 0.99998	-	
308	TOTAL INCOME TAXES	(sum Ins 306 to 307)	14,946,261		14,945,719	
309	RETURN ON RATE BASE (Rate Base*WACC)	(In 255 * In 353)	31,492,404		31,491,262.19	
310	INTEREST ON IPP CONTRIBUTION FOR CONST. (Note F) (Worksheet D, In 2.(B))		-	DA 1.00000	-	
311	(Gains) / Losses on Sales of Plant Held for Future Use (Worksheet N, In 4, Cols. ((F) & (H))		-		-	
312	Tax Impact on Net Loss / (Gain) on Sales of Plant Held for Future Use (In 311 * In301)		-		-	
313	TOTAL REVENUE REQUIREMENT		60,121,367		60,106,780	
	(sum Ins 281, 290, 298, 308, 309, 310, 311, 312)					

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SUPPORTING CALCULATIONS

No.	TRANSMISSION PLANT INCLUDED IN PJM TARIFF								
314	Total transmission plant		(In 197)						565,270,816
315	Less transmission plant excluded from PJM Tariff (Note P)								-
316	Less transmission plant included in OATT Ancillary Services (Worksheet A, In 23, Col. (C)) (Note Q)								-
317	Transmission plant included in PJM Tariff		(In 314 - In 315 - In 316)						565,270,816
318	Percent of transmission plant in PJM Tariff		(In 317 / In 314)				TP=		1.00000
319	WAGES & SALARY ALLOCATOR (W/S)		(Note R)	Direct Payroll	Payroll Billed from AEP Service Corp.	Total			
320	Line Deliberately Left Blank								
321	Transmission	354.21.b		-	1,095,196	1,095,196	TP	1.00000	1,095,196
322	Regional Market Expenses	354.22.b		-	-	-	NA	0.00000	-
323	Line Deliberately Left Blank								
324	Other (Excludes A&G)	354.24,25,26.b		-	5,700	5,700	NA	0.00000	-
325	Total	(sum Ins 321, 322, & 324)		-	1,100,896	1,100,896			1,095,196
326	Transmission related amount						W/S=		0.99482
327	Actual (Uncapped) Capital Structure								
327	WEIGHTED AVERAGE COST OF CAPITAL (WACC)								\$
328	Long Term Interest	(Worksheet L, In. 46, col. (D))					See W/S L		11,283,262
329	Preferred Dividends	(Worksheet L, In. 56, col. (D))							-
330	<u>Development of Common Stock:</u>								
331	Proprietary Capital	(FF1 p 112, Ln 16.c)							272,845,406
332	Less: Preferred Stock	(FF1 p 112, Ln 3.c)							-
333	Less: Account 216.1	(FF1 p 112, Ln 12.c)							-
334	Less: Account 219	(FF1 p 112, Ln 15.c)							-
335	Common Stock	(In 331 - In 332 - In 333 - In 334)							272,845,406
336	Long Term Debt	Worksheet L, In 46, col. (B))		See W/S L	Capital Structure Percentages	Cost (Note S)			
337	Preferred Stock (In 332)				\$	%		Weighted	
338	Common Stock (In 335)				328,000,000	54.59%	3.44%		0.0188
339	Total (Sum Ins 336 to 338)				-	0.00%	0.00%		0.0000
					272,845,406	45.41%	11.49%		0.0522
					600,845,406	100.00%	WACC=		0.0710
340	AEP OPERATING COMPANIES' COMPOSITE (Note S)								
340	WEIGHTED AVERAGE COST OF CAPITAL (WACC)								\$
341	Long Term Interest	(Worksheet Q, In. 14)							451,725,399
342	Preferred Dividends	(Worksheet Q, In. 36)							-
343	<u>Development of Common Stock:</u>								
344	Proprietary Capital	(Worksheet Q, In. 37)							8,970,826,119
345	Less: Preferred Stock	(Worksheet Q, In. 38)							-
346	Less: Account 216.1	(Worksheet Q, In. 39)							31
347	Less: Account 219	(Worksheet Q, In. 40)							(23,856,179)
348	Common Stock	(In 344 - In 345 - In 346 - In 347)							8,994,682,267
349					%	\$	Cost		Weighted
350	Long Term Debt	(Worksheet Q, In 50)			50.88%	9,109,864,778	4.96%		0.0252
351	Preferred Stock (Worksheet Q, In 51)				0.00%	-	0.00%		0.0000
352	Common Stock (Worksheet Q, In 52)				49.12%	8,794,037,374	11.49%		0.0564
353	Total (Worksheet Q, In 45)					17,903,902,152	WACC=		0.0817

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Letter

Notes

General Notes: a) References to data from Worksheets are indicated as: Worksheet X, Line#.Column.X

- A Revenue credits include:
1) Forfeited Discounts.
2) Miscellaneous Service Revenues.
3) Rental revenues earned on assets included in the rate base.
4) Revenues for associated business projects provided by employees whose labor and overhead costs are in the transmission cost of service.
5) Other electric revenues.
6) Revenues for grandfathered PTP contracts included in the load divisor.
See Worksheet E for details.
- B The annual and monthly net plant carrying charges on page 1 are used to compute the revenue requirement for RTEP sponsored upgrades or those projects receiving approved incentive-ROE's.
- C Transmission Plant balances in this study are historic as of December 31, 2016.
- D The total-company balances shown for Accounts 281, 282, 283, 190 only reflect ADIT that relates to utility operations. The balance of Account 255 is reduced by prior flow throughs and is completely excluded if the utility chose to utilize amortization of tax credits against FIT expense. An exception to this is pre-1971 ITC balances, which are required to be taken as an offset to rate base. Account 281 is not allocated. In compliance with FERC Rulemaking RM02-7-000, Asset Retirement Obligation deferrals have been removed from ratebase. Transmission ADIT allocations are shown on WS B.
The company will not include the ADIT portion of deferred hedge gains and losses in rate base.
- E Cash Working Capital assigned to transmission is one-eighth of O&M allocated to transmission, as shown on line 265. It excludes:
1) Load Scheduling & Dispatch Charges in account 561 that are collected in the OATT Ancillary Services Revenue, as shown on line 262.
2) AEP transmission equalization transfers, as shown on line 263
3) The impact of state regulatory deferrals and amortizations, as shown on line 264
4) All A&G Expenses, as shown on line 277.
- F Consistent with Paragraph 657 of Order 2003-A, the amount on line 254 is equal to the balance of IPP System Upgrade Credits owed to transmission customers that made contributions toward the construction of System upgrades, and includes accrued interest and unreturned balance of contributions. The annual interest expense is included on line 310.
- G Removes from the cost of service the Load Scheduling and Dispatch expenses booked to accounts 561.1 through 561.8. Expenses recorded in these accounts, with the exception of 561.4 & 561.8 (lines 192 & 193 above) are recovered in Schedule 1A, OATT ancillary services rates. See Worksheet F, lines 5 through 14, for descriptions and the Form 1 Source of these accounts' balances.
- H Removes cost of transmission service provided by others to determine the basis of cash working capital on line 265. To the extent such service is incurred to provide the PJM service at issue, e.g. transmission equalization agreement, such costs are added back on lines 279 and 280 to determine the total O&M collected in the formula. The amounts on lines 279 and 280 are also excluded in the calculation of the FCR percentage calculated on lines 182 through 188.
The addbacks on lines 279 and 280 of activity recorded in 565 represents inter-company sales or purchases of transmission capacity necessary to meet each AEP company's transmission load relative to their available transmission capacity.
The company records referenced on lines 279 and 280 is the AEP WEST VIRGINIA TRANSMISSION COMPANY general ledger.
- I Removes the impact of state regulatory deferrals or their amortization from O&M expense.
- J General Plant and Administrative & General expenses, other than in accounts 924, 928, and 930, will be functionalized based on the Wages & Salaries "W/S" allocator. The allocation basis for accounts 924, 928 and 930 are separately presented in the formula. A change in the allocation method for an account must be approved via a 205 filing with the FERC.
- K The Post-employment Benefit Other than Pension (PBOP) expense is fixed based on an approved ratio of PBOP expense to direct labor expense
- L Expenses reported for these A&G accounts will be included in the cost of service only to the extent they are directly assignable to transmission service. Worksheet F allocates these expense items. Acct 928 Includes Regulatory Commission expenses itemized in FERC Form-1 at page 351, column H. FERC Assessment Fees and Annual Charges shall not be allocated to transmission. Only safety-related and educational advertising costs in Account 930.1 are included in the TCOS. Account 930.2 includes the expenses incurred by the transmission function for Associated Business Development revenues given as a credit to the TCOS on Worksheet E.
- M See note K above. Per the settlement in Docket ER10-355, recoverable PBOP expense is based on a rate of 9.4 cents per dollar of direct labor. This rate may be adjusted up or down every four years based on a comparison of the Allowable TransCo PBOP Expense and the Actual PBOP Expense for a four year Historic and four year Projected period. If the over or under collection is greater than plus or minus 20% of the recoverable amount, an adjustment will be proposed in a Section 205 rate filing.
- N Includes only FICA, unemployment, highway, property and other assessments charged in the current year. Gross receipts, sales & use and taxes related to income are excluded.
- O The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and p = the percentage of federal income tax deductible for state income taxes. See Worksheet G for the development of the Company's composite SIT.
A utility that elected to utilize amortization of tax credits against taxable income, rather than book tax credits to Account No. 255 and reduce rate base, must reduce its income tax expense by the amount of the Amortized Investment Tax Credit (Form 1, 266.8.f) (In 305) multiplied by (1/1-T) . If the applicable tax rates are zero enter 0.
Inputs Required: FIT = 35.00%
SIT= 6.50% (State Income Tax Rate or Composite SIT. Worksheet G))
p = 0.00% (percent of federal income tax deductible for state purposes)
- P Removes plant excluded from the OATT because it does not meet the PJM's definition of Transmission Facilities or is otherwise ineligible to be recovered under the OATT.
- Q Removes transmission plant (e.g. step-up transformers) included in the development of OATT ancillary service rates and not already removed for reasons indicated in Note P.
- R Includes functional wages & salaries billed by AEP Service Corporation for support of the operating company.
- S As shown on Worksheet Q, the AEP West Virginia Transmission Company capital structure and weighted cost of capital (WACC) shall be based on (1) the weighted composite of AEP East Operating Companies' actual end-of-year capital structure, including year-end outstanding long term debt (LTD) and preferred stock (PS) issuances (Projected) or the beginning and ending average capital structure, including the beginning and ending average outstanding LTD and PS issuances (True-Up) with the common equity portion as capped in Docket No. ER08-1329 where any excess common equity is priced at the cost of LTD and the composite equity ratio is further capped at 50%, and (2) the actual weighted composite LTD and PS cost using actual calendar year LTD expense and PS dividends of the AEP East Operating Companies excluding all interest rate hedging costs and/or gains, until the the Company establishes its own actual capital structure.
Upon establishment of actual debt financing for AEP West Virginia Transmission Company, the Company shall use its own actual capital structure capped by a 50% Common Equity Cap and its own LTD costs, excluding all interest rate hedging costs and/or gains, as computed on Worksheet L for the Projected TCOS or Worksheet M for the True Up TCOS.
- T AEP WEST VIRGINIA TRANSMISSION COMPANY's Common Stock is limited to 50% of the capital structure. This limit may only be changed through a Section 205 or 206 filing effective after June 30, 2013.
If the percentage of equity exceeds the cap, the excess is included in weighted percentage of long term debt in the capital structure.

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Line No.						Transmission Amount
1	REVENUE REQUIREMENT (w/o incentives)	(In 136)				\$53,559,964
			Total			
2	REVENUE CREDITS	(Note A) (Worksheet E)	-	DA	1.00000	\$ -
3	REVENUE REQUIREMENT For All Company Facilities	(In 1 less In 2)				\$ 53,559,964

MEMO: The Carrying Charge Calculations on lines 6 to 11 below are used in calculating project revenue requirements billed through PJM Schedule 12, Transmission Enhancement Charges. The total non-incentive revenue requirements for these projects shown on line 4 is included in the total on line 3.

4	Revenue Requirement for PJM Schedule 12 Facilities (w/o incentives) (Worksheet K)	41,934,095	DA	1.00000	\$ 41,934,095
5	NET PLANT CARRYING CHARGE w/o intra-AEP charges or credits or ROE incentives (Note B)				
6	Annual Rate	((In 1 - In 102 - In 103)/ In 48 x 100)			12.01%
7	Monthly Rate	(In 6 / 12)			1.00%
8	NET PLANT CARRYING CHARGE ON LINE 6 , w/o depreciation or ROE incentives (Note B)				
9	Annual Rate	((In 1 - In 102 - In 103 - In 108) / In 48 x 100)			10.53%
10	NET PLANT CARRYING CHARGE ON LINE 9, w/o Return, income taxes or ROE incentives (Note B)				
11	Annual Rate	((In 1 - In 102 - In 103 - In 108 - In 131 - In 132) / In 48 x 100)			1.58%
12	ADDITIONAL REVENUE REQUIREMENT for projects w/ incentive ROE's (Note B) (Worksheet K)				-
13	REVENUE REQUIREMENT FOR SCHEDULE 1A CHARGES				
14	Total Load Dispatch & Scheduling (Account 561)	Line 85 Below			85,997
15	Less: Load Dispatch - Scheduling, System Control and Dispatch Services (321.88.b)				-
16	Less: Load Dispatch - Reliability, Planning & Standards Development Services (321.92.b)				-
17	Total 561 Internally Developed Costs	(Line 14 - Line 15 - Line 16)			85,997

AEPTCo subsidiaries in PJM
Transmission Cost of Service Formula Rate
Utilizing Actual Cost Data for 2016 with Average Ratebase Balances

