

AEP East Companies  
Transmission Cost of Service Formula Rate  
Utilizing Historic Cost Data for 2016 with Year-End Rate Base Balances

APPALACHIAN POWER COMPANY

Line No.						Transmission Amount
166	REVENUE REQUIREMENT (w/o incentives)	(In 303)				\$304,012,247
			Total		Allocator	
167	REVENUE CREDITS	(Note A) (Worksheet E)	8,678,938	DA	1.00000	\$ 8,678,938
168	REVENUE REQUIREMENT For All Company Facilities	(In 166 less In 167)				\$ 295,333,309

MEMO: The Carrying Charge Calculations on lines 171 to 176 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 169 is included in the total on line 168.

169	Not applicable on this template					
170	NET PLANT CARRYING CHARGE w/o intra-AEP charges or credits or ROE incentives (Note B)					
171	Annual Rate	( (In 166 - In 270 - In 271)/ In 213 x 100)				14.90%
172	Monthly Rate	(In 171 / 12)				1.24%
173	NET PLANT CARRYING CHARGE ON LINE 171 , w/o depreciation or ROE incentives (Note B)					
174	Annual Rate	( (In 166 - In 270 - In 271 - In 276) / In 213 x 100)				12.95%
175	NET PLANT CARRYING CHARGE ON LINE 174, w/o Return, income taxes or ROE incentives (Note B)					
176	Annual Rate	( (In 166 - In 270 - In 271 - In 276 - In 298 - In 299) / In 213 x 100)				4.03%
177	Not applicable on this template					
178	REVENUE REQUIREMENT FOR SCHEDULE 1A CHARGES					
179	Total Load Dispatch & Scheduling (Account 561)	Line 250 Below				11,318,542
180	Less: Load Dispatch - Scheduling, System Control and Dispatch Services (321.88.b)					6,007,177
181	Less: Load Dispatch - Reliability, Planning & Standards Development Services (321.92.b)					1,550,870
182	Total 561 Internally Developed Costs	(Line 179 - Line 180 - Line 181)				3,760,495

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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					
183	Production	(Worksheet A In 1.C)	6,287,399,099	NA	0.00000	-
184	Less: Production ARO (Enter Negative)	(Worksheet A In 2.C)	(90,225,576)	NA	0.00000	-
185	Transmission	(Worksheet A In 3.C & Ln 307)	2,795,292,451	DA		2,728,583,541
186	Less: Transmission ARO (Enter Negative)	(Worksheet A In 4.C& Ln 308)	-	TP	0.97614	-
187	Plus: Transmission Plant-in-Service Additions (Worksheet I)		N/A	NA	0.00000	N/A
188	Plus: Additional Trans Plant on Transferred Assets (Worksheet I)		N/A	NA	0.00000	N/A
189	Distribution	(Worksheet A In 5.C)	3,566,941,043	NA	0.00000	-
190	Less: Distribution ARO (Enter Negative)	(Worksheet A In 6.C)	(3,069)	NA	0.00000	-
191	General Plant	(Worksheet A In 7.C)	221,448,904	W/S	0.08543	18,918,517
192	Less: General Plant ARO (Enter Negative)	(Worksheet A In 8.C)	(781,258)	W/S	0.08543	(66,743)
193	Intangible Plant	(Worksheet A In 9.C)	105,361,383	W/S	0.08543	9,001,088
194	TOTAL GROSS PLANT	(sum Ins 183 to 193)	12,885,432,977	GP(h)=	0.213919	2,756,436,403
				GTD=	0.42887	
195	ACCUMULATED DEPRECIATION AND AMORTIZATION					
196	Production	(Worksheet A In 12.C)	2,184,905,747	NA	0.00000	-
197	Less: Production ARO (Enter Negative)	(Worksheet A In 13.C)	(29,499,535)	NA	0.00000	-
198	Transmission	(Worksheet A In 14.C & 28.C)	709,981,557	TP1=	0.97010	688,752,443
199	Less: Transmission ARO (Enter Negative)	(Worksheet A In 15.C)	-	TP1=	0.97010	-
200	Plus: Transmission Plant-in-Service Additions (Worksheet I)		N/A	DA	1.00000	N/A
201	Plus: Additional Projected Deprec on Transferred Assets (Worksheet I)		N/A	DA	1.00000	N/A
202	Plus: Additional Transmission Depreciation for 2017 (In 276)		N/A	TP1	0.97010	N/A
203	Plus: Additional General & Intangible Depreciation for 2017 (In 275 + In 276)		N/A	W/S	0.08543	N/A
204	Plus: Additional Accum Deprec on Transferred Assets (Worksheet I)		N/A	DA	1.00000	N/A
205	Distribution	(Worksheet A In 16.C)	1,198,723,386	NA	0.00000	-
206	Less: Distribution ARO (Enter Negative)	(Worksheet A In 17.C)	(1,792)	NA	0.00000	-
207	General Plant	(Worksheet A In 18.C)	74,723,306	W/S	0.08543	6,383,658
208	Less: General Plant ARO (Enter Negative)	(Worksheet A In 19.C)	(634,805)	W/S	0.08543	(54,232)
209	Intangible Plant	(Worksheet A In 20.C)	61,802,515	W/S	0.08543	5,279,827
210	TOTAL ACCUMULATED DEPRECIATION	(sum Ins 196 to 209)	4,200,000,379			700,361,696
211	NET PLANT IN SERVICE					
212	Production	(In 183 + In 184 - In 196 - In 197)	4,041,767,311			-
213	Transmission	(In 185 + In 186 - In 198 - In 199)	2,085,310,894			2,039,831,099
214	Plus: Transmission Plant-in-Service Additions (In 187 - In 200)		N/A			N/A
215	Plus: Additional Trans Plant on Transferred Assets (In 188 - In 201)		N/A			N/A
216	Plus: Additional Transmission Depreciation for 2017 (-In 202)		N/A			N/A
217	Plus: Additional General & Intangible Depreciation for 2017 (-In 203)		N/A			N/A
218	Plus: Additional Accum Deprec on Transferred Assets (Worksheet I) (-In 204)		N/A			N/A
219	Distribution	(In 189 + In 190 - In 205 - In 206)	2,368,216,380			-
220	General Plant	(In 191 + In 192 - In 207 - In 208)	146,579,145			12,522,347
221	Intangible Plant	(In 193 - In 209)	43,558,868			3,721,261
222	TOTAL NET PLANT IN SERVICE	(sum Ins 212 to 221)	8,685,432,598	NP(h)=	0.236727	2,056,074,707
223	DEFERRED TAX ADJUSTMENTS TO RATE BASE	(Note D)				
224	Account No. 281.1 (enter negative)	(Worksheet B, In 2 & In 5.C)	(302,975,148)	NA		-
225	Account No. 282.1 (enter negative)	(Worksheet B, In 7 & In 10.C)	(1,799,314,927)	DA		(467,680,955)
226	Account No. 283.1 (enter negative)	(Worksheet B, In 12 & In 15.C)	(427,772,320)	DA		(36,832,792)
227	Account No. 190.1	(Worksheet B, In 17 & In 20.C)	295,894,511	DA		58,731,329
228	Account No. 255 (enter negative)	(Worksheet B, In 24 & In 25.C)	(915,123)	DA		(58,596)
229	TOTAL ADJUSTMENTS	(sum Ins 224 to 228)	(2,235,083,007)			(445,841,014)
230	PLANT HELD FOR FUTURE USE	(Worksheet A In 29.C & In 30.C)	4,226,482	DA		1,632,033
231	REGULATORY ASSETS	(Worksheet A In 36. (C))	-	DA		-
232	WORKING CAPITAL	(Note E)				
233	Cash Working Capital	(1/8 * In 253)	4,720,798			4,608,137
234	Transmission Materials & Supplies	(Worksheet C, In 2.(D))	1,510,127	TP	0.97614	1,474,088
235	A&G Materials & Supplies	(Worksheet C, In 3.(D))	180,013	W/S	0.08543	15,379
236	Stores Expense	(Worksheet C, In 4.(D))	-	GP(h)	0.21392	-
237	Prepayments (Account 165) - Labor Allocated	(Worksheet C, In 6.G)	206,845,492	W/S	0.08543	17,670,938
238	Prepayments (Account 165) - Gross Plant	(Worksheet C, In 6.F)	4,505,036	GP(h)	0.21392	963,712
239	Prepayments (Account 165) - Transmission Only	(Worksheet C, In 6.E)	-	DA	1.00000	-
240	Prepayments (Account 165) - Unallocable	(Worksheet C, In 6.D)	(203,422,929)	NA	0.00000	-
241	TOTAL WORKING CAPITAL	(sum Ins 233 to 240)	14,338,537			24,732,254
242	IPP CONTRIBUTIONS FOR CONSTRUCTION	(Note F) (Worksheet D, In 7.B)	(2,788,702)	DA	1.00000	(2,788,702)
243	RATE BASE (sum Ins 222, 229, 230, 231, 241, 242)		6,466,125,907			1,633,809,277

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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					
244	Production	321.80.b	1,207,840,345			
245	Distribution	322.156.b	158,709,477			
246	Customer Related Expense	322 & 323.164,171,178.b	54,479,624			
247	Regional Marketing Expenses	322.131.b	5,154,463			
248	Transmission	321.112.b	216,839,976			
249	TOTAL O&M EXPENSES	(sum lns 244 to 248)	1,643,023,885			
250	Less: Total Account 561	(Note G) (Worksheet F, ln 13.C)	11,318,542			
251	Less: Account 565	(Note H) 321.96.b	131,660,618			
252	Less: Regulatory Deferrals & Amortizations	(Note I) (Worksheet F, ln 4.C)	36,094,435			
253	Total O&M Allocable to Transmission	(lns 248 - 250 - 251 - 252)	37,766,381	TP	0.97614	36,865,096
254	Administrative and General	323.197.b (Note J)	104,281,877			
255	Less: Acct. 924, Property Insurance	323.185.b	3,238,061			
256	Acct. 9260039 PBOP Expense	PBOP Worksheet O Line 9 & 10, (Note K)	(11,363,460)			
257	Acct. 9260057 PBOP Medicare Subsidy	PBOP Worksheet O Line 11, (Note K)	-			
258	PBOP Expense Billed From AEPSC	PBOP Worksheet O Line 13, (Note K)	(983,322)			
259	Acct. 928, Reg. Com. Exp.	323.189.b	4,280,043			
260	Acct. 930.1, Gen. Advert. Exp.	323.191.b	340,610			
261	Acct. 930.2, Misc. Gen. Exp.	323.192.b	8,891,510			
262	Balance of A & G	(ln 254 - sum ln 255 to ln 261)	99,878,435	W/S	0.08543	8,532,676
263	Plus: Acct. 924, Property Insurance	(ln 255)	3,238,061	GP(h)	0.21392	692,682
264	Acct. 928 - Transmission Specific	Worksheet F ln 18.(E) (Note L)	54,118	TP	0.97614	52,826
265	Acct 930.1 - Only safety related ads -Direct	Worksheet F ln 35.(E) (Note L)	-	TP	0.97614	-
266	Acct 930.2 - Misc Gen. Exp. - Trans	Worksheet F ln 42.(E) (Note L)	5,483,952	DA	1.00000	5,483,952
267	Settlement Approved PBOP Recovery	PBOP Worksheet O, Col. C, Line 1, (Note M)	10,717,707	W/S	0.08543	915,620
268	A & G Subtotal	(sum lns 262 to 267)	119,372,273			15,677,757
269	O & M EXPENSE SUBTOTAL	(ln 253 + ln 268)	157,138,654			52,542,854
270	Plus: TEA Settlement in Account 565	Company Records (Note H)	-	DA	1.00000	-
271	Plus: Transmission Lease Payments To Affiliates in Acct 565 (Company Records) (Note H)		-	DA	1.00000	-
272	TOTAL O & M EXPENSE	(ln 269 + ln 270 + ln 271)	157,138,654			52,542,854
273	DEPRECIATION AND AMORTIZATION EXPENSE					
274	Production	336.2-6.f	193,538,062	NA	0.00000	-
275	Distribution	336.8.f	131,046,174	NA	0.00000	-
276	Transmission	336.7.f	41,155,895	TP1	0.97010	39,925,295
277	Plus: Transmission Plant-in-Service Additions (Worksheet I)		N/A			N/A
278	General	336.10.f	4,426,414	W/S	0.08543	378,151
279	Intangible	336.1.f	14,054,278	W/S	0.08543	1,200,666
280	TOTAL DEPRECIATION AND AMORTIZATION	(Ln 274+275+276+277+278+279)	384,220,823			41,504,112
281	TAXES OTHER THAN INCOME	(Note N)				
282	Labor Related					
283	Payroll	Worksheet H ln 23.(D)	8,400,592	W/S	0.08543	717,668
284	Plant Related					
285	Property	Worksheet H ln 23.(C) & ln 58.(C)	63,547,826	DA		23,887,444
286	Gross Receipts/Sales & Use	Worksheet H ln 23.(F)	35,237,876	NA	0.00000	-
287	Other	Worksheet H ln 23.(E)	16,050,808	GP(h)	0.21392	3,433,570
288	TOTAL OTHER TAXES	(sum lns 283 to 287)	123,237,102			28,038,682
289	INCOME TAXES	(Note O)				
290	T=1 - {[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)} =		37.42%			
291	EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =		40.72%			
292	where WCLTD=(ln 327) and WACC = (ln 330)					
293	and FIT, SIT & p are as given in Note O.					
294	GRCF=1 / (1 - T) = (from ln 290)		1.5979			
295	Amortized Investment Tax Credit (enter negative)	(FF1 p.114, ln 19.c)	-			
296	Income Tax Calculation	(ln 291 * ln 299)	208,253,053			52,619,725
297	ITC adjustment	(ln 294 * ln 295)	-	NP(h)	0.23673	-
298	TOTAL INCOME TAXES	(sum lns 296 to 297)	208,253,053			52,619,725
299	RETURN ON RATE BASE (Rate Base*WACC)	(ln 243 * ln 330)	511,387,370			129,213,294
300	INTEREST ON IPP CONTRIBUTION FOR CONST. (Note F) (Worksheet D, ln 2.(B))		93,580	DA	1.00000	93,580
301	(Gains) / Losses on Sales of Plant Held for Future Use (Worksheet N, ln 4, Cols. ((F) & (H))		-			-
302	Tax Impact on Net Loss / (Gain) on Sales of Plant Held for Future Use (ln 301 * ln291)		-			-
303	TOTAL REVENUE REQUIREMENT		1,384,330,582			304,012,247
	(sum lns 272, 280, 288, 298, 299, 300, 301, 302)					

