

AEPTCo subsidiaries in PJM
Transmission Cost of Service Formula Rate
Utilizing Actual/Projected FERC Form 1 Data
AEP Appalachian Transmission Company

For Twelve Months Ended **2019**

Line No.			Total	Allocator	DA	1.00000	Transmission Amount
1	REVENUE REQUIREMENT (w/o incentives)	(In 113)					\$2,468,560
2	REVENUE CREDITS	(Worksheet E, In 8) (Note A)	-	DA	1.00000		\$ -
3	Facility Credits under PJM OATT Section 30.9	Worksheet E, In 9) (Note X)					0
4	REVENUE REQUIREMENT For All Company Facilities	(In 1 less In 2 plus In 3)					\$ 2,468,560

MEMO: The Carrying Charge Calculations on lines 7 to 12 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 5 is included in the total on line 4.

5	Revenue Requirement for PJM Schedule 12 Facilities (w/o incentives) (Worksheet JK)		-	DA	1.00000		\$ -
6	NET PLANT CARRYING CHARGE w/o intra-AEP charges or credits or ROE incentives (Note B)						
7	Annual Rate	((In 1 - In 80) / (In 33) x 100)					17.61%
8	Monthly Rate	(In 7 / 12)					1.47%
9	NET PLANT CARRYING CHARGE ON LINE 7 , w/o depreciation or ROE incentives (Note B)						
10	Annual Rate	((In 1 - In 80 - In 83) / (In 33) x 100)					16.35%
11	NET PLANT CARRYING CHARGE ON LINE 10, w/o Return, income taxes or ROE incentives (Note B)						
12	Annual Rate	((In 1 - In 80 - In 83 - In 108 - In 109) / (In 33) x 100)					8.16%
13	ADDITIONAL REVENUE REQUIREMENT for projects w/ incentive ROE's (Note B) (Worksheet JK)						-
14	REVENUE REQUIREMENT FOR SCHEDULE 1A CHARGES						
15	Total Load Dispatch & Scheduling (Account 561)	Line 63 Below					65,482
16	Less: Load Dispatch - Scheduling, System Control and Dispatch Services (321.88.b)						
17	Less: Load Dispatch - Reliability, Planning & Standards Development Services (321.92.b)						
18	Total 561 Internally Developed Costs	(Line 15 - Line 16 - Line 17)					65,482

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Line No.	(1) RATE BASE CALCULATION	(2) Data Sources (See "General Notes")	(3) TO Total NOTE C	(4) Allocator	(5) Total Transmission
19	GROSS PLANT IN SERVICE				
19	Transmission	(Worksheet A In 14.(d) & Ln 117)	14,037,714	DA 1.00000	14,037,714
20	Less: Transmission ARO (Enter Negative)	(Worksheet A In 14.(e))	-	TP 1.00000	-
21	General Plant	(Worksheet A In 14.(h))	-	W/S 1.00000	-
22	Less: General Plant ARO (Enter Negative)	(Worksheet A In 14.(i))	-	W/S 1.00000	-
23	Intangible Plant	(Worksheet A In 14.(j))	240,782	W/S 1.00000	240,782
24	TOTAL GROSS PLANT	(Sum of Lines: 19 to 23)	14,278,496	GP= 1.00000 GTD= 1.00000	14,278,496
25	ACCUMULATED DEPRECIATION AND AMORTIZATION				
26	Transmission	(Worksheet A In 28.(d) & Ln 43.(b))	23,266	TP1= 1.00000	23,266
27	Less: Transmission ARO (Enter Negative)	(Worksheet A In 28.(e))	-	TP1= 1.00000	-
28	General Plant	(Worksheet A In 28.(h))	-	W/S 1.00000	-
29	Less: General Plant ARO (Enter Negative)	(Worksheet A In 28.(i))	-	W/S 1.00000	-
30	Intangible Plant	(Worksheet A In 28.(j))	35,722	W/S 1.00000	35,722.08
31	TOTAL ACCUMULATED DEPRECIATION	(Sum of Lines: 26 to 30)	58,988		58,988
32	NET PLANT IN SERVICE				
33	Transmission	(In 19 + In 20 - In 26 - In 27)	14,014,448		14,014,448
34	General Plant	(In 21 + In 22 - In 28 - In 29)	-		-
35	Intangible Plant	(In 23 - In 30)	205,060		205,060
36	TOTAL NET PLANT IN SERVICE	(Sum of Lines: 33 to 35)	14,219,508	NP= 1.00000	14,219,508
37	DEFERRED TAX ADJUSTMENTS TO RATE BASE	(Note D)			
38	Account No. 281.1 (enter neagative)	(Worksheet B, In 2 & In 5.E)	-	NA	-
39	Account No. 282.1 (enter negative)	(Worksheet B, In 7 & In 10.E)	(303,021)	DA	(303,021)
40	Account No. 283.1 (enter negative)	(Worksheet B, In 12 & In 15.E)	(275,248)	DA	(275,248)
41	Account No. 190.1	(Worksheet B, In 17 & In 20.E)	71,564	DA	71,564
42	Account No. 255 (enter negative)	(Worksheet B, In 24 & In 25.E)	-	DA	-
43	TOTAL ADJUSTMENTS	(sum Ins 38 to 42)	(506,705)		(506,705)
44	PLANT HELD FOR FUTURE USE	(Worksheet A In 44.(e)) In 45.(e))	-	DA	-
45	REGULATORY ASSETS	(Worksheet A In 51.(e))	-	DA	-
46	UNFUNDED RESERVES (ENTER NEGATIVE) (NOTE Y)	(Worksheet A In 54.(e))	-	W/S 1.00000	-
47	WORKING CAPITAL	(Note E)			
48	Cash Working Capital	(1/8 * In 66)	65,699		65,699
49	Transmission Materials & Supplies	(Worksheet C, In 2.(F))	-	TP 1.00000	-
50	A&G Materials & Supplies	(Worksheet C, In 3.(F))	-	W/S 1.00000	-
51	Stores Expense	(Worksheet C, In 4.(F))	-	GP 1.00000	-
52	Prepayments (Account 165) - Labor Allocated	(Worksheet C, In 8.(G))	-	W/S 1.00000	-
53	Prepayments (Account 165) - Gross Plant	(Worksheet C, In 8.(F))	3,207	GP 1.00000	3,207
54	Prepayments (Account 165) - Transmission Only	(Worksheet C, In 8.(E))	-	DA 1.00000	-
55	Prepayments (Account 165) - Unallocable	(Worksheet C, In 8.(D))	-	NA 0.00000	-
56	TOTAL WORKING CAPITAL	(sum Ins 48 to 55)	68,906		68,906
57	IPP CONTRIBUTIONS FOR CONSTRUCTION	(Note F) (Worksheet D, In 8.B)	-	DA 1.00000	-
58	RATE BASE (sum Ins 36, 43, 44, 45, 46, 56, 57)		13,781,709		13,781,709