AEP WEST VIRGINIA TRANSMISSION COMPANY

	(1)	(2)	(3)		(4)	(5)
	<u>RATE BASE CALCULATION</u>	<u>Data Sources</u> <u>(See "General Notes")</u>	<u>TO Total</u> <u>NOTE C</u>	<u>Allocator</u>		<u>Total</u> <u>Transmission</u>
Line No.	GROSS PLANT IN SERVICE					
18	<i>Line Deliberately Left Blank</i>					
19	<i>Line Deliberately Left Blank</i>					
20	Transmission	(Worksheet A In 3.E & Ln 140)	453,045,873	DA		453,045,873
21	Less: Transmission ARO (Enter Negative)	(Worksheet A In 4.E & Ln 141)	-	TP	1.00000	-
22	Plus: Transmission Plant-in-Service Additions (Worksheet I)		N/A	NA	0.00000	N/A
23	Plus: Additional Trans Plant on Transferred Assets (Worksheet I)		N/A	NA	0.00000	N/A
24	<i>Line Deliberately Left Blank</i>					
25	<i>Line Deliberately Left Blank</i>					
26	General Plant	(Worksheet A In 7.E)	-	W/S	0.99482	-
27	Less: General Plant ARO (Enter Negative)	(Worksheet A In 8.E)	-	W/S	0.99482	-
28	Intangible Plant	(Worksheet A In 9.E)	2,168,683	W/S	0.99482	2,157,454
29	TOTAL GROSS PLANT	(Sum of Lines: 20 to 23 & 26 to 28)	455,214,556	GP(h)= GTD=	0.99998 0.00000	455,203,327
30	ACCUMULATED DEPRECIATION AND AMORTIZATION					
31	<i>Line Deliberately Left Blank</i>					
32	<i>Line Deliberately Left Blank</i>					
33	Transmission	(Worksheet A In 14.E & 28.E)	7,234,491	TP1=	1.00000	7,234,491
34	Less: Transmission ARO (Enter Negative)	(Worksheet A In 15.E)	-	TP1=	1.00000	-
35	Plus: Transmission Plant-in-Service Additions (Worksheet I)		N/A	DA	1.00000	N/A
36	Plus: Additional Projected Deprec on Transferred Assets (Worksheet I)		N/A	DA	1.00000	N/A
37	Plus: Additional Transmission Depreciation for 2017 (In 108)		N/A	TP1	1.00000	N/A
38	Plus: Additional General & Intangible Depreciation for 2017 (In 107 + In 108)		N/A	W/S	0.99482	N/A
39	Plus: Additional Accum Deprec on Transferred Assets (Worksheet I)		N/A	DA	1.00000	N/A
40	<i>Line Deliberately Left Blank</i>					
41	<i>Line Deliberately Left Blank</i>					
42	General Plant	(Worksheet A In 18.E)	-	W/S	0.99482	-
43	Less: General Plant ARO (Enter Negative)	(Worksheet A In 19.E)	-	W/S	0.99482	-
44	Intangible Plant	(Worksheet A In 20.E)	255,426	W/S	0.99482	254,103
45	TOTAL ACCUMULATED DEPRECIATION	(Sum of Lines: 33 to 39 & 42 to 44)	7,489,917			7,488,594
46	NET PLANT IN SERVICE					
47	<i>Line Deliberately Left Blank</i>					
48	Transmission	(In 20 + In 21 - In 33 - In 34)	445,811,382			445,811,382
49	Plus: Transmission Plant-in-Service Additions (In 22 - In 35)		N/A			N/A
50	Plus: Additional Trans Plant on Transferred Assets (In 23 - In 36)		N/A			N/A
51	Plus: Additional Transmission Depreciation for 2017 (-In 37)		N/A			N/A
52	Plus: Additional General & Intangible Depreciation for 2017 (-In 38)		N/A			N/A
53	Plus: Additional Accum Deprec on Transferred Assets (Worksheet I) (-In 39)		N/A			N/A
54	<i>Line Deliberately Left Blank</i>					
55	General Plant	(In 26 + In 27 - In 42 - In 43)	-			-
56	Intangible Plant	(In 28 - In 44)	1,913,258			1,903,351
57	TOTAL NET PLANT IN SERVICE	(Sum of Lines: 48 to 53 & 55, 56)	447,724,639	NP(h)=	0.99998	447,714,733
58	DEFERRED TAX ADJUSTMENTS TO RATE BASE	(Note D)				
59	Account No. 281.1 (enter negative)	(Worksheet B, In 2 & In 5.E)	-	NA		-
60	Account No. 282.1 (enter negative)	(Worksheet B, In 7 & In 10.E)	(79,802,647)	DA		(79,802,647)
61	Account No. 283.1 (enter negative)	(Worksheet B, In 12 & In 15.E)	(16,825,055)	DA		(16,825,055)
62	Account No. 190.1	(Worksheet B, In 17 & In 20.E)	8,576,467	DA		8,576,467
63	Account No. 255 (enter negative)	(Worksheet B, In 24 & In 25.E)	-	DA		-
64	TOTAL ADJUSTMENTS	(sum Ins 59 to 63)	(88,051,235)			(88,051,235)
65	PLANT HELD FOR FUTURE USE	(Worksheet A In 29.E & In 30.E)	-	DA		-
66	REGULATORY ASSETS	(Worksheet A In 41. (E))	-	DA		-
67	WORKING CAPITAL	(Note E)				
68	Cash Working Capital	(1/8 * In 88)	464,344			464,344
69	Transmission Materials & Supplies	(Worksheet C, In 2.F)	-	TP	1.00000	-
70	A&G Materials & Supplies	(Worksheet C, In 3.F)	-	W/S	0.99482	-
71	Stores Expense	(Worksheet C, In 4.(D))	-	GP(h)	0.99998	-
72	Prepayments (Account 165) - Labor Allocated	(Worksheet C, In 8.G)	1,341,932	W/S	0.99482	1,334,984
73	Prepayments (Account 165) - Gross Plant	(Worksheet C, In 8.F)	64,014	GP(h)	0.99998	64,012
74	Prepayments (Account 165) - Transmission Only	(Worksheet C, In 8.E)	-	DA	1.00000	-
75	Prepayments (Account 165) - Unallocable	(Worksheet C, In 8.D)	-	NA	0.00000	-
76	TOTAL WORKING CAPITAL	(sum Ins 68 to 75)	1,870,290			1,863,341
77	IPP CONTRIBUTIONS FOR CONSTRUCTION	(Note F) (Worksheet D, In 8 (B))	-	DA	1.00000	-
78	RATE BASE (sum Ins 57, 64, 65, 66, 76, 77)		361,543,694			361,526,838

AEPTCo subsidiaries in PJM
Transmission Cost of Service Formula Rate
Utilizing Actual Cost Data for 2016 with Average Ratebase Balances

Formula Rate
True-UP TCOS
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AEP WEST VIRGINIA TRANSMISSION COMPANY

	(1)	(2)	(3)		(4)	(5)
	EXPENSE, TAXES, RETURN & REVENUE REQUIREMENTS CALCULATION	Data Sources (See "General Notes")	TO Total	Allocator	Total Transmission	
Line No.	OPERATION & MAINTENANCE EXPENSE					
79	Line Deliberately Left Blank					
80	Line Deliberately Left Blank					
81	Customer Related Expense	322.164,171,178.b	-			
82	Regional Marketing Expenses	322.131.b	-			
83	Transmission	321.112.b	3,800,749			
84	TOTAL O&M EXPENSES	(sum Ins 81 to 83)	3,800,749			
85	Less: Total Account 561	(Note G) (Worksheet F, In 14.C)	85,997			
86	Less: Account 565	(Note H) 321.96.b	-			
87	Less: Regulatory Deferrals & Amortizations	(Note I) (Worksheet F, In 4.C)	-			
88	Total O&M Allocable to Transmission	(Ins 83 - 85 - 86 - 87)	3,714,752	TP	1.00000	3,714,752
89	Administrative and General	323.197.b (Note J)	2,054,139			
90	Less: Acct. 924, Property Insurance	323.185.b	102,253			
91	Acct. 928, Reg. Com. Exp.	323.189.b	14,832			
92	Acct. 930.1, Gen. Advert. Exp.	323.191.b	-			
93	Acct. 930.2, Misc. Gen. Exp.	323.192.b	38,966			
94	Balance of A & G	(In 89 - sum In 90 to In 93)	1,898,088	W/S	0.99482	1,888,260
95	Plus: Acct. 924, Property Insurance	(In 90)	102,253	GP(h)	0.99998	102,250
96	Acct. 928 - Transmission Specific	Worksheet F In 20.(E) (Note L)	14,832	TP	1.00000	14,832
97	Acct 930.1 - Only safety related ads -Direct	Worksheet F In 37.(E) (Note L)	-	TP	1.00000	-
98	Acct 930.2 - Misc Gen. Exp. - Trans	Worksheet F In 42.(E) (Note L)	-	DA	1.00000	-
99	PBOP Adjustment	Worksheet O Ln 16 (B), (Note K & M)	229,969	W/S	0.99482	228,778
100	A & G Subtotal	(sum Ins 94 to 99)	2,245,141			2,234,121
101	O & M EXPENSE SUBTOTAL	(In 88 + In 100)	5,959,893			5,948,872
102	Plus: TEA Settlement in Account 565	Company Records (Note H)	-	DA	1.00000	-
103	Plus: Transmission Lease Payments To Affiliates in Acct 565	(Company Records) (Note H)	-	DA	1.00000	-
104	TOTAL O & M EXPENSE	(In 101 + In 102 + In 103)	5,959,893			5,948,872
105	DEPRECIATION AND AMORTIZATION EXPENSE					
106	Line Deliberately Left Blank					
107	Line Deliberately Left Blank					
108	Transmission	336.7.f	6,625,971	TP1	1.00000	6,625,971
109	Plus: Transmission Plant-in-Service Additions (Worksheet I)		N/A			N/A
110	Plus: Formation Costs Amortization	(Worksheet A In 35.E)	-	TP1	1.00000	-
111	General	336.10.f	-	W/S	0.99482	-
112	Intangible	336.1.f	363,428	W/S	0.99482	361,546
113	TOTAL DEPRECIATION AND AMORTIZATION	(Ln 108+109+111+112)	6,989,399			6,987,517
114	TAXES OTHER THAN INCOME	(Note N)				
115	Labor Related					
116	Payroll	Worksheet H In 23.(D)	-	W/S	0.99482	-
117	Plant Related					
118	Property	Worksheet H In 23.(C) & In 58.(C)	733,410	DA		733,410
119	Gross Receipts/Sales & Use	Worksheet H In 23.(F)	-	NA	0.00000	-
120	Other	Worksheet H In 23.(E)	-	GP(h)	0.99998	-
121	TOTAL OTHER TAXES	(sum Ins 116 to 120)	733,410			733,410
122	INCOME TAXES	(Note O)				
123	T=1 - {[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)} =		39.23%			
124	EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =		50.61%			
125	where WCLTD=(In 174) and WACC = (In 177)					
126	and FIT, SIT & p are as given in Note O.					
127	GRCF=1 / (1 - T) = (from In 123)		1.6454			
128	Amortized Investment Tax Credit (enter negative)	(FF1 p.114, In 19.c)	-			
129	Income Tax Calculation	(In 124 * In 132)	13,405,679			13,405,054
130	ITC adjustment	(In 127 * In 128)	-	NP(h)	0.99998	-
131	TOTAL INCOME TAXES	(sum Ins 129 to 130)	13,405,679			13,405,054
132	RETURN ON RATE BASE (Rate Base*WACC)	(In 78 * In 177)	26,486,346.01			26,485,111.18
133	INTEREST ON IPP CONTRIBUTION FOR CONST. (Note F) (Worksheet D, In 2.(B))		-	DA	1.00000	-
134	(Gains) / Losses on Sales of Plant Held for Future Use (Worksheet N, In 4, Cols. ((F) & (H))		-			-
135	Tax Impact on Net Loss / (Gain) on Sales of Plant Held for Future Use (In 134 * In124)		-			-
136	TOTAL REVENUE REQUIREMENT		53,574,727			53,559,964
	(sum Ins 104, 113, 121, 131, 132, 133)					

AEP WEST VIRGINIA TRANSMISSION COMPANY

SUPPORTING CALCULATIONS

No.	TRANSMISSION PLANT INCLUDED IN PJM TARIFF									
137	Total transmission plant	(In 20)								453,045,873
138	Less transmission plant excluded from PJM Tariff (Note P)								-	
139	Less transmission plant included in OATT Ancillary Services (Worksheet A, In 23, Col. (C)) (Note Q)								-	
140	Transmission plant included in PJM Tariff	(In 137 - In 138 - In 139)								453,045,873
141	Percent of transmission plant in PJM Tariff	(In 140 / In 137)								TP= 1.00000
142	WAGES & SALARY ALLOCATOR (W/S)	(Note R)	Direct Payroll	Payroll Billed from AEP Service Corp.	Total					
143	Line Deliberately Left Blank									
144	Transmission	354.21.b	-	1,095,196	1,095,196	TP	1.00000	1,095,196		
145	Regional Market Expenses	354.22.b	-	-	-	NA	0.00000	-		
146	Line Deliberately Left Blank									
147	Other (Excludes A&G)	354.24,25,26.b	-	5,700	5,700	NA	0.00000	-		
148	Total	(sum Ins 144, 145, & 147)	-	1,100,896	1,100,896	1,095,196				
149	Transmission related amount								W/S= 0.99482	
ACTUAL CAPPED CAPITAL COST STRUCTURE (Note S)										
150	WEIGHTED AVERAGE COST OF CAPITAL (WACC)								\$	
151	Long Term Interest	(Worksheet M, In. 20, col. (E))	7,604,151							
152	Preferred Dividends	(Worksheet M, In. 49, col. (E))	-							
153	Development of Average Common Stock Balance:									
154	Proprietary Capital	(Worksheet M, In. 1, col. (E))	243,602,764							
155	Less: Preferred Stock	(Worksheet M, In. 2, col. (E))	-							
156	Less: Account 216.1	(Worksheet M, In. 3, col. (E))	-							
157	Less: Account 219	(Worksheet M, In. 4, col. (E))	-							
158	Average Common Stock	(In 154 - In 155 - In 156 - In 157)	243,602,764							
Capped Actual Average Capital Structure										
		Average \$	Capital Structure Percentages		Cost (Note S)		Weighted			
			Actual	Cap Limit						
159	Long Term Debt W/S M, In 11, In 21, col. (E))	240,500,000	49.68%	50.00%	3.16%		0.0158			
160	Preferred Stock (In 155)	-	0.00%	0.00%	0.00%		0.0000			
161	Common Stock (In 158)	243,602,764	50.32%	50.00%	11.49%		0.0575			
162	Total (Sum Ins 159 to 161)	484,102,764	100.00%	100.00%	WACC=		0.0733			
163	Capital Structure Equity Limit (Note T)	50.0%								
AEP OPERATING COMPANIES' COMPOSITE (Note S)										
164	WEIGHTED AVERAGE COST OF CAPITAL (WACC)								\$	
165	Long Term Interest	(Worksheet Q, In. 132)	451,725,399							
166	Preferred Dividends	(Worksheet Q, In. 134)	-							
167	Development of Actual Average Common Stock:									
168	Proprietary Capital	(Worksheet Q, In. 135)	8,784,010,576							
169	Less: Preferred Stock	(Worksheet Q, In. 136)	-							
170	Less: Account 216.1	(Worksheet Q, In. 137)	3,352,896							
171	Less: Account 219	(Worksheet Q, In. 138)	(20,371,012)							
172	Common Stock	(In 168 - In 169 - In 170 - In 171)	8,801,028,692							
173	True Up Capitalization with Equity Caps			%	\$	Cost		Weighted		
174	Long Term Debt (Worksheet Q, In 148)			50.54%	8,912,952,561	5.07%		0.0256		
175	Preferred Stock (Worksheet Q, In 149)			0.00%	-	0.00%		0.0000		
176	Common Stock (Worksheet Q, In 150)			49.46%	8,722,039,385	11.49%		0.0568		
177	Total (Worksheet Q, In 143)			100%	17,634,991,947	WACC=		0.0824		

AEPTCo subsidiaries in PJM
Transmission Cost of Service Formula Rate
Utilizing Actual Cost Data for 2016 with Average Ratebase Balances

AEP WEST VIRGINIA TRANSMISSION COMPANY

Letter

Notes

General Notes: a) References to data from Worksheets are indicated as: Worksheet X, Line#.Column.X