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SUPPORTING CALCULATIONS

In No.	TRANSMISSION PLANT INCLUDED IN PJM TARIFF									
304	Total transmission plant	(In 185)							2,795,292,451	
305	Less transmission plant excluded from PJM Tariff	(Note P)								
306	Less transmission plant included in OATT Ancillary Services	(Worksheet A, In 23, Col. (C))	(Note Q)						66,708,910	
307	Transmission plant included in PJM Tariff	(In 304 - In 305 - In 306)							2,728,583,541	
308	Percent of transmission plant in PJM Tariff	(In 307 / In 304)						TP=	0.97614	
309	WAGES & SALARY ALLOCATOR (W/S)	(Note R)	Direct Payroll	Payroll Billed from AEP Service Corp.	Total					
310	Production	354.20.b	58,244,326	25,814,276	84,058,602	NA	0.00000		-	
311	Transmission	354.21.b	422,523	13,257,119	13,679,642	TP	0.97614		13,353,181	
312	Regional Market Expenses	354.22.b	0	0	-	NA	0.00000		-	
313	Distribution	354.23.b	33,954,027	4,937,493	38,891,520	NA	0.00000		-	
314	Other (Excludes A&G)	354.24,25,26.b	10,302,391	9,372,240	19,674,631	NA	0.00000		-	
315	Total	(sum Ins 310 to 314)	✓102,923,267	✓53,381,128	156,304,395				13,353,181	
316	Transmission related amount							W/S=	0.08543	
317	WEIGHTED AVERAGE COST OF CAPITAL (WACC)								\$	
318	Long Term Interest	(Worksheet L, In. 44, col. (D))							193,142,183	
319	Preferred Dividends	(Worksheet L, In. 49, col. (D))							-	
320	Development of Common Stock:									
321	Proprietary Capital	(FF1 p 112, Ln 16.c)							3,582,763,277	
322	Less: Preferred Stock	(FF1 p 112, Ln 3.c)							-	
323	Less: Account 216.1	(FF1 p 112, Ln 12 .c)							1,758,641	
324	Less: Account 219	(FF1 p 112, Ln 15.c)							(9,136,157)	
325	Common Stock	(In 321 - In 322 - In 323 - In 324)							3,590,140,793	
326								Cost		
327	Long Term Debt (Note T)	Worksheet L, In 44, col. (B))	\$	%		Cost		Weighted		
328	Preferred Stock (In 322)		4,067,860,260	53.12%		(Note S)	0.0475		0.0252	
329	Common Stock (In 325)		-	0.00%			-		0.0000	
330	Total (Sum Ins 327 to 329)		3,590,140,793	46.88%			11.49%		0.0539	
			7,658,001,053					WACC=	0.0791	



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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 253. It excludes: 1) Load Scheduling & Dispatch Charges in account 561 that are collected in the OATT Ancillary Services Revenue, as shown on line 250. 2) AEP transmission equalization transfers, as shown on line 251 3) The impact of state regulatory deferrals and amortizations, as shown on line 252 4) All A&G Expenses, as shown on line 268.
F	Consistent with Paragraph 657 of Order 2003-A, the amount on line 242 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 300.
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 180 & 181 above) are recovered in Schedule 1A, OATT ancillary services rates. See Worksheet F, lines 4 through 13, 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 253. 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 270 and 271 to determine the total O&M collected in the formula. The amounts on lines 270 and 271 are also excluded in the calculation of the FCR percentage calculated on lines 170 through 176. The addbacks on lines 270 and 271 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 270 and 271 is the APPALACHIAN POWER 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	These deductions on lines 256 through 258 are to remove from the cost of service the expenses recorded by the company for Postemployment Benefits Other than Pensions (PBOP). See Note M below for the recoverable PBOP 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 ER08-1329, recoverable PBOP expense is based on an annual total for the operating companies that is ratioed to them based on the total of actual annual PBOP costs, including charges from the AEP Service Corporation. The calculation of the recoverable amount for each company is shown on Worksheet O, and the process for updating the annual total is documented on Attachment F, Allowable PBOP Expense Formula.
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) (ln 295) multiplied by (1/1-T) . If the applicable tax rates are zero enter 0. Inputs Required: FIT = 35.00% SIT= 3.72% (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	Long Term Debt cost rate = long-term interest (ln 318) / long term debt (ln 327). Preferred Stock cost rate = preferred dividends (ln 319) / preferred outstanding (ln 328). Common Stock cost rate (ROE) = 11.49%, the rate accepted by FERC in Docket No. ER08-1329. It includes an additional 50 basis points for remaining a member of the PJM RTO.  In the Projected & Historic templates, the interest expense on long-term debt is the sum of a full year's interest expense at the coupon rate for each issuance outstanding as of December 31 of the historic year. The projected expense for variable rate debt will be based on the effective rate at December 31. These conventions ensure that the expense used in the projection will reflect a full year, similar to the actual expense that will appear in the subsequent true-up of the projection, and minimize the impact on the true-up of using a partial year interest expense. The projection will reflect the actual historic-year expense recorded for issuance expenses, discounts and premiums, and gains or losses on reacquired debt. Eligible hedging gains or losses will be limited to five basis points of the projected capital structure. Details and calculations are shown on Worksheet L.
T	This note only applies to Indiana Michigan Power Company.
U	This note only applies to the true-up template.

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Line No.						Transmission Amount
1	REVENUE REQUIREMENT (w/o incentives)	(In 138)				\$285,286,282
2	REVENUE CREDITS	(Note A) (Worksheet E)	Total	DA	1.00000	\$ 8,678,938
			8,678,938			
3	REVENUE REQUIREMENT For All Company Facilities	(In 1 less In 2)				\$ 276,607,344
<b>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.</b>						
4	Revenue Requirement for PJM Schedule 12 Facilities (w/o incentives) (Worksheet K)		15,247,613	DA	1.00000	\$ 15,247,613
5	NET PLANT CARRYING CHARGE w/o intra-AEP charges or credits or ROE incentives (Note B)					
6	Annual Rate	((In 1 - In 105 - In 106) / In 48 x 100)				15.43%
7	Monthly Rate	(In 6 / 12)				1.29%
8	NET PLANT CARRYING CHARGE ON LINE 6 , w/o depreciation or ROE incentives (Note B)					
9	Annual Rate	((In 1 - In 105 - In 106 - In 111) / In 48 x 100)				13.27%
10	NET PLANT CARRYING CHARGE ON LINE 9, w/o Return, income taxes or ROE incentives (Note B)					
11	Annual Rate	((In 1 - In 105 - In 106 - In 111 - In 133 - In 134) / In 48 x 100)				4.44%
12	ADDITIONAL REVENUE REQUIREMENT for projects w/ incentive ROE's (Note B) (Worksheet K)					-
13	<b>REVENUE REQUIREMENT FOR SCHEDULE 1A CHARGES</b>					
14	Total Load Dispatch & Scheduling (Account 561)	Line 85 Below				11,318,542
15	Less: Load Dispatch - Scheduling, System Control and Dispatch Services (321.88.b)					6,007,177
16	Less: Load Dispatch - Reliability, Planning & Standards Development Services (321.92.b)					1,550,870
17	Total 561 Internally Developed Costs	(Line 14 - Line 15 - Line 16)				3,760,495

AEP East Companies  
Transmission Cost of Service Formula Rate  
Utilizing Actual Cost Data for 2016 with Average Ratebase Balances

APPALACHIAN POWER 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	Production	(Worksheet A In 1.E)	6,222,155,584	NA	0.00000	-
19	Less: Production ARO (Enter Negative)	(Worksheet A In 2.E)	(81,387,034)	NA	0.00000	-
20	Transmission	(Worksheet A In 3.E & Ln 142)	2,600,783,504	DA		2,535,747,410
21	Less: Transmission ARO (Enter Negative)	(Worksheet A In 4.E & Ln 143)	-	TP	0.97499	-
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	Distribution	(Worksheet A In 5.E)	3,483,534,408	NA	0.00000	-
25	Less: Distribution ARO (Enter Negative)	(Worksheet A In 6.E)	(3,069)	NA	0.00000	-
26	General Plant	(Worksheet A In 7.E)	215,363,087	W/S	0.08533	18,377,084
27	Less: General Plant ARO (Enter Negative)	(Worksheet A In 8.E)	(796,502)	W/S	0.08533	(67,966)
28	Intangible Plant	(Worksheet A In 9.E)	94,198,918	W/S	0.08533	8,038,060
29	TOTAL GROSS PLANT	(sum Ins 18 to 28)	12,533,848,896	GP(h)=	0.20441	2,562,094,588
				GTD=	0.00000	
30	ACCUMULATED DEPRECIATION AND AMORTIZATION					
31	Production	(Worksheet A In 12.E)	2,112,930,484	NA	0.00000	-
32	Less: Production ARO (Enter Negative)	(Worksheet A In 13.E)	(28,083,606)	NA	0.00000	-
33	Transmission	(Worksheet A In 14.E & 28.E)	707,762,514	TP1=	0.97084	687,127,061
34	Less: Transmission ARO (Enter Negative)	(Worksheet A In 15.E)	-	TP1=	0.97084	-
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 111)		N/A	TP1	0.97084	N/A
38	Plus: Additional General & Intangible Depreciation for 2017 (In 110 + In 111)		N/A	W/S	0.08533	N/A
39	Plus: Additional Accum Deprec on Transferred Assets (Worksheet I)		N/A	DA	1.00000	N/A
40	Distribution	(Worksheet A In 16.E)	1,159,485,818	NA	0.00000	-
41	Less: Distribution ARO (Enter Negative)	(Worksheet A In 17.E)	(1,757)	NA	0.00000	-
42	General Plant	(Worksheet A In 18.E)	73,818,973	W/S	0.08533	6,299,025
43	Less: General Plant ARO (Enter Negative)	(Worksheet A In 19.E)	(638,942)	W/S	0.08533	(54,521)
44	Intangible Plant	(Worksheet A In 20.E)	57,375,083	W/S	0.08533	4,895,856
45	TOTAL ACCUMULATED DEPRECIATION	(sum Ins 31 to 44)	4,082,648,565			698,267,420
46	NET PLANT IN SERVICE					
47	Production	(In 18 + In 19 - In 31 - In 32)	4,055,921,672			-
48	Transmission	(In 20 + In 21 - In 33 - In 34)	1,893,020,990			1,848,620,349
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	Distribution	(In 24 + In 25 - In 40 - In 41)	2,324,047,279			-
55	General Plant	(In 26 + In 27 - In 42 - In 43)	141,386,554			12,064,614
56	Intangible Plant	(In 28 - In 44)	36,823,835			3,142,204
57	TOTAL NET PLANT IN SERVICE	(sum Ins 47 to 56)	8,451,200,330	NP(h)=	0.22054	1,863,827,167
58	DEFERRED TAX ADJUSTMENTS TO RATE BASE	(Note D)				
59	Account No. 281.1 (enter negative)	(Worksheet B, In 2 & In 5.E)	(310,351,985)	NA		-
60	Account No. 282.1 (enter negative)	(Worksheet B, In 7 & In 10.E)	(1,715,219,159)	DA		(430,979,746)
61	Account No. 283.1 (enter negative)	(Worksheet B, In 12 & In 15.E)	(445,164,748)	DA		(43,675,646)
62	Account No. 190.1	(Worksheet B, In 17 & In 20.E)	304,070,405	DA		57,306,620
63	Account No. 255 (enter negative)	(Worksheet B, In 24 & In 25.E)	(970,000)	DA		(87,201)
64	TOTAL ADJUSTMENTS	(sum Ins 59 to 63)	(2,167,635,486)			(417,435,973)
65	PLANT HELD FOR FUTURE USE	(Worksheet A In 29.E & In 30.E)	4,483,849	DA		1,753,094
66	REGULATORY ASSETS	(Worksheet A In 36. (E))	-	DA		-
67	WORKING CAPITAL	(Note E)				
68	Cash Working Capital	(1/8 * In 88)	4,720,798			4,602,748
69	Transmission Materials & Supplies	(Worksheet C, In 2.F)	1,228,287	TP	0.97499	1,197,572
70	A&G Materials & Supplies	(Worksheet C, In 3.F)	256,526	W/S	0.08533	21,890
71	Stores Expense	(Worksheet C, In 4.(D))	-	GP(h)	0.20441	-
72	Prepayments (Account 165) - Labor Allocated	(Worksheet C, In 8.G)	202,470,768	W/S	0.08533	17,276,973
73	Prepayments (Account 165) - Gross Plant	(Worksheet C, In 8.F)	4,172,771	GP(h)	0.20441	852,973
74	Prepayments (Account 165) - Transmission Only	(Worksheet C, In 8.E)	-	DA	1.00000	-
75	Prepayments (Account 165) - Unallocable	(Worksheet C, In 8.D)	(198,564,350)	NA	0.00000	-
76	TOTAL WORKING CAPITAL	(sum Ins 68 to 75)	14,284,800			23,952,155
77	IPP CONTRIBUTIONS FOR CONSTRUCTION	(Note F) (Worksheet D, In 8 (B))	(2,741,912)	DA	1.00000	(2,741,912)
78	RATE BASE (sum Ins 57, 64, 65, 66, 76, 77)		6,299,591,581			1,469,354,532