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	(1)	(2)	(3)	(4)	(5)
	EXPENSE, TAXES, RETURN & REVENUE REQUIREMENTS CALCULATION		TO Total	Allocator	Total Transmission
Line		Data Sources (See "General Notes")			
No.	OPERATION & MAINTENANCE EXPENSE				
59	Customer Related Expense	322 & 323.164,171.178.b	-		
60	Regional Marketing Expenses	322.131.b	-		
61	Transmission	321.112.b	591,076		
62	TOTAL O&M EXPENSES	(sum Ins 59 to 61)	591,076		
63	Less: Total Account 561	(Note G) (Worksheet F, In 14.C)	65,482		
64	Less: Account 565	(Note H) 321.96.b	-		
65	Less: Regulatory Deferrals & Amortizations	(Note I) (Worksheet F, In 4.C)	-		
66	Total O&M Allocable to Transmission	(Ins 61 - 63 - 64 - 65)	525,594	TP 1.00000	525,594
67	Administrative and General	323.197.b (Notes J & M)	322,741		
68	Less: Acct. 924, Property Insurance	323.185.b	17,596		
69	Acct. 928, Reg. Com. Exp.	323.189.b	2,604		
70	Acct. 930.1, Gen. Advert. Exp.	323.191.b	54		
71	Acct. 930.2, Misc. Gen. Exp.	323.192.b	5,732		
72	Balance of A & G	(In 67 - sum In 68 to In 71)	296,755	W/S 1.00000	296,755
73	Plus: Acct. 924, Property Insurance	(In 68)	17,596	GP(h) 1.00000	17,596
74	Acct. 928 - Transmission Specific	Worksheet F In 21.(E) (Note L)	2,506	TP 1.00000	2,506
75	Acct 930.1 - Only safety related ads -Direct	Worksheet F In 38.(E) (Note L)	-	TP 1.00000	-
76	Acct 930.2 - Misc Gen. Exp. - Trans	Worksheet F In 43.(E) (Note L)	36	DA 1.00000	36
77	F&GCP Adjustment	Worksheet O Ln 16.(B). (Note K & M)	49,486	W/S 1.00000	49,486
78	A & G Subtotal	(sum Ins 72 to 77)	366,378		366,378
79	O & M EXPENSE SUBTOTAL	(In 66 + In 78)	891,972		891,972
80	Plus: Transmission Lease Payments To Affiliates in Acct 565 (Company Records) (Note H)		-	DA 1.00000	-
81	TOTAL O & M EXPENSE	(In 79 + In 80)	891,972		891,972
82	DEPRECIATION AND AMORTIZATION EXPENSE				
83	Transmission	336.7.f	176,633	TP1 1.00000	176,633
84	General	336.10.f	-	W/S 1.00000	-
85	Intangible	336.1.f	43,982	W/S 1.00000	43,982
86	TOTAL DEPRECIATION AND AMORTIZATION	(Ln 83+84+85)	220,615		220,615
87	TAXES OTHER THAN INCOME (Note N)				
88	Labor Related				
89	Payroll	Worksheet H In 23.(D)	-	W/S 1.00000	-
90	Plant Related				
91	Property	Worksheet H-p2 In 3.(C) & In 3.(G)	165,394	DA 1.00000	165,394
92	Gross Receipts/Sales & Use	Worksheet H In 23.(F)	-	NA 0.00000	-
93	Other	Worksheet H In 23.(E)	41,602	GP 1.00000	41,602
94	TOTAL OTHER TAXES	(sum Ins 89 to 93)	206,996		206,996
95	INCOME TAXES (Note O)				
96	$T=1 - ((1 - SIT) * (1 - FIT)) / (1 - SIT * FIT * p)$		25.60%		
97	$EIT=(T/(1-T)) * (1-(WCLTD/WACC))$		23.00%		
98	where WCLTD=(In 136) and WACC = (In 139)				
99	and FIT, SIT & p are as given in Note O.				
100	$GRCF=1 / (1 - T)$ = (from In 96)		1,3440		
101	Amortized Investment Tax Credit (enter negative)	(FF1 p.114, In 19.c)	-		
102	Excess Deferred Income Tax	(Note T)	1,020	NP(h) 1.00000	1,020
103	Tax Effect of Permanent and Flow-Through Differences	(Note T)	56	NP(h) 1.00000	56
104	Income Tax Calculation	(In 97 * In 109)	214,603		214,603
105	ITC adjustment	(In 100 * In 101)	-	NP(h) 1.00000	-
106	Excess Deferred Income Tax	(In 100 * In 102)	1,371		1,371
107	Tax Effect of Permanent and Flow-Through Differences	(In 100 * In 103)	75		75
108	TOTAL INCOME TAXES	(sum Ins 104 to 107)	216,050		216,050
109	RETURN ON RATE BASE (Rate Base*WACC)	(In 58 * In 139)	932,927		932,927
110	INTEREST ON IPP CONTRIBUTION FOR CONST. (Note F) (Worksheet D, In 2.(B))		-	DA 1.00000	-
111	(Gains) / Losses on Sales of Plant Held for Future Use (Worksheet N, In 4, Cols. (F) & (H))		-		-
112	Tax Impact on Net Loss / (Gain) on Sales of Plant Held for Future Use (In 111 * In 97)		-		-
113	TOTAL REVENUE REQUIREMENT (sum Ins 81, 86, 94, 108, 109, 110, 111, 112)		2,468,560		2,468,560

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SUPPORTING CALCULATIONS

In	TRANSMISSION PLANT INCLUDED IN PJM TARIFF							
114	Total transmission plant	(In 19)					14,037,714	
115	Less transmission plant excluded from PJM Tariff	(Worksheet A, In 42.(d) (Note P))					-	
116	Less transmission plant included in OATT Ancillary Services	(Worksheet A, In 42, Col. (b)) (Note Q)					-	
117	Transmission plant included in PJM Tariff	(In 114 - In 115 - In 116)					14,037,714	
118	Percent of transmission plant in PJM Tariff	(In 117 / In 114)				TP=	1.0000	
119	WAGES & SALARY ALLOCATOR (W/S)	(Note R)						
120	<i>Line Deliberately Left Blank</i>		Direct Payroll	Payroll Billed from AEP Service Corp.	Total			
121	Transmission	354.21.b	-	291,510	291,510	TP	1.00000	291,510
122	Regional Market Expenses	354.22.b	-	-	-	NA	0.00000	-
123	<i>Line Deliberately Left Blank</i>							
124	Other (Excludes A&G)	354.24,25,26.b	-	-	-	NA	0.00000	-
125	Total	(sum lns 121, 122, & 124)	-	291,510	291,510			291,510
126	Transmission related amount					W/S=	1.0000	
	Actual (Uncapped) Capital Structure							
127	WEIGHTED AVERAGE COST OF CAPITAL (WACC)						\$	
128	Long Term Interest	(Worksheet M, In 36, col.(d))					1,407,588	
129	Preferred Dividends	(Worksheet M, In 45, col.(d))					-	
130	Development of Common Stock:							
131	Proprietary Capital	(Worksheet M, In 14, col.(b))					27,438,889	
132	Less: Preferred Stock	(Worksheet M, In 14, col.(c))					-	
133	Less: Account 216.1	(Worksheet M, In 14, col.(d))					-	
134	Less: Account 219	(Worksheet M, In 14, col.(e))					-	
135	Common Stock	(In 131 - In 132 - In 133 - In 134)					27,438,889	
			Capital Structure Percentages			Cost		
			\$	Actual	Cap Limit	(Note S)	Weighted	
136	Long Term Debt (Note S) Worksheet M, In 28, col. (a), In 37, col. (d))		35,307,692	56.27%	56.27%	3.99%	0.0224	
137	Preferred Stock (In 132)		-	0.00%	0.00%	0.00%	0.0000	
138	Common Stock (In 135)		27,438,889	43.73%	43.73%	10.35%	0.0453	
139	Total (Sum lns 136 to 138)		62,746,581	100.00%	100.00%		WACC=	0.0677
140	Capital Structure Equity Limit (Note Z)		55.00%					