- A Revenue credits include:
1) Forfeited Discounts.
2) Miscellaneous Service Revenues.
3) Rental revenues earned on assets included in the rate base.
4) Revenues for associated business projects provided by employees whose labor and overhead costs are in the transmission cost of service.
5) Other electric revenues.
6) Revenues for grandfathered PTP contracts included in the load divisor.
See Worksheet E for details.
- B The annual and monthly net plant carrying charges on page 1 are used to compute the revenue requirement for RTEP sponsored upgrades or those projects receiving approved incentive-ROE's.
- C Transmission Plant balances in this study reflect the average of the balances at December 31, 2015 and December 31, 2016.
- D The total-company balances shown for Accounts 281, 282, 283, 190 only reflect ADIT that relates to utility operations. The balance of Account 255 is reduced by prior flow throughs and is completely excluded if the utility chose to utilize amortization of tax credits against FIT expense. An exception to this is pre-1971 ITC balances, which are required to be taken as an offset to rate base. Account 281 is not allocated. In compliance with FERC Rulemaking RM02-7-000, Asset Retirement Obligation deferrals have been removed from ratebase. Transmission ADIT allocations are shown on WS B. The company will not include the ADIT portion of deferred hedge gains and losses in rate base.
- E Cash Working Capital assigned to transmission is one-eighth of O&M allocated to transmission, as shown on line 88. It excludes:
1) Load Scheduling & Dispatch Charges in account 561 that are collected in the OATT Ancillary Services Revenue, as shown on line 85.
2) AEP transmission equalization transfers, as shown on line 86
3) The impact of state regulatory deferrals and amortizations, as shown on line 87
4) All A&G Expenses, as shown on line 100.
- F Consistent with Paragraph 657 of Order 2003-A, the amount on line 77 is equal to the balance of IPP System Upgrade Credits owed to transmission customers that made contributions toward the construction of System upgrades, and includes accrued interest and unreturned balance of contributions. The annual interest expense is included on line 133.
- G Removes from the cost of service the Load Scheduling and Dispatch expenses booked to accounts 561.1 through 561.8. Expenses recorded in these accounts, with the exception of 561.4 & 561.8 (lines 15 & 16 above) are recovered in Schedule 1A, OATT ancillary services rates. See Worksheet F, lines 5 through 14, for descriptions and the Form 1 Source of these accounts' balances.
- H Removes cost of transmission service provided by others to determine the basis of cash working capital on line 88. To the extent such service is incurred to provide the PJM service at issue, e.g. transmission equalization agreement, such costs are added back on lines 102 and 103 to determine the total O&M collected in the formula. The amounts on lines 102 and 103 are also excluded in the calculation of the FCR percentage calculated on lines 5 through 11. The addbacks on lines 102 and 103 of activity recorded in 565 represents inter-company sales or purchases of transmission capacity necessary to meet each AEP company's transmission load relative to their available transmission capacity. The company records referenced on lines 102 and 103 is the AEP WEST VIRGINIA TRANSMISSION COMPANY general ledger.
- I Removes the impact of state regulatory deferrals or their amortization from O&M expense.
- J General Plant and Administrative & General expenses, other than in accounts 924, 928, and 930, will be functionalized based on the Wages & Salaries "W/S" allocator. The allocation basis for accounts 924, 928 and 930 are separately presented in the formula. A change in the allocation method for an account must be approved via a 205 filing with the FERC.
- K The Post-employment Benefit Other than Pension (PBOP) expense is fixed based on an approved ratio of PBOP expense to direct labor expense
- L Expenses reported for these A&G accounts will be included in the cost of service only to the extent they are directly assignable to transmission service. Worksheet F allocates these expense items. Acct 928 Includes Regulatory Commission expenses itemized in FERC Form-1 at page 351, column H. FERC Assessment Fees and Annual Charges shall not be allocated to transmission. Only safety-related and educational advertising costs in Account 930.1 are included in the TCOS. Account 930.2 includes the expenses incurred by the transmission function for Associated Business Development revenues given as a credit to the TCOS on Worksheet E.
- M See note K above. Per the settlement in Docket ER10-355, recoverable PBOP expense is based on a rate of 9.4 cents per dollar of direct labor. This rate may be adjusted up or down every four years based on a comparison of the Allowable TransCo PBOP Expense and the Actual PBOP Expense for a four year Historic and four year Projected period. If the over or under collection is greater than plus or minus 20% of the recoverable amount, an adjustment will be proposed in a Section 205 rate filing.
- N Includes only FICA, unemployment, highway, property and other assessments charged in the current year. Gross receipts, sales & use and taxes related to income are excluded.
- O The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and p = the percentage of federal income tax deductible for state income taxes. See Worksheet G for the development of the Company's composite SIT. A utility that elected to utilize amortization of tax credits against taxable income, rather than book tax credits to Account No. 255 and reduce rate base, must reduce its income tax expense by the amount of the Amortized Investment Tax Credit (Form 1, 266.8.f) (In 128) multiplied by (1/1-T) . If the applicable tax rates are zero enter 0.
- | | | | |
|------------------|-------|--------|---|
| Inputs Required: | FIT = | 35.00% | |
| | SIT= | 6.50% | (State Income Tax Rate or Composite SIT. Worksheet G)) |
| | p = | 0.00% | (percent of federal income tax deductible for state purposes) |
- P Removes plant excluded from the OATT because it does not meet the PJM's definition of Transmission Facilities or is otherwise ineligible to be recovered under the OATT.
- Q Removes transmission plant (e.g. step-up transformers) included in the development of OATT ancillary service rates and not already removed for reasons indicated in Note P.
- R Includes functional wages & salaries billed by AEP Service Corporation for support of the operating company.
- S As shown on Worksheet Q, the AEP West Virginia Transmission Company capital structure and weighted cost of capital (WACC) shall be based on (1) the weighted composite of AEP East Operating Companies' actual end-of-year capital structure, including year-end outstanding long term debt (LTD) and preferred stock (PS) issuances (Projected) or the beginning and ending average capital structure, including the beginning and ending average outstanding LTD and PS issuances (True-Up) with the common equity portion as capped in Docket No. ER08-1329 where any excess common equity is priced at the cost of LTD and the composite equity ratio is further capped at 50%, and (2) the actual weighted composite LTD and PS cost using actual calendar year LTD expense and PS dividends of the AEP East Operating Companies excluding all interest rate hedging costs and/or gains, until the the Company establishes its own actual capital structure.
Upon establishment of actual debt financing for AEP West Virginia Transmission Company, the Company shall use its own actual capital structure capped by a 50% Common Equity Cap and its own LTD costs, excluding all interest rate hedging costs and/or gains, as computed on Worksheet L for the Projected TCOS or Worksheet M for the True Up TCOS.
- T 2013.
If the percentage of equity exceeds the cap, the excess is included in weighted percentage of long term debt in the capital structure.

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using 2016 FF1 Balances
Worksheet A Supporting Plant Balances
AEP WEST VIRGINIA TRANSMISSION COMPANY

Line	(A)	(B)	(C)	(D)	(E)
Number	Rate Base Item & Supporting Balance	Source of Data	Balance @ December 31, 2016	Balance @ December 31, 2015	Average Balance for 2016
NOTE: Functional ARO investment and accumulated depreciation balances shown below are included in the total functional balances shown here.					
NOTE: The ratebase should not include the unamortized balance of hedging gains or losses.					
Plant Investment Balances					
1	Line Deliberately Left Blank				
2	Line Deliberately Left Blank				
3	Transmission Plant In Service	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 58	565,270,816	340,820,929	453,045,873
4	Transmission Asset Retirement Obligation	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 57	-	-	-
5	Line Deliberately Left Blank				
6	Line Deliberately Left Blank				
7	General Plant In Service	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 99	-	-	-
8	General Asset Retirement Obligation	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 98	-	-	-
9	Intangible Plant In Service	FF1, page 205 Col.(g) & pg. 204 Col. (b), In 5	2,976,059	1,361,307	2,168,683
10	Total Property Investment Balance	(Sum of Lines: 3, 7, 9)	568,246,875	342,182,236	455,214,556
11	Total ARO Balance (included in total on line 10)	(Sum of Lines: 4, 8)	-	-	-
Accumulated Depreciation & Amortization Balances					
12	Line Deliberately Left Blank				
13	Line Deliberately Left Blank				
14	Transmission Accumulated Depreciation	FF1, page 219, In 25, Col. (b)	10,534,889	3,934,093	7,234,491
15	Transmission ARO Accumulated Depreciation	Company Records - Note 1	-	-	-
16	Line Deliberately Left Blank				
17	Line Deliberately Left Blank				
18	General Accumulated Depreciation	FF1, page 219, In 28, Col. (b)	-	-	-
19	General ARO Accumulated Depreciation	Company Records - Note 1	-	-	-
20	Intangible Accumulated Amortization	FF1, page 200, In 21, Col. (b)	437,139	73,712	255,426
21	Total Accumulated Depreciation or Amortization	(Sum of Lines: 14, 18, 20)	10,972,028	4,007,805	7,489,917
22	Total ARO Balance (included in total on line 21)	(Sum of Lines: 15, 19)	-	-	-
Generation Step-Up Units					
23	GSU Investment Amount	Company Records - Note 1	-	-	-
24	GSU Accumulated Depreciation	Company Records - Note 1	-	-	-
25	GSU Net Balance	(Line 23 - Line 24)	-	-	-
Transmission Accumulated Depreciation Net of GSU Accumulated Depreciation					
26	Transmission Accumulated Depreciation	(Line 14 Above)	10,534,889	3,934,093	7,234,491
27	Less: GSU Accumulated Depreciation	(Line 24 Above)	-	-	-
28	Subtotal of Transmission Net of GSU	(Line 26 - Line 27)	10,534,889	3,934,093	7,234,491
Plant Held For Future Use					
29	Plant Held For Future Use	FF1, page 214, In 47, Col. (d)	-	-	-
30	Transmission Plant Held For Future	Company Records - Note 1	-	-	-
Regulatory Assets and Liabilities Approved for Recovery In Ratebase					
Note: Regulatory Assets & Liabilities can only be included in ratebase pursuant to a 205 filing with the FERC.					
31	Beginning Balance of Regulatory Asset (Note 2)		-	-	-
32	Amortization in Months		-	-	-
33	Monthly Amortization		-	-	-
34	Months in 2016 to be amortized		-	-	-
35	Amortization Expense in 2016		-	-	-
36	Months in 2017 to be amortized		-	-	-
37	Amortization Expense in 2017		-	-	-
38	Ending Balance of Regulatory Asset		-	-	-
39	Average Balance of Regulatory Asset		-	-	-
40	Unamortized Balance of Regulatory Asset at YE 2016		-	-	-
41	Total Regulatory Deferrals Included in Ratebase (Note 2)		-	-	-

NOTE 1 On this worksheet, "Company Records" refers to AEP's property accounting ledger.
NOTE 2 Formation costs through 6/30/2010 are includable at 50% with 48 month amortization and no return on the unamortized balance. The balance on line 41 may not include unamortized formation costs.

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using 2016 FF1 Balances
Worksheet B Supporting ADIT and ITC Balances
AEP WEST VIRGINIA TRANSMISSION COMPANY

<u>Line Number</u>	<u>(A) Description</u>	<u>(B) Source</u>	<u>(C) Balance @ December 31, 2016</u>	<u>(D) Balance @ December 31, 2015</u>	<u>(E) Average Balance for 2016</u>
1	<u>Account 281</u>				
2	Year End Utility Deferrals	FF1, p. 272 - 273, ln 8, Col. (k)	-	-	-
3	Less: ARO Related Deferrals	Company Records - Note 1	-	-	-
4	Less: Other Excluded Deferrals	Company Records - Note 1	-	-	-
5	Transmission Related Deferrals	Ln 2 - ln 3 - ln 4	-	-	-
6	<u>Account 282</u>				
7	Year End Utility Deferrals	FF1, p. 274 - 275, ln 5, Col. (k)	103,890,429	55,714,865	79,802,647
8	Less: ARO Related Deferrals	Company Records - Note 1	-	-	-
9	Less: Other Excluded Deferrals	Company Records - Note 1	-	-	-
10	Transmission Related Deferrals	Ln 7 - ln 8 - ln 9	103,890,429	55,714,865	79,802,647
11	<u>Account 283</u>				
12	Year End Utility Deferrals	FF1, p. 276 - 277, ln 9, Col. (k)	21,612,126	12,037,984	16,825,055
13	Less: ARO Related Deferrals	Company Records - Note 1	-	-	-
14	Less: Other Excluded Deferrals	Company Records - Note 1	-	-	-
15	Transmission Related Deferrals	Ln 12 - ln 13 - ln 14	21,612,126	12,037,984	16,825,055
16	<u>Account 190</u>				
17	Year End Utility Deferrals	FF1, p. 234, ln 8, Col. (c)	10,960,041	6,192,893	8,576,467
18	Less: ARO Related Deferrals	Company Records - Note 1	-	-	-
19	Less: Other Excluded Deferrals	Company Records - Note 1	-	-	-
20	Transmission Related Deferrals	Ln 17 - ln 18 - ln 19	10,960,041	6,192,893	8,576,467
21	<u>Account 255</u>				
22	Year End ITC Balances	FF1, p. 266-267, ln 8, Col. (h)	-	-	-
23	Less: Balances Not Qualified for Ratebase	Company Records - Note 1	-	-	-
24	ITC Balances Includeable in Ratebase	Ln 22 - ln 23	-	-	-
25	Transmission Related Deferrals	Company Records - Note 1	-	-	-

NOTE 1 On this worksheet, "Company Records" refers to AEP's tax accounting ledger.

NOTE 2 ADIT balances should exclude balances related to hedging activity.

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using 2016 FF1 Balances
Worksheet C Supporting Working Capital Rate Base Adjustments
AEP WEST VIRGINIA TRANSMISSION COMPANY

Formula Rate
WS C - Working Capital
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(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Materials & Supplies								
Line Number	Source	Balance @ December 31, 2016	Balance @ December 31, 2015	Average Balance for 2016				
1								
2	Transmission Materials & Supplies	FF1, p. 227, ln 8, Col. (c) & (b)	0	0	-			
3	General Materials & Supplies	FF1, p. 227, ln 11, Col. (c) & (b)	0	0	-			
4	Stores Expense (Undistributed)	FF1, p. 227, ln 16, Col. (c) & (b)	0	0	-			

Prepayment Balance Summary

	Average of YE Balance	Excludable Balances	100% Transmission Related	Transmission Plant Related	Transmission Labor Related	Total Included in Ratebase (E)+(F)+(G)
5						
6	Totals as of December 31, 2016	637,399	0	0	67,348	570,051
7	Totals as of December 31, 2015	2,174,493	0	0	60,679	2,113,814
8	Average Balance	1,405,946	-	-	64,014	1,341,932

Prepayments Account 165 - Balance @ 12/31/2016

	2016 YE Balance	Excludable Balances	100% Transmission Related	Transmission Plant Related	Transmission Labor Related	Total Included in Ratebase (E)+(F)+(G)	Explanation
9	Acc. No.	Description					
10	1650001	Prepaid Insurance	47,799	-	47,799	47,799	Plant related insurance policies
11	165000216	Prepaid Taxes	0	-	-	-	
12	1650003	Prepaid Rents	0	-	-	-	
13	1650004	Prepaid Interest	0	-	-	-	
14	1650005	Prepaid Employee Benefits	0	-	-	-	
15	1650006	Other Prepayments	0	-	-	-	
16	1650009	Prepaid Carry Cost-Factored AR	0	-	-	-	
17	1650010	Prepaid Pension Benefits	0	-	-	-	
18	1650014	FAS 158 Qual Contra Asset	0	-	-	-	
19	1650016	FAS 112 ASSETS	0	-	-	-	
20	1650021	Prepaid Insurance - EIS	15,382	-	15,382	15,382	Plant related insurance policies
21	1650023	Prepaid Lease	4,167	-	4,167	4,167	Prepaid lease
22	1650031	Prepaid OCIP Work Comp	65,314	-	-	65,314	Labor related Workers' Compensation
23	1650032	Prepaid OCIP Work Comp LT	204,164	-	-	204,164	Labor related Workers' Compensation
24	1650033	Prepaid OCIP Work Comp - Aff	77,551	-	-	77,551	Labor related Workers' Compensation
25	1650034	Prepaid OCIP Work Comp LT- Aff	223,021	-	-	223,021	Labor related Workers' Compensation
Subtotal - Form 1, p 111.57.c			637,399	0	0	67,348	570,051

Prepayments Account 165 - Balance @ 12/31/ 2015

	2015 YE Balance	Excludable Balances	100% Transmission Related	Transmission Plant Related	Transmission Labor Related	Total Included in Ratebase (E)+(F)+(G)	Explanation
26	Acc. No.	Description					
27	1650001	Prepaid Insurance	35,165	-	35,165	35,165	
28	165000215	Prepaid Taxes	0	-	-	-	
29	1650003	Prepaid Rents	0	-	-	-	
30	1650004	Prepaid Interest	0	-	-	-	
31	1650005	Prepaid Employee Benefits	0	-	-	-	
32	1650006	Other Prepayments	0	-	-	-	
33	1650009	Prepaid Carry Cost-Factored AR	0	-	-	-	
34	1650010	Prepaid Pension Benefits	0	-	-	-	
35	1650014	FAS 158 Qual Contra Asset	0	-	-	-	
36	1650016	FAS 112 ASSETS	0	-	-	-	
37	1650021	Prepaid Insurance - EIS	21,347	-	21,347	21,347	
38	1650023	Prepaid Lease	4,167	-	4,167	4,167	
39	1650031	Prepaid OCIP Work Comp	429,720	-	-	429,720	
40	1650032	Prepaid OCIP Work Comp LT	565,519	-	-	565,519	
41	1650033	Prepaid OCIP Work Comp - Aff	513,231	-	-	513,231	
42	1650034	Prepaid OCIP Work Comp LT- Aff	605,344	-	-	605,344	
Subtotal - Form 1, p 111.57.c			2,174,493	0	0	60,679	2,113,814

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using 2016 FF1 Balances
Worksheet D Supporting IPP Credits
AEP WEST VIRGINIA TRANSMISSION COMPANY

<u>Line Number</u>	<u>(A) Description</u>	<u>(B) 2016</u>
1	Net Funds from IPP Customers 12/31/2015 (2016 FORM 1, P269, line 24.b)	-
2	Interest Expense (Company Records - Note 1)	-
3	Revenue Credits to Generators (Company Records - Note 1)	-
4	<u>Other Adjustments</u>	
5	Accounting Adjustment (Company Records - Note 1)	-
6		-
7	Net Funds from IPP Customers 12/31/2016 (2016 FORM 1, P269, line 24.f)	-
8	Average Balance for Year as Indicated in Column $((\text{Ln } 1 + \text{Ln } 7)/2)$	-

Note 1 On this worksheet Company Records refers to AEP WEST VIRGINIA TRANSMISSION COMPANY's general ledger.