APPALACHIAN POWER 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	Production	321.80.b	1,207,840,345			
80	Distribution	322.156.b	158,709,477			
81	Customer Related Expense	322.164,171,178.b	54,479,624			
82	Regional Marketing Expenses	322.131.b	5,154,463			
83	Transmission	321.112.b	216,839,976			
84	TOTAL O&M EXPENSES	(sum Ins 79 to 83)	1,643,023,885			
85	Less: Total Account 561	(Note G) (Worksheet F, In 13.C)	11,318,542			
86	Less: Account 565	(Note H) 321.96.b	131,660,618			
87	Less: Regulatory Deferrals & Amortizations	(Note I) (Worksheet F, In 4.C)	36,094,435			
88	Total O&M Allocable to Transmission	(Ins 83 - 85 - 86 - 87)	37,766,381	TP	0.97499	36,821,982
89	Administrative and General	323.197.b (Note J)	104,281,877			
90	Less: Acct. 924, Property Insurance	323.185.b	3,238,061			
91	Acct. 9260039 PBOP Expense	PBOP Worksheet O Line 9 & 10, (Note K)	(11,363,460)			
92	Acct. 9260057 PBOP Medicare Subsidy	PBOP Worksheet O Line 11, (Note K)	-			
93	PBOP Expense Billed From AEPSC	PBOP Worksheet O Line 13, (Note K)	(983,322)			
94	Acct. 928, Reg. Com. Exp.	323.189.b	4,280,043			
95	Acct. 930.1, Gen. Advert. Exp.	323.191.b	340,610			
96	Acct. 930.2, Misc. Gen. Exp.	323.192.b	8,891,510			
97	Balance of A & G	(In 89 - sum In 90 to In 96)	99,878,435	W/S	0.08533	8,522,697
98	Plus: Acct. 924, Property Insurance	(In 90)	3,238,061	GP(h)	0.20441	661,905
99	Acct. 928 - Transmission Specific	Worksheet F In 18.(E) (Note L)	54,118	TP	0.97614	52,826
100	Acct 930.1 - Only safety related ads -Direct	Worksheet F In 35.(E) (Note L)	-	TP	0.97614	-
101	Acct 930.2 - Misc Gen. Exp. - Trans	Worksheet F In 42.(E) (Note L)	5,483,952	DA	1.00000	5,483,952
102	Settlement Approved PBOP Recovery	PBOP Worksheet O, Col. C, Line 1, (Note M)	10,717,707	W/S	0.08533	914,549
103	A & G Subtotal	(sum Ins 97 to 102)	119,372,273			15,635,930
104	O & M EXPENSE SUBTOTAL	(In 88 + In 103)	157,138,654			52,457,912
105	Plus: TEA Settlement in Account 565	Company Records (Note H)	-	DA	1.00000	-
106	Plus: Transmission Lease Payments To Affiliates in Acct 565 (Company Records) (Note H)		-	DA	1.00000	-
107	TOTAL O & M EXPENSE	(In 104 + In 105 + In 106)	157,138,654			52,457,912
108	DEPRECIATION AND AMORTIZATION EXPENSE					
109	Production	336.2-6.f	193,538,062	NA	0.00000	-
110	Distribution	336.8.f	131,046,174	NA	0.00000	-
111	Transmission	336.7.f	41,155,895	TP1	0.97084	39,955,958
112	Plus: Transmission Plant-in-Service Additions (Worksheet I)		N/A			N/A
113	General	336.10.f	4,426,414	W/S	0.08533	377,709
114	Intangible	336.1.f	14,054,278	W/S	0.08533	1,199,261
115	TOTAL DEPRECIATION AND AMORTIZATION	(Ln 109+110+ 111+112+113+114)	384,220,823			41,532,928
116	TAXES OTHER THAN INCOME	(Note N)				
117	Labor Related					
118	Payroll	Worksheet H In 23.(D)	8,400,592	W/S	0.08533	716,828
119	Plant Related					
120	Property	Worksheet H In 23.(C) & In 58.(C)	63,547,826	DA		23,887,444
121	Gross Receipts/Sales & Use	Worksheet H In 23.(F)	35,237,876	NA	0.00000	-
122	Other	Worksheet H In 23.(E)	16,050,808	GP(h)	0.20441	3,281,010
123	TOTAL OTHER TAXES	(sum Ins 118 to 122)	123,237,102			27,885,283
124	INCOME TAXES	(Note O)				
125	T=1 - {[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)} =		37.42%			
126	EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =		40.69%			
127	where WCLTD=(In 162) and WACC = (In 165)					
128	and FIT, SIT & p are as given in Note O.					
129	GRCF=1 / (1 - T) = (from In 125)		1.5979			
130	Amortized Investment Tax Credit (enter negative)	(FF1 p.114, In 19.c)	-			
131	Income Tax Calculation	(In 126 * In 134)	202,523,304			47,237,750
132	ITC adjustment	(In 129 * In 130)	-	NP(h)	0.22054	-
133	TOTAL INCOME TAXES	(sum Ins 131 to 132)	202,523,304			47,237,750
134	RETURN ON RATE BASE (Rate Base*WACC)	(In 78 * In 165)	497,666,964			116,078,828
135	INTEREST ON IPP CONTRIBUTION FOR CONST. (Note F) (Worksheet D, In 2.(B))		93,580	DA	1.00000	93,580
136	(Gains) / Losses on Sales of Plant Held for Future Use (Worksheet N, In 4, Cols. ((F) & (H))		-			-
137	Tax Impact on Net Loss / (Gain) on Sales of Plant Held for Future Use (In 136 * In126)		-			-
138	TOTAL REVENUE REQUIREMENT (sum Ins 107, 115, 123, 133, 134, 135)		1,364,880,427			285,286,282



APPALACHIAN POWER COMPANY

SUPPORTING CALCULATIONS

In No.	TRANSMISSION PLANT INCLUDED IN PJM TARIFF									
139	Total transmission plant	(In 20)							2,600,783,504	
140	Less transmission plant excluded from PJM Tariff	(Note P)							-	
141	Less transmission plant included in OATT Ancillary Services	(Worksheet A, In 23, Col. (C))	(Note Q)						65,036,094	
142	Transmission plant included in PJM Tariff	(In 139 - In 140 - In 141)							2,535,747,410	
143	Percent of transmission plant in PJM Tariff	(In 142 / In 139)						TP=	0.97499	
144	WAGES & SALARY ALLOCATOR (W/S)	(Note R)	Direct Payroll	Payroll Billed from	Total					
145	Production	354.20.b	58,244,326	AEP Service Corp. 25,814,276	84,058,602	NA	0.00000		-	
146	Transmission	354.21.b	422,523	13,257,119	13,679,642	TP	0.97499		13,337,564	
147	Regional Market Expenses	354.22.b	0	0	-	NA	0.00000		-	
148	Distribution	354.23.b	33,954,027	4,937,493	38,891,520	NA	0.00000		-	
149	Other (Excludes A&G)	354.24,25,26.b	10,302,391	9,372,240	19,674,631	NA	0.00000		-	
150	Total	(sum Ins 145 to 149)	102,923,267	53,381,128	156,304,395				13,337,564	
151	Transmission related amount							W/S=	0.08533	
152	WEIGHTED AVERAGE COST OF CAPITAL (WACC)								\$	
153	Long Term Interest	(Worksheet M, In. 21, col. (E))							190,493,163	
154	Preferred Dividends	(Worksheet M, In. 55, col. (E))							-	
155	Development of Common Stock:								Average	
156	Proprietary Capital	(Worksheet M, In. 1, col. (E))							3,528,906,683	
157	Less: Preferred Stock	(Worksheet M, In. 2, col. (E))							-	
158	Less: Account 216.1	(Worksheet M, In. 3, col. (E))							1,758,641	
159	Less: Account 219	(Worksheet M, In. 4, col. (E))							(5,964,407)	
160	Common Stock	(In 156 - In 157 - In 158 - In 159)							3,533,112,449	
161		Average \$		Capital Structure Weighting		Cost				
162	Long Term Debt (Note T) W/S M, In 11, In 22, col. (E))	4,016,871,185	Actual	Cap Limit		(Note S)		Weighted		
163	Preferred Stock (In 157)	-	53.20%	0.00%		0.0474		0.0252		
164	Commone Stock (In 160)	3,533,112,449	0.00%	0.00%		-		0.0000		
165	Total (Sum Ins 162 to 164)	7,549,983,634	46.80%	0.00%		11.49%		0.0538		
								WACC=	0.0790	
166	Capital Structure Equity Limit (Note U)	100.0%								

AEP East Companies  
Transmission Cost of Service Formula Rate  
Utilizing Actual Cost Data for 2016 with Average Ratebase Balances

APPALACHIAN POWER 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 103.
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 135.
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 4 through 13, 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 105 and 106 to determine the total O&M collected in the formula. The amounts on lines 105 and 106 are also excluded in the calculation of the FCR percentage calculated on lines 5 through 11. The addbacks on lines 105 and 106 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 105 and 106 is the APPALACHIAN POWER 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	These deductions on lines 91 through 93 are to remove from the cost of service the expenses recorded by the company for Postemployment Benefits Other than Pensions (PBOP). See Note M below for the recoverable PBOP 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 ER08-1329, recoverable PBOP expense is based on an annual total for the operating companies that is ratioed to them based on the total of actual annual PBOP costs, including charges from the AEP Service Corporation. The calculation of the recoverable amount for each company is shown on Worksheet O, and the process for updating the annual total is documented on Attachment F, Allowable PBOP Expense Formula.
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 130) multiplied by (1/1-T) . If the applicable tax rates are zero enter 0. Inputs Required: FIT = 35.00% SIT= 3.72% (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	Long Term Debt cost rate = long-term interest (In 153) /average long term debt (In 162). Preferred Stock cost rate = preferred dividends (In 154) / preferred outstanding (In 163). Common Stock cost rate (ROE) = 11.49%, the rate accepted by FERC in Docket No. ER08-1329. It includes an additional 50 basis points for PJM RTO membership. Interest expense for the true-up WACC is based on actual expenses for the true-up year. The amount of eligible hedging gains or losses included in total interest expense is limited to five basis points of the true-up capital structure. Details and calculations of the true-up weighted average cost of capital are shown on Worksheet M. Eligible Hedging Gains and Losses are defined in the Formula Protocols in the tariff, and on Worksheet M.
T	This note only applies to Indiana Michigan Power Company.
U	Per Settlement, equity for APPALACHIAN POWER COMPANY is limited to 100% of Capital Structure. If the percentage of equity exceeds the cap, the excess is included in weighted percentage of long term debt in the capital structure. During the period ended December 31, 2011 the equity cap is in effect. During this period, a change in the cap percentage must be approved via a 205 filing with the FERC.

AEP East Companies  
Cost of Service Formula Rate Using 2016 FF1 Balances  
Worksheet A Supporting Plant Balances  
APPALACHIAN POWER 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.					
<b>Plant Investment Balances</b>					
1	Production Plant In Service	FF1, page 205 Col.(g) & pg. 204 Col. (b), In 46	6,287,399,099	6,156,912,069	6,222,155,584
2	Production Asset Retirement Obligation (ARO)	FF1, page 205&204, Col.(g)&(b), Ins 15,24,34,44	90,225,576	72,548,492	81,387,034
3	Transmission Plant In Service	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 58	2,795,292,451	2,406,274,556	2,600,783,504
4	Transmission Asset Retirement Obligation	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 57	-	-	-
5	Distribution Plant In Service	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 75	3,566,941,043	3,400,127,773	3,483,534,408
6	Distribution Asset Retirement Obligation	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 74	3,069	3,069	3,069
7	General Plant In Service	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 99	221,448,904	209,277,271	215,363,087
8	General Asset Retirement Obligation	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 98	781,258	811,747	796,502
9	Intangible Plant In Service	FF1, page 205 Col.(g) & pg. 204 Col. (b), In 5	105,361,383	83,036,453	94,198,918
10	Total Property Investment Balance	(Sum of Lines: 3, 1, 5, 7, 9)	12,976,442,880	12,255,628,122	12,616,035,501
11	Total ARO Balance (included in total on line 10)	(Sum of Lines: 4, 2, 6, 8)	91,009,903	73,363,308	82,186,605
<b>Accumulated Depreciation &amp; Amortization Balances</b>					
12	Production Accumulated Depreciation	FF1, page 219, Ins 20-24, Col. (b)	2,184,905,747	2,040,955,221	2,112,930,484
13	Production ARO Accumulated Depreciation	Company Records - Note 1	29,499,535	26,667,676	28,083,606
14	Transmission Accumulated Depreciation	FF1, page 219, In 25, Col. (b)	709,981,557	705,543,470	707,762,514
15	Transmission ARO Accumulated Depreciation	Company Records - Note 1	-	-	-
16	Distribution Accumulated Depreciation	FF1, page 219, In 26, Col. (b)	1,198,723,386	1,120,248,249	1,159,485,818
17	Distribution ARO Accumulated Depreciation	Company Records - Note 1	1,792	1,723	1,757
18	General Accumulated Depreciation	FF1, page 219, In 28, Col. (b)	74,723,306	72,914,639	73,818,973
19	General ARO Accumulated Depreciation	Company Records - Note 1	634,805	643,078	638,942
20	Intangible Accumulated Amortization	FF1, page 200, In 21, Col. (b)	61,802,515	52,947,650	57,375,083
21	Total Accumulated Depreciation or Amortization	(Sum of Lines: 14, 12, 16, 18, 20)	4,230,136,511	3,992,609,229	4,111,372,870
22	Total ARO Balance (included in total on line 21)	(Sum of Lines: 15, 13, 17, 19)	30,136,132	27,312,477	28,724,305
<b>Generation Step-Up Units</b>					
23	GSU Investment Amount	Company Records - Note 1	66,708,910	63,363,278	65,036,094
24	GSU Accumulated Depreciation	Company Records - Note 1	21,229,114	20,041,792	20,635,453
25	GSU Net Balance	(Line 23 - Line 24)	45,479,795	43,321,486	44,400,641
<b>Transmission Accumulated Depreciation Net of GSU Accumulated Depreciation</b>					
26	Transmission Accumulated Depreciation	(Line 14 Above)	709,981,557	705,543,470	707,762,514
27	Less: GSU Accumulated Depreciation	(Line 24 Above)	21,229,114	20,041,792	20,635,453
28	Subtotal of Transmission Net of GSU	(Line 26 - Line 27)	688,752,443	685,501,678	687,127,061
<b>Plant Held For Future Use</b>					
29	Plant Held For Future Use	FF1, page 214, In 47, Col. (d)	4,226,482	4,741,216	4,483,849
30	Transmission Plant Held For Future	Company Records - Note 1	1,632,033	1,874,156	1,753,094
<b>Regulatory Assets and Liabilities Approved for Recovery In Ratebase</b>					
Note: Regulatory Assets & Liabilities can only be included in ratebase pursuant to a 205 filing with the FERC.					
31					-
32					-
33					-
34					-
35					-
36	Total Regulatory Deferrals Included in Ratebase		-	-	-

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

NOTE: The ratebase should not include the unamortized balance of hedging gains or losses.

AEP East Companies  
Cost of Service Formula Rate Using 2016 FF1 Balances  
Worksheet B Supporting ADIT and ITC Balances  
APPALACHIAN POWER 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	<b><u>Account 281</u></b>				
2	Year End Utility Deferrals	FF1, p. 272 - 273, ln 8, Col. (k)	302,975,148	317,728,821	310,351,985
3	Less: ARO Related Deferrals	Company Records - Note 1	-	-	-
4	Less: Other Excluded Deferrals	Company Records - Note 1	302,975,148	317,728,821	310,351,985
5	Transmission Related Deferrals	Ln 2 - ln 3 - ln 4	-	-	-
6	<b><u>Account 282</u></b>				
7	Year End Utility Deferrals	FF1, p. 274 - 275, ln 5, Col. (k)	1,799,314,927	1,631,123,390	1,715,219,159
8	Less: ARO Related Deferrals	Company Records - Note 1	19,587,464	18,375,714	18,981,589
9	Less: Other Excluded Deferrals	Company Records - Note 1	1,312,046,508	1,218,469,140	1,265,257,824
10	Transmission Related Deferrals	Ln 7 - ln 8 - ln 9	467,680,955	394,278,536	430,979,746
11	<b><u>Account 283</u></b>				
12	Year End Utility Deferrals	FF1, p. 276 - 277, ln 9, Col. (k)	427,772,320	462,557,175	445,164,748
13	Less: ARO Related Deferrals	Company Records - Note 1	10,571,050	12,274,742	11,422,896
14	Less: Other Excluded Deferrals	Company Records - Note 1	380,368,479	399,763,932	390,066,206
15	Transmission Related Deferrals	Ln 12 - ln 13 - ln 14	36,832,792	50,518,502	43,675,646
16	<b><u>Account 190</u></b>				
17	Year End Utility Deferrals	FF1, p. 234, ln 8, Col. (c)	295,894,511	312,246,298	304,070,405
18	Less: ARO Related Deferrals	Company Records - Note 1	44,526,501	49,125,163	46,825,832
19	Less: Other Excluded Deferrals	Company Records - Note 1	192,636,681	207,239,225	199,937,953
20	Transmission Related Deferrals	Ln 17 - ln 18 - ln 19	58,731,329	55,881,910	57,306,620
21	<b><u>Account 255</u></b>				
22	Year End ITC Balances	FF1, p. 266-267, ln 8, Col. (h)	915,123	1,024,877	970,000
23	Less: Balances Not Qualified for Ratebase	Company Records - Note 1	0	0	-
24	ITC Balances Includeable Ratebase	Ln 22 - ln 23	915,123	1,024,877	970,000
25	Transmission Related Deferrals	Company Records - Note 1	58,596	115,806	87,201

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.