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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. 7) If AEP Transmission Companies have any directly assigned transmission facilities, the revenue credits in the formula rate shall include all revenues associated with those directly assigned transmission facilities, irrespective of whether the loads of the customer are included in the formula rate divisor; provided however, such addition to revenue credits shall not be reflected if the costs of such directly assigned transmission facilities are not included in the transmission plant balances on which the formula rate ATRR is based. 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. Interest will be calculated based on Worksheet R and any over under recovery will be filed and posted as part of the informational filing.
C	Transmission Plant Balances in this study are projected or actual average 13 month balances.
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. In compliance with FERC Rulemaking the calculation of ADIT in the annual projection will be performed in accordance with IRS regulation Section 1.167(l)-(h)(6)(ii). Detailed balances for the projected or actual period, distinguished between utility and non-utility balances, will be filed and posted as part of the informational filing. 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 66. It excludes: 1) Load Scheduling & Dispatch Charges in account 561 that are collected in the OATT Ancillary Services Revenue, as shown on line 63. 2) Costs of Transmission of Electricity by Others, as described in Note H. 3) The impact of state regulatory deferrals and amortizations, as shown on line 65 4) All A&G Expenses, as shown on line 78.
F	Consistent with Paragraph 657 of Order 2003-A, the amount on line 57 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 110.
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 16 & 17 above) are recovered in Schedule 1A, OATT ancillary services rates. See Worksheet F, lines 5 through 14, for descriptions and the Form 1 Source of these accounts' balances.
H	Removes cost of transmission service provided by others to determine the basis of cash working capital on line 66. To the extent such service is incurred to provide the PJM service at issue, e.g. lease payments to affiliates, such costs are added back on line 80 to determine the total O&M collected in the formula. The amounts on line80 is also excluded in the calculation of the FCR percentage calculated on lines 6 through 12. The addbacks on line80 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 line80 is the AEP Appalachian Transmission Company general ledger.
I	Removes the impact of state regulatory deferrals or their amortization from Transmission O&M expense.
J	General Plant and Administrative & General expenses, other than in accounts 924, 928, and 930, will be functionalized based on the Wages & Salaries "W/S" allocator. The allocation basis for accounts 924, 928 and 930 are separately presented in the formula. A change in the allocation method for an account must be approved via a 205 filing with the FERC.
K	The Post-employment Benefit Other than Pension (PBOP) expense is fixed based on an approved ratio of PBOP expense to direct labor expense.
L	Expenses reported for these A&G accounts will be included in the cost of service only to the extent they are directly assignable to transmission service. Worksheet F allocates these expense items. Act 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. Recoverable PBOP expense is based on a rate of \$(0.058) cents per dollar of direct labor. This rate may be adjusted up or down every four years based on a comparison of the Allowable TransCo PBOP Expense and the Actual PBOP Expense for a four year Historic and four year Projected period. If the over or under collection is greater than plus or minus 20% of the recoverable amount, an adjustment will be proposed in a Section 205 rate filing.
N	Includes only FICA, unemployment, highway, property and other assessments. 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, 265.8.f) (In 101) multiplied by (1/(1-T)). If the applicable tax rates are zero enter 0. Inputs Required: FIT = 21.00% SIT = 5.82% (State Income Tax Rate or Composite SIT, Worksheet G) p = 0.00% (percent of federal income tax deductible for state purposes)
	The formula rate shall reflect the applicable state and federal statutory tax rates in effect during the period the calculated estimated unit charges are applicable. If the statutory tax rates change during such period, the effective tax rates used in the formula shall be weighted by the number of days the pre-change rate and post-change rate each is in effect.
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 128)/average long term debt (Ln 136). Preferred Stock cost rate = preferred dividends (Ln 129)/preferred outstanding (In 137). Common Stock cost rate (ROE) = 10.35%, per the Settlement in FERC Docket No. EL17-13. It includes an additional 50 basis points for PJM RTO membership. All Transmission Companies other than AEP Appalachian Transmission Company utilize their own capital structure and costs as shown on Worksheet M. The calculations on Worksheet M will use the projected or actual 13 month average balances of long-term debt, common and preferred equity and calendar year long term debt interest expenses, preferred dividends and approved ROE. The long term debt balances and long term debt cost rate shall not include any amounts related to hedging activity. As shown on Worksheet Q, the AEP Appalachian Transmission Company capital structure and weighted cost of capital (WACC) shall be based on the weighted composite of the AEP East Operating Companies beginning and ending average outstanding LTD and PS issuances with the common equity portion in Docket No. ER08-1329, and (2) the weighted composite LTD and PS cost using projected or actual calendar year LTD expense and PS dividends of the AEP East Operating Companies excluding all interest rate hedging costs and/or gains, until the Company establishes its own actual capital structure.
	Excess / (Deficit) Deferred Income Taxes will be amortized over the average remaining life of the assets to which it relates, unless the Commission requires a different amortization period. The Tax Effect of Permanent Differences captures the differences in the income taxes due under the Federal and State tax calculations that are not the result of a timing difference, including but not limited to depreciation related to capitalized AFUDC equity and meals and entertainment deductions. The Tax Effect of Flow-Through differences captures current tax expense related to timing differences on items for which tax deductions were used to reduce customer rates through the use of flow-through accounting in a prior period. Transmission balances for the projected or actual period, will be filed and posted as part of the informational filing.
T	
U	Cash investment in prepaid pension and benefits recorded in FERC Account 165 is permitted to be included in the formula. A labor expense allocation factor will be used to allocate total company costs. All
V	The formula rate shall allocate property tax expense based on the as filed net plant cost allocation method detailed on Worksheet H.
W	AEP Transmission Companies will record depreciation expense using composites of the depreciation rates shown on Worksheet P which rates will not be changed absent a Section 205 or 206 filing at FERC to seek a change in depreciation rates. No other changes to the formula rate may be included in that filing. Under Section 30.9 of the PJM OATT, a network customer that owns existing transmission facilities that are integrated with the Transmission Provider's Transmission System may be eligible to receive consideration either through a billing credit or some other mechanism. Calculation of any credit under this subsection, pursuant to approval by FERC for inclusion in this formula rate for collection on behalf of the network customer, shall be addressed in either the Network Customer's Service Agreement or any other agreement between the parties. X The cost of service will make a rate base adjustment to remove unfunded reserves associated with contingent liabilities recorded to Accounts 228.1-228.4 from rate base. Z Per the settlement in EL17-13, equity is limited to 55% of the Company's capital structure. If the percentage of actual equity exceeds the cap, the excess is included as long term debt in the capital structure.

AEPTCo subsidiaries in PJM
 Cost of Service Formula Rate Using Actual/Projected FF1 Balances
 Worksheet A Rate Base
 AEP Appalachian Transmission Company

Line No	Month (a)	Gross Plant In Service				
		Transmission (d)	Transmission ARO (e)	General (h)	General ARO (i)	Intangible (j)
	(Note A)	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 58	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 57	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 99	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 98	FF1, page 205 Col.(g) & pg. 204 Col. (b), In 5
1	December Prior to Rate Year	856,380	-	-	-	175,612
2	January	865,938	-	-	-	187,545
3	February	866,070	-	-	-	193,693
4	March	866,125	-	-	-	190,614
5	April	866,129	-	-	-	199,984
6	May	(692,623)	-	-	-	208,658
7	June	1,499,197	-	-	-	223,979
8	July	1,529,331	-	-	-	235,657
9	August	1,531,093	-	-	-	250,672
10	September	1,530,806	-	-	-	260,670
11	October	1,819,500	-	-	-	273,516
12	November	85,221,949	-	-	-	293,011
13	December of Rate Year	85,730,388	-	-	-	436,553
14	Average of the 13 Monthly Balances	14,037,714	-	-	-	240,782

Line No	Month (a)	Accumulated Depreciation				
		Transmission (d)	Transmission ARO (e)	General (h)	General ARO (i)	Intangible (j)
	(Note A)	FF1, page 219, In 25, Col. (b)	Company Records (Included in total in Column (d))	FF1, page 219, In 28, Col. (b)	Company Records (Included in total in Column (h))	FF1, page 200, In 21, Col. (b)
15	December Prior to Rate Year	2,176	-	-	-	15,872
16	January	2,252	-	-	-	18,799
17	February	3,223	-	-	-	21,924
18	March	5,184	-	-	-	24,241
19	April	6,568	-	-	-	27,418
20	May	8,021	-	-	-	30,751
21	June	9,399	-	-	-	34,229
22	July	11,905	-	-	-	37,962
23	August	15,012	-	-	-	41,889
24	September	17,444	-	-	-	46,067
25	October	19,807	-	-	-	50,412
26	November	23,415	-	-	-	54,970
27	December of Rate Year	178,055	-	-	-	59,854
28	Average of the 13 Monthly Balances	23,266	-	-	-	35,722