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using 2016 FF1 Balances
Worksheet E Supporting Revenue Credits
AEP WEST VIRGINIA TRANSMISSION COMPANY

<u>Line Number</u>	<u>Description</u>	<u>Total Company</u>	<u>Non- Transmission</u>	<u>Transmission</u>
1	Account 450, Forfeited Discounts (FF1 p.300.16.(b); Company Records - Note 1)	-	-	-
2	Account 451, Miscellaneous Service Revenues (FF1 p.300.17.(b); Company Records - Note 1)	-	-	-
3	Account 454, Rent from Electric Property (FF1 p.300.19.(b); Company Records - Note 1)	-	-	-
4	Account 4560015, Associated Business Development - (Company Records - Note 1)	-	-	-
5	Account 456 - Other Electric Revenues - (Company Records - Note 1)	52,672,361	52,672,361	-
6	Subtotal - Other Operating Revenues (Company Total equals (FF1 p. 300.26.(b))	52,672,361	52,672,361	-
7	Accounts 4470004 & 5, Revenues from Grandfathered Transmission Contracts - (Company Records - Note 1)	-	-	-
8	Total Other Operating Revenues To Reduce Revenue Requirement	52,672,361	52,672,361	-

Note 1 The total company data on this worksheet comes from the indicated FF1 source, or AEP WEST VIRGINIA TRANSMISSION COMPANY's general ledger. The functional amounts identified as transmission revenue also come from the general ledger.

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using 2016 FF1 Balances
Worksheet F Supporting Allocation of Specific O&M or A&G Expenses
AEP WEST VIRGINIA TRANSMISSION COMPANY

Formula Rate
WS F Misc Exp
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(A)		(B)	(C)	(D)	(E)	(F)
<u>Line</u>	<u>Item No.</u>	<u>Description</u>	<u>2016</u>	<u>100%</u>	<u>100%</u>	
<u>Number</u>			<u>Expense</u>	<u>Non-Transmission</u>	<u>Transmission</u>	<u>Explanation</u>
					<u>Specific</u>	
<u>Regulatory O&M Deferrals & Amortizations</u>						
1	5700005	Maint Station-Reliability-Df	-			
2						
3						
4		Total	-			
<u>Detail of Account 561 Per FERC Form 1</u>						
5	FF1 p 321.84.b	561 - Load Dispatching	-			
6	FF1 p 321.85.b	561.1 - Load Dispatch - Reliability	57			
7	FF1 p 321.86.b	561.2 - Load Dispatch - Monitor & Operate Trans System	39,817			
8	FF1 p 321.87.b	561.3 - Load Dispatch - Trans Service & Scheduling	-			
9	FF1 p 321.88.b	561.4 - Scheduling, System Control & Dispatch	-			
10	FF1 p 321.89.b	561.5 - Reliability, Planning and Standards Development	46,123			
11	FF1 p 321.90.b	561.6 - Transmission Service Studies	-			
12	FF1 p 321.91.b	561.7 - Generation Interconnection Studies	-			
13	FF1 p 321.92.b	561.8 - Reliability, Planning and Standards Development Services	-			
14		Total of Account 561	85,997			
<u>Account 928</u>						
15	9280000	Regulatory Commission Exp	-	-	-	
16	9280001	Regulatory Commission Exp-Adm	-	-	-	
17	9280002	Regulatory Commission Exp-Case	-	-	-	
18	9280002	Regulatory Commission Exp-Case	-	-	-	
19	9280005	Regulatory Commission Exp-FERC Trans Case	14,832	-	14,832	
20		Total	14,832	-	14,832	
<u>Account 930.1</u>						
21	9301000	General Advertising Expenses	-	-	-	
22	9301001	Newspaper Advertising Space	-	-	-	
23	9301002	Radio Station Advertising Time	-	-	-	
24	9301003	TV Station Advertising Time	-	-	-	
25	9301004	Newspaper Advertising Prod Exp	-	-	-	
26	9301005	Radio &TV Advertising Prod Exp	-	-	-	
27	9301006	Spec Corporate Comm Info Proj	-	-	-	
28	9301007	Special Adv Space & Prod Exp	-	-	-	
29	9301008	Direct Mail and Handouts	-	-	-	
30	9301009	Fairs, Shows, and Exhibits	-	-	-	
31	9301010	Publicity	-	-	-	
32	9301011	Dedications, Tours, & Openings	-	-	-	
33	9301012	Public Opinion Surveys	-	-	-	
34	9301013	Movies Slide Films & Speeches	-	-	-	
35	9301014	Video Communications	-	-	-	
36	9301015	Other Corporate Comm Exp	-	-	-	
37		Total	-	-	-	
<u>Account 930.2</u>						
38	9302000	Misc General Expenses	34,444	34,444	-	
39	9302003	Corporate & Fiscal Expenses	4,523	4,523	-	
40	9302004	Research, Develop&Demonstr Exp	-	-	-	
41	9302007	Assoc Business Development Exp	-	-	0	
42		Total	38,966	38,966	-	

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using 2016 FF1 Balances
Worksheet G Supporting - Development of Composite State Income Tax Rate
AEP WEST VIRGINIA TRANSMISSION COMPANY

1	West Virginia Excise Tax Rate	6.50%	
	Apportionment Factor - Note 2	100.00%	
	Effective State Tax Rate		6.50%
2	_____ Tax Rate	0.00%	
	Apportionment Factor - Note 2	0.00%	
	Effective State Tax Rate		0.00%
3	_____ Tax Rate	0.00%	
	Apportionment Factor - Note 2	0.00%	
	Effective State Tax Rate		0.00%
4	_____ Tax Rate	0.00%	
	Apportionment Factor - Note 2	0.00%	
	Effective State Tax Rate		0.00%
5	_____ Tax Rate	0.00%	
	Apportionment Factor - Note 2	0.00%	
	Effective State Tax Rate		0.00%
	Total Effective State Income Tax Rate		<u>6.50%</u>

Note 1 The Ohio State Income Tax is being phased-out prorata 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.

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

Line No.	(A) Account	(B) Total Company NOTE 1	(C) Property	(D) Labor	(E) Other	(F) Non-Allocable
1	Revenue Taxes					
2	Gross Receipts Tax	-				-
3	Real Estate and Personal Property Taxes					
4	Real and Personal Property - West Virginia	733,410	733,410			
5	Real and Personal Property - Virginia	-	-			
6	Real and Personal Property - Tennessee	-	-			
7	Real and Personal Property - Other Jurisdictions	-	-			
8	Payroll Taxes					
9	Federal Insurance Contribution (FICA)	-		-		
10	Federal Unemployment Tax	-		-		
11	State Unemployment Insurance	-		-		
12	<i>Line Deliberately Left Blank</i>					
13	State Severance Taxes	-				-
14	Miscellaneous Taxes					
15	State Business & Occupation Tax	-				-
16	State Public Service Commission Fees	-			-	
17	State Franchise Taxes	-			-	
18	State Lic/Registration Fee	-			-	
19	Misc. State and Local Tax	-			-	
20	Sales & Use	-				-
21	Federal Excise Tax	-				-
22	Michigan Single Business Tax	-				-
23	Total Taxes by Allocable Basis	733,410	733,410	-	-	-
	(Total Company Amount Ties to FFI p.114, Ln 14,(c))					
	NOTE 1: The detail of each total company number and its source in the FERC Form 1 is shown on WS H-1.					
Functional Property Tax Allocation						
		Lines 24-58 Column (B) Deliberately Left Blank	Transmission	Lines 24-58 Column (D) Deliberately Left Blank	General	Total
24	Functionalized Net Plant (Hist. TCOS, Lns 224 thru 234)	-	554,735,927	-	-	554,735,927
	WEST VIRGINIA JURISDICTION					
25	Percentage of Plant in WEST VIRGINIA JURISDICTION					
26	Net Plant in WEST VIRGINIA JURISDICTION (Ln 24 * Ln 25)	-	-	-	-	-
27	Less: Net Value of Exempted Generation Plant					
28	Taxable Property Basis (Ln 26 - Ln 27)	-	-	-	-	-
29	Relative Valuation Factor					0
30	Weighted Net Plant (Ln 28 * Ln 29)	-	-	-	-	
31	General Plant Allocator (Ln 30 / (Total - General Plant))	0.00%	100.00%	0.00%	-100.00%	
32	Functionalized General Plant (Ln 31 * General Plant)	-	-	-	-	-
33	Weighted WEST VIRGINIA JURISDICTION Plant (Ln 30 + 32)	-	-	-	-	-
34	Functional Percentage (Ln 33/Total Ln 33)	0.00%	100.00%	0.00%		
35	Functionalized Expense in WEST VIRGINIA JURISDICTION	-	733,410	-		733,410
	JURISDICTION					
36	Percentage of Plant in JURISDICTION					
37	Net Plant in JURISDICTION (Ln 24 * Ln 36)	-	-	-	-	-
38	Less: Net Value of Exempted Generation Plant					
39	Taxable Property Basis (Ln 37 - Ln 38)	-	-	-	-	-
40	Relative Valuation Factor					0
41	Weighted Net Plant (Ln 39 * Ln 40)	-	-	-	-	
42	General Plant Allocator (Ln 41 / (Total - General Plant))	0.00%	100.00%	0.00%	-100.00%	
43	Functionalized General Plant (Ln 42 * General Plant)	-	-	-	-	-
44	Weighted JURISDICTION Plant (Ln 41 + 43)	-	-	-	-	-
45	Functional Percentage (Ln 44/Total Ln 44)	0.00%	100.00%	0.00%		
46	Functionalized Expense in JURISDICTION	-	-	-		-
	JURISDICTION					
47	Net Plant in JURISDICTION (Ln 24 - Ln 26 - Ln 3	-	554,735,927	-	-	554,735,927
48	Less: Net Value Exempted Generation Plant					
49	Taxable Property Basis	-	554,735,927	-	-	554,735,927
50	Relative Valuation Factor					
51	Weighted Net Plant (Ln 49 * Ln 50)	-	-	-	-	
52	General Plant Allocator (Ln 51 / (Total - General Plant)	0.00%	100.00%	0.00%	-100.00%	
53	Functionalized General Plant (Ln 53 * General Plant)	-	-	-	-	-
54	Weighted JURISDICTION Plant (Ln 51 + 53)	-	-	-	-	-
55	Functional Percentage (Ln 54/Total Ln 54)	0.00%	100.00%	0.00%		
56	Functionalized Expense in JURISDICTION	-	-	-		-
57	Total Other Jurisdictions: (Line 7 * Net Plant Allocator)		-			-
58	Total Func. Property Taxes (Sum Lns 35, 46 56, 57)	-	733,410	-		733,410

(A)		(B)	(C)	(D)
Line No.	Annual Tax Expenses by Type (Note 1)	Total Company	FERC FORM 1 Tie-Back	FERC FORM 1 Reference
1	<u>Revenue Taxes</u>			
2	Gross Receipts Tax	-		
3	<u>Real Estate and Personal Property Taxes</u>			
4	Real and Personal Property - West Virginia	733,410	733,410	P.263 In 22 (i)
5	Real and Personal Property - Virginia	-		
6	Real and Personal Property - Tennessee	-		
7	Real and Personal Property - Other Jurisdictions	-		
8	<u>Payroll Taxes</u>			
9	Federal Insurance Contribution (FICA)	-		
10	Federal Unemployment Tax	-		
11	State Unemployment Insurance	-		
12	<i>Line Left Deliberately Blank</i>			
13	State Severance Taxes	-		
14	<u>Miscellaneous Taxes</u>			
15	State Business & Occupation Tax	-		
16	State Public Service Commission Fees	-		
17	State Franchise Taxes	-		
18	State Lic/Registration Fee	-		
19	Misc. State and Local Tax	-		
20	Sales & Use	-	-	
21	Federal Excise Tax	-		
22	Michigan Single Business Tax	-		
23	Total Taxes by Allocable Basis (Total Company Amount Ties to FFI p.114, Ln 14,(c))	733,410	733,410	

Note 1: The taxes assessed on each transmission company can differ from year to year and between transmission 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 transmission 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.

I. Calculate Return and Income Taxes with 0 basis point ROE increase for Projects Qualified for Regional Billing.

A. Determine 'R' with hypothetical 0 basis point increase in ROE for Identified Projects

ROE w/o incentives (True-Up TCOS, ln 176)			11.49%
Project ROE Incentive Adder		0	<==ROE Adder Cannot Exceed 100 Basis Points
ROE with additional 0 basis point incentive		11.49%	<== 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 174 through176)			
	%	Cost	Weighted cost
Long Term Debt	50.00%	3.16%	1.581%
Preferred Stock	0.00%	0.00%	0.000%
Common Stock	50.00%	11.49%	5.745%
		R =	7.326%

SUMMARY OF TRUED-UP ANNUAL REVENUE REQUIREMENTS FOR RTEPPROJECTS				
TRUE-UP YEAR	2016	Rev Require	W Incentives	Incentive Amounts
As Projected in Prior Year WS J	\$	37,812,665	\$	37,811,477
Actual after True-up	\$	41,934,095	\$	41,934,095
True-up of ARR For 2016		4,121,430		4,122,618

B. Determine Return using 'R' with hypothetical 0 basis point ROE increase for Identified Projects.

Rate Base (True-Up TCOS, ln 78)	361,526,838
R (fom A. above)	7.326%
Return (Rate Base x R)	26,485,111

C. Determine Income Taxes using Return with hypothetical 0 basis point ROE increase for Identified Projects.

Return (from B. above)	26,485,111
Effective Tax Rate (True-Up TCOS, ln 124)	50.61%
Income Tax Calculation (Return x CIT)	13,405,054
ITC Adjustment	-
Income Taxes	13,405,054

II. Calculate Net Plant Carrying Charge Rate (Fixed Charge Rate or FCR) with hypothetical 0 basis point ROE increase.

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

Annual Revenue Requirement (True-Up TCOS, ln 1)	53,559,964
T.E.A. & Lease Payments (True-Up TCOS, Lns 102 & 103)	-
Return (True-Up TCOS, ln 132)	26,485,111
Income Taxes (True-Up TCOS, ln 131)	13,405,054
Annual Revenue Requirement, Less TEA	13,669,800
Charges, Return and Taxes	

B. Determine Annual Revenue Requirement with hypothetical 0 basis point increase in ROE.

Annual Revenue Requirement, Less TEA Charges, Return and Taxes	13,669,800
Return (from I.B. above)	26,485,111
Income Taxes (from I.C. above)	13,405,054
Annual Revenue Requirement, with 0 Basis Point ROE increase	53,559,964
Depreciation (True-Up TCOS, ln 108)	6,625,971
Annual Rev. Req. w/ 0 Basis Point ROE increase, less Depreciation	46,933,993

C. Determine FCR with hypothetical 0 basis point ROE increase.

Net Transmission Plant (True-Up TCOS, ln 48)	445,811,382
Annual Revenue Requirement, with 0 Basis Point ROE increase	53,559,964
FCR with 0 Basis Point increase in ROE	12.01%

Annual Rev. Req. w / 0 Basis Point ROE increase, less Dep.	46,933,993
FCR with 0 Basis Point ROE increase, less Depreciation	10.53%
FCR less Depreciation (True-Up TCOS, ln 9)	10.53%
Incremental FCR with 0 Basis Point ROE increase, less Depreciation	0.00%

III. Calculation of Composite Depreciation Rate

Transmission Plant @ Beginning of Historic Period () (P.206, ln 58,(b)):	340,820,929
Transmission Plant @ End of Historic Period () (P.207, ln 58,(g)):	565,270,816
Subtotal	906,091,745
Average Transmission Plant Balance for	453,045,873
Annual Depreciation Rate (True-Up TCOS, ln 108)	6,625,971
Composite Depreciation Rate	1.46%
Depreciable Life for Composite Depreciation Rate	68.37
Round to nearest whole year	68

Note 1: Until AEP WEST VIRGINIA TRANSMISSION COMPANY establishes Transmission plant in service the depreciation expense component of the carrying charge will be calculated as in the Operating Company formula approved in Docket No. ER08-1329. The calculation for AEP WEST VIRGINIA TRANSMISSION COMPANY is shown on Worksheet P.

A. Base Plan Facilities

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	498,629	498,629	-
Prior Yr True-Up	514,858	514,858	-
True-Up Adjustment	16,229	16,229	-

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.

[illegible]

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.