AEP East Companies  
Cost of Service Formula Rate Using 2016 FF1 Balances  
Worksheet C Supporting Working Capital Rate Base Adjustments  
APPALACHIAN POWER COMPANY

Formula Rate  
APCo 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)	1,510,127	946,447	1,228,287			
3	General Materials & Supplies	FF1, p. 227, ln 11, Col. (c) & (b)	180,013	333,038	256,526			
4	Stores Expense (Undistributed)	FF1, p. 227, ln 16, Col. (c) & (b)	0	0	-			

Prepayment Balance Summary							
5		<u>Average of YE Balance</u>	<u>Excludable Balances</u>	<u>100% Transmission Related</u>	<u>Transmission Plant Related</u>	<u>Transmission Labor Related</u>	<u>Total Included in Ratebase (E)+(F)+(G)</u>
6	Totals as of December 31, 2016	7,927,599	(203,422,929)	0	4,505,036	206,845,492	211,350,528
7	Totals as of December 31, 2015	8,230,780	(193,705,770)	0	3,840,506	198,096,044	201,936,550
8	Average Balance	8,079,190	(198,564,350)	-	4,172,771	202,470,768	206,643,539

Prepayments Account 165 - Balance @ 12/31/2016									
9	Acc. No.	Description	2016 YE Balance	Excludable Balances	100% Transmission Related	Transmission Plant Related	Transmission Labor Related	Total Included in Ratebase (E)+(F)+(G)	Explanation
10	1650001	Prepaid Insurance	2,182,620	-		2,182,620		2,182,620	Plant Related Insurance Policies
11	165000216	Prepaid Taxes	2,032,408	2,032,408		-		-	Prepaid Taxes - Distribution
12	165000217	Prepaid Taxes	801,550			801,550		801,550	Prepaid Taxes - Property
13	1650003	Prepaid Rents	0	-			-	-	
14	1650004	Prepaid Interest	25,374	25,374				-	Prepaid Interest - Distribution
15	1650005	Prepaid Employee Benefits	239,500				239,500	239,500	Health Savings Program
16	1650006	Other Prepayments	116,848	116,848	-	-		-	PPD Sales
17	1650009	Prepaid Carry Cost-Factored AR	103,436	103,436				-	AR Factoring - Retail Only
18	1650010	Prepaid Pension Benefits	164,624,905				164,624,905	164,624,905	Prefunded Pension Expense
19	1650014	FAS 158 Qual Contra Asset	(164,624,905)	(164,624,905)				-	SFAS 158 Offset
20	1650016	FAS 112 ASSETS	0	-			-	-	SFAS 112 Overfunding Asset
21	1650021	Prepaid Insurance - EIS	1,284,616	-		1,284,616		1,284,616	Plant Related Insurance Policies
22	1650023	Prepaid Lease	236,250	-		236,250		236,250	Prepaid Lease
23	1650031	Prepaid OCIP Work Comp	324,410		-		324,410	324,410	Labor Related Expense
24	1650032	Prepaid OCIP Work Comp LT	109,502		-		109,502	109,502	Labor Related Expense
25	1650033	Prepaid OCIP Work Comp	336,856		-		336,856	336,856	Labor Related Expense
26	1650034	Prepaid OCIP Work Comp LT-Aff	119,616		-		119,616	119,616	Labor Related Expense
27	1650035	PRW without MED-D benefits	41,090,703				41,090,703	41,090,703	Labor Related Expense
28	1650036	PRW for Med-D benefits	0				-	-	
29	1650037	FAS 158 Contra-PRW exclud Med-D	(41,090,703)	(41,090,703)				-	SFAS 158 Offset
30	165001113	Prepaid Sales Taxes	0	-				-	
31	165001216	Prepaid Use Tax	14,613	14,613				-	Prepaid Use Tax - Generation
Subtotal - Form 1, p 111.57.c			7,927,599	(203,422,929)	0	4,505,036	206,845,492	211,350,528	

Prepayments Account 165 - Balance @ 12/31/ 2015									
32	Acc. No.	Description	2015 YE Balance	Excludable Balances	100% Transmission Related	Transmission Plant Related	Transmission Labor Related	Total Included in Ratebase (E)+(F)+(G)	Explanation
33	1650001	Prepaid Insurance	2,081,320	-		2,081,320		2,081,320	Plant Related Insurance Policies
34	165000215	Prepaid Taxes	2,045,305	2,045,305		-		-	Prepaid Taxes - Distribution
35	1650003	Prepaid Rents	0	-			-	-	
36	1650004	Prepaid Interest	25,818	25,818				-	Prepaid Interest - Distribution
37	1650005	Prepaid Employee Benefits	213,500	-			213,500	213,500	Health Savings Program
38	1650006	Other Prepayments	116,848	116,848	-	-		-	PPD Sales
39	1650009	Prepaid Carry Cost-Factored AR	91,198	91,198				-	AR Factoring - Retail Only
40	1650010	Prepaid Pension Benefits	166,744,628				166,744,628	166,744,628	Prefunded Pension Expense
41	1650014	FAS 158 Qual Contra Asset	(166,744,628)	(166,744,628)				-	SFAS 158 Offset
42	1650016	FAS 112 ASSETS	0	-			-	-	SFAS 112 Overfunding Asset
43	1650021	Prepaid Insurance - EIS	1,015,824	-		1,015,824		1,015,824	Plant Related Insurance Policies
44	1650023	Prepaid Lease	743,362	-		743,362		743,362	Prepaid Lease
45	1650031	Prepaid OCIP Work Comp	590,006		-		590,006	590,006	Labor Related Expense
46	1650032	Prepaid OCIP Work Comp LT	333,415		-		333,415	333,415	Labor Related Expense
47	1650033	Prepaid OCIP Work Comp	603,350		-		603,350	603,350	Labor Related Expense
48	1650034	Prepaid OCIP Work Comp LT-Aff	360,442		-		360,442	360,442	Labor Related Expense
49	1650035	PRW without MED-D benefits	29,250,703				29,250,703	29,250,703	Labor Related Expense
50	1650036	PRW for Med-D benefits	0				-	-	
51	1650037	FAS 158 Contra-PRW exclud Med-D	(29,250,703)	(29,250,703)				-	SFAS 158 Offset
52	165001113	Prepaid Sales Taxes	0	-				-	
53	165001215	Prepaid Use Tax	10,392	10,392				-	Prepaid Use Tax - Generation
Subtotal - Form 1, p 111.57.c			8,230,780	(193,705,770)	0	3,840,506	198,096,044	201,936,550	

AEP East Companies  
Cost of Service Formula Rate Using 2016 FF1 Balances  
Worksheet D Supporting IPP Credits  
APPALACHIAN POWER 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 13.b)	(2,695,122)
2	Interest Accrual (Company Records - Note 1)	(93,580)
3	Revenue Credits to Generators (Company Records - Note 1)	0
4	<u>Other Adjustments</u>	
5	Accounting Adjustment (Company Records - Note 1)	0
6		0
7	Net Funds from IPP Customers 12/31/2016 (2016 FORM 1, P269, line 13.f)	(2,788,702)
8	Average Balance for Year as Indicated in Column ((ln 1 + ln 7)/2)	<u>(2,741,912)</u>

Note 1 On this worksheet Company Records refers to APPALACHIAN POWER COMPANY's general ledger.

AEP East Companies  
Cost of Service Formula Rate Using 2016 FF1 Balances  
Worksheet E Supporting Revenue Credits  
APPALACHIAN POWER 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)	4,911,520	4,911,520	-
2	Account 451,Miscellaneous Service Revenues (FF1 p.300.17.(b); Company Records - Note 1)	3,082,505	2,724,604	357,901
3	Account 454, Rent from Electric Property (FF1 p.300.19.(b); Company Records - Note 1)	22,576,908	20,140,059	2,436,849
4	Account 4560015, Associated Business Development - (Company Records - Note 1)	9,988,387	4,104,199	5,884,188
5	Account 456 - Other Electric Revenues - (Company Records - Note 1)	66,982,868	66,982,868	-
6	Subtotal - Other Operating Revenues (Company Total equals (FF1 p. 300.26.(b))	107,542,188	98,863,250	8,678,938
7	Accounts 4470004 & 5, Revenues from Grandfathered Transmission Contracts - (Company Records - Note 1)	-	-	-
8	Total Other Operating Revenues To Reduce Revenue Requirement	107,542,188	98,863,250	8,678,938

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

AEP East Companies  
Cost of Service Formula Rate Using 2016 FF1 Balances  
Worksheet F Supporting Allocation of Specific O&M or A&G Expenses  
APPALACHIAN POWER COMPANY

Formula Rate  
APCo 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>	
<b><u>Regulatory O&amp;M Deferrals &amp; Amortizations</u></b>						
1	5660007	Virginia T-RAC UnderRecovery	35,953,985			
2	5660000	Amortization Severance	140,450			
3		<b>Total</b>	<b>\$ 36,094,435</b>			
<b><u>Detail of Account 561 Per FERC Form 1</u></b>						
4	FF1 p 321.84.b	561 - Load Dispatching	0			
5	FF1 p 321.85.b	561.1 - Load Dispatch - Reliability	34,707			
6	FF1 p 321.86.b	561.2 - Load Dispatch - Monitor & Operate Trans System	3,238,880			
7	FF1 p 321.87.b	561.3 - Load Dispatch - Trans Service & Scheduling	0			
8	FF1 p 321.88.b	561.4 - Scheduling, System Control & Dispatch	6,007,177			
9	FF1 p 321.89.b	561.5 - Reliability, Planning and Standards Development	486,908			
10	FF1 p 321.90.b	561.6 - Transmission Service Studies	0			
11	FF1 p 321.91.b	561.7 - Generation Interconnection Studies	0			
12	FF1 p 321.92.b	561.8 - Reliability, Planning and Standards Development Services	1,550,870			
13		<b>Total of Account 561</b>	<b>11,318,542</b>			
<b><u>Account 928</u></b>						
14	9280000	Regulatory Commission Exp	5,914	5,914		-
15	9280001	Regulatory Commission Exp-Adm	1,458,607	1,458,607		-
16	9280002	Regulatory Commission Exp-Case	2,761,404	2,761,404		-
17	9280005	Regulatory Commission Exp-Trans Case	54,118	0	54,118	
18		<b>Total</b>	<b>4,280,043</b>	<b>4,225,925</b>	<b>54,118</b>	
<b><u>Account 930.1</u></b>						
19	9301000	General Advertising Expenses	10,467	10,467		-
20	9301001	Newspaper Advertising Space	76,037	76,037		-
21	9301002	Radio Station Advertising Time	27,974	27,974		-
22	9301003	TV Station Advertising Time	35,175	35,175		-
23	9301004	Newspaper Advertising Prod Exp	3,846	3,846		-
24	9301005	Radio &TV Advertising Prod Exp	3,028	3,028		-
25	9301006	Spec Corporate Comm Info Proj	11,260	11,260		-
26	9301007	Special Adv Space & Prod Exp	225	225		-
27	9301008	Direct Mail and Handouts	-	-		-
28	9301009	Fairs, Shows, and Exhibits	734	734		-
29	9301010	Publicity	8,643	8,643		-
30	9301011	Dedications, Tours, & Openings	-	-		-
31	9301012	Public Opinion Surveys	123,573	123,573		-
32	9301013	Movies Slide Films & Speeches	-	-		-
33	9301014	Video Communications	1,664	1,664		-
34	9301015	Other Corporate Comm Exp	37,985	37,985		-
35		<b>Total</b>	<b>340,611</b>	<b>340,611</b>		-
<b><u>Account 930.2</u></b>						
36	9302000	Misc General Expenses	1,016,364	1,016,364		0
37	9302003	Corporate & Fiscal Expenses	139,974	139,974		0
38	9302004	Research, Develop&Demonstr Exp	3,901	3,901		0
39	9302006	Assoc Bus Dev - Materials Sold	171,706	171,706		0
40	9302007	Assoc Business Development Exp	7,559,565	2,075,613	5,483,952	
41	9302458	Non Affiliated Expense	0	0		
42		<b>Total</b>	<b>8,891,510</b>	<b>3,407,558</b>	<b>5,483,952</b>	



AEP East Companies  
Cost of Service Formula Rate Using 2016 FF1 Balances  
Worksheet G Supporting - Development of Composite State Income Tax Rate  
APPALACHIAN POWER COMPANY

Tennessee Income Tax Rate	6.50%	
Apportionment Factor - Note 2	2.34%	
Effective State Tax Rate		0.15%
West Virginia Net Income Tax Rate	6.50%	
Apportionment Factor - Note 2	54.27%	
Effective State Tax Rate		3.53%
Virginia Income Tax Rate	6.00%	
Apportionment Factor - Note 2	0.00%	
Effective State Tax Rate		0.00%
Michigan Business Income Tax Rate	6.00%	
Apportionment Factor - Note 2	0.02%	
Effective State Tax Rate		0.00%
Ohio Franchise Tax Rate	0.00%	
Phase-out Factor Note 1	0.00%	
Apportionment Factor - Note 2	0.00%	
Effective State Tax Rate		0.00%
Illinois Corporate Income Tax Rate	7.75%	
Apportionment Factor - Note 2	0.47%	
Effective State Tax Rate		0.04%
Total Effective State Income Tax Rate		<u>3.72%</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 0% in 2009. The phase-out factors can be found in the Ohio Revised Code at 5733.01(G)2(a)(v). This tax has been replaced with a Commercial Activities Tax that is included in Schedule H and H-1.
- Note 2 Apportionment Factors are determined as part of the Company's annual tax return for that jurisdiction.