AEPTCo subsidiaries in PJM
 Cost of Service Formula Rate Using Actual/Projected FF1 Balances
 Worksheet A Rate Base
 AEP Appalachian Transmission Company

Line No	Month (a)	OATT Ancillary Services (GSU) Plant In Service (b)	OATT Ancillary Services (GSU) Accumulated Depreciation (c)	Excluded Plant - Plant In Service (d)	Excluded Plant - Accumulated Depreciation (e)
		Company Records (included in total in column (d) of gross plant above)	Company Records (included in total in column (d) of accumulated depreciation above)	Company Records	Company Records
	(Note A)				
29	December Prior to Rate Year	-	-	-	-
30	January	-	-	-	-
31	February	-	-	-	-
32	March	-	-	-	-
33	April	-	-	-	-
34	May	-	-	-	-
35	June	-	-	-	-
36	July	-	-	-	-
37	August	-	-	-	-
38	September	-	-	-	-
39	October	-	-	-	-
40	November	-	-	-	-
41	December of Rate Year	-	-	-	-
42	Average of the 13 Monthly Balances	-	-	-	-

43 Transmission Accumulated Depreciation net of GSU 23,266

<u>Plant Held For Future Use</u>		<u>Source of Data</u>	<u>Balance @ December 31, 2019</u>	<u>Balance @ December 31, 2018</u>	<u>Average Balance for 2019</u>
(a)	(b)	(c)	(d)	(e)	
44	<u>Plant Held For Future Use</u>	FF1, page 214, ln 47, Col. (d)	-	-	-
45	<u>Transmission Plant Held For Future Use (Included in total on line 4</u>	Company Records - Note 1	-	-	-

Regulatory Assets and Liabilities Approved for Recovery In Ratebase

Note: Regulatory Assets & Liabilities can only be included in ratebase pursuant to a 205 filing with the FERC.

46	-	-	-	-	-
47	-	-	-	-	-
48	-	-	-	-	-
49	-	-	-	-	-
50	-	-	-	-	-
51	Total Regulatory Deferrals Included in Ratebase		-	-	-

Unfunded Reserves Summary (Company Records)

52 Description Account

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using Actual/Projected FF1 Balances
Worksheet A Rate Base
AEP Appalachian Transmission Company

53a	-	-	-	-	-
53b	-	-	-	-	-
54	Total				-

NOTE 1: On this worksheet, "Company Records" refers to AEP's property accounting ledger.
NOTE 2: The ratebase should not include the unamortized balance of hedging gains or losses.

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using Actual/Projected FF1 Balances
Worksheet B Supporting ADIT and ITC Balances
AEP Appalachian Transmission Company

Line Number	(A) Description	(B) Source	(C)		(D)	(E)
			Balance @ 31, 2019	December	Balance @ 31, 2018	December
1	Account 281					
2	Year End Utility Deferrals	FF1, p. 272 - 273, In 8, Col. (k)				-
3	Less: ARO Related Deferrals	WS B-1 - Actual Stmt. AF Ln. 4 (Note 1)				-
4	Less: Other Excluded Deferrals	WS B-1 - Actual Stmt. AF Ln. 3 (Note 1)				-
5	Transmission Related Deferrals	Ln 2 - In 3 - In 4		-		-
6	Account 282					
7	Year End Utility Deferrals	FF1, p. 274 - 275, In 5, Col. (k)	687,548		(81,506)	303,021
8	Less: ARO Related Deferrals	WS B-1 - Actual Stmt. AF Ln. 7 (Note 1)				-
9	Less: Other Excluded Deferrals	WS B-1 - Actual Stmt. AF Ln. 6 (Note 1)				-
10	Transmission Related Deferrals	Ln 7 - In 8 - In 9	687,548		(81,506)	303,021
11	Account 283					
12	Year End Utility Deferrals	FF1, p. 276 - 277, In 9, Col. (k)	478,165		72,331	275,248
13	Less: ARO Related Deferrals	WS B-1 - Actual Stmt. AF Ln. 13 (Note 1)				-
14	Less: Other Excluded Deferrals	WS B-1 - Actual Stmt. AF Ln. 12 (Note 1)				-
15	Transmission Related Deferrals	Ln 12 - In 13 - In 14	478,165		72,331	275,248
16	Account 190					
17	Year End Utility Deferrals	FF1, p. 234, In 8, Col. (c)	110,108		33,020	71,564
18	Less: ARO Related Deferrals	WS B-2 - Actual Stmt. AG Ln. 4 (Note 1)				-
19	Less: Other Excluded Deferrals	WS B-2 - Actual Stmt. AG Ln. 3 (Note 1)				-
20	Transmission Related Deferrals	Ln 17 - In 18 - In 19	110,108		33,020	71,564
21	Account 255					
22	Year End ITC Balances	FF1, p. 266-267, In 8, Col. (h)	-		-	-
23	Less: Balances Not Qualified for Ratebase	Company Records - Note 1				-
24	ITC Balances Includeable in Ratebase	Ln 22 - In 23				-
25	Transmission Related Deferrals	WS B-1 - Actual Stmt. AF Ln. 20 (Note 1)				-

NOTE 1 On this worksheet, "Company Records" refers to AEP's tax forecast and accounting ledger. The PTRR will use projected ending balances and reflect proration required by IRS Letter Rule Section 1.167(l)-l(h)(6)(ii). Line item detail of actual deferred tax items will be included on Worksheet B.

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

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R		
								11/30/2019 Beginning Balance		Balance Sheet Entries		Tax Expense Entries		12/31/2019 Ending Balance					
Line No.	Account (NOTE A)	Description of Account	Protected Unprotected	Tax Rate Change Act	Excess Balance at Remeasurement	Amortization Methodology (NOTE C)	Amortization Period	Excess ADIT Regulatory Offset	Excess ADIT in Utility Deferrals	Balance Sheet Account Reclassifications		410411 Excess Amortization (NOTE C)		410411 Deferred Tax Expensed (Benefit)		Excess ADIT Regulatory Offset	Excess ADIT in Utility Deferrals	Reference	
										182.3	254	NOTE C	NOTE C						
Sum of Cols (9 - 15)																			
Deferred Tax Account (NOTE B)																			
1a	1904001	ADRT - FAS 109 Excess	N/A	TCJA 2017				2,437					11,479						
1b	2821001	ADRT - Utility Presently	Protected	TCJA 2017		ARAM	Life of Asset		10,673										
1c	2821001	ADRT - Utility Presently	Unprotected	TCJA 2017	(9.655)	10 Years	1/2018 - 12/2027		8,659				(5,550)	58,737					
1d	2821001	ADRT - Utility Presently FAS 109 Excess	Protected	TCJA 2017				(10,673)											
1e	2821001	ADRT - Utility Presently FAS 109 Excess	Unprotected	TCJA 2017				8,680					53,181						
1f	2831001	ADRT - Other Utility Deferrals	Unprotected	TCJA 2017					7,336				4,537	164,463					
1g	2831001	ADRT - Other FAS 109 Excess	Unprotected	TCJA 2017	2.600	10 Years	1/2018 - 12/2027												
1h								224,609					41,480						
NOTE D																			
Regulatory Deferral Accounts																			
2a	182.3	Regulatory Asset		TCJA 2017				15,769											
2b	254	Regulatory Liability		TCJA 2017				12,156					2,493						
2c																			
3		Total For Accounting Entries (Sum of Lines 1a through 2c)						9	9,174					1,019	12,576				10,724
NOTE E																			

NOTE A: In order to ensure ratebase neutrality, AEP utilizes the fourth digit of its seven digit FERC Tax subaccount numbers to identify balances associated with utility operations vs regulatory reporting requirements. A "1" in the fourth digit of a FERC tax account refers to the utility operations balance or entry. Accounts with the "1" designation will be included in the determination of ratebase to be recovered in the formula rate. A "4" in the fourth place of the account number indicates accounts used to track regulatory accounting requirements. The excess ADIT amounts recorded in accounts with the "4" designation will be contra to the "1" balance, which will ensure that in the formula rate the excess amount will be paid of ratebase, but at the total FERC account level the tax asset or liability will be recorded at the current Federal FIT rate. The amounts recorded in the "4" will be offset on a net basis in the regulatory asset or liability subaccount established for this purpose.