(e.g. ER05-925-000)

Project Description: RTEP ID: b1864.1 (Add two additional 345/138 kV transformers at Kammer)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	9,645,772	9,645,772	-
Prior Yr True-Up	9,957,944	9,957,944	-
True-Up Adjustment	312,172	312,172	-

Details			
Investment	85,052,302	Current Year	2016
Service Year (yyyy)	2014	ROE increase accepted by FERC (Basis Points)	-
Service Month (1-12)	8	FCR w/o incentives, less depreciation	10.53%
Useful life	68	FCR w/incentives approved for these facilities, less dep.	10.53%
CIAC (Yes or No)	No	Annual Depreciation Expense	1,243,923

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 ##
2014	85,052,302	414,641	84,637,661	84,844,982	9,346,925	9,346,925	\$ -
2015	84,637,661	1,243,923	83,393,738	84,015,700	10,088,902	10,088,902	\$ -
2016	83,393,738	1,243,923	82,149,815	82,771,777	9,957,944	9,957,944	\$ -
2017	82,149,815	1,243,923	80,905,893	81,527,854	9,826,987	9,826,987	\$ -
2018	80,905,893	1,243,923	79,661,970	80,283,931	9,696,030	9,696,030	\$ -
2019	79,661,970	1,243,923	78,418,047	79,040,009	9,565,072	9,565,072	\$ -
2020	78,418,047	1,243,923	77,174,124	77,796,086	9,434,115	9,434,115	\$ -
2021	77,174,124	1,243,923	75,930,202	76,552,163	9,303,158	9,303,158	\$ -
2022	75,930,202	1,243,923	74,686,279	75,308,240	9,172,201	9,172,201	\$ -
2023	74,686,279	1,243,923	73,442,356	74,064,317	9,041,243	9,041,243	\$ -
2024	73,442,356	1,243,923	72,198,433	72,820,395	8,910,286	8,910,286	\$ -
2025	72,198,433	1,243,923	70,954,510	71,576,472	8,779,329	8,779,329	\$ -
2026	70,954,510	1,243,923	69,710,588	70,332,549	8,648,371	8,648,371	\$ -
2027	69,710,588	1,243,923	68,466,665	69,088,626	8,517,414	8,517,414	\$ -
2028	68,466,665	1,243,923	67,222,742	67,844,703	8,386,457	8,386,457	\$ -
2029	67,222,742	1,243,923	65,978,819	66,600,781	8,255,499	8,255,499	\$ -
2030	65,978,819	1,243,923	64,734,896	65,356,858	8,124,542	8,124,542	\$ -
2031	64,734,896	1,243,923	63,490,974	64,112,935	7,993,585	7,993,585	\$ -
2032	63,490,974	1,243,923	62,247,051	62,869,012	7,862,627	7,862,627	\$ -
2033	62,247,051	1,243,923	61,003,128	61,625,089	7,731,670	7,731,670	\$ -
2034	61,003,128	1,243,923	59,759,205	60,381,167	7,600,713	7,600,713	\$ -
2035	59,759,205	1,243,923	58,515,282	59,137,244	7,469,755	7,469,755	\$ -
2036	58,515,282	1,243,923	57,271,360	57,893,321	7,338,798	7,338,798	\$ -
2037	57,271,360	1,243,923	56,027,437	56,649,398	7,207,841	7,207,841	\$ -
2038	56,027,437	1,243,923	54,783,514	55,405,475	7,076,883	7,076,883	\$ -
2039	54,783,514	1,243,923	53,539,591	54,161,553	6,945,926	6,945,926	\$ -
2040	53,539,591	1,243,923	52,295,668	52,917,630	6,814,969	6,814,969	\$ -
2041	52,295,668	1,243,923	51,051,746	51,673,707	6,684,011	6,684,011	\$ -
2042	51,051,746	1,243,923	49,807,823	50,429,784	6,553,054	6,553,054	\$ -
2043	49,807,823	1,243,923	48,563,900	49,185,862	6,422,097	6,422,097	\$ -
2044	48,563,900	1,243,923	47,319,977	47,941,939	6,291,139	6,291,139	\$ -
2045	47,319,977	1,243,923	46,076,055	46,698,016	6,160,182	6,160,182	\$ -
2046	46,076,055	1,243,923	44,832,132	45,454,093	6,029,225	6,029,225	\$ -
2047	44,832,132	1,243,923	43,588,209	44,210,170	5,898,268	5,898,268	\$ -
2048	43,588,209	1,243,923	42,344,286	42,966,248	5,767,310	5,767,310	\$ -
2049	42,344,286	1,243,923	41,100,363	41,722,325	5,636,353	5,636,353	\$ -
2050	41,100,363	1,243,923	39,856,441	40,478,402	5,505,396	5,505,396	\$ -
2051	39,856,441	1,243,923	38,612,518	39,234,479	5,374,438	5,374,438	\$ -
2052	38,612,518	1,243,923	37,368,595	37,990,556	5,243,481	5,243,481	\$ -
2053	37,368,595	1,243,923	36,124,672	36,746,634	5,112,524	5,112,524	\$ -
2054	36,124,672	1,243,923	34,880,749	35,502,711	4,981,566	4,981,566	\$ -
2055	34,880,749	1,243,923	33,636,827	34,258,788	4,850,609	4,850,609	\$ -
2056	33,636,827	1,243,923	32,392,904	33,014,865	4,719,652	4,719,652	\$ -
2057	32,392,904	1,243,923	31,148,981	31,770,942	4,588,694	4,588,694	\$ -
2058	31,148,981	1,243,923	29,905,058	30,527,020	4,457,737	4,457,737	\$ -
2059	29,905,058	1,243,923	28,661,135	29,283,097	4,326,780	4,326,780	\$ -
2060	28,661,135	1,243,923	27,417,213	28,039,174	4,195,822	4,195,822	\$ -
2061	27,417,213	1,243,923	26,173,290	26,795,251	4,064,865	4,064,865	\$ -
2062	26,173,290	1,243,923	24,929,367	25,551,328	3,933,908	3,933,908	\$ -
2063	24,929,367	1,243,923	23,685,444	24,307,406	3,802,950	3,802,950	\$ -
2064	23,685,444	1,243,923	22,441,521	23,063,483	3,671,993	3,671,993	\$ -
2065	22,441,521	1,243,923	21,197,599	21,819,560	3,541,036	3,541,036	\$ -
2066	21,197,599	1,243,923	19,953,676	20,575,637	3,410,078	3,410,078	\$ -
2067	19,953,676	1,243,923	18,709,753	19,331,714	3,279,121	3,279,121	\$ -
2068	18,709,753	1,243,923	17,465,830	18,087,792	3,148,164	3,148,164	\$ -
2069	17,465,830	1,243,923	16,221,908	16,843,869	3,017,206	3,017,206	\$ -
2070	16,221,908	1,243,923	14,977,985	15,599,946	2,886,249	2,886,249	\$ -
2071	14,977,985	1,243,923	13,734,062	14,356,023	2,755,292	2,755,292	\$ -
2072	13,734,062	1,243,923	12,490,139	13,112,101	2,624,334	2,624,334	\$ -
2073	12,490,139	1,243,923	11,246,216	11,868,178	2,493,377	2,493,377	\$ -

Project Totals	73,806,086	380,524,153	380,524,153
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** This is the total amount that needs to be reported to PJM for billing to all regions.

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.

[illegible]

A. Base Plan Facilities

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	2,231,859	2,231,859	-
Prior Yr True-Up	2,302,077	2,302,077	-
True-Up Adjustment	70,218	70,218	-

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.

[illegible]

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Facilities receiving incentives accepted by FERC in Docket No.

(e.g. ER05-925-000)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	6,500,748	6,500,748	-
Prior Yr True-Up	6,710,234	6,710,234	-
True-Up Adjustment	209,486	209,486	-

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.

[illegible]

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A. Base Plan Facilities

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	2,575,052	2,575,052	-
Prior Yr True-Up	2,590,323	2,590,323	-
True-Up Adjustment	15,271	15,271	-

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.

[illegible]

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.

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Facilities receiving incentives accepted by FERC in Docket No.

(e.g. ER05-925-000)

Project Description: RTEP ID: b2017 (Reconductor or rebuild Sporn - Waterford - Muskingum River 345 kV line)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	145,269	145,269	-
Prior Yr True-Up	173,243	173,243	-
True-Up Adjustment	27,974	27,974	-

Details			
Investment	1,463,656	Current Year	2016
Service Year (yyyy)	2015	ROE increase accepted by FERC (Basis Points)	-
Service Month (1-12)	6	FCR w/o incentives, less depreciation	10.53%
Useful life	68	FCR w/incentives approved for these facilities, less dep.	10.53%
CIAC (Yes or No)	No	Annual Depreciation Expense	21,407

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 ##
2015	1,463,656	10,703	1,452,953	1,458,304	164,230	164,230	\$ -
2016	1,452,953	21,407	1,431,546	1,442,249	173,243	173,243	\$ -
2017	1,431,546	21,407	1,410,140	1,420,843	170,990	170,990	\$ -
2018	1,410,140	21,407	1,388,733	1,399,436	168,736	168,736	\$ -
2019	1,388,733	21,407	1,367,327	1,378,030	166,482	166,482	\$ -
2020	1,367,327	21,407	1,345,920	1,356,623	164,229	164,229	\$ -
2021	1,345,920	21,407	1,324,514	1,335,217	161,975	161,975	\$ -
2022	1,324,514	21,407	1,303,107	1,313,810	159,721	159,721	\$ -
2023	1,303,107	21,407	1,281,700	1,292,404	157,468	157,468	\$ -
2024	1,281,700	21,407	1,260,294	1,270,997	155,214	155,214	\$ -
2025	1,260,294	21,407	1,238,887	1,249,591	152,961	152,961	\$ -
2026	1,238,887	21,407	1,217,481	1,228,184	150,707	150,707	\$ -
2027	1,217,481	21,407	1,196,074	1,206,778	148,453	148,453	\$ -
2028	1,196,074	21,407	1,174,668	1,185,371	146,200	146,200	\$ -
2029	1,174,668	21,407	1,153,261	1,163,965	143,946	143,946	\$ -
2030	1,153,261	21,407	1,131,855	1,142,558	141,692	141,692	\$ -
2031	1,131,855	21,407	1,110,448	1,121,151	139,439	139,439	\$ -
2032	1,110,448	21,407	1,089,042	1,099,745	137,185	137,185	\$ -
2033	1,089,042	21,407	1,067,635	1,078,338	134,932	134,932	\$ -
2034	1,067,635	21,407	1,046,229	1,056,932	132,678	132,678	\$ -
2035	1,046,229	21,407	1,024,822	1,035,525	130,424	130,424	\$ -
2036	1,024,822	21,407	1,003,416	1,014,119	128,171	128,171	\$ -
2037	1,003,416	21,407	982,009	992,712	125,917	125,917	\$ -
2038	982,009	21,407	960,602	971,306	123,663	123,663	\$ -
2039	960,602	21,407	939,196	949,899	121,410	121,410	\$ -
2040	939,196	21,407	917,789	928,493	119,156	119,156	\$ -
2041	917,789	21,407	896,383	907,086	116,902	116,902	\$ -
2042	896,383	21,407	874,976	885,680	114,649	114,649	\$ -
2043	874,976	21,407	853,570	864,273	112,395	112,395	\$ -
2044	853,570	21,407	832,163	842,866	110,142	110,142	\$ -
2045	832,163	21,407	810,757	821,460	107,888	107,888	\$ -
2046	810,757	21,407	789,350	800,053	105,634	105,634	\$ -
2047	789,350	21,407	767,944	778,647	103,381	103,381	\$ -
2048	767,944	21,407	746,537	757,240	101,127	101,127	\$ -
2049	746,537	21,407	725,131	735,834	98,873	98,873	\$ -
2050	725,131	21,407	703,724	714,427	96,620	96,620	\$ -
2051	703,724	21,407	682,317	693,021	94,366	94,366	\$ -
2052	682,317	21,407	660,911	671,614	92,113	92,113	\$ -
2053	660,911	21,407	639,504	650,208	89,859	89,859	\$ -
2054	639,504	21,407	618,098	628,801	87,605	87,605	\$ -
2055	618,098	21,407	596,691	607,395	85,352	85,352	\$ -
2056	596,691	21,407	575,285	585,988	83,098	83,098	\$ -
2057	575,285	21,407	553,878	564,582	80,844	80,844	\$ -
2058	553,878	21,407	532,472	543,175	78,591	78,591	\$ -
2059	532,472	21,407	511,065	521,768	76,337	76,337	\$ -
2060	511,065	21,407	489,659	500,362	74,083	74,083	\$ -
2061	489,659	21,407	468,252	478,955	71,830	71,830	\$ -
2062	468,252	21,407	446,846	457,549	69,576	69,576	\$ -
2063	446,846	21,407	425,439	436,142	67,323	67,323	\$ -
2064	425,439	21,407	404,033	414,736	65,069	65,069	\$ -
2065	404,033	21,407	382,626	393,329	62,815	62,815	\$ -
2066	382,626	21,407	361,219	371,923	60,562	60,562	\$ -
2067	361,219	21,407	339,813	350,516	58,308	58,308	\$ -
2068	339,813	21,407	318,406	329,110	56,054	56,054	\$ -
2069	318,406	21,407	297,000	307,703	53,801	53,801	\$ -
2070	297,000	21,407	275,593	286,297	51,547	51,547	\$ -
2071	275,593	21,407	254,187	264,890	49,294	49,294	\$ -
2072	254,187	21,407	232,780	243,484	47,040	47,040	\$ -
2073	232,780	21,407	211,374	222,077	44,786	44,786	\$ -
2074	211,374	21,407	189,967	200,670	42,533	42,533	\$ -

Project Totals	1,273,689	6,529,619	6,529,619
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** This is the total amount that needs to be reported to PJM for billing to all regions.

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.

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.

[illegible]

Facilities receiving incentives accepted by FERC in Docket No.

(e.g. ER05-925-000)

Project Description: RTEP ID: b2020 (Rebuild Amos-Kanawha River 138 kV corridor)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	15,720,783	15,720,783	-
Prior Yr True-Up	17,612,024	17,612,024	-
True-Up Adjustment	1,891,241	1,891,241	-

Details			
Investment	148,957,737	Current Year	2016
Service Year (yyyy)	2015	ROE increase accepted by FERC (Basis Points)	-
Service Month (1-12)	5	FCR w/o incentives, less depreciation	10.53%
Useful life	68	FCR w/incentives approved for these facilities, less dep.	10.53%
CIAC (Yes or No)	No	Annual Depreciation Expense	2,178,564

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.

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 #/
2015	148,957,737	2,170,829	147,686,908	148,322,322	16,885,861	16,885,861	\$ -
2016	147,686,908	2,178,564	145,508,343	146,597,625	17,612,024	17,612,024	\$ -
2017	145,508,343	2,178,564	143,329,779	144,419,061	17,382,670	17,382,670	\$ -
2018	143,329,779	2,178,564	141,151,214	142,240,497	17,153,316	17,153,316	\$ -
2019	141,151,214	2,178,564	138,972,650	140,061,932	16,923,961	16,923,961	\$ -
2020	138,972,650	2,178,564	136,794,085	137,883,368	16,694,607	16,694,607	\$ -
2021	136,794,085	2,178,564	134,615,521	135,704,803	16,465,253	16,465,253	\$ -
2022	134,615,521	2,178,564	132,436,956	133,526,239	16,235,899	16,235,899	\$ -
2023	132,436,956	2,178,564	130,258,392	131,347,674	16,006,545	16,006,545	\$ -
2024	130,258,392	2,178,564	128,079,827	129,169,110	15,777,190	15,777,190	\$ -
2025	128,079,827	2,178,564	125,901,263	126,990,545	15,547,836	15,547,836	\$ -
2026	125,901,263	2,178,564	123,722,698	124,811,981	15,318,482	15,318,482	\$ -
2027	123,722,698	2,178,564	121,544,134	122,633,416	15,089,128	15,089,128	\$ -
2028	121,544,134	2,178,564	119,365,569	120,454,852	14,859,773	14,859,773	\$ -
2029	119,365,569	2,178,564	117,187,005	118,276,287	14,630,419	14,630,419	\$ -
2030	117,187,005	2,178,564	115,008,441	116,097,723	14,401,065	14,401,065	\$ -
2031	115,008,441	2,178,564	112,829,876	113,919,158	14,171,711	14,171,711	\$ -
2032	112,829,876	2,178,564	110,651,312	111,740,594	13,942,356	13,942,356	\$ -
2033	110,651,312	2,178,564	108,472,747	109,562,029	13,713,002	13,713,002	\$ -
2034	108,472,747	2,178,564	106,294,183	107,383,465	13,483,648	13,483,648	\$ -
2035	106,294,183	2,178,564	104,115,618	105,204,900	13,254,294	13,254,294	\$ -
2036	104,115,618	2,178,564	101,937,054	103,026,336	13,024,939	13,024,939	\$ -
2037	101,937,054	2,178,564	99,758,489	100,847,771	12,795,585	12,795,585	\$ -
2038	99,758,489	2,178,564	97,579,925	98,669,207	12,566,231	12,566,231	\$ -
2039	97,579,925	2,178,564	95,401,360	96,490,642	12,336,877	12,336,877	\$ -
2040	95,401,360	2,178,564	93,222,796	94,312,078	12,107,522	12,107,522	\$ -
2041	93,222,796	2,178,564	91,044,231	92,133,513	11,878,168	11,878,168	\$ -
2042	91,044,231	2,178,564	88,865,667	89,954,949	11,648,814	11,648,814	\$ -
2043	88,865,667	2,178,564	86,687,102	87,776,385	11,419,460	11,419,460	\$ -
2044	86,687,102	2,178,564	84,508,538	85,597,820	11,190,105	11,190,105	\$ -
2045	84,508,538	2,178,564	82,329,973	83,419,256	10,960,751	10,960,751	\$ -
2046	82,329,973	2,178,564	80,151,409	81,240,691	10,731,397	10,731,397	\$ -
2047	80,151,409	2,178,564	77,972,844	79,062,127	10,502,043	10,502,043	\$ -
2048	77,972,844	2,178,564	75,794,280	76,883,562	10,272,688	10,272,688	\$ -
2049	75,794,280	2,178,564	73,615,715	74,704,998	10,043,334	10,043,334	\$ -
2050	73,615,715	2,178,564	71,437,151	72,526,433	9,813,980	9,813,980	\$ -

[illegible]

Project Totals	129,806,134
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** This is the total amount that needs to be reported to PJM for billing to all regions.