AEP East Companies  
Cost of Service Formula Rate Using 2016 FF1 Balances  
Worksheet H Supporting Taxes Other than Income  
APPALACHIAN POWER COMPANY

	(A)	(B)	(C)	(D)	(E)	(F)
Line No.	Account	Total Company NOTE 1	Property	Labor	Other	Non-Allocable
1	<b>Revenue Taxes</b>					
2	Gross Receipts Tax	13,395,252				13,395,252
3	<b>Real Estate and Personal Property Taxes</b>					
4	Real and Personal Property - West Virginia	43,668,816	43,668,816			
5	Real and Personal Property - Virginia	17,182,074	17,182,074			
6	Real and Personal Property - Tennessee	1,176,886	1,176,886			
7	Real and Personal Property - Other Jurisdictions	1,520,050	1,520,050			
8	<b>Payroll Taxes</b>					
9	Federal Insurance Contribution (FICA )	8,183,031		8,183,031		
10	Federal Unemployment Tax	57,237		57,237		
11	State Unemployment Insurance	160,324		160,324		
12	<b>Production Taxes</b>					
13	State Severance Taxes	-				-
14	<b>Miscellaneous Taxes</b>					
15	State Business & Occupation Tax	22,048,042				22,048,042
16	State Public Service Commission Fees	5,652,370			5,652,370	
17	State Franchise Taxes	10,395,371			10,395,371	
18	State Lic/Registration Fee	2,967			2,967	
19	Misc. State and Local Tax	100			100	
20	Sales & Use	(218,460)				(218,460)
21	Federal Excise Tax	13,042				13,042
22	Michigan Single Business Tax	-				-
23	Total Taxes by Allocable Basis	123,237,102	63,547,826	8,400,592	16,050,808	35,237,876
	(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.					
	<b>Functional Property Tax Allocation</b>					
		Production	Transmsission	Distribution	General	Total
24	Functionalized Net Plant (Hist. TCOS, Lns 212 thru 222)	4,041,767,311	2,085,310,894	2,368,216,380	146,579,145	8,641,873,730
	<b>VIRGINIA JURISDICTION</b>					
25	Percentage of Plant in VIRGINIA JURISDICTION	8.14%	51.72%	55.76%	52.00%	
26	Net Plant in VIRGINIA JURISDICTION (Ln 24 * Ln 25)	328,999,859	1,078,522,794	1,320,517,453	76,221,155	2,804,261,262
27	Less: Net Value of Exempted Generation Plant	35,189,620				
28	Taxable Property Basis (Ln 26 - Ln 27)	293,810,239	1,078,522,794	1,320,517,453	76,221,155	2,769,071,642
29	Relative Valuation Factor	100%	100%	100%	100%	
30	Weighted Net Plant (Ln 28 * Ln 29)	293,810,239	1,078,522,794	1,320,517,453	76,221,155	
31	General Plant Allocator (Ln 30 / (Total - General Plant))	10.91%	40.05%	49.04%	-100.00%	
32	Functionalized General Plant (Ln 31 * General Plant)	8,316,301	30,527,597	37,377,257	(76,221,155)	-
33	Weighted VIRGINIA JURISDICTION Plant (Ln 30 + 32)	302,126,540	1,109,050,391	1,357,894,710	0	2,769,071,642
34	Functional Percentage (Ln 33/Total Ln 33)	10.91%	40.05%	49.04%		
35	Functionalized Expense in VIRGINIA JURISDICTION	1,874,693	6,881,651	8,425,729		17,182,074
	<b>WEST VA JURISDICTION</b>					
36	Percentage of Plant in WEST VA JURISDICTION	91.13%	45.95%	44.24%	47.82%	
37	Net Plant in WEST VA JURISDICTION (Ln 24 * Ln 36)	3,683,262,551	958,200,356	1,047,698,926	70,094,147	5,759,255,980
38	Less: Net Value of Exempted Generation Plant	3,059,765,723				
39	Taxable Property Basis (Ln 37 - Ln 38)	623,496,828	958,200,356	1,047,698,926	70,094,147	2,699,490,257
40	Relative Valuation Factor	100%	100%	100%	100%	
41	Weighted Net Plant (Ln 39 * Ln 40)	623,496,828	958,200,356	1,047,698,926	70,094,147	
42	General Plant Allocator (Ln 41 / (Total - General Plant))	23.71%	36.44%	39.85%	-100.00%	
43	Functionalized General Plant (Ln 42 * General Plant)	16,621,109	25,543,598	27,929,441	(70,094,147)	-
44	Weighted WEST VA JURISDICTION Plant (Ln 41 + 43)	640,117,937	983,743,954	1,075,628,367	0	2,699,490,257
45	Functional Percentage (Ln 44/Total Ln 44)	23.71%	36.44%	39.85%		
46	Functionalized Expense in WEST VA JURISDICTION	10,354,989	15,913,721	17,400,106		43,668,816
	<b>TENNESSEE JURISDICTION</b>					
47	Net Plant in TENNESSEE JURISDICTION (Ln 24 - Ln 26 - Ln 37)	29,504,901	48,587,744	-	263,842	78,356,488
48	Less: Net Value Exempted Generation Plant					
49	Taxable Property Basis	29,504,901	48,587,744	-	263,842	78,356,488
50	Relative Valuation Factor	100%	100%	100%	100%	
51	Weighted Net Plant (Ln 49 * Ln 50)	29,504,901	48,587,744	-	263,842	
52	General Plant Allocator (Ln 51 / (Total - General Plant))	37.78%	62.22%	0.00%	-100.00%	
53	Functionalized General Plant (Ln 53 * General Plant)	99,685	164,158	-	(263,842)	
54	Weighted TENNESSEE JURISDICTION Plant (Ln 51 + 53)	29,604,586	48,751,902	-	0	78,356,488
55	Functional Percentage (Ln 54/Total Ln 54)	37.78%	62.22%	0.00%		
56	Functionalized Expense in TENNESSEE JURISDICTION	444,650	732,236	-		1,176,886
57	Total Other Jurisdictions: (Line 7 * Net Plant Allocator)		359,837			1,520,050
58	Total Func. Property Taxes (Sum Lns 35, 46 56, 57)	12,674,333	23,887,444	25,825,835		63,547,826

AEP East Companies  
Cost of Service Formula Rate Using 2016 FF1 Balances  
Worksheet H-1 Form 1 Source Reference of Company Amounts on WS H  
APPALACHIAN POWER COMPANY

(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	13,395,252	13,633,007	P.263.1 ln 3 (i)
			(24,958)	P.263.1 ln 27 (i)
			178,569	P.263.1 ln 28 (i)
			(391,366)	P.263.1 ln 29 (i)
3	<u>Real Estate and Personal Property Taxes</u>			
4	Real and Personal Property - West Virginia	43,668,816	21,226,314	P.263 ln 33 (i)
			22,313,184	P.263 ln 34 (i)
			52,968	P.263 ln 37 (i)
			76,350	P.263 ln 38 (i)
			-	
5	Real and Personal Property - Virginia	17,182,074	2,535	P.263.2 ln 20 (i)
			16,972,269	P.263.2 ln 21 (i)
			(19,373)	P.263.2 ln 24 (i)
			226,643	P.263.2 ln 25 (i)
			-	
			-	
6	Real and Personal Property - Tennessee	1,176,886	16,310	P.263.3 ln 8 (i)
			1,160,576	P.263.3 ln 9 (i)
7	Real and Personal Property - Other Jurisdictions	1,520,050	105,195	P.263.1 ln 31 (i)
			1,414,855	P.263.1 ln 32 (i)
			-	
8	<u>Payroll Taxes</u>			
9	Federal Insurance Contribution (FICA)	8,183,031	8,183,031	P.263 ln 6 (i)
10	Federal Unemployment Tax	57,237	57,237	P.263 ln 9 (i)
11	State Unemployment Insurance	160,324	138,054	P.263.1 ln 15 (i)
			4,269	P.263.1 ln 37 (i)
			17,912	P.263.2 ln 31 (i)
			88	P.263.4 ln 21 (i)
12	<u>Production Taxes</u>		1	P.262.3 ln 20 (i)
13	State Severance Taxes	-	-	
14	<u>Miscellaneous Taxes</u>			
15	State Business & Occupation Tax	22,048,042	70,958	P.263 ln 20 (i)
			21,977,084	P.263 ln 21 (i)
			-	
16	State Public Service Commission Fees	5,652,370	2,059,360	P.263 ln 25 (i)
			3,593,010	P.263 ln 26 (i)
17	State Franchise Taxes	10,395,371	20,345	P.263.1 ln 18 (i)
			(577,925)	P.263.2 ln 10 (i)
			10,704,000	P.263.2 ln 11 (i)
			43,951	P.263.3 ln 4 (i)
			205,000	P.263.3 ln 5 (i)
			-	
			-	
			-	
18	State Lic/Registration Fee	2,967	571	P.263.1 ln 5 (i)
			65	P.263.1 ln 8 (i)
			1,700	P.263.2 ln 33 (i)
			600	P.263.2 ln 36 (i)
			(25)	P.263.2 ln 37 (i)
			21	P.263.3 ln 12 (i)
			20	P.263.3 ln 27 (i)
			15	P.263.4 ln 18 (i)
19	Misc. State and Local Tax	100	100	P.263.3 ln 22 (i)
			-	
20	Sales & Use	(218,460)	5	P.263 ln 30 (i)
			(218,465)	P.263.1 ln 26(i)
			-	
21	Federal Excise Tax	13,042	240	P.263 ln 13 (i)
			12,802	P.263 ln 14 (i)
22	Michigan Single Business Tax	-	-	
23	Total Taxes by Allocable Basis (Total Company Amount Ties to FFI p.114, Ln 14,(c))	123,237,102	123,237,102	

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



ROE w/o incentives (True-Up TCOS, ln 164)	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 162 through164)		
	%	Cost
Long Term Debt	53.20%	4.74%
Preferred Stock	0.00%	0.00%
Common Stock	46.80%	11.49%
		<u>Weighted cost</u>
		2.523%
		0.000%
		<u>5.377%</u>
	R =	7.900%

Rate Base (True-Up TCOS, ln 78)	1,469,354,532
R (from A. above)	7.900%
Return (Rate Base x R)	116,078,828

Return (from B. above)	116,078,828
Effective Tax Rate (True-Up TCOS, ln 126)	40.69%
Income Tax Calculation (Return x CIT)	47,237,750
ITC Adjustment	-
Income Taxes	47,237,750

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

Annual Revenue Requirement (True-Up TCOS, In 1)	285,286,282
T.E.A. & Lease Payments (True-Up TCOS, Lns 105 & 106)	-
Return (True-Up TCOS, In 134)	116,078,828
Income Taxes (True-Up TCOS, In 133)	<u>47,237,750</u>
Annual Revenue Requirement, Less TEA	121,969,704
Charges, Return and Taxes	

Annual Revenue Requirement, Less TEA Charges, Return and Taxes	121,969,704
Return (from I.B. above)	116,078,828
Income Taxes (from I.C. above)	47,237,750
Annual Revenue Requirement, with 0 Basis Point ROE increase	285,286,282
Depreciation (True-Up TCOS, ln 111)	39,955,958
Annual Rev. Req. w/ 0 Basis Point ROE increase, less Depreciation	245,330,325

Net Transmission Plant (True-Up TCOS, In 48)	1,848,620,349
Annual Revenue Requirement, with 0 Basis Point ROE increase	285,286,282
FCR with 0 Basis Point increase in ROE	15.43%

Annual Rev. Req. w/ 0 Basis Point ROE increase, less Dep.	245,330,325
FCR with 0 Basis Point ROE increase, less Depreciation	13.27%
FCR less Depreciation (True-Up TCOS, In 9)	<u>13.27%</u>
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, In 58,(b)):	2,406,274,556
Transmission Plant @ End of Historic Period () (P.207, In 58,(g)):	2,795,292,451
Subtotal	5,201,567,007
Average Transmission Plant Balance for	2,600,783,504
Annual Depreciation Rate (True-Up TCOS, In 111)	41,155,895
Composite Depreciation Rate	1.58%
Depreciable Life for Composite Depreciation Rate	63.19
Round to nearest whole year	63



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

### A. Base Plan Facilities

(e.g. ER05-925-000)

RTEP ID: b0318 (Amos 765/138 kV Transformer)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	1,719,834	1,719,834	-
Prior Yr True-Up	1,816,473	1,816,473	-
True-Up Adjustment	96,639	96,639	-