NOTE B: The amount of the FIT gross up to be recorded on regulatory assets and liabilities will be reported on the first line of ADIT accounts provided for each specific change in tax rates.

NOTE C: The ten year amortization period for unprotected excess ADIT is consistent with the period agreed upon by the Company and its customers and approved for the Company's PJM formula rates. Appalachian Power Company, et al. 166 FERC ¶ 61,138 (2019).

NOTE D: In the event of future tax rate changes, additional lines will be inserted as required to reflect any new ADIT or regulatory deferral accounts that may be necessary to track that tax rate change.

NOTE E: The amount of excess amortization entries shown in lines 1a through 1h are shown as a debit or credit to the ADIT account from which it is being amortized. The total in line 3 is the offset as charged to the 410411 account.

WS B - 2 Col B/C, ADIT Item 2.11
 WS B - 1 Col N, ADIT Item 5.10
 WS B - 1 Col N, ADIT Item 5.11
 WS B - 1 Col B/C, ADIT Item 5.12
 WS B - 1 Col N, ADIT Item 9.03
 WS B - 1 Col B/C, ADIT Item 9.08

Company Records
 FERC Form 1-p. 276 Ln. 3 Col. (b) (8)

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using Actual/Projected FF1 Balances
Worksheet C Supporting Working Capital Rate Base Adjustments
AEP Appalachian Transmission Company

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Materials & Supplies								
Line Number	Source		Balance @ December 31, 2019	Balance @ December 31, 2018	Average Balance for 2019			
1								
2	Transmission Materials & Supplies	FF1, p. 227, ln 8, Col. (c) & (b)	0	0	-			
3	General Materials & Supplies	FF1, p. 227, ln 11, Col. (c) & (b)			-			
4	Stores Expense (Undistributed) - Account 163	FF1, p. 227, ln 16, Col. (c) & (b)			-			

Prepayment Balance Summary (Note 1)

	Average of YE Balance	Excludable Balances	100% Transmission Related	Transmission Plant Related	Transmission Labor Related	Total Included in Ratebase (E)+(F)+(G)
5						
6	Totals as of December 31, 2019	6,414	0	0	6,414	0
7	Totals as of December 31, 2018	0	0	0	0	0
8	Average Balance	<u>3,207</u>	<u>-</u>	<u>-</u>	<u>3,207</u>	<u>-</u>

Prepayments Account 165 - Balance @ 12/31/2019

9	Acc. No.	Description	2019 YE Balance	Excludable Balances	100% Transmission Related	Transmission Plant Related	Transmission Labor Related	Total Included in Ratebase (E)+(F)+(G)	Explanation
10	1650021	Prepaid Insurance - EIS	6,414	-	-	6,414	-	6,414	
11				-	-	-	-	-	
12				-	-	-	-	-	
13				-	-	-	-	-	
14				-	-	-	-	-	
15				-	-	-	-	-	
16				-	-	-	-	-	
17				-	-	-	-	-	
18				-	-	-	-	-	
19				-	-	-	-	-	
20				-	-	-	-	-	
21				-	-	-	-	-	
22				-	-	-	-	-	
23				-	-	-	-	-	
24				-	-	-	-	-	
25				-	-	-	-	-	
		Subtotal - Form 1, p 111.57.c	<u>6,414</u>	<u>0</u>	<u>0</u>	<u>6,414</u>	<u>0</u>	<u>6,414</u>	

Prepayments Account 165 - Balance @ 12/31/ 2018

26	Acc. No.	Description	2018 YE Balance	Excludable Balances	100% Transmission Related	Transmission Plant Related	Transmission Labor Related	Total Included in Ratebase (E)+(F)+(G)	Explanation
27				-	-	0	-	-	
28				-	-	-	-	-	
29				-	-	-	-	-	
30				-	-	-	-	-	
31				-	-	-	-	-	
32				-	-	-	-	-	
33				-	-	-	-	-	
34				-	-	-	-	-	
35				-	-	-	-	-	
36				-	-	-	-	-	
37				-	-	-	-	-	
38				-	-	-	-	-	
39				-	-	-	-	-	
40				-	-	-	-	-	
		Subtotal - Form 1, p 111.57.d	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	

Note 1: Prepayment Balance will not include: (i) federal and state income tax payments made to offset additional tax liabilities resulting (or expected to result) from prior federal or state audits or from the filing of one or more amended income tax returns; (ii) outstanding income tax refunds due to [company] resulting (or expected to result) from prior federal or state audits or from the filing of one or more amended income tax returns; or (iii) prepayments of federal or state income taxes which are attributable to income earned during periods prior to January 1 of the year depicted in the Balance Sheet (as described in USofA Account 236).

AEPTCo subsidiaries in PJM
 Cost of Service Formula Rate Using Actual/Projected FF1 Balances
 Worksheet D Supporting IPP Credits
 AEP Appalachian Transmission Company

<u>Line Number</u>	<u>(A) Description</u>	<u>(B) 2019</u>
1	Net Funds from IPP Customers 12/31/2018 (2019 FORM 1, P269)	-
2	Interest Expense (Company Records - Note 1)	-
3	Revenue Credits to Generators (Company Records - Note 1)	-
4	<u>Other Adjustments</u>	
5	Accounting Adjustment (Company Records - Note 1)	-
6		-
7	Net Funds from IPP Customers 12/31/2019 (2019 FORM 1, P269)	-
8	Average Balance for Year as Indicated in Column $((\text{In } 1 + \text{In } 7)/2)$	-

Note 1 On this worksheet Company Records refers to AEP Appalachian Transmission Company's general ledger.

AEPTCo subsidiaries in PJM
 Cost of Service Formula Rate Using Actual/Projected FF1 Balances
 Worksheet E Supporting Revenue Credits
 AEP Appalachian Transmission Company

<u>Line Number</u>	<u>Description</u>	<u>Total Company</u>	<u>Non-Transmission</u>	<u>Transmission</u>
1	Account 450, Forfeited Discounts (FF1 p.300.16.(b); Company Records - Note 1)		-	
2	Account 451, Miscellaneous Service Revenues (FF1 p.300.17.(b); Company Records - Note 1)		-	
3	Account 454, Rent from Electric Property (FF1 p.300.19.(b); Company Records - Note 1)		-	
4	Account 4560015, Associated Business Development - (Company Records - Notes 1, 2)		-	
5	Account 456 - Other Electric Revenues - (Company Records - Notes 1,2)	4,136,919	4,136,919	
5a	Account 457.1, Regional Control Service Revenues (FF1 p.300.23.(b); Company Records - Note 1)		-	
5b	Account 457.2, Miscellaneous Revenues (FF1 p.300.24.(b); Company Records - Note 1)		-	
6	Subtotal - Other Operating Revenues (Company Total equals (FF1 p. 300.26.(b))	4,136,919	4,136,919	-
7	Accounts 4470004 & 5, Revenues from Grandfathered Transmission Contracts - (Company Records - Note 1)		-	
8	Total Other Operating Revenues To Reduce Revenue Requirement	4,136,919	4,136,919	-
9	Facility Credits under PJM OATT Section 30.9			