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.

Facilities receiving incentives accepted by FERC in Docket No.

(e.g. ER05-925-000)

Project Description: RTEP ID: b2022 (Terminate Tristate-Kyger Creek 345 kV line at Sporn)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	493,365	493,365	-
Prior Yr True-Up	521,442	521,442	-
True-Up Adjustment	28,077	28,077	-

Details			
Investment	4,386,411	Current Year	2016
Service Year (yyyy)	2015	ROE increase accepted by FERC (Basis Points)	-
Service Month (1-12)	10	FCR w/o incentives, less depreciation	10.53%
Useful life	68	FCR w/incentives approved for these facilities, less dep.	10.53%
CIAC (Yes or No)	No	Annual Depreciation Expense	64,153

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 ##
2015	4,386,411	10,692	4,375,719	4,381,065	471,921	471,921	\$ -
2016	4,375,719	64,153	4,311,566	4,343,642	521,442	521,442	\$ -
2017	4,311,566	64,153	4,247,413	4,279,489	514,688	514,688	\$ -
2018	4,247,413	64,153	4,183,260	4,215,336	507,934	507,934	\$ -
2019	4,183,260	64,153	4,119,107	4,151,183	501,180	501,180	\$ -
2020	4,119,107	64,153	4,054,954	4,087,031	494,426	494,426	\$ -
2021	4,054,954	64,153	3,990,801	4,022,878	487,672	487,672	\$ -
2022	3,990,801	64,153	3,926,648	3,958,725	480,918	480,918	\$ -
2023	3,926,648	64,153	3,862,495	3,894,572	474,164	474,164	\$ -
2024	3,862,495	64,153	3,798,342	3,830,419	467,411	467,411	\$ -
2025	3,798,342	64,153	3,734,189	3,766,266	460,657	460,657	\$ -
2026	3,734,189	64,153	3,670,036	3,702,113	453,903	453,903	\$ -
2027	3,670,036	64,153	3,605,883	3,637,960	447,149	447,149	\$ -
2028	3,605,883	64,153	3,541,730	3,573,807	440,395	440,395	\$ -
2029	3,541,730	64,153	3,477,577	3,509,654	433,641	433,641	\$ -
2030	3,477,577	64,153	3,413,424	3,445,501	426,887	426,887	\$ -
2031	3,413,424	64,153	3,349,272	3,381,348	420,133	420,133	\$ -
2032	3,349,272	64,153	3,285,119	3,317,195	413,380	413,380	\$ -
2033	3,285,119	64,153	3,220,966	3,253,042	406,626	406,626	\$ -
2034	3,220,966	64,153	3,156,813	3,188,889	399,872	399,872	\$ -
2035	3,156,813	64,153	3,092,660	3,124,736	393,118	393,118	\$ -
2036	3,092,660	64,153	3,028,507	3,060,583	386,364	386,364	\$ -
2037	3,028,507	64,153	2,964,354	2,996,430	379,610	379,610	\$ -
2038	2,964,354	64,153	2,900,201	2,932,277	372,856	372,856	\$ -
2039	2,900,201	64,153	2,836,048	2,868,124	366,102	366,102	\$ -
2040	2,836,048	64,153	2,771,895	2,803,971	359,349	359,349	\$ -
2041	2,771,895	64,153	2,707,742	2,739,818	352,595	352,595	\$ -
2042	2,707,742	64,153	2,643,589	2,675,665	345,841	345,841	\$ -
2043	2,643,589	64,153	2,579,436	2,611,513	339,087	339,087	\$ -
2044	2,579,436	64,153	2,515,283	2,547,360	332,333	332,333	\$ -
2045	2,515,283	64,153	2,451,130	2,483,207	325,579	325,579	\$ -
2046	2,451,130	64,153	2,386,977	2,419,054	318,825	318,825	\$ -
2047	2,386,977	64,153	2,322,824	2,354,901	312,071	312,071	\$ -
2048	2,322,824	64,153	2,258,671	2,290,748	305,318	305,318	\$ -
2049	2,258,671	64,153	2,194,518	2,226,595	298,564	298,564	\$ -
2050	2,194,518	64,153	2,130,365	2,162,442	291,810	291,810	\$ -
2051	2,130,365	64,153	2,066,212	2,098,289	285,056	285,056	\$ -
2052	2,066,212	64,153	2,002,059	2,034,136	278,302	278,302	\$ -
2053	2,002,059	64,153	1,937,906	1,969,983	271,548	271,548	\$ -
2054	1,937,906	64,153	1,873,754	1,905,830	264,794	264,794	\$ -
2055	1,873,754	64,153	1,809,601	1,841,677	258,040	258,040	\$ -
2056	1,809,601	64,153	1,745,448	1,777,524	251,287	251,287	\$ -
2057	1,745,448	64,153	1,681,295	1,713,371	244,533	244,533	\$ -
2058	1,681,295	64,153	1,617,142	1,649,218	237,779	237,779	\$ -
2059	1,617,142	64,153	1,552,989	1,585,065	231,025	231,025	\$ -
2060	1,552,989	64,153	1,488,836	1,520,912	224,271	224,271	\$ -
2061	1,488,836	64,153	1,424,683	1,456,759	217,517	217,517	\$ -
2062	1,424,683	64,153	1,360,530	1,392,606	210,763	210,763	\$ -
2063	1,360,530	64,153	1,296,377	1,328,453	204,009	204,009	\$ -
2064	1,296,377	64,153	1,232,224	1,264,300	197,256	197,256	\$ -
2065	1,232,224	64,153	1,168,071	1,200,148	190,502	190,502	\$ -
2066	1,168,071	64,153	1,103,918	1,135,995	183,748	183,748	\$ -
2067	1,103,918	64,153	1,039,765	1,071,842	176,994	176,994	\$ -
2068	1,039,765	64,153	975,612	1,007,689	170,240	170,240	\$ -
2069	975,612	64,153	911,459	943,536	163,486	163,486	\$ -
2070	911,459	64,153	847,306	879,383	156,732	156,732	\$ -
2071	847,306	64,153	783,153	815,230	149,978	149,978	\$ -
2072	783,153	64,153	719,000	751,077	143,225	143,225	\$ -
2073	719,000	64,153	654,847	686,924	136,471	136,471	\$ -
2074	654,847	64,153	590,694	622,771	129,717	129,717	\$ -

Project Totals	3,795,717	19,681,095	19,681,095
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** This is the total amount that needs to be reported to PJM for billing to all regions.

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.

[illegible]

Facilities receiving incentives accepted by FERC in Docket No.

(e.g. ER05-925-000)

Project Description: RTEP ID: b1875 (138 kV Bradley to McClung upgrades)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	1,188	0	(1,188)
Prior Yr True-Up	243,886	243,886	-
True-Up Adjustment	242,698	243,886	1,188

Details			
Investment	2,080,786	Current Year	2016
Service Year (yyyy)	2014	ROE increase accepted by FERC (Basis Points)	-
Service Month (1-12)	9	FCR w/o incentives, less depreciation	10.53%
Useful life	68	FCR w/incentives approved for these facilities, less dep.	10.53%
CIAC (Yes or No)	No	Annual Depreciation Expense	30,432

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 ##
2014	2,080,786	7,608	2,073,178	2,076,982	226,268	226,268	\$ -
2015	2,073,178	30,432	2,042,746	2,057,962	247,090	247,090	\$ -
2016	2,042,746	30,432	2,012,313	2,027,529	243,886	243,886	\$ -
2017	2,012,313	30,432	1,981,881	1,997,097	240,682	240,682	\$ -
2018	1,981,881	30,432	1,951,449	1,966,665	237,478	237,478	\$ -
2019	1,951,449	30,432	1,921,016	1,936,233	234,274	234,274	\$ -
2020	1,921,016	30,432	1,890,584	1,905,800	231,071	231,071	\$ -
2021	1,890,584	30,432	1,860,152	1,875,368	227,867	227,867	\$ -
2022	1,860,152	30,432	1,829,720	1,844,936	224,663	224,663	\$ -
2023	1,829,720	30,432	1,799,287	1,814,503	221,459	221,459	\$ -
2024	1,799,287	30,432	1,768,855	1,784,071	218,255	218,255	\$ -
2025	1,768,855	30,432	1,738,423	1,753,639	215,051	215,051	\$ -
2026	1,738,423	30,432	1,707,990	1,723,206	211,848	211,848	\$ -
2027	1,707,990	30,432	1,677,558	1,692,774	208,644	208,644	\$ -
2028	1,677,558	30,432	1,647,126	1,662,342	205,440	205,440	\$ -
2029	1,647,126	30,432	1,616,693	1,631,910	202,236	202,236	\$ -
2030	1,616,693	30,432	1,586,261	1,601,477	199,032	199,032	\$ -
2031	1,586,261	30,432	1,555,829	1,571,045	195,828	195,828	\$ -
2032	1,555,829	30,432	1,525,397	1,540,613	192,624	192,624	\$ -
2033	1,525,397	30,432	1,494,964	1,510,180	189,421	189,421	\$ -
2034	1,494,964	30,432	1,464,532	1,479,748	186,217	186,217	\$ -
2035	1,464,532	30,432	1,434,100	1,449,316	183,013	183,013	\$ -
2036	1,434,100	30,432	1,403,667	1,418,883	179,809	179,809	\$ -
2037	1,403,667	30,432	1,373,235	1,388,451	176,605	176,605	\$ -
2038	1,373,235	30,432	1,342,803	1,358,019	173,401	173,401	\$ -
2039	1,342,803	30,432	1,312,370	1,327,587	170,198	170,198	\$ -
2040	1,312,370	30,432	1,281,938	1,297,154	166,994	166,994	\$ -
2041	1,281,938	30,432	1,251,506	1,266,722	163,790	163,790	\$ -
2042	1,251,506	30,432	1,221,074	1,236,290	160,586	160,586	\$ -
2043	1,221,074	30,432	1,190,641	1,205,857	157,382	157,382	\$ -
2044	1,190,641	30,432	1,160,209	1,175,425	154,178	154,178	\$ -
2045	1,160,209	30,432	1,129,777	1,144,993	150,974	150,974	\$ -
2046	1,129,777	30,432	1,099,344	1,114,560	147,771	147,771	\$ -
2047	1,099,344	30,432	1,068,912	1,084,128	144,567	144,567	\$ -
2048	1,068,912	30,432	1,038,480	1,053,696	141,363	141,363	\$ -
2049	1,038,480	30,432	1,008,047	1,023,264	138,159	138,159	\$ -
2050	1,008,047	30,432	977,615	992,831	134,955	134,955	\$ -
2051	977,615	30,432	947,183	962,399	131,751	131,751	\$ -
2052	947,183	30,432	916,751	931,967	128,548	128,548	\$ -
2053	916,751	30,432	886,318	901,534	125,344	125,344	\$ -
2054	886,318	30,432	855,886	871,102	122,140	122,140	\$ -
2055	855,886	30,432	825,454	840,670	118,936	118,936	\$ -
2056	825,454	30,432	795,021	810,237	115,732	115,732	\$ -
2057	795,021	30,432	764,589	779,805	112,528	112,528	\$ -
2058	764,589	30,432	734,157	749,373	109,325	109,325	\$ -
2059	734,157	30,432	703,724	718,941	106,121	106,121	\$ -
2060	703,724	30,432	673,292	688,508	102,917	102,917	\$ -
2061	673,292	30,432	642,860	658,076	99,713	99,713	\$ -
2062	642,860	30,432	612,428	627,644	96,509	96,509	\$ -
2063	612,428	30,432	581,995	597,211	93,305	93,305	\$ -
2064	581,995	30,432	551,563	566,779	90,101	90,101	\$ -
2065	551,563	30,432	521,131	536,347	86,898	86,898	\$ -
2066	521,131	30,432	490,698	505,914	83,694	83,694	\$ -
2067	490,698	30,432	460,266	475,482	80,490	80,490	\$ -
2068	460,266	30,432	429,834	445,050	77,286	77,286	\$ -
2069	429,834	30,432	399,401	414,618	74,082	74,082	\$ -
2070	399,401	30,432	368,969	384,185	70,878	70,878	\$ -
2071	368,969	30,432	338,537	353,753	67,675	67,675	\$ -
2072	338,537	30,432	308,105	323,321	64,471	64,471	\$ -
2073	308,105	30,432	277,672	292,888	61,267	61,267	\$ -

Project Totals	1,803,114	9,322,790	9,322,790
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** This is the total amount that needs to be reported to PJM for billing to all regions.

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.

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.

[illegible]

Facilities receiving incentives accepted by FERC in Docket No.

(e.g. ER05-925-000)

Project Description: RTEP ID: b2230 (Replace three 765kV line reactors on Amos-Hanging Rock)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	0	0	(0)
Prior Yr True-Up	1,308,063	1,308,063	-
True-Up Adjustment	1,308,063	1,308,063	0

Details			
Investment	12,290,088	Current Year	2016
Service Year (yyyy)	2016	ROE increase accepted by FERC (Basis Points)	-
Service Month (1-12)	11	FCR w/o incentives, less depreciation	10.53%
Useful life	68	FCR w/incentives approved for these facilities, less dep.	10.53%
CIAC (Yes or No)	No	Annual Depreciation Expense	179,747

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.