Details							
Investment	13,789,272	Current Year				2016	
Service Year (yyyy)	2008	ROE increase accepted by FERC (Basis Points)				-	
Service Month (1-12)	6	FCR w/o incentives, less depreciation				13.27%	
Useful life	63	FCR w/incentives approved for these facilities, less dep.				13.27%	
CIAC (Yes or No)	No	Annual Depreciation Expense				218,877	
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 #
2008	13,789,272	109,439	13,679,833	13,734,553	1,932,151	1,932,151	\$ -
2009	13,679,833	218,877	13,460,956	13,570,395	2,019,804	2,019,804	\$ -
2010	13,460,956	218,877	13,242,079	13,351,517	1,990,757	1,990,757	\$ -
2011	13,242,079	218,877	13,023,201	13,132,640	1,961,709	1,961,709	\$ -
2012	13,023,201	218,877	12,804,324	12,913,763	1,932,662	1,932,662	\$ -
2013	12,804,324	218,877	12,585,447	12,694,885	1,903,615	1,903,615	\$ -
2014	12,585,447	218,877	12,366,569	12,476,008	1,874,568	1,874,568	\$ -
2015	12,366,569	218,877	12,147,692	12,257,131	1,845,521	1,845,521	\$ -
2016	12,147,692	218,877	11,928,815	12,038,253	1,816,473	1,816,473	\$ -
2017	11,928,815	218,877	11,709,937	11,819,376	1,787,426	1,787,426	\$ -
2018	11,709,937	218,877	11,491,060	11,600,499	1,758,379	1,758,379	\$ -
2019	11,491,060	218,877	11,272,183	11,381,621	1,729,332	1,729,332	\$ -
2020	11,272,183	218,877	11,053,305	11,162,744	1,700,285	1,700,285	\$ -
2021	11,053,305	218,877	10,834,428	10,943,867	1,671,237	1,671,237	\$ -
2022	10,834,428	218,877	10,615,551	10,724,989	1,642,190	1,642,190	\$ -
2023	10,615,551	218,877	10,396,673	10,506,112	1,613,143	1,613,143	\$ -
2024	10,396,673	218,877	10,177,796	10,287,235	1,584,096	1,584,096	\$ -
2025	10,177,796	218,877	9,958,919	10,068,357	1,555,049	1,555,049	\$ -
2026	9,958,919	218,877	9,740,041	9,849,480	1,526,001	1,526,001	\$ -
2027	9,740,041	218,877	9,521,164	9,630,603	1,496,954	1,496,954	\$ -
2028	9,521,164	218,877	9,302,287	9,411,725	1,467,907	1,467,907	\$ -
2029	9,302,287	218,877	9,083,409	9,192,848	1,438,860	1,438,860	\$ -
2030	9,083,409	218,877	8,864,532	8,973,971	1,409,813	1,409,813	\$ -
2031	8,864,532	218,877	8,645,655	8,755,093	1,380,765	1,380,765	\$ -
2032	8,645,655	218,877	8,426,777	8,536,216	1,351,718	1,351,718	\$ -
2033	8,426,777	218,877	8,207,900	8,317,339	1,322,671	1,322,671	\$ -
2034	8,207,900	218,877	7,989,023	8,098,461	1,293,624	1,293,624	\$ -
2035	7,989,023	218,877	7,770,145	7,879,584	1,264,577	1,264,577	\$ -
2036	7,770,145	218,877	7,551,268	7,660,707	1,235,529	1,235,529	\$ -
2037	7,551,268	218,877	7,332,391	7,441,829	1,206,482	1,206,482	\$ -
2038	7,332,391	218,877	7,113,513	7,222,952	1,177,435	1,177,435	\$ -
2039	7,113,513	218,877	6,894,636	7,004,075	1,148,388	1,148,388	\$ -
2040	6,894,636	218,877	6,675,759	6,785,197	1,119,341	1,119,341	\$ -
2041	6,675,759	218,877	6,456,881	6,566,320	1,090,293	1,090,293	\$ -
2042	6,456,881	218,877	6,238,004	6,347,443	1,061,246	1,061,246	\$ -
2043	6,238,004	218,877	6,019,127	6,128,565	1,032,199	1,032,199	\$ -
2044	6,019,127	218,877	5,800,249	5,909,688	1,003,152	1,003,152	\$ -
2045	5,800,249	218,877	5,581,372	5,690,811	974,105	974,105	\$ -
2046	5,581,372	218,877	5,362,495	5,471,933	945,057	945,057	\$ -
2047	5,362,495	218,877	5,143,617	5,253,056	916,010	916,010	\$ -
2048	5,143,617	218,877	4,924,740	5,034,179	886,963	886,963	\$ -
2049	4,924,740	218,877	4,705,863	4,815,301	857,916	857,916	\$ -
2050	4,705,863	218,877	4,486,985	4,596,424	828,869	828,869	\$ -
2051	4,486,985	218,877	4,268,108	4,377,547	799,821	799,821	\$ -
2052	4,268,108	218,877	4,049,231	4,158,669	770,774	770,774	\$ -
2053	4,049,231	218,877	3,830,353	3,939,792	741,727	741,727	\$ -
2054	3,830,353	218,877	3,611,476	3,720,915	712,680	712,680	\$ -
2055	3,611,476	218,877	3,392,599	3,502,037	683,633	683,633	\$ -
2056	3,392,599	218,877	3,173,721	3,283,160	654,585	654,585	\$ -
2057	3,173,721	218,877	2,954,844	3,064,283	625,538	625,538	\$ -
2058	2,954,844	218,877	2,735,967	2,845,405	596,491	596,491	\$ -
2059	2,735,967	218,877	2,517,089	2,626,528	567,444	567,444	\$ -
2060	2,517,089	218,877	2,298,212	2,407,651	538,397	538,397	\$ -
2061	2,298,212	218,877	2,079,335	2,188,773	509,349	509,349	\$ -
2062	2,079,335	218,877	1,860,457	1,969,896	480,302	480,302	\$ -
2063	1,860,457	218,877	1,641,580	1,751,019	451,255	451,255	\$ -
2064	1,641,580	218,877	1,422,703	1,532,141	422,208	422,208	\$ -
2065	1,422,703	218,877	1,203,825	1,313,264	393,161	393,161	\$ -
2066	1,203,825	218,877	984,948	1,094,387	364,113	364,113	\$ -
2067	984,948	218,877	766,071	875,509	335,066	335,066	\$ -
Project Totals		13,023,201		71,400,814	71,400,814	71,400,814	

\*\* 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	35,303	35,303	-
Prior Yr True-Up	344,461	344,461	-
True-Up Adjustment	309,158	309,158	-

**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.



### 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	1,563,801	1,563,801	-
Prior Yr True-Up	2,290,496	2,290,496	-
True-Up Adjustment	726,695	726,695	-

Details			
Investment	15,807,797	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	13.27%
Useful life	63	FCR w/incentives approved for these facilities, less dep.	13.27%
CIAC (Yes or No)	No	Annual Depreciation Expense	250.91

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	15,807,797	62,729	15,745,068	15,776,432	2,156,419	2,156,419	\$ -
2015	15,745,068	250,917	15,494,150	15,619,609	2,323,795	2,323,795	\$ -
2016	15,494,150	250,917	15,243,233	15,368,692	2,290,496	2,290,496	\$ -
2017	15,243,233	250,917	14,992,315	15,117,774	2,257,197	2,257,197	\$ -
2018	14,992,315	250,917	14,741,398	14,866,857	2,223,897	2,223,897	\$ -
2019	14,741,398	250,917	14,490,481	14,615,939	2,190,598	2,190,598	\$ -
2020	14,490,481	250,917	14,239,563	14,365,022	2,157,299	2,157,299	\$ -
2021	14,239,563	250,917	13,988,646	14,114,104	2,124,000	2,124,000	\$ -
2022	13,988,646	250,917	13,737,728	13,863,187	2,090,700	2,090,700	\$ -
2023	13,737,728	250,917	13,486,811	13,612,270	2,057,401	2,057,401	\$ -
2024	13,486,811	250,917	13,235,894	13,361,352	2,024,102	2,024,102	\$ -
2025	13,235,894	250,917	12,984,976	13,110,435	1,990,803	1,990,803	\$ -
2026	12,984,976	250,917	12,734,059	12,859,517	1,957,503	1,957,503	\$ -
2027	12,734,059	250,917	12,483,141	12,608,600	1,924,204	1,924,204	\$ -
2028	12,483,141	250,917	12,232,224	12,357,683	1,890,905	1,890,905	\$ -
2029	12,232,224	250,917	11,981,306	12,106,765	1,857,606	1,857,606	\$ -
2030	11,981,306	250,917	11,730,389	11,855,848	1,824,306	1,824,306	\$ -
2031	11,730,389	250,917	11,479,472	11,604,930	1,791,007	1,791,007	\$ -
2032	11,479,472	250,917	11,228,554	11,354,013	1,757,708	1,757,708	\$ -
2033	11,228,554	250,917	10,977,637	11,103,096	1,724,409	1,724,409	\$ -
2034	10,977,637	250,917	10,726,719	10,852,178	1,691,109	1,691,109	\$ -
2035	10,726,719	250,917	10,475,802	10,601,261	1,657,810	1,657,810	\$ -
2036	10,475,802	250,917	10,224,885	10,350,343	1,624,511	1,624,511	\$ -
2037	10,224,885	250,917	9,973,967	10,099,426	1,591,212	1,591,212	\$ -
2038	9,973,967	250,917	9,723,050	9,848,508	1,557,913	1,557,913	\$ -
2039	9,723,050	250,917	9,472,132	9,597,591	1,524,613	1,524,613	\$ -
2040	9,472,132	250,917	9,221,215	9,346,674	1,491,314	1,491,314	\$ -
2041	9,221,215	250,917	8,970,298	9,095,756	1,458,015	1,458,015	\$ -
2042	8,970,298	250,917	8,719,380	8,844,839	1,424,716	1,424,716	\$ -
2043	8,719,380	250,917	8,468,463	8,593,921	1,391,416	1,391,416	\$ -
2044	8,468,463	250,917	8,217,545	8,343,004	1,358,117	1,358,117	\$ -
2045	8,217,545	250,917	7,966,628	8,092,087	1,324,818	1,324,818	\$ -
2046	7,966,628	250,917	7,715,710	7,841,169	1,291,519	1,291,519	\$ -
2047	7,715,710	250,917	7,464,793	7,590,252	1,258,219	1,258,219	\$ -
2048	7,464,793	250,917	7,213,876	7,339,334	1,224,920	1,224,920	\$ -
2049	7,213,876	250,917	6,962,958	7,088,411	1,191,621	1,191,621	\$ -
2050	6,962,958	250,917	6,712,041	6,837,499	1,158,322	1,158,322	\$ -
2051	6,712,041	250,917	6,461,123	6,586,582	1,125,022	1,125,022	\$ -
2052	6,461,123	250,917	6,210,206	6,335,665	1,091,723	1,091,723	\$ -

Project Totals	14,866,857	82,285,328	82,285,328
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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: b2021 (Kanawha River Gen Retirement - Upgrades)

**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]

Project Totals	2,266,265	12,662,734	12,662,734
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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.



### A. Base Plan Facilities

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	2,089,493	2,089,493	-
Prior Yr True-Up	2,218,535	2,218,535	-
True-Up Adjustment	129,042	129,042	-

**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.

Facilities receiving incentives accepted by FERC in Docket No.	(e.g. ER05-925-000)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	8,871,247	8,871,247	-
Prior Yr True-Up	-	-	-
True-Up Adjustment	(8,871,247)	(8,871,247)	-

[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.

### A. Base Plan Facilities

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	13,022,465	13,022,465	-
Prior Yr True-Up	532,423	532,423	-
True-Up Adjustment	(12,490,042)	(12,490,042)	-

**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.



### Facilities receiving incentives accepted by FERC in Docket No.

(e.g. ER05-925-000)

**Project Description:** RTEP ID: b1663.2 (Jacksons Ferry 765 kV breakers, switches, bus work, and relays)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	780,577	780,577	-
Prior Yr True-Up	808,771	808,771	-
True-Up Adjustment	28,194	28,194	-

Details			
Investment	5,482,087	Current Year	2016
Service Year (yyyy)	2015	ROE increase accepted by FERC (Basis Points)	-
Service Month (1-12)	12	FCR w/o incentives, less depreciation	13.27%
Useful life	63	FCR w/incentives approved for these facilities, less dep.	13.27%
CIAC (Yes or No)	No	Annual Depreciation Expense	87,017

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	5,482,087	-	5,482,087	5,482,087	727,528	727,528	\$ -
2016	5,482,087	87,017	5,395,070	5,438,578	808,771	808,771	\$ -
2017	5,395,070	87,017	5,308,052	5,351,561	797,223	797,223	\$ -
2018	5,308,052	87,017	5,221,035	5,264,544	785,675	785,675	\$ -
2019	5,221,035	87,017	5,134,018	5,177,527	774,127	774,127	\$ -
2020	5,134,018	87,017	5,047,001	5,090,509	762,579	762,579	\$ -
2021	5,047,001	87,017	4,959,983	5,003,492	751,030	751,030	\$ -
2022	4,959,983	87,017	4,872,966	4,916,475	739,482	739,482	\$ -
2023	4,872,966	87,017	4,785,949	4,829,458	727,934	727,934	\$ -
2024	4,785,949	87,017	4,698,932	4,742,440	716,386	716,386	\$ -
2025	4,698,932	87,017	4,611,914	4,655,423	704,838	704,838	\$ -
2026	4,611,914	87,017	4,524,897	4,568,406	693,290	693,290	\$ -
2027	4,524,897	87,017	4,437,880	4,481,389	681,742	681,742	\$ -
2028	4,437,880	87,017	4,350,863	4,394,371	670,194	670,194	\$ -
2029	4,350,863	87,017	4,263,845	4,307,354	658,646	658,646	\$ -
2030	4,263,845	87,017	4,176,828	4,220,337	647,098	647,098	\$ -
2031	4,176,828	87,017	4,089,811	4,133,320	635,550	635,550	\$ -
2032	4,089,811	87,017	4,002,794	4,046,302	624,002	624,002	\$ -
2033	4,002,794	87,017	3,915,776	3,959,285	612,454	612,454	\$ -
2034	3,915,776	87,017	3,828,759	3,872,268	600,906	600,906	\$ -
2035	3,828,759	87,017	3,741,742	3,785,251	589,358	589,358	\$ -
2036	3,741,742	87,017	3,654,725	3,698,233	577,810	577,810	\$ -
2037	3,654,725	87,017	3,567,707	3,611,216	566,262	566,262	\$ -
2038	3,567,707	87,017	3,480,690	3,524,199	554,714	554,714	\$ -
2039	3,480,690	87,017	3,393,673	3,437,182	543,165	543,165	\$ -
2040	3,393,673	87,017	3,306,656	3,350,164	531,617	531,617	\$ -
2041	3,306,656	87,017	3,219,638	3,263,147	520,069	520,069	\$ -
2042	3,219,638	87,017	3,132,621	3,176,130	508,521	508,521	\$ -
2043	3,132,621	87,017	3,045,604	3,089,113	496,973	496,973	\$ -
2044	3,045,604	87,017	2,958,587	3,002,095	485,425	485,425	\$ -
2045	2,958,587	87,017	2,871,569	2,915,078	473,877	473,877	\$ -
2046	2,871,569	87,017	2,784,552	2,828,061	462,329	462,329	\$ -
2047	2,784,552	87,017	2,697,535	2,741,044	450,781	450,781	\$ -
2048	2,697,535	87,017	2,610,518	2,654,026	439,233	439,233	\$ -
2049	2,610,518	87,017	2,523,500	2,567,009	427,685	427,685	\$ -
2050	2,523,500	87,017	2,436,483	2,479,992	416,137	416,137	\$ -
2051	2,436,483	87,017	2,349,466	2,392,974	404,589	404,589	\$ -
2052	2,349,466	87,017	2,262,449	2,305,957	393,041	393,041	\$ -
2053	2,262,449	87,017	2,175,431	2,218,940	381,493	381,493	\$ -
2054	2,175,431	87,017	2,088,414	2,131,923	369,945	369,945	\$ -
2055	2,088,414	87,017	2,001,397	2,044,905	358,397	358,397	\$ -
2056	2,001,397	87,017	1,914,380	1,957,888	346,849	346,849	\$ -
2057	1,914,380	87,017	1,827,362	1,870,871	335,300	335,300	\$ -
2058	1,827,362	87,017	1,740,345	1,783,854	323,752	323,752	\$ -
2059	1,740,345	87,017	1,653,328	1,696,836	312,204	312,204	\$ -
2060	1,653,328	87,017	1,566,311	1,609,819	300,656	300,656	\$ -
2061	1,566,311	87,017	1,479,293	1,522,802	289,108	289,108	\$ -
2062	1,479,293	87,017	1,392,276	1,435,785	277,560	277,560	\$ -
2063	1,392,276	87,017	1,305,259	1,348,767	266,012	266,012	\$ -
2064	1,305,259	87,017	1,218,242	1,261,750	254,464	254,464	\$ -
2065	1,218,242	87,017	1,131,224	1,174,733	242,916	242,916	\$ -
2066	1,131,224	87,017	1,044,207	1,087,716	231,368	231,368	\$ -
2067	1,044,207	87,017	957,190	1,000,698	219,820	219,820	\$ -
2068	957,190	87,017	870,173	913,681	208,272	208,272	\$ -
2069	870,173	87,017	783,155	826,664	196,724	196,724	\$ -
2070	783,155	87,017	696,138	739,647	185,176	185,176	\$ -
2071	696,138	87,017	609,121	652,629	173,628	173,628	\$ -
2072	609,121	87,017	522,104	565,612	162,080	162,080	\$ -
2073	522,104	87,017	435,086	478,595	150,532	150,532	\$ -
2074	435,086	87,017	348,069	391,578	138,984	138,984	\$ -