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

Note 2 The total of line 4 and line 5 will equal total Account 456 as listed on FF1 p.300.21-22.(b)

AEPTCo subsidiaries in PJM
 Cost of Service Formula Rate Using Actual/Projected FF1 Balances
 Worksheet F Supporting Allocation of Specific O&M or A&G Expenses
 AEP Appalachian Transmission Company

(A)	(B)	(C)	(D)	(E)	(F)	
<u>Line</u> <u>Number</u>	<u>Item No.</u>	<u>Description</u>	<u>2019</u> <u>Expense</u>	<u>100%</u> <u>Non-Transmission</u>	<u>100%</u> <u>Transmission</u> <u>Specific</u>	<u>Explanation</u>
Regulatory O&M Deferrals & Amortizations						
1						
2						
3						
4		Total	-			
Detail of Account 561 Per FERC Form 1						
5						
6	FF1 p 321.85.b	561.1 - Load Dispatch - Reliability	-			
7	FF1 p 321.86.b	561.2 - Load Dispatch - Monitor & Operate Trans System	57,363			
8	FF1 p 321.87.b	561.3 - Load Dispatch - Trans Service & Scheduling	-			
9	FF1 p 321.88.b	561.4 - Scheduling, System Control & Dispatch	-			
10	FF1 p 321.89.b	561.5 - Reliability, Planning and Standards Development	8,119			
11	FF1 p 321.90.b	561.6 - Transmission Service Studies	-			
12	FF1 p 321.91.b	561.7 - Generation Interconnection Studies	-			
13	FF1 p 321.92.b	561.8 - Reliability, Planning and Standards Development Services	-			
14		Total of Account 561	65,482			
Account 928						
15	9280000	Regulatory Commission Exp	9	9	-	
16	9280001	Regulatory Commission Exp-Adm	1	1	-	
17	9280002	Regulatory Commission Exp-Case	87	87	-	
18	9280005	Reg Com Exp-FERC Trans Cases	2,506	-	2,506	
19						
20						
21		Total (FERC Form 1 p.323.189.b)	2,604	97	2,506	
Account 930.1						
22	9301000	General Advertising Expenses	2	2	-	
23	9301001	Newspaper Advertising Space	16	16	-	
24	9301010	Publicity	11	11	-	
25	9301012	Public Opinion Surveys	1	1	-	
26	9301015	Other Corporate Comm Exp	24	24	-	
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38		Total (FERC Form 1 p.323.191.b)	54	54	-	
Account 930.2						
39	9302000	Misc General Expenses	4,721	4,721	-	
40	9302003	Corporate & Fiscal Expenses	976	976	-	
41	9302007	Assoc Business Development Exp	36	-	36	
42						
43		Total (FERC Form 1 p.323.192.b)	5,732	5,697	36	

AEPTCo subsidiaries in PJM
 Cost of Service Formula Rate Using Actual/Projected FF1 Balances
 Worksheet G Supporting - Development of Composite State Income Tax Rate
 AEP Appalachian Transmission Company

1	Tennessee Excise Tax Rate	6.50%	
	Apportionment Factor - Note 1	24.89%	
	Effective State Tax Rate		1.62%
2	Virginia State Tax Rate	6.00%	
	Apportionment Factor - Note 1	69.92%	
	Effective State Tax Rate		4.20%
3	_____ Tax Rate		
	Apportionment Factor - Note 1		
	Effective State Tax Rate		0.00%
4	_____ Tax Rate		
	Apportionment Factor - Note 1		
	Effective State Tax Rate		0.00%
5	_____ Tax Rate		
	Apportionment Factor - Note 1		
	Effective State Tax Rate		0.00%
	Total Effective State Income Tax Rate		<u>5.82%</u>

Note 1 Apportionment Factors are determined as part of the Company's annual tax return for that jurisdiction.

Line No.	(A) Account	(B) Total Company	(C) Property	(D) Labor	(E) Other	(F) Non-Allocable
NOTE 1						
1	Revenue Taxes					
2	Gross Receipts Tax	-				-
3	Real Estate and Personal Property Taxes					
4	Real and Personal Property - West Virginia	-	-			
5	Real and Personal Property - Virginia	394	394			
6	Real and Personal Property - Tennessee	165,000	165,000			
7	Real and Personal Property - Other Jurisdictions	-	-			
8	Payroll Taxes					
9	Federal Insurance Contribution (FICA)	-		-		
10	Federal Unemployment Tax	-		-		
11	State Unemployment Insurance	-		-		
12	<i>Line Deliberately Left Blank</i>					
13	State Severance Taxes	-				-
14	Miscellaneous Taxes					
15	State Business & Occupation Tax	-				-
16	State Public Service Commission Fees	-			-	
17	State Franchise Taxes	41,602			41,602	
18	State Lic/Registration Fee	-			-	
19	Misc. State and Local Tax	-			-	
20	Sales & Use	-				-
21	Federal Excise Tax	-				-
22	Michigan Single Business Tax	-				-
23	Total Taxes by Allocable Basis	<u>206,996</u>	<u>165,394</u>	<u>-</u>	<u>41,602</u>	<u>-</u>

(Total Company Amount Ties to FFI p.114, Ln 14,(c))

NOTE 1: The detail of each total company number and its source in the FERC Form 1 is shown on WS H-1.

Functional Property Tax Allocation

	Lines 24-58 Column (B) Deliberately Left Blank		Lines 24-58 Column (D) Deliberately Left Blank		Total
	Transmission	General	Transmission	General	
24 Functionalized Net Plant (TCOS, Lns 33 thru 36)	-	14,014,448	-	-	14,014,448
WEST VIRGINIA JURISDICTION					
25 Percentage of Plant in WEST VIRGINIA JURISDICTION					
26 Net Plant in WEST VIRGINIA JURISDICTION (Ln 24 * Ln 25)	-	-	-	-	-
27 Less: Net Value of Exempted Generation Plant	-	-	-	-	-
28 Taxable Property Basis (Ln 26 - Ln 27)	-	-	-	-	-
29 Relative Valuation Factor	-	-	-	-	-
30 Weighted Net Plant (Ln 28 * Ln 29)	-	-	-	-	-
31 General Plant Allocator (Ln 30 / (Total - General Plant))	0.00%	100.00%	0.00%	-100.00%	
32 Functionalized General Plant (Ln 31 * General Plant)	-	-	-	-	-
33 Weighted WEST VIRGINIA JURISDICTION Plant (Ln 30 + 32)	-	-	-	-	-
34 Functional Percentage (Ln 33/Total Ln 33)	0.00%	100.00%	0.00%	-	
JURISDICTION					
35 Net Plant in JURISDICTION (Ln 24 - Ln 26)	-	14,014,448	-	-	14,014,448
36 Less: Net Value Exempted Generation Plant	-	-	-	-	-
37 Taxable Property Basis	-	14,014,448	-	-	14,014,448
38 Relative Valuation Factor	-	-	-	-	-
39 Weighted Net Plant (Ln 37 * Ln 38)	-	-	-	-	-
40 General Plant Allocator (Ln 39 / (Total - General Plant))	0.00%	100.00%	0.00%	-100.00%	
41 Functionalized General Plant (Ln 41 * General Plant)	-	-	-	-	-
42 Weighted JURISDICTION Plant (Ln 39 + 41)	-	-	-	-	-
43 Functional Percentage (Ln 42/Total Ln 42)	0.00%	100.00%	0.00%	-	