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 ##
2016	12,290,088	14,979	12,275,109	12,282,599	1,308,063	1,308,063	\$ -
2017	12,275,109	179,747	12,095,362	12,185,235	1,462,581	1,462,581	\$ -
2018	12,095,362	179,747	11,915,614	12,005,488	1,443,657	1,443,657	\$ -
2019	11,915,614	179,747	11,735,867	11,825,741	1,424,734	1,424,734	\$ -
2020	11,735,867	179,747	11,556,120	11,645,994	1,405,811	1,405,811	\$ -
2021	11,556,120	179,747	11,376,373	11,466,246	1,386,887	1,386,887	\$ -
2022	11,376,373	179,747	11,196,625	11,286,499	1,367,964	1,367,964	\$ -
2023	11,196,625	179,747	11,016,878	11,106,752	1,349,040	1,349,040	\$ -
2024	11,016,878	179,747	10,837,131	10,927,004	1,330,117	1,330,117	\$ -
2025	10,837,131	179,747	10,657,383	10,747,257	1,311,194	1,311,194	\$ -
2026	10,657,383	179,747	10,477,636	10,567,510	1,292,270	1,292,270	\$ -
2027	10,477,636	179,747	10,297,889	10,387,763	1,273,347	1,273,347	\$ -
2028	10,297,889	179,747	10,118,142	10,208,015	1,254,424	1,254,424	\$ -
2029	10,118,142	179,747	9,938,394	10,028,268	1,235,500	1,235,500	\$ -
2030	9,938,394	179,747	9,758,647	9,848,521	1,216,577	1,216,577	\$ -
2031	9,758,647	179,747	9,578,900	9,668,773	1,197,653	1,197,653	\$ -
2032	9,578,900	179,747	9,399,152	9,489,026	1,178,730	1,178,730	\$ -
2033	9,399,152	179,747	9,219,405	9,309,279	1,159,807	1,159,807	\$ -
2034	9,219,405	179,747	9,039,658	9,129,532	1,140,883	1,140,883	\$ -
2035	9,039,658	179,747	8,859,911	8,949,784	1,121,960	1,121,960	\$ -
2036	8,859,911	179,747	8,680,163	8,770,037	1,103,037	1,103,037	\$ -
2037	8,680,163	179,747	8,500,416	8,590,290	1,084,113	1,084,113	\$ -
2038	8,500,416	179,747	8,320,669	8,410,542	1,065,190	1,065,190	\$ -
2039	8,320,669	179,747	8,140,921	8,230,795	1,046,266	1,046,266	\$ -
2040	8,140,921	179,747	7,961,174	8,051,048	1,027,343	1,027,343	\$ -
2041	7,961,174	179,747	7,781,427	7,871,301	1,008,420	1,008,420	\$ -
2042	7,781,427	179,747	7,601,680	7,691,553	989,496	989,496	\$ -
2043	7,601,680	179,747	7,421,932	7,511,806	970,573	970,573	\$ -
2044	7,421,932	179,747	7,242,185	7,332,059	951,650	951,650	\$ -
2045	7,242,185	179,747	7,062,438	7,152,311	932,726	932,726	\$ -
2046	7,062,438	179,747	6,882,690	6,972,564	913,803	913,803	\$ -
2047	6,882,690	179,747	6,702,943	6,792,817	894,879	894,879	\$ -
2048	6,702,943	179,747	6,523,196	6,613,070	875,956	875,956	\$ -
2049	6,523,196	179,747	6,343,449	6,433,322	857,033	857,033	\$ -
2050	6,343,449	179,747	6,163,701	6,253,575	838,109	838,109	\$ -
2051	6,163,701	179,747	5,983,954	6,073,828	819,186	819,186	\$ -
2052	5,983,954	179,747	5,804,207	5,894,080	800,262	800,262	\$ -
2053	5,804,207	179,747	5,624,459	5,714,333	781,339	781,339	\$ -
2054	5,624,459	179,747	5,444,712	5,534,586	762,416	762,416	\$ -
2055	5,444,712	179,747	5,264,965	5,354,838	743,492	743,492	\$ -
2056	5,264,965	179,747	5,085,218	5,175,091	724,569	724,569	\$ -
2057	5,085,218	179,747	4,905,470	4,995,344	705,646	705,646	\$ -
2058	4,905,470	179,747	4,725,723	4,815,597	686,722	686,722	\$ -
2059	4,725,723	179,747	4,545,976	4,635,849	667,799	667,799	\$ -
2060	4,545,976	179,747	4,366,228	4,456,102	648,875	648,875	\$ -
2061	4,366,228	179,747	4,186,481	4,276,355	629,952	629,952	\$ -
2062	4,186,481	179,747	4,006,734	4,096,607	611,029	611,029	\$ -
2063	4,006,734	179,747	3,826,987	3,916,860	592,105	592,105	\$ -
2064	3,826,987	179,747	3,647,239	3,737,113	573,182	573,182	\$ -
2065	3,647,239	179,747	3,467,492	3,557,366	554,259	554,259	\$ -
2066	3,467,492	179,747	3,287,745	3,377,618	535,335	535,335	\$ -
2067	3,287,745	179,747	3,107,997	3,197,871	516,412	516,412	\$ -
2068	3,107,997	179,747	2,928,250	3,018,124	497,488	497,488	\$ -
2069	2,928,250	179,747	2,748,503	2,838,376	478,565	478,565	\$ -
2070	2,748,503	179,747	2,568,756	2,658,629	459,642	459,642	\$ -
2071	2,568,756	179,747	2,389,008	2,478,882	440,718	440,718	\$ -
2072	2,389,008	179,747	2,209,261	2,299,135	421,795	421,795	\$ -
2073	2,209,261	179,747	2,029,514	2,119,387	402,871	402,871	\$ -
2074	2,029,514	179,747	1,849,766	1,939,640	383,948	383,948	\$ -
2075	1,849,766	179,747	1,670,019	1,759,893	365,025	365,025	\$ -

[illegible]

Project Totals	10,620,069	55,222,424	55,222,424
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** This is the total amount that needs to be reported to PJM for billing to all regions.

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.

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using 2016 FF1 Balances
Worksheet L Supporting Projected Cost of Debt
AEP WEST VIRGINIA TRANSMISSION COMPANY

Formula Rate
WS L Cost of Debt
Page 31 of 38

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

<u>Line Number</u>	<u>(A) Issuance</u>	<u>(B) Principle Outstanding</u>	<u>(C) Interest Rate</u>	<u>(D) Annual Expense (See Note S on Projected Template)</u>
1	<u>Long Term Debt (FF1.p. 256-257, a,h)</u>			
2	Bonds - Acc 221			-
3				-
4				-
5				-
6	Reacquired Bonds - Total Account 222			-
7				-
8				-
9				-
10	Advances from Assoc Companies			-
11	Senior Notes, Series B, Tranche F, 5.52%	35,000,000	5.520%	1,932,000
12	Senior Notes, Series C, Tranche A, 2.68%	20,400,000	2.680%	546,720
13	Senior Notes, Series C, Tranche B, 3.18%	12,000,000	3.180%	381,600
14	Senior Notes, Series C, Tranche C, 3.56%	22,800,000	3.560%	811,680
15	Senior Notes, Series C, Tranche F, 3.81%	13,200,000	3.810%	502,920
16	Senior Notes, Series C, Tranche H, 4.05%	5,000,000	4.050%	202,500
17	Senior Notes, Series C, Tranche I, 4.53%	9,600,000	4.530%	434,880
18	Senior Notes, Series C, Tranche D, 3.66%	10,000,000	3.660%	366,000
19	Senior Notes, Series C, Tranche G, 4.01%	15,000,000	4.010%	601,500
20	Senior Notes, Series C, Tranche E, 3.76%	10,000,000	3.760%	376,000
21	Senior Notes, Series E, 4.00%	81,000,000	4.000%	3,240,000
22	Senior Notes, Series D, 3.10%	29,000,000	3.100%	899,000
23	Credit Facility	65,000,000	1.299%	844,169
24				-
25	Other Long Term Debt - Acc 224			-
26				-
27				-
28				-
29				-
30				-
31				-
32				-
33				-
34				-
35				-
36				-
37				-
38	Sale/Leaseback (If Applicable)		0.00%	-
39	<u>Issuance Discount, Premium, & Expenses:</u>			
40	Auction Fees	FF1.p. 256 & 257.Lines Described as Fees		-
41	Amort of Debt Discount and Expenses 428	FF1.p. 117.63.c		107,275
42	Less: Amort of Debt Premiums	FF1.p. 117.65.c		-
43	<u>Reacquired Debt:</u>			
44	Amortization of Loss	FF1.p. 117.64.c		37,018
45	Less: Amortization of Gain	FF1.p. 117.66.c		-
46	Total Interest on Long Term Debt	328,000,000	3.44%	11,283,262
47	<u>Preferred Stock (FF1.p. 250-251)</u>	<u>Preferred Shares Outstanding</u>		
48				-
49				-
50				-
51				-
52				-
53				-
54				-
55				-
56	Dividends on Preferred Stock	-	0.00%	-

NOTE: All interest rate hedging gains/losses shall be excluded from long term debt expense.

Worksheet M Supporting Calculation of Capital Structure and Weighted Average Cost of Capital
Based on Average of Balances At 12/31/2015 & 12/31/2016

(A)	(B)	(C)	(D)	(E)
Line		Balances @ 12/31/2016	Balances @ 12/31/2015	Average
<u>Development of Average Balance of Common Equity</u>				
1	Proprietary Capital (112.16.c&d)	272,845,406	214,360,121	243,602,764
2	Less Preferred Stock (Ln 48 Below)	-	-	-
3	Less Account 216.1 (112.12.c&d)	-	-	-
4	Less Account 219.1 (112.15.c&d)	-	-	-
5	Average Balance of Common Equity	272,845,406	214,360,121	243,602,764

Development of Cost of Long Term Debt Based on Average Outstanding Balance

6	Bonds (112.18.c&d)	-	-	-
7	Less: Reacquired Bonds (112.19.c&d)	-	-	-
8	LT Advances from Assoc. Companies (112.20.c&d)	263,000,000	218,000,000	240,500,000
9	Senior Unsecured Notes (112.21.c&d)	-	-	-
10	Less: Fair Value Hedges (See Note on Ln 12 below)	-	-	-
11	Total Average Debt	263,000,000	218,000,000	240,500,000

12	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)			
13	Annual Interest Expense for 2016			
14	Interest on Long Term Debt (256-257.33.i)			7,459,858
	Less: Total Hedge (Gain)/Expense Accumulated from p 256-257, col (i) of FERC Form 1			-
15	included in Ln 14 and shown in Ln 32 below.			-
16	Amort of Debt Discount & Expense (117.63.c)			107,275
17	Amort of Loss on Reacquired Debt (117.64.c)			37,018
18	Less: Amort of Premium on Debt (117.65.c)			-
19	Less: Amort of Gain on Reacquired Debt (117.66.c)			-
20	Total Interest Expense (Ln 14 - Ln 15 + Ln 16 + Ln 17 - Ln 18 - Ln 19)			7,604,151
21	Average Cost of Debt for 2016 (Ln 20/Ln 11)			3.16%

CALCULATION OF HEDGE GAINS/LOSSES TO BE EXLCUED FROM TCOS

22	AEP WEST VIRGINIA TRANSMISSION COMPANY may not include costs (or gains) related to interest hedging activities				
				Amortization Period	
	HEDGE AMOUNTS BY ISSUANCE (FROM p. 256-257 (i) of the FERC Form 1)	(Amortization of (Gain)/Loss for 2016	Remaining Unamortized Balance	Beginning	Ending
23					
24					
25					
26					
27					
28					
29					
30					
31					
32	Net (Gain)/Loss Hedge Amortization To Be Removed	-			

Development of Cost of Preferred Stock

	Preferred Stock			Average
33	0% Series - - Dividend Rate (p. 250-251. 7 & 10.a)			
34	0% Series - - Par Value (p. 250-251. 8.c)			
35	0% Series - - Shares O/S (p.250-251. 8 & 11.e)			
36	0% Series - - Monetary Value (Ln 34 * Ln 35)	-	-	-
37	0% Series - - Dividend Amount (Ln 33 * Ln 36)	-	-	-
38	0% Series - - Dividend Rate (p. 250-251.a)			
39	0% Series - - Par Value (p. 250-251.c)			
40	0% Series - - Shares O/S (p.250-251. e)			
41	0% Series - - Monetary Value (Ln 39 * Ln 40)	-	-	-
42	0% Series - - Dividend Amount (Ln 38 * Ln 41)	-	-	-
43	0% Series - - Dividend Rate (p. 250-251.a)			
44	0% Series - - Par Value (p. 250-251.c)			
45	0% Series - - Shares O/S (p.250-251.e)			
46	0% Series - - Monetary Value (Ln 44 * Ln 45)	-	-	-
47	0% Series - - Dividend Amount (Ln 43 * Ln 46)	-	-	-
48	Balance of Preferred Stock (Lns 36, 41, 46)	-	-	-
49	Dividends on Preferred Stock (Lns 37, 42, 47)	-	-	-
50	Average Cost of Preferred Stock (Ln 49/48)	0.00%	0.00%	0.00%

- Year End Total Agrees to FF1 p.112, Ln 3, col (c) & (d)

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using 2016 FF1 Balances
Worksheet N - Gains (Losses) on Sales of Plant Held For Future Use
AEP WEST VIRGINIA TRANSMISSION COMPANY

Note: Gain or loss on plant held for future are recorded in accounts 411.6 or 411.7 respectively. Sales will be funtionalized 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.

Line	(A) Date	(B) Property Description	(C) Function (T) or (G) T = Transmission G = General	(D) Basis	(E) Proceeds	(F) (Gain) / Loss	(G) Functional Allocator	(H) Functionalized Proceeds (Gain) / Loss	(I) FERC Account
1						-	0.000%	-	
2						-	0.000%	-	
3						-	0.000%	-	
4				Net (Gain) or Loss for 2016		-		-	

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using 2016 FF1 Balances
Calculation of Post-employment Benefits Other than Pensions Expenses Allocable to Transmission Service
Worksheet O - PBOP Support
AEP WEST VIRGINIA TRANSMISSION COMPANY

PBOP	(A)	(B)
1	<u>Calculation of PBOP Expenses</u>	
2	<u>AEP System PBOP Rate</u>	
3	Total AEP System PBOP expenses	-\$72,936,887
4	Base Year relating to retired personnel	\$0
5	Amount allocated on Labor	-\$72,936,887
6	Total AEP System Direct Labor Expense	\$1,328,013,157
7	AEP System PBOP expense per dollar of direct labor (PBOP Rate)	-\$0.055
8	Currently Approved PBOP Rate	-\$0.058
9	Base PBOP TransCo labor expensed in current year	\$1,199,454
10	Allowable TransCo PBOP Expense for current year (Ln 8 * Ln 9)	-\$69,568
11	Direct PBOP Expense per Actuarial Report	\$0
12	Additional PBOP Ledger Entry (From Company Records)	\$0
13	Medicare Credit	\$0
14	PBOP Expenses From AEP Affiliates (From Company Records)	-\$299,537
15	Actual PBOP Expense (Sum Lines 11-14)	-\$299,537
16	PBOP Adjustment Line 10 less Line 15	\$229,969

AEPTCo subsidiaries in PJM
Worksheet - P
DEPRECIATION RATES
FOR TRANSMISSION PLANT PROPERTY ACCOUNTS
EFFECTIVE AS OF 07/01/2015

AEP WEST VIRGINIA TRANSMISSION COMPANY

	PLANT ACCT.	RATES Note 1
<i>TRANSMISSION PLANT</i>		
Land Rights	350.1	
Structures & Improvements	352.0	1.52%
Station Equipment	353.0	1.68%
Towers & Fixtures	354.0	1.54%
Poles & Fixtures	355.0	2.64%
Overhead Conductor	356.0	1.19%
Underground Conduit	357.0	1.45%
Underground Conductors	358.0	7.23%

Note: Per the Settlement in Docket No. ER10-355, Appendix A.1.2, AEP WEST VIRGINIA TRANSMISSION COMPANY shall use the depreciation rates shown above by FERC Account until such time as the FERC approves new depreciation rates pursuant to a Section 205 or 206 filing to change rates.

	<u>APCo</u>	<u>WPCo</u>	<u>TOTAL</u>
1 T-Plant (FF1 206.58.g)	1,811,822,367	29,740,179	1,841,562,546
2 T-Plant (FF1 206.58.b)	1,752,450,105	25,887,202	1,778,337,307
3 Average (Ln 1+ Ln 2)/2	1,782,136,236	27,813,691	1,809,949,927
4 Depreciation (FF1 336.7.f)	29,597,240	752,928	30,350,168
5 Composite Depreciation (Ln 3 / Ln 4)			1.68%

Note: AEP WEST VIRGINIA TRANSMISSION COMPANY shall initially use the composite depreciation rate for APCo and WPCo shown above to estimate depreciation expense for transmission projects in Worksheets I, J, and K until a composite depreciation rate based on transmission plant in service and depreciation expenses recorded by AEP WEST VIRGINIA TRANSMISSION COMPANY for its own transmission facilities can be calculated in AEP WEST VIRGINIA TRANSMISSION COMPANY's the first Annual Update including a True-Up TCOS.