Project Totals	5,134,018	28,686,278	28,686,278
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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: b1875 (138 kV Bradley to McClung upgrades)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	1,117	1,117	-
Prior Yr True-Up	57,293	57,293	-
True-Up Adjustment	56,176	56,176	-

Details			
Investment	395,407	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	13.27%
Useful life	63	FCR w/incentives approved for these facilities, less dep.	13.27%
CIAC (Yes or No)	No	Annual Depreciation Expense	6,276

**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 ##
2014	395,407	1,569	393,838	394,622	53,939	53,939	\$ -
2015	393,838	6,276	387,562	390,700	58,126	58,126	\$ -
2016	387,562	6,276	381,285	384,423	57,293	57,293	\$ -
2017	381,285	6,276	375,009	378,147	56,460	56,460	\$ -
2018	375,009	6,276	368,733	371,871	55,627	55,627	\$ -
2019	368,733	6,276	362,456	365,595	54,794	54,794	\$ -
2020	362,456	6,276	356,180	359,318	53,961	53,961	\$ -
2021	356,180	6,276	349,904	353,042	53,128	53,128	\$ -
2022	349,904	6,276	343,628	346,766	52,296	52,296	\$ -
2023	343,628	6,276	337,351	340,489	51,463	51,463	\$ -
2024	337,351	6,276	331,075	334,213	50,630	50,630	\$ -
2025	331,075	6,276	324,799	327,937	49,797	49,797	\$ -
2026	324,799	6,276	318,522	321,660	48,964	48,964	\$ -
2027	318,522	6,276	312,246	315,384	48,131	48,131	\$ -
2028	312,246	6,276	305,970	309,108	47,298	47,298	\$ -
2029	305,970	6,276	299,693	302,832	46,465	46,465	\$ -
2030	299,693	6,276	293,417	296,555	45,632	45,632	\$ -
2031	293,417	6,276	287,141	290,279	44,799	44,799	\$ -
2032	287,141	6,276	280,864	284,003	43,966	43,966	\$ -
2033	280,864	6,276	274,588	277,726	43,133	43,133	\$ -
2034	274,588	6,276	268,312	271,450	42,300	42,300	\$ -
2035	268,312	6,276	262,036	265,174	41,467	41,467	\$ -
2036	262,036	6,276	255,759	258,897	40,635	40,635	\$ -
2037	255,759	6,276	249,483	252,621	39,802	39,802	\$ -
2038	249,483	6,276	243,207	246,345	38,969	38,969	\$ -
2039	243,207	6,276	236,930	240,069	38,136	38,136	\$ -
2040	236,930	6,276	230,654	233,792	37,303	37,303	\$ -
2041	230,654	6,276	224,378	227,516	36,470	36,470	\$ -
2042	224,378	6,276	218,101	221,240	35,637	35,637	\$ -
2043	218,101	6,276	211,825	214,963	34,804	34,804	\$ -
2044	211,825	6,276	205,549	208,687	33,971	33,971	\$ -
2045	205,549	6,276	199,273	202,411	33,138	33,138	\$ -
2046	199,273	6,276	192,996	196,134	32,305	32,305	\$ -
2047	192,996	6,276	186,720	189,858	31,472	31,472	\$ -
2048	186,720	6,276	180,444	183,582	30,639	30,639	\$ -
2049	180,444	6,276	174,167	177,306	29,807	29,807	\$ -
2050	174,167	6,276	167,891	171,029	28,974	28,974	\$ -
2051	167,891	6,276	161,615	164,753	28,141	28,141	\$ -
2052	161,615	6,276	155,338	158,477	27,308	27,308	\$ -
2053	155,338	6,276	149,062	152,200	26,475	26,475	\$ -
2054	149,062	6,276	142,786	145,924	25,642	25,642	\$ -
2055	142,786	6,276	136,510	139,648	24,809	24,809	\$ -
2056	136,510	6,276	130,233	133,371	23,976	23,976	\$ -
2057	130,233	6,276	123,957	127,095	23,143	23,143	\$ -
2058	123,957	6,276	117,681	120,819	22,310	22,310	\$ -
2059	117,681	6,276	111,404	114,543	21,477	21,477	\$ -
2060	111,404	6,276	105,128	108,266	20,644	20,644	\$ -
2061	105,128	6,276	98,852	101,990	19,811	19,811	\$ -
2062	98,852	6,276	92,575	95,714	18,978	18,978	\$ -
2063	92,575	6,276	86,299	89,437	18,146	18,146	\$ -
2064	86,299	6,276	80,023	83,161	17,313	17,313	\$ -
2065	80,023	6,276	73,747	76,885	16,480	16,480	\$ -
2066	73,747	6,276	67,470	70,608	15,647	15,647	\$ -
2067	67,470	6,276	61,194	64,332	14,814	14,814	\$ -
2068	61,194	6,276	54,918	58,056	13,981	13,981	\$ -
2069	54,918	6,276	48,641	51,779	13,148	13,148	\$ -
2070	48,641	6,276	42,365	45,503	12,315	12,315	\$ -
2071	42,365	6,276	36,089	39,227	11,482	11,482	\$ -
2072	36,089	6,276	29,812	32,951	10,649	10,649	\$ -
2073	29,812	6,276	23,536	26,674	9,816	9,816	\$ -

[illegible]

Project Totals	371,871
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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: b1797.1 (Reconductor portion of Cloverdale-Lexington 500 kV line)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	5,862,811	5,862,811	-
Prior Yr True-Up	6,790,254	6,790,254	-
True-Up Adjustment	927,443	927,443	-

Details			
Investment	48,460,332	Current Year	2016
Service Year (yyyy)	2016	ROE increase accepted by FERC (Basis Points)	-
Service Month (1-12)	6	FCR w/o incentives, less depreciation	13.27%
Useful life	63	FCR w/incentives approved for these facilities, less dep.	13.27%
CIAC (Yes or No)	No	Annual Depreciation Expense	769,212

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	48,460,332	384,606	48,075,726	48,268,029	6,790,254	6,790,254	\$ -
2017	48,075,726	769,212	47,306,515	47,691,120	7,098,298	7,098,298	\$ -
2018	47,306,515	769,212	46,537,303	46,921,909	6,996,216	6,996,216	\$ -
2019	46,537,303	769,212	45,768,091	46,152,697	6,894,134	6,894,134	\$ -
2020	45,768,091	769,212	44,998,880	45,383,486	6,792,052	6,792,052	\$ -
2021	44,998,880	769,212	44,229,668	44,614,274	6,689,970	6,689,970	\$ -
2022	44,229,668	769,212	43,460,456	43,845,062	6,587,888	6,587,888	\$ -
2023	43,460,456	769,212	42,691,245	43,075,851	6,485,806	6,485,806	\$ -
2024	42,691,245	769,212	41,922,033	42,306,639	6,383,724	6,383,724	\$ -
2025	41,922,033	769,212	41,152,822	41,537,427	6,281,642	6,281,642	\$ -
2026	41,152,822	769,212	40,383,610	40,768,216	6,179,560	6,179,560	\$ -
2027	40,383,610	769,212	39,614,398	39,999,004	6,077,478	6,077,478	\$ -
2028	39,614,398	769,212	38,845,187	39,229,793	5,975,396	5,975,396	\$ -
2029	38,845,187	769,212	38,075,975	38,460,581	5,873,314	5,873,314	\$ -
2030	38,075,975	769,212	37,306,764	37,691,369	5,771,232	5,771,232	\$ -
2031	37,306,764	769,212	36,537,552	36,922,158	5,669,150	5,669,150	\$ -
2032	36,537,552	769,212	35,768,340	36,152,946	5,567,067	5,567,067	\$ -
2033	35,768,340	769,212	34,999,129	35,383,734	5,464,985	5,464,985	\$ -
2034	34,999,129	769,212	34,229,917	34,614,523	5,362,903	5,362,903	\$ -
2035	34,229,917	769,212	33,460,705	33,845,311	5,260,821	5,260,821	\$ -
2036	33,460,705	769,212	32,691,494	33,076,100	5,158,739	5,158,739	\$ -
2037	32,691,494	769,212	31,922,282	32,306,888	5,056,657	5,056,657	\$ -
2038	31,922,282	769,212	31,153,071	31,537,676	4,954,575	4,954,575	\$ -
2039	31,153,071	769,212	30,383,859	30,768,465	4,852,493	4,852,493	\$ -
2040	30,383,859	769,212	29,614,647	29,999,253	4,750,411	4,750,411	\$ -
2041	29,614,647	769,212	28,845,436	29,230,042	4,648,329	4,648,329	\$ -
2042	28,845,436	769,212	28,076,224	28,460,830	4,546,247	4,546,247	\$ -
2043	28,076,224	769,212	27,307,012	27,691,618	4,444,165	4,444,165	\$ -
2044	27,307,012	769,212	26,537,801	26,922,407	4,342,083	4,342,083	\$ -
2045	26,537,801	769,212	25,768,589	26,153,195	4,240,001	4,240,001	\$ -
2046	25,768,589	769,212	24,999,378	25,383,983	4,137,919	4,137,919	\$ -
2047	24,999,378	769,212	24,230,166	24,614,772	4,035,837	4,035,837	\$ -
2048	24,230,166	769,212	23,460,954	23,845,560	3,933,755	3,933,755	\$ -
2049	23,460,954	769,212	22,691,743	23,076,349	3,831,673	3,831,673	\$ -
2050	22,691,743	769,212	21,922,531	22,307,137	3,729,591	3,729,591	\$ -
2051	21,922,531	769,212	21,153,320	21,537,925	3,627,509	3,627,509	\$ -
2052	21,153,320	769,212	20,384,108	20,768,714	3,525,427	3,525,427	\$ -
2053	20,384,108	769,212	19,614,896	19,999,502	3,423,345	3,423,345	\$ -
2054	19,614,896	769,212	18,845,685	19,230,290	3,321,263	3,321,263	\$ -
2055	18,845,685	769,212	18,076,473	18,461,079	3,219,181	3,219,181	\$ -
2056	18,076,473	769,212	17,307,261	17,691,867	3,117,099	3,117,099	\$ -
2057	17,307,261	769,212	16,538,050	16,922,656	3,015,016	3,015,016	\$ -
2058	16,538,050	769,212	15,768,838	16,153,444	2,912,934	2,912,934	\$ -
2059	15,768,838	769,212	14,999,627	15,384,232	2,810,852	2,810,852	\$ -
2060	14,999,627	769,212	14,230,415	14,615,021	2,708,770	2,708,770	\$ -
2061	14,230,415	769,212	13,461,203	13,845,809	2,606,688	2,606,688	\$ -
2062	13,461,203	769,212	12,691,992	13,076,598	2,504,606	2,504,606	\$ -
2063	12,691,992	769,212	11,922,780	12,307,386	2,402,524	2,402,524	\$ -
2064	11,922,780	769,212	11,153,568	11,538,174	2,300,442	2,300,442	\$ -
2065	11,153,568	769,212	10,384,357	10,768,963	2,198,360	2,198,360	\$ -
2066	10,384,357	769,212	9,615,145	9,999,751	2,096,278	2,096,278	\$ -
2067	9,615,145	769,212	8,845,934	9,230,539	1,994,196	1,994,196	\$ -
2068	8,845,934	769,212	8,076,722	8,461,328	1,892,114	1,892,114	\$ -
2069	8,076,722	769,212	7,307,510	7,692,116	1,790,032	1,790,032	\$ -
2070	7,307,510	769,212	6,538,299	6,922,905	1,687,950	1,687,950	\$ -
2071	6,538,299	769,212	5,769,087	6,153,693	1,585,868	1,585,868	\$ -
2072	5,769,087	769,212	4,999,876	5,384,481	1,483,786	1,483,786	\$ -
2073	4,999,876	769,212	4,230,664	4,615,270	1,381,704	1,381,704	\$ -
2074	4,230,664	769,212	3,461,452	3,846,058	1,279,622	1,279,622	\$ -
2075	3,461,452	769,212	2,692,241	3,076,846	1,177,540	1,177,540	\$ -

Project Totals	45,768,091	250,927,471	250,927,471
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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: b1712.1 (Altavista-Leesville 138kV line)

2016	Rev Require	W Incentives	Incentive Amounts
Prior Yr Projected	0	0	-
Prior Yr True-Up	36,996	36,996	-
True-Up Adjustment	36,996	36,996	-

Details			
Investment	267,989	Current Year	2016
Service Year (yyyy)	2011	ROE increase accepted by FERC (Basis Points)	-
Service Month (1-12)	6	FCR w/o incentives, less depreciation	13.27%
Useful life	63	FCR w/incentives approved for these facilities, less dep.	13.27%
CIAC (Yes or No)	No	Annual Depreciation Expense	4,254

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]

Project Totals	253,101	1,387,646	1,387,646
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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.