Line No.	(A) Annual Tax Expenses by Type (Note 1)	(B) Total Company	(C) FERC FORM 1 Tie-Back	(D) FERC FORM 1 Reference			
1	Revenue Taxes						
2	Gross Receipts Tax	-					
<hr/>							
Line No.	(A) "Real Estate and Personal Property Tax Detail Annual Tax Expenses by Type (Note 1)"	(B) Tax Year	(C) Total Company	(D) FERC FORM 1 Tie-Back	(E) FERC FORM 1 Reference	(F) Tax Year Factor (Note 2)	(G) Transmission Function (Note 2)
Real Estate and Personal Property Taxes Total (Ln 4 + Ln 5 + Ln 6 + Ln 7)							
3			165,394				165,394
4	Real and Personal Property - West Virginia		-				-
5	Real and Personal Property - Virginia		394	394	P.263, Ln 18(i)	100%	394
6	Real and Personal Property - Tennessee	2019	165,000	165,000	P.263, Ln 26(j)	100%	165,000
7	Real and Personal Property - Other Jurisdictions		-				-

Line No.	(A) Annual Tax Expenses by Type (Note 1)	(B) Total Company	(C) FERC FORM 1 Tie-Back	(D) FERC FORM 1 Reference
8	Payroll Taxes			
9	Federal Insurance Contribution (FICA)	-		
10	Federal Unemployment Tax	-		
11	State Unemployment Insurance	-		
12	<i>Line Left Deliberately Blank</i>			
13	State Severance Taxes	-		
14	Miscellaneous Taxes			
15	State Business & Occupation Tax	-		
16	State Public Service Commission Fees	-		
17	State Franchise Taxes	2018 2019	41,602 20,801 20,801	P.263 ln 29 (i) P.263 ln 30 (i)
18	State Lic/Registration Fee	-		
19	Misc. State and Local Tax	-		
20	Sales & Use	-		
21	Federal Excise Tax	-		
22	Michigan Single Business Tax	-		
23	Total Taxes by Allocable Basis (Total Company Amount Ties to FF1 p.114, Ln 14,(c))		206,996	206,996

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

Note 2: The transmission functional amounts for any Real Estate and Property taxes listed on pages 263 of the FERC Form 1 will be allocated using the transmission functional allocator calculated for each state in Worksheet H of the applicable year that the taxes were assessed. Real and Personal Property - Other Jurisdictions will be allocated using the Gross Plant Allocator from the applicable year..

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using Actual/Projected FF1 Balances
Worksheet I RESERVED
AEP Appalachian Transmission Company

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using Actual/Projected FF1 Balances
Worksheet K Supporting Calculation of TRUE-UP PJM RTEP Project Revenue Requirement Billed to Benefiting Zones
AEP Appalachian Transmission Company

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

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

ROE w/o incentives (TCOS, ln 138)			10.35%
Project ROE Incentive Adder			0
ROE with additional 0 basis point incentive			10.35%
Determine R (cost of long term debt, cost of preferred stock and equity percentage is from the True-Up TCOS, lns 136 through 138)			
	%	Cost	Weighted cost
Long Term Debt	56.27%	3.89%	2.243%
Preferred Stock	0.00%	0.00%	0.000%
Common Stock	43.73%	10.35%	4.526%
		R =	6.769%

SUMMARY OF TRUED-UP ANNUAL REVENUE REQUIREMENTS FOR RTEPPROJECTS			
TRUE-UP YEAR	Rev Require	W Incentives	Incentive Amounts
As Projected in Prior Year WS J	#/N/A	#/N/A	#/N/A
Actual After True-up	#/N/A	#/N/A	#/N/A
True-up of ARR For 2019	#/N/A	#/N/A	#/N/A

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

Rate Base (True-Up TCOS, ln 58)	13,781,709
R (from A. above)	6.769%
Return (Rate Base x R)	932,927

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

Return (from B. above)	932,927
Effective Tax Rate (TCOS, ln 97)	23.00%
Income Tax Calculation (Return x CIT)	214,603
ITC Adjustment	-
Excess Deferred Income Tax	1,371
Tax Affect of Permanent Differences	75
Income Taxes	216,050

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

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

Annual Revenue Requirement (TCOS, ln 1)	2,468,560
Lease Payments (TCOS, lns 80)	-
Return (TCOS, ln 109)	932,927
Income Taxes (TCOS, ln 108)	216,050
Annual Revenue Requirement, Less Lease Payments, Return and Taxes	1,319,583

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

Annual Revenue Requirement, Less Lease Payments, Return and Taxes	1,319,583
Return (from I.B. above)	932,927
Income Taxes (from I.C. above)	216,050
Annual Revenue Requirement, with 0 Basis Point ROE increase	2,468,560
Depreciation (TCOS, ln 83)	176,633
Annual Rev. Req. w/ 0 Basis Point ROE increase, less Depreciation	2,291,927

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

Net Transmission Plant (Projected TCOS, ln 33)	14,014,448
Annual Revenue Requirement, with 0 Basis Point ROE increase	2,468,560
FCR with 0 Basis Point increase in ROE	17.61%
Annual Rev. Req. w/ 0 Basis Point ROE increase, less Dep.	2,291,927
FCR with 0 Basis Point ROE increase, less Depreciation	16.35%
FCR less Depreciation (TCOS, ln 10)	16.35%
Incremental FCR with 0 Basis Point ROE increase, less Depreciation	0.00%

III. Calculation of Composite Depreciation Rate

Average Transmission Plant Balance for 2019 TCOS, ln 19	14,037,714
Annual Depreciation and Amortization Expense (TCOS, ln 83)	176,633
Composite Depreciation Rate	1.26%
Depreciable Life for Composite Depreciation Rate	79.47
Average Life in Whole Years	79

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

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using Actual/Projected FF1 Balances
Worksheet L RESERVED
AEP Appalachian Transmission Company

AEPTCo subsidiaries in PJM
 Cost of Service Formula Rate Using Actual/Projected FF1 Balances
 Worksheet M Supporting Calculation of Capital Structure and Weighted Average Cost of Capital
 AEP Appalachian Transmission Company

Line No	Month (a)	Average Balance of Common Equity				Average Balance of Common Equity (f)=(b)-(c)-(d)-(e)
		Proprietary Capital (b)	Less: Preferred Stock (c)	Less Undistributed Sub Earnings (Acct 216.1) (d)	Less AOCI (Acct 219.1) (e)	
	(Note A)	(FF1 112.16)	(FF1 250-251)	(FF1 112.12)	(FF1 112.15)	
1	December Prior to Rate Year	25,568,815	-	-	-	25,568,815
2	January	26,153,658				26,153,658
3	February	26,650,885				26,650,885
4	March	26,812,871				26,812,871
5	April	27,218,765				27,218,765
6	May	26,349,078				26,349,078
7	June	26,820,268				26,820,268
8	July	27,447,193				27,447,193
9	August	27,909,263				27,909,263
10	September	28,322,055				28,322,055
11	October	28,953,250				28,953,250
12	November	29,463,117				29,463,117
13	December of Rate Year	29,036,332				29,036,332
14	Average of the 13 Monthly Balances	27,438,889	-	-	-	27,438,889

Line No	Month (a)	Average Balance of Long Term Debt					Gross Proceeds Outstanding Long-Term Debt (g)=(b)-(c)+(d)+(e)-(f)
		Bonds (b)	Less: Recquired Bonds (c)	LT Advances from Assoc. Companies (d)	Senior Unsecured Notes (e)	Less: Fair Value Hedges (f)	
	(Note A)	(FF1 112.18)	(FF1 112.19)	(FF1 112.20)	(FF1 112.21)	FF1, page 257, Col. (h) - Note 1	
15	December Prior to Rate Year	-	-	15,000,000	-	-	15,000,000
16	January			15,000,000			15,000,000
17	February			15,000,000			15,000,000
18	March			15,000,000			15,000,000
19	April			15,000,000			15,000,000
20	May			15,000,000			15,000,000
21	June			43,000,000			43,000,000
22	July			43,000,000			43,000,000
23	August			43,000,000			43,000,000
24	September			60,000,000			60,000,000
25	October			60,000,000			60,000,000
26	November			60,000,000			60,000,000
27	December of Rate Year			60,000,000			60,000,000
28	Average of the 13 Monthly Balances	-	-	35,307,692	-	-	35,307,692