AEP East Consolidated Utility Capital Structure
Consolidation of Operating Companies' Capital Structure @ December 31, 2016
Worksheet Q Page 1

Line	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>Development of Long Term Debt Balances at Year End</u>							
1 Bonds (112.18.c&d)	322,118,952	-	-	-	-	-	322,118,952
2 Less: Reacquired Bonds (112.19.c&d)	-	40,000,000	-	-	345,400,000	-	385,400,000
3 LT Advances from Assoc. Companies (112.20.c&d)	-	-	-	20,000,000	-	-	20,000,000
4 Senior Unsecured Notes (112.21.c&d) Excludes Spent Nuc Fuel Disp F	3,745,741,308	2,007,898,146	870,000,000	-	1,978,861,479	350,000,000	8,952,500,933
5 Less: Fair Value Hedges (See Note on Ln 7 below)	-	-	-	-	-	-	-
6 Total Long Term Debt Balance	4,067,860,260	1,967,898,146	870,000,000	20,000,000	1,633,461,479	350,000,000	8,909,219,885
7 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							
<u>Development of Long Term Debt Interest Expense</u>							
8 Interest on Long Term Debt (256-257.33.i)	183,241,459	90,712,806	44,423,930	904,000	104,441,643	11,095,742	434,819,580
9 Amort of Debt Discount & Expense (117.63.c)	2,982,641	1,820,729	725,700	-	1,369,728	245,632	7,144,430
10 Amort of Loss on Reacquired Debt (117.64.c)	4,269,063	1,283,093	33,651	-	1,287,793	-	6,873,600
11 Less: Amort of Premium on Debt (117.65.c)	-	-	-	-	-	-	-
12 Less: Amort of Gain on Reacquired Debt (117.66.c)	-	1,712	-	-	-	-	1,712
13 Less: Hedge Interest on pp 256-257(i)	(1,128,890)	-	92,956	-	(1,853,567)	-	(2,889,501)
14 LTD Interest Expense	191,622,053	93,814,916	45,090,325	904,000	108,952,731	11,341,374	451,725,399
<u>Development of Cost of Preferred Stock and Preferred Dividends</u>							
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)	-	-			-		
18 Monetary Value (Ln 16 * Ln 17)	-	-	-	-	-	-	-
19 Dividend Amount (Ln 15 * Ln 18)	-	-	-	-	-	-	-
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)		-			-		
23 Monetary Value (Ln 21 * Ln 22)	-	-	-	-	-	-	-
24 Dividend Amount (Ln 20 * Ln 23)	-	-	-	-	-	-	-
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)		-			-		
28 Monetary Value (Ln 26 * Ln 27)	-	-	-	-	-	-	-
29 Dividend Amount (Ln 25 * Ln 28)	-	-	-	-	-	-	-
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)		-			-		
33 Monetary Value (Ln 31 * Ln 32)	-	-	-	-	-	-	-
34 Dividend Amount (Ln 30 * Ln 33)	-	-	-	-	-	-	-
35 Preferred Stock (Lns 18, 23, 28,33)	-	-	-	-	-	-	-
36 Preferred Dividends (Lns 19, 24, 29,34)	-	-	-	-	-	-	-
<u>Development of Common Equity</u>							
37 Proprietary Capital (112.16.c)	3,582,763,277	2,151,747,058	668,401,428	37,530,838	2,117,544,466	412,839,052	8,970,826,119
38 Less: Preferred Stock (Ln 35 Above)	-	-	-	-	-	-	-
39 Less: Account 216.1 (112.12.c)	1,758,641	(6,674,314)	-	-	4,915,704	-	31
40 Less: Account 219.1 (112.15.c)	(9,136,157)	(16,256,513)	(1,354,460)	-	3,016,012	(125,061)	(23,856,179)
41 Balance of Common Equity	3,590,140,793	2,174,677,885	669,755,888	37,530,838	2,109,612,750	412,964,113	8,994,682,267
<u>Calculation of Capital Shares</u>							
42 Long Term Debt (Ln 6 Above)	4,067,860,260	1,967,898,146	870,000,000	20,000,000	1,633,461,479	350,000,000	8,909,219,885
43 Preferred Stock (Ln 35 Above)	-	-	-	-	-	-	-
44 Common Equity (Ln 41 Above)	3,590,140,793	2,174,677,885	669,755,888	37,530,838	2,109,612,750	412,964,113	8,994,682,267
45 Total Company Structure	7,658,001,053	4,142,576,031	1,539,755,888	57,530,838	3,743,074,229	762,964,113	17,903,902,152
46 LTD Capital Shares (Ln 42 / Ln 45)	53.12%	47.50%	56.50%	34.76%	43.64%	45.87%	49.76%
47 Preferred Stock Capital Shares (Ln 43 / Ln 45)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
48 Common Equity Capital Shares (Ln 44 / Ln 45)	46.88%	52.50%	43.50%	65.24%	56.36%	54.13%	50.24%
49 Equity Capital Share Limit	100.00%	100.00%	100.00%	100.00%	51.00%	100.00%	50.00%
50 LTD Capital Shares with Capital Equity Cap	53.12%	47.50%	56.50%	34.76%	49.00%	45.87%	50.88%
51 Preferred Stock Capital Shares	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
52 Common Equity Capital Shares with Capital Equity Cap	46.88%	52.50%	43.50%	65.24%	51.00%	54.13%	49.12%
<u>Calculation of Capital Cost Rate</u>							
53 LTD Capital Cost Rate (Ln 14 / Ln 6)	4.71%	4.77%	5.18%	4.52%	6.67%	3.24%	5.07%
54 Preferred Stock Capital Cost Rate (Ln 36 / Ln 35)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
55 Common Equity Capital Cost Rate	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%
<u>Calculation of Weighted Capital Cost Rate</u>							
56 LTD Weighted Capital Cost Rate (Ln 50 * Ln 53)	2.50%	2.26%	2.93%	1.57%	3.27%	1.49%	2.58%
57 Preferred Stock Capital Cost Rate (Ln 51 * Ln 54)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
58 Common Equity Capital Cost Rate (Ln 52 * Ln 55)	5.39%	6.03%	5.00%	7.50%	5.86%	6.22%	5.64%
59 Total Company Structure	7.89%	8.30%	7.93%	9.07%	9.13%	7.71%	8.22%

AEP East Consolidated Utility Capital Structure
Consolidation of Operating Companies' Capital Structure @ December 31, 2015
Worksheet Q Page 2

Line	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>Development of Long Term Debt Balances at Year End</u>							
60 Bonds (112.18.c&d)	345,097,743	-	-	-	-	-	345,097,743
61 Less: Reacquired Bonds (112.19.c&d)	-	40,000,000	-	-	345,400,000	-	385,400,000
62 LT Advances from Assoc. Companies (112.20.c&d)	-	-	-	20,000,000	-	-	20,000,000
63 Senior Unsecured Notes (112.21.c&d) Excludes Spent Nuc Fuel Disp F	3,620,784,367	1,609,281,752	870,000,000	-	2,328,942,762	350,000,000	8,779,008,881
64 Less: Fair Value Hedges (See Note on Ln 66 below)	-	-	-	-	-	-	-
65 Total Long Term Debt Balance	3,965,882,110	1,569,281,752	870,000,000	20,000,000	1,983,542,762	350,000,000	8,758,706,624
66 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)							
<u>Development of Long Term Debt Interest Expense</u>							
67 Interest on Long Term Debt (256-257.33.i)	188,068,200	79,376,715	43,405,169	904,000	117,119,422	7,144,374	436,017,880
68 Amort of Debt Discount & Expense (117.63.c)	2,916,356	1,779,096	716,313	-	1,595,208	171,512	7,178,485
69 Amort of Loss on Reacquired Debt (117.64.c)	3,960,759	1,283,093	33,624	-	1,311,350	-	6,588,826
70 Less: Amort of Premium on Debt (117.65.c)	-	-	-	-	-	-	-
71 Less: Amort of Gain on Reacquired Debt (117.66.c)	-	1,712	-	-	-	-	1,712
72 Less: Hedge Interest on pp 256-257(i)	(422,541)	1,676,623	92,956	-	(2,097,663)	-	(750,625)
73 LTD Interest Expense	195,367,856	80,760,569	44,062,150	904,000	122,123,643	7,315,886	450,534,104
<u>Development of Cost of Preferred Stock and Preferred Dividends</u>							
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)	-	-			-		
77 Monetary Value (Ln 75 * Ln 76)	-	-	-	-	-	-	-
78 Dividend Amount (Ln 74 * Ln 77)	-	-	-	-	-	-	-
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)		-			-		
82 Monetary Value (Ln 80 * Ln 81)	-	-	-	-	-	-	-
83 Dividend Amount (Ln 79 * Ln 82)	-	-	-	-	-	-	-
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)		-			-		
87 Monetary Value (Ln 85 * Ln 86)	-	-	-	-	-	-	-
88 Dividend Amount (Ln 84 * Ln 87)	-	-	-	-	-	-	-
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)					-		
92 Monetary Value (Ln 90 * Ln 91)	-	-	-	-	-	-	-
93 Dividend Amount (Ln 89 * Ln 92)	-	-	-	-	-	-	-
94 Preferred Stock (Lns 77, 82, 87,92)	-	-	-	-	-	-	-
95 Preferred Dividends (Lns 78, 83, 88,93)	-	-	-	-	-	-	-
<u>Development of Common Equity</u>							
96 Proprietary Capital (112.16.c)	3,475,050,089	2,036,408,552	663,073,876	29,626,191	1,986,574,950	406,461,375	8,597,195,033
97 Less: Preferred Stock (Ln 94 Above)	-	-	-	-	-	-	-
98 Less: Account 216.1 (112.12.c)	1,758,641	31,416	-	-	4,915,704	-	6,705,761
99 Less: Account 219.1 (112.15.c)	(2,792,656)	(16,739,231)	(1,645,475)	-	4,229,596	61,921	(16,885,845)
100 Balance of Common Equity	3,476,084,104	2,053,116,367	664,719,351	29,626,191	1,977,429,650	406,399,454	8,607,375,117
<u>Calculation of Capital Shares</u>							
101 Long Term Debt (Ln 65 Above)	3,965,882,110	1,569,281,752	870,000,000	20,000,000	1,983,542,762	350,000,000	8,758,706,624
102 Preferred Stock (Ln 94 Above)	-	-	-	-	-	-	-
103 Common Equity (Ln 100 Above)	3,476,084,104	2,053,116,367	664,719,351	29,626,191	1,977,429,650	406,399,454	8,607,375,117
104 Total Company Structure	7,441,966,214	3,622,398,119	1,534,719,351	49,626,191	3,960,972,412	756,399,454	17,366,081,741
105 LTD Capital Shares (Ln 101 / Ln 104)	53.29%	43.32%	56.69%	40.30%	50.08%	46.27%	50.44%
106 Preferred Stock Capital Shares (Ln 102 / Ln 104)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
107 Common Equity Capital Shares (Ln 103 / Ln 104)	46.71%	56.68%	43.31%	59.70%	49.92%	53.73%	49.56%
108 Equity Capital Share Limit	100.00%	100.00%	100.00%	100.00%	51.00%	100.00%	50.00%
109 LTD Capital Shares with Capital Equity Cap	53.29%	43.32%	56.69%	40.30%	50.08%	46.27%	50.44%
110 Preferred Stock Capital Shares	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
111 Common Equity Capital Shares with Capital Equity Cap	46.71%	56.68%	43.31%	59.70%	49.92%	53.73%	49.56%
<u>Calculation of Capital Cost Rate</u>							
112 LTD Capital Cost Rate (Ln 73 / Ln 65)	4.93%	5.15%	5.06%	4.52%	6.16%	2.09%	5.14%
113 Preferred Stock Capital Cost Rate (Ln 95 / Ln 94)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
114 Common Equity Capital Cost Rate	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%
<u>Calculation of Weighted Capital Cost Rate</u>							
115 LTD Weighted Capital Cost Rate (Ln 109 * Ln 112)	2.63%	2.23%	2.87%	1.82%	3.08%	0.97%	2.59%
116 Preferred Stock Capital Cost Rate (Ln 110 * Ln 113)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
117 Common Equity Capital Cost Rate (Ln 111 * Ln 114)	5.37%	6.51%	4.98%	6.86%	5.74%	6.17%	5.69%
118 Total Company Structure	7.99%	8.74%	7.85%	8.68%	8.82%	7.14%	8.29%

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

Line	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>Development of Average Long Term Debt</u>							
119 Average Bonds (Ln 1 + Ln 60) / 2	333,608,348	-	-	-	-	-	333,608,348
120 Less: Average Reacquired Bonds (Ln 2 + Ln 61) / 2	-	40,000,000	-	-	345,400,000	-	385,400,000
121 Average LT Advances from Assoc. Companies (Ln 3 + Ln 62) / 2	-	-	-	20,000,000	-	-	20,000,000
122 Average Senior Unsecured Notes (Ln 4 + Ln 63) / 2	3,683,262,838	1,808,589,949	870,000,000	-	2,153,902,121	350,000,000	8,865,754,907
123 Less: Average Fair Value Hedges (See Note on Ln 125 below)	-	-	-	-	-	-	-
124 Average Balance of Long Term Debt	4,016,871,185	1,768,589,949	870,000,000	20,000,000	1,808,502,121	350,000,000	8,833,963,255
125 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)							
<u>Development of 2016 Long Term Debt Interest Expense</u>							
126 Interest on Long Term Debt (256-257.33.i)	183,241,459	90,712,806	44,423,930	904,000	104,441,643	11,095,742	434,819,580
127 Amort of Debt Discount & Expense (117.63.c)	2,982,641	1,820,729	725,700	-	1,369,728	245,632	7,144,430
128 Amort of Loss on Reacquired Debt (117.64.c)	4,269,063	1,283,093	33,651	-	1,287,793	-	6,873,600
129 Less: Amort of Premium on Debt (117.65.c)	-	-	-	-	-	-	-
130 Less: Amort of Gain on Reacquired Debt (117.66.c)	-	1,712	-	-	-	-	1,712
131 Less: Hedge Interest on pp 256-257(i)	(1,128,890)	-	92,956	-	(1,853,567)	-	(2,889,501)
132 2016 LTD Interest Expense	191,622,053	93,814,916	45,090,325	904,000	108,952,731	11,341,374	451,725,399
<u>2016 Cost of Preferred Stock and Preferred Dividends</u>							
133 Average Balance of Preferred Stock (Ln 35 + Ln 94) / 2	-	-	-	-	-	-	-
134 2016 Preferred Dividends (Ln 36)	-	-	-	-	-	-	-
<u>Development of Average Common Equity</u>							
135 Average Proprietary Capital (Ln 37 + Ln 96) / 2	3,528,906,683	2,094,077,805	665,737,652	33,578,515	2,052,059,708	409,650,214	8,784,010,576
136 Less: Average Preferred Stock (Ln 133 Above)	-	-	-	-	-	-	-
137 Less: Average Account 216.1 (Ln 39 + Ln 98) / 2	1,758,641	(3,321,449)	-	-	4,915,704	-	3,352,896
138 Less: Average Account 219.1 (Ln 40 + Ln 99) / 2	(5,964,407)	(16,497,872)	(1,499,968)	-	3,622,804	(31,570)	(20,371,012)
139 Average Balance of Common Equity	3,533,112,449	2,113,897,126	667,237,620	33,578,515	2,043,521,200	409,681,784	8,801,028,692
<u>Calculation of Capital Shares</u>							
140 Average Balance of Long Term Debt (Ln 124 Above)	4,016,871,185	1,768,589,949	870,000,000	20,000,000	1,808,502,121	350,000,000	8,833,963,255
141 Average Balance of Preferred Stock (Ln 133 Above)	-	-	-	-	-	-	-
142 Average Balance of Common Equity (Ln 139 Above)	3,533,112,449	2,113,897,126	667,237,620	33,578,515	2,043,521,200	409,681,784	8,801,028,692
143 Average of Total Company Structure	7,549,983,634	3,882,487,075	1,537,237,620	53,578,515	3,852,023,321	759,681,784	17,634,991,947
144 Average Balance of LTD Capital Shares (Ln 140 / Ln 143)	53.20%	45.55%	56.60%	37.33%	46.95%	46.07%	50.09%
145 Average Balance of Preferred Stock Capital Shares (Ln 141 / Ln 143)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
146 Average Balance of Common Equity Capital Shares (Ln 142 / Ln 143)	46.80%	54.45%	43.40%	62.67%	53.05%	53.93%	49.91%
147 Equity Capital Share Limit	100.00%	100.00%	100.00%	100.00%	51.00%	100.00%	50.00%
148 LTD Capital Shares with Capital Equity Cap	53.20%	45.55%	56.60%	37.33%	49.00%	46.07%	50.54%
149 Preferred Stock Capital Shares	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
150 Common Equity Capital Shares with Capital Equity Cap	46.80%	54.45%	43.40%	62.67%	51.00%	53.93%	49.46%
<u>Calculation of Capital Cost Rate</u>							
151 LTD Capital Cost Rate (Ln 132 / Ln 124)	4.77%	5.30%	5.18%	4.52%	6.02%	3.24%	5.11%
152 Preferred Stock Capital Cost Rate (Ln 134 / Ln 133)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
153 Common Equity Capital Cost Rate	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%	11.49%
<u>Calculation of Weighted Capital Cost Rate</u>							
154 LTD Weighted Capital Cost Rate (Ln 148 * Ln 151)	2.54%	2.42%	2.93%	1.69%	2.95%	1.49%	2.58%
155 Preferred Stock Capital Cost Rate (Ln 149 * Ln 152)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
156 Common Equity Capital Cost Rate (Ln 150 * Ln 153)	5.38%	6.26%	4.99%	7.20%	5.86%	6.20%	5.68%
157 ACTUAL WEIGHTED AVG COST OF CAPITAL	7.91%	8.67%	7.92%	8.89%	8.81%	7.69%	8.27%