AEP East Companies  
Cost of Service Formula Rate Using 2016 FF1 Balances  
Worksheet L Supporting Projected Cost of Debt  
APPALACHIAN POWER COMPANY

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

<u>Line</u> <u>Number</u>	<u>(A)</u> <u>Issuance</u>	<u>(B)</u> <u>Principle Outstanding</u>	<u>(C)</u> <u>Interest Rate</u>	<u>(D)</u> <u>Annual Expense</u> (See Note S on Projected Template)	<u>(E)</u> <u>Notes</u>
1	<b>Long Term Debt (FF1.p. 256-257.h)</b>				
2	Advances From Associated Co.	-	0.000%	-	
3	Appalachian Consumer Rate Relief Funding Debenture:				
4	Tranche A-1 Due 2024	157,618,952	2.008%	3,164,358	
5	Tranche A-2 Due 2031	164,500,000	3.772%	6,205,269	
6	<b>Installment Purchase Contracts (FF1.p. 256-257.h, a)</b>				
7	WV EDA Amos Project, Series 2009A	54,375,000	1.490%	810,188	
8	WV EDA Amos Project, Series 2009B	50,000,000	1.550%	775,000	
9	WV EDA IPC Mountaineer Project, Series 2008A	75,000,000	1.100%	825,000	
10	WV EDA IPC Mountaineer Project, Series 2008B	50,275,000	1.100%	553,025	
11	Russell County, Va Series K	17,500,000	4.625%	809,375	
12	Amos Project, Series 2010A	50,000,000	5.375%	2,687,500	
13	Amos Project, Series 2011A	65,350,000	1.700%	1,110,950	
14	IPC Putnam County, WV, Series 2008C	30,000,000	3.250%	975,000	
15	IPC Putnam County, WV, Series 2008D	40,000,000	3.250%	1,300,000	
16	Mason County WV, Series L	100,000,000	1.625%	1,625,000	
17	Amos Project, Series 2015A	86,000,000	1.900%	1,634,000	
18	Senior Unsecured Notes - Series S	-	0.000%	-	
19	Senior Unsecured Notes - Series T	350,000,000	4.600%	16,100,000	
20	Senior Unsecured Notes - Series I	-	0.000%	-	
21	Senior Unsecured Notes - Series K	250,000,000	5.000%	12,500,000	
22	Senior Unsecured Notes - Series L	250,000,000	5.800%	14,500,000	
23	Senior Unsecured Notes - Series H	200,000,000	5.950%	11,900,000	
24	Senior Unsecured Notes - Series N	250,000,000	6.375%	15,937,500	
25	Senior Unsecured Notes - Series P	250,000,000	6.700%	16,750,000	
26	Senior Unsecured Notes - Series Q	500,000,000	7.000%	35,000,000	
27	Senior Unsecured Notes - Series R	-	7.950%	-	
28	Floating Rate Senior Unsecured Notes - Series U	300,000,000	4.400%	13,200,000	
29	Senior Unsecured Notes - Series V	300,000,000	3.400%	10,200,000	
30	Senior Unsecured Notes - Series W	350,000,000	4.450%	15,575,000	
31	Floating Rate Term Credit Agreement	125,000,000	2.060%	2,575,000	
32	Sale/Leaseback - Skimmer Station	2,241,308	13.707%	307,205	
33					
34					
35					
36	<u>Issuance Discount, Premium, &amp; Expenses:</u>				
37	Auction Fees	FF1.p. 256 & 257.Lines Described as Fees		-	
38	Allowable Hedge Amortization (See Ln 54 Below)			(1,128,890)	
39	Amort of Debt Discount and Expenses	FF1.p. 117.63.c		2,982,641	
40	Amort of Debt Premimums (Enter Negative)	FF1.p. 117.65.c		-	
41	<u>Reacquired Debt:</u>				
42	Amortization of Loss	FF1.p. 117.64.c		4,269,063	
43	Amortization of Gain	FF1.p. 117.66.c		-	
44	<b>Total Interest on Long Term Debt</b>	4,067,860,260	4.75%	193,142,183	
45	<b>Preferred Stock (FF1.p. 250-251)</b>	<b>Preferred Shares Outstanding</b>			
46		-	0.00%	-	
47				-	
48				-	
49	<b>Dividends on Preferred Stock</b>	-	0.00%	-	
50	Eligible Hedging Gains and Losses (WS M, Ln 34, (E))			(1,128,890)	
51	Total Projected Capital Structure Balance for 2017 (Projected TCOS, Ln 165)			7,658,001,053	
52	Financial Hedge Recovery Limit - Five Basis Points of Total Capital			0.0005	
53	Limit of Recoverable Amount			3,829,001	
54	<b>Recoverable Hedge Amortization (Lesser of Ln 50 or Ln 53)</b>			<b>(1,128,890)</b>	



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
<b><u>Development of Average Balance of Common Equity</u></b>				
1	Proprietary Capital (112.16.c&d)	3,582,763,277	3,475,050,089	3,528,906,683
2	Less Preferred Stock (Ln 54 Below)	0	0	-
3	Less Account 216.1 (112.12.c&d)	1,758,641	1,758,641	1,758,641
4	Less Account 219.1 (112.15.c&d)	(9,136,157)	(2,792,656)	(5,964,407)
5	<b>Average Balance of Common Equity</b>	<b>3,590,140,793</b>	<b>3,476,084,104</b>	<b>3,533,112,449</b>

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

6	Bonds (112.18.c&d)	322,118,952	345,097,743	333,608,348
7	Less: Reacquired Bonds (112.19.c&d)	-	-	-
8	LT Advances from Assoc. Companies (112.20.c&d)	-	-	-
9	Senior Unsecured Notes (112.21.c&d)	3,745,741,308	3,620,784,367	3,683,262,838
10	Less: Fair Value Hedges (See Note on Ln 12 below)	-	-	-
11	<b>Total Average Debt</b>	<b>4,067,860,260</b>	<b>3,965,882,110</b>	<b>4,016,871,185</b>

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. (Column H of the FF1)**

13	<b>Annual Interest Expense for 2016</b>		
14	Interest on Long Term Debt (256-257.33.i)		183,241,459
15	Less: Total Hedge Gain/Expense Accumulated from p 256-257, col. (i) of FERC Form 1 included in Ln 14 and shown in Ln 33 below.		(1,128,890)
16	Plus: Allowed Hedge Recovery From Ln 38 below.		(1,128,890)
17	Amort of Debt Discount & Expense (117.63.c)		2,982,641
18	Amort of Loss on Reacquired Debt (117.64.c)		4,269,063
19	Less: Amort of Premium on Debt (117.65.c)		-
20	Less: Amort of Gain on Reacquired Debt (117.66.c)		-
21	<b>Total Interest Expense (Ln 14 + Ln 17 + Ln 18 - Ln 19 - Ln 20)</b>		<b>190,493,163</b>
22	<b>Average Cost of Debt for 2016 (Ln 21/Ln 11)</b>		<b>4.74%</b>

**CALCULATION OF RECOVERABLE HEDGE GAINS/LOSSES**

23 **NOTE: The net amount of hedging gains or losses recorded in account 427 to be recovered in this formula rate should be limited to the effective portion of pre-issuance cash flow hedges that are amortized over the life of the underlying debt issuances. The recovery of a net loss or passback of a net gain will be limited to five basis points of the total Capital Structure. Amounts related to the ineffective portion of pre-issuance hedges, cash settlements of fair value hedges issued on Long Term Debt, post-issuance cash flow hedges, and cash flow hedges of variable rate debt issuances are not recoverable in this formula and are to be recorded in the "Excludable" column below.**

HEDGE AMOUNTS BY ISSUANCE (FROM p. 256-257 (i) of the FERC Form 1)		Total Hedge (Gain)/Loss for 2016	Less Excludable Amounts (See NOTE on Line 23)	Net Includable Hedge Amount	Remaining Unamortized Balance	Amortization Period	
						Beginning	Ending
24	Senior Unsecured Notes - Series H	37,068		37,068	605,544	May-03	May-33
25	Senior Unsecured Notes - Series N	(194,198)		(194,198)	(3,738,320)	Apr-06	Apr-36
26	Senior Unsecured Notes - Series Q	159,672	-	159,672	3,386,355	Mar-08	Apr-38
27	Senior Unsecured Notes - Series S	-	-	-	(0)	May-10	May-15
28	Senior Unsecured Notes - Series T	(1,131,432)		(1,131,432)	(4,777,160)	Mar-11	Mar-21
29					-		
30		-		-	-		
31		-	-	-	-		
32			-				
33	<b>Total Hedge Amortization</b>	<b>(1,128,890)</b>	<b>-</b>				
34	Hedge Gain or Loss Prior to Application of Recovery Limit (Sum of Lines 24 to )			(1,128,890)			
35	Total Average Capital Structure Balance for 2016 (True-UP TCOS, Ln 165)			7,549,983,634			
36	Financial Hedge Recovery Limit - Five Basis Points of Total Capital			0.0005			
37	Limit of Recoverable Amount			3,774,992			
38	<b>Recoverable Hedge Amortization (Lesser of Ln 34 or Ln 37)</b>			<b>(1,128,890)</b>			

**Development of Cost of Preferred Stock**

Preferred Stock	Average	
39 0% Series - 0 - Dividend Rate (p. 250-251. 7 & 10.a)	0.00%	0.00%
40 0% Series - 0 - Par Value (p. 250-251. 8.c)	\$ -	\$ -
41 0% Series - 0 - Shares O/S (p.250-251. 8 & 11.e)	-	-
42 0% Series - 0 - Monetary Value (Ln 40 * Ln 41)	-	-
43 0% Series - 0 - Dividend Amount (Ln 39 * Ln 42)	-	-
44 0% Series - - Dividend Rate (p. 250-251.a)		
45 0% Series - - Par Value (p. 250-251.c)		
46 0% Series - - Shares O/S (p.250-251. e)		
47 0% Series - 0 - Monetary Value (Ln 45 * Ln 46)	-	-
48 0% Series - - Dividend Amount (Ln 44 * Ln 47)	-	-
49 0% Series - - Dividend Rate (p. 250-251.a)		
50 0% Series - - Par Value (p. 250-251.c)		
51 0% Series - - Shares O/S (p.250-251.e)		
52 0% Series - 0 - Monetary Value (Ln * Ln 49)	-	-
53 0% Series - - Dividend Amount (Ln 49 * Ln 52)	-	-
54 <b>Balance of Preferred Stock (Lns 42, 47, 52)</b>	-	-
55 <b>Dividends on Preferred Stock (Lns 43, 48, 53)</b>	-	-
56 <b>Average Cost of Preferred Stock (Ln 55/54)</b>	0.00%	0.00%

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

**AEP East Companies**  
**Cost of Service Formula Rate Using 2016 FF1 Balances**  
**Worksheet N - Gains (Losses) on Sales of Plant Held For Future Use**  
**APPALACHIAN POWER 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		-		-	

AEP East Companies  
Cost of Service Formula Rate Using 2016 FF1 Balances  
Worksheet O - Calculation of Postemployment Benefits Other than Pensions Expenses Allocable to Transmission Service  
APPALACHIAN POWER COMPANY

Formula Rate  
APCo -WS O  
Page 35 of 36

Total AEP East Operating Company PBOP Settlement Amount 30,000,000

**Allocation of PBOP Settlement Amount for 2016:**

		Total Company Amount						
Line#	Company	Actual Expense (Including AEPSC Billed OPEB)	Ratio of Company Actual to Total	Allocation of PBOP Recovery Allowance	Labor Allocator for 2016	Actual Expense	Allowable Expense	One Year Functional Expense (Over)/Under
		(A) (Line 14)	(B)=(A)/Total (A)	(C)=(B) * 30000000	(D)	(E)=(A) * (D)	(F)=(C) * (D)	(G)=(E) - (F)
1	APCo	(12,346,782)	35.73%	10,717,707	8.543%	(1,054,793)	915,620	(1,970,414)
2								
3	I&M	(9,563,753)	27.67%	8,301,881	5.073%	(485,163)	421,149	(906,312)
4	KPCo	(2,800,340)	8.10%	2,430,854	7.798%	(218,365)	189,553	(407,917)
5	KNGP	(285,815)	0.83%	248,104	9.707%	(27,744)	24,083	(51,827)
6	OPCo	(9,018,468)	26.10%	7,828,542	15.752%	(1,420,595)	1,233,157	(2,653,752)
7	WPCo	(544,793)	1.58%	472,911	2.301%	(12,537)	10,882	(23,419)
8	Sum of Lines 1 to 7	(34,559,952)		30,000,000		(3,219,196)	2,794,445	(6,013,641)

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

	APCo	I&M	KPCo	KNGSPT	OPCo	WPCo	AEP East Total
9 Direct Charged PBOP Expense per Actuarial Report *	(11,929,531)	(9,236,604)	(2,795,013)	(250,357)	(8,261,373)	(314,716)	(32,787,594)
10 Additional PBOP Ledger Entries (from Company Records)	566,071	399,177	256,460	5,139	173,801	(198,356)	
11 Medicare Subsidy *	-	-	-	-	-	-	-
12 Net Company Expense (Ln 9 + Ln 10 + Ln 11)	(11,363,460)	(8,837,427)	(2,538,553)	(245,218)	(8,087,572)	(513,072)	(31,585,303)
13 PBOP Expenses From AEP Service Corporation (from Company Records)	(983,322)	(726,326)	(261,787)	(40,597)	(930,896)	(31,721)	(2,974,649)
14 Company PBOP Expense (Ln 12 + Ln 13)	(12,346,782)	(9,563,753)	(2,800,340)	(285,815)	(9,018,468)	(544,793)	(34,559,952)

\* Sourced from Actuarial Report

AEP EAST COMPANIES  
Worksheet - P CALCULATION OF  
TOTAL WEIGHTED AVERAGE DEPRECIATION RATES  
FOR TRANSMISSION PLANT PROPERTY ACCOUNT  
EFFECTIVE AS OF 6/1/2015  
FOR MULTIPLE JURISDICTION COMPANIES  
APPALACHIAN POWER COMPANY

	VIRGINIA				WEST VIRGINIA			FERC WHOLESALE			FERC KINGSPORT			COMPANY
	(1)				(2)			(3)			(4)			
PLANT ACCT.	VA SCC RATES	ALLOCATION FACTOR (5)	WTD AVG. DEPREC. RATE		PSC OF WV APPROVED RATES	ALLOCATION FACTOR (5)	WTD AVG. DEPREC. RATE	FERC RATES	ALLOCATION FACTOR (5)	WTD AVG. DEPREC. RATE	FERC RATES	ALLOCATION FACTOR (5)	WTD AVG. DEPREC. RATE	WTD AVG. DEPREC. RATE
<b>TRANSMISSION PLANT</b>														
Land Rights - Va.	350.1	0.66%	1.000000	0.66%										0.66%
Energy Storage Equip	351.0				6.67%	1.000000	6.67%							6.67%
Structures & Improvements	352.0	1.55%	0.485235	0.75%	1.52%	0.422555	0.64%	2.19%	0.033699	0.07%	2.19%	0.058511	0.13%	1.59%
Station Equipment	353.0	1.95%	0.485235	0.95%	1.68%	0.422555	0.71%	2.19%	0.033699	0.07%	2.19%	0.058511	0.13%	1.86%
Towers & Fixtures	354.0	1.14%	0.485235	0.55%	1.54%	0.422555	0.65%	2.19%	0.033699	0.07%	2.19%	0.058511	0.13%	1.40%
Poles & Fixtures	355.0	2.77%	0.485235	1.34%	2.64%	0.422555	1.12%	2.19%	0.033699	0.07%	2.19%	0.058511	0.13%	2.66%
Overhead Conductor	356.0	1.01%	0.485235	0.49%	1.19%	0.422555	0.50%	2.19%	0.033699	0.07%	2.19%	0.058511	0.13%	1.19%
Underground Conduit	357.0	1.23%	0.485235	0.60%	1.45%	0.422555	0.61%	2.19%	0.033699	0.07%	2.19%	0.058511	0.13%	1.41%
Underground Conductors	358.0	3.18%	0.485235	1.54%	7.23%	0.422555	3.06%	2.19%	0.033699	0.07%	2.19%	0.058511	0.13%	4.80%

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

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

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

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

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

(6) Energy Storage Equipment is a new account established per FERC Order 784.

**GENERAL NOTES:**

The rates for each AEP company have been approved by their respective regulatory commissions.  
APCo falls under the authority of Virginia, West Virginia and the FERC. Therefore, APCo's rates are a composite of the jurisdictions under which it operates. Each jurisdictions' rate is multiplied by an allocation factor, and the product for each jurisdiction is added with the other jurisdictions to derive the composite rate for the company.  
Per the terms of the settlement in this case, AEP will make a 205 filing whenever a company's rates are changed by their commission(s), or if the methodology to calculate the jurisdictional allocator in multiple-state companies changes. Changes in the allocation factors will not necessitate a 205 filing.