NOTE 1: The balance of fair value hedges on outstanding long term debt are to be excluded from the balance of long term debt included in the formula's capital structure. (Page 257 Column H of the FF1)

AEPTCo subsidiaries in PJM
 Cost of Service Formula Rate Using Actual/Projected FF1 Balances
 Worksheet M Supporting Calculation of Capital Structure and Weighted Average Cost of Capital
 AEP Appalachian Transmission Company

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

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
29	Annual Interest Expense for 2019						
30	Interest on Long Term Debt - Accts 221 - 224 (256-257.33.i)			1,389,281			
31	Less: Total Hedge Gain/Expense Accumulated from p 256-257, col. (i) of FERC Form 1 included in Ln 30 and shown in 43 below.			-			
32	Amort of Debt Discount & Expense - Acct 428 (117.63.c)			18,307			
33	Amort of Loss on Reacquired Debt - Acct 428.1 (117.64.c)			-			
34	Less: Amort of Premium on Debt - Acct 429 (117.65.c)			-			
35	Less: Amort of Gain on Reacquired Debt - Acct 429.1 (117.66.c)			-			
36	Total Interest Expense (Ln 30 - 31 + 32 + 33 - 34 - 35)			1,407,588			
37	Average Cost of Debt for 2019 (Ln 36/ In 28 (g))			3.99%			

CALCULATION OF HEDGE GAINS/LOSSES TO BE EXCLUDED FROM TCOS

38 AEP Appalachian Transmission Company may not include costs (or gains) related to interest hedging activities.

	Amortization Period				
	HEDGE AMOUNTS BY ISSUANCE (FROM p. 256-257 (i) of the FERC Form 1)	(Amortization of (Gain)/Loss for 2019	Remaining Unamortized Balance	Beginning	Ending
39					
40					
41					
42					
43	Net (Gain)/Loss Hedge Amortization To Be Removed	-	-	-	-

Development of Cost of Preferred Stock

44	Balance of Preferred Stock (Line 14 (c))	-
45	Dividends on Preferred Stock (Acct 437, FF1 118.29)	-
46	Average Cost of Preferred Stock (Ln 45 / In 44)	#DIV/0!

AEPTCo subsidiaries in PJM
Cost of Service Formula Rate Using Actual/Projected FF1 Balances
Worksheet N - Gains (Losses) on Sales of Plant Held For Future Use
AEP Appalachian Transmission Company

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

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

AEP/Co subsidiaries in PJM
Cost of Service Formula Rate Using Actual/Projected FF1 Balances
Calculation of Post-employment Benefits Other than Pensions Expenses Allocable to Transmission Service
Worksheet O - PBOP Support
AEP Appalachian Transmission Company

PBOP	(A)	(B)
1	<u>Calculation of PBOP Expenses</u>	
2	<u>AEP System PBOP Rate</u>	
3	Total AEP System PBOP expenses	-\$80,135,777
4	Base Year relating to retired personnel	\$0
5	Amount allocated on Labor	-\$80,135,777
6	Total AEP System Direct Labor Expense	\$1,454,108,109
7	AEP System PBOP expense per dollar of direct labor (PBOP Rate)	-\$0.055
8	Currently Approved PBOP Rate	-\$0.043
9	Base PBOP TransCo labor expensed in current year	295,124
10	Allowable TransCo PBOP Expense for current year (Ln 8 * Ln 9)	-\$12,690
11	Direct PBOP Expense per Actuarial Report	\$0
12	Additional PBOP Ledger Entry (From Company Records)	\$0
13	Medicare Credit	\$0
14	PBOP Expenses From AEP Affiliates (From Company Records)	-\$62,176
15	Actual PBOP Expense (Sum Lines 11-14)	-\$62,176
16	PBOP Adjustment Line 10 less Line 15	\$49,486

Note: PBOP Expense will be calculated in accordance with the settlement in Docket ER10-355.

As part of the annual update process, AEP will provide to transmission customers and include in its informational filing an independently prepared actuarial report that includes a ten (10) year forecast of PBOP expenses. During the annual update process conducted for rate year 2018 and every four years thereafter, Worksheet O will be used to determine whether the PBOP allowance rate (\$PBOP per \$Direct O&M Labor) should be adjusted going forward for the next four years. If the annual actuarial report issued during the year of any PBOP rate review projects PBOP costs during the next four years that, when allocated to the AEP Transmission Companies based on their projected direct labor expenses over that same projected four-year period, absent a change in the PBOP Rate, will likely cause the AEP East Transmission Companies to over or under collect their cumulative PBOP expenses by more than 20% of the projected next four year's total PBOP expense, taking into account the net over or under collection of such expenses during the previous four years, the PBOP rate shall be adjusted. In order to determine whether continued use of the then approved PBOP rate is likely to result in the AEP Companies' incurrence of a cumulative allowance of PBOP costs under the formula rate will result in a cumulative over or under-recovery of actual PBOP expenses exceeding 20% over the subsequent four year period, Worksheet O will be used to determine (a) the level of cumulative over or under collections of PBOP expense during the time since the PBOP allowance rate was last set, including carrying costs based on the weighted average cost of capital each year from the formula rate actual transmission cost-of-service (b) the cumulative net present value of projected PBOP costs during the next four years as estimated by the then current actuarial report, assuming a discount rate equal to the actual transmission cost of service average cost of capital for the immediately prior calendar year and (c) the cumulative net present value of continued collections over the next four years based on the projected AEP Transmission Companies direct labor expenses and the then effective PBOP allowance rate assuming a discount rate equal to the prior year weighted average cost of capital. If the absolute value of (a)+(b)-(c) exceeds 20% of (b), then the PBOP allowance rate used in the formula rate calculation shall be changed to the value that will cause the projected result of (a)+(b)-(c) to equal zero. If the projected over or under collection during the next four years, (a)+(b)-(c), is less than 20% of (b), then the PBOP Rate will continue in effect for the next four years at the then effective rate. If it is determined through this procedure AEP Companies will over-recover or under-recover actual PBOP expenses by more than 20% over the subsequent four-year period, AEP shall make a filing under FPA Section 205 to change the PBOP Rate stated in the formula rate shown on Worksheet O. No other changes to the formula rate may be included in that filing.

AEPTCo subsidiaries in PJM
 Worksheet - P
 DEPRECIATION RATES
 FOR TRANSMISSION PLANT PROPERTY ACCOUNTS
 EFFECTIVE AS OF MARCH 6, 2019

AEP Appalachian Transmission Company

	PLANT ACCT.	RATES Note 1
<i>TRANSMISSION PLANT</i>		
Land Rights	351.0	14.22%
Structures & Improvements	352.0	1.62%
Station Equipment	353.0	2.37%
Towers & Fixtures	354.0	1.59%
Poles & Fixtures	355.0	2.71%
Overhead Conductor	356.0	1.53%
Underground Conduit	357.0	3.71%
Underground Conductors	358.0	5.24%

<i>GENERAL PLANT</i>		
Structures and Improvements	390.0	1.91%
Office Furniture and Equip.	391.0	3.17%
Stores Equipment	393.0	1.80%
Tools, Shop and Garage Equipment	394.0	2.57%
Laboratory Equipment	395.0	4.01%
Power Operated Equipment	396.0	3.90%
Communications Equipment	394.0	4.98%
Micellaneous Equipment	398.0	2.70%

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

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

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

