AEP Transmission Formula Rate Template Utilizing FERC Form 1 Data For rates effective July 1, 2016

	SPP Zone 1 Projected AEP Re	evenue Requirements		
Line No.			OKTCo Annual Revenue Requirement	SWTCo Annual Revenue Requirement
A. AEP N	letwork Integration Transmission Service (NITS)			
1	REVENUE REQUIREMENT (w/o incentives)	(TCOS Line 1)	\$65,470,116	\$136,455
2	LESS: REVENUE CREDITS	(TCOS Line 5)	\$1,793,628	\$5,682
3	CURRENT YEAR ZONE 1 AEP NETWORK SERVICE REVENUE REQUIREMENT	(TCOS Line 6)	\$63,676,488	\$130,773
4 5 6 7 8	LESS: REVENUE REQUIREMENTS INCLUDED IN LINE 1 FOR: BASE PLAN UPGRADES (W/O INCENTIVES) REQUESTED UPGRADES (W/O INCENTIVES) ECONOMIC UPGRADES (W/O INCENTIVES) SUBTOTAL	(TCOS Line 7) (Worksheet F) (Worksheet F)	13,475,209 - - 13,475,209	- - -
9	EXISTING ZONAL ATRR (W/O INCENTIVES)	(Line 3- Line 8)	50,201,279	130,773
10	INCENTIVE REVENUE REQUIREMENT FOR ZONAL PROJECTS	(TCOS Line 15)	-	-
11	EXISTING ZONAL ATRR FOR SPP OATT ATTACHMENT H, SEC. 1, COL. 3	(Ln 9 + Ln 10)	\$50,201,279	\$130,773
12	2015 Historic AEP West Zone SPP Average 12-Mo. Peak Demand	8,211	8,211	8,211
13	AEP Monthly NITS Rate in \$/MW - Month	(Line 11 / Line 12) / 12	\$509.49	\$1.33
B. <u>Point</u> -	to-Point Service			
14 15 16 17 18 19 20	Annual Point-to-Point Rate in \$/MW - Year Monthly Point-to-Point Rate in \$/MW - Month Weekly Point-to-Point Rate in \$/MW - Weekly Daily On-Peak Point-to-Point Rate in \$/MW - Day Daily Off-Peak Point-to-Point Rate in \$/MW - Day Hourly On-Peak Point-to-Point Rate in \$/MW - Hour Hourly Off-Peak Point-to-Point Rate in \$/MW - Hour	(Line 11 / Line 12) (Line 14 / 12) (Line 14 / 52) (Line 14 / 260) (Line 14 / 365) (Line 14 / 4160) (Line 14 / 8760)	\$6,113.91 \$509.49 \$117.58 \$23.52 \$16.75 \$1.47 \$0.70	\$15.93 \$1.33 \$0.31 \$0.06 \$0.04 \$0.00 \$0.00

AEPTCo - SPP Formula Rate Projected NITS Rates Page: 1 of 69

AEPTCo - SPP Formula Rate Schedule 1 Rates Page: 2 of 69

AEP Transmission Formula Rate Template Utilizing FERC Form 1 Data For rates effective July 1, 2016

		SPF	P SCHEDULE 1 AEP Revenue Requir	rements	
	Line No.	·		OKTCo Annual Revenue Requirement	SWTCo Annual Revenue Requirement
A.	<u>Schedu</u>	le 1 ARR For 2016 Projected Year			
	1	Total Load Dispatch & Scheduling (Account 561) (TCOS Line 77)		\$52,177	\$0
	2	Less: Load Dispatch - Scheduling, System Control and Dispatch Services (321.88.b)		\$0	\$0
	3	Less: Load Dispatch - Reliability, Planning & Standards Development Services (321.92.b)		\$0	\$0
	4	Total 561 Internally Developed Costs	(Line 1 - Line 2 - Line 3)	\$52,177	\$0
	5	Less: PTP Service Credit (prior year Sched 1 revenue from PTP transactions)		\$0	\$0
	6	PROJECTED ZONAL ARR FOR 2016	(Line 4 - Line 5)	\$0	\$0
В.	<u>Schedul</u> 7	le 1 Projected 7/1/2016 Rate Calculations 2015 Historic AEP West Zone SPP Average 12-Mo. Peak Demand	8,211	8,211	8,211
	8	Annual Point-to-Point Rate in \$/MW - Year	(Line 6 / Line 7)	\$0.00	\$0.00
	9	Monthly Point-to-Point Rate (In 8 / 12) \$/MW - Month	(Line 8 / 12)	\$0.00	\$0.00
	10	Weekly Point-to-Point Rate (In 8 / 52) \$/MW - Weekly	(Line 8 / 52)	\$0.00	\$0.00
	11	Daily Off-Peak Point-to-Point Rate (In 8 / 365) \$/MW - Day	(Line 8 / 365)	\$0.00	\$0.00
	12	Hourly Off-Peak Point-to-Point Rate (In 8 / 8760) \$/MW - Hour	(Line 8 / 8760)	\$0.00	\$0.00

AEPTCo - SPP Formula Rate Trued-Up NITS Rates Page: 3 of 69

AEP Transmission Formula Rate Template Calculation of True-Up Rate For Schedule 9 For Calendar Year 2015

SPP Zone 1 Trued-Up AEP Revenue Requirements

Α.

Line No.			OKTCo Annual Revenue Requirement	SWTCo Annual Revenue Requirement
Netwo	ork Service			
1	TRUE-UP YEAR 2015 REVENUE REQUIREMENT (w/o incentives)	(True-Up TCOS Line 1)	\$50,287,062	\$137,807
2	LESS: REVENUE CREDITS	(True-Up TCOS Line 5)	\$1,793,628	\$5,682
3	TRUE-UP YEAR ZONE 1 AEP NETWORK SERVICE REVENUE REQUIREMENT	(True-Up TCOS Line 6)	\$48,493,434	\$132,125
4 5 6 7 8	LESS: REVENUE REQUIREMENTS INCLUDED IN LINE 1 FOR: BASE PLAN UPGRADES (W/O INCENTIVES) REQUESTED UPGRADES (W/O INCENTIVES) ECONOMIC UPGRADES (W/O INCENTIVES) SUBTOTAL	(True-Up TCOS Line 7) (Worksheet G) (Worksheet G)	13,185,393 - - 13,185,393	- - - -
9	EXISTING ZONAL ATRR (W/O INCENTIVES)	(Line 3- Line 8)	35,308,041	132,125
10	INCENTIVE REVENUE REQUIREMENT FOR ZONAL PROJECTS	(True-Up TCOS Line 15)	-	-
11	TRUED-UP ZONAL ATRR (W/ INCENTIVES) FOR 2015	(Line 9 + Line 10)	35,308,041	132,125
12	2015 Historic AEP West Zone SPP Average 12-Mo. Peak Demand	8,211	8,211	8,211
13	Monthly NITS Rate in \$/MW - Month	(Line 11 / Line 12) /12	358.34	1.34

AEP Transmission Formula Rate Template Calculation of Schedule 11 Revenue Requirements For AEP Transmission Projects

For Calendar Year 2015 and Projected Year 2016

AEP TRANSCO Schedule 11 Revenue Requirement Including True-Up of Prior Collections

Note: Some project's final trued-up cost may not meet SPP's \$100,000 threshold for socialization. In that case a true-up of the pirior year ARR will be made in columns (H) through (O), but no projected ARR will be shown in columns (E) through (G) for the current year.

	(A)	(B)	(C)	(D)	(E)	(F)	(G) = (E)+(F)	(H)	(1)	(L)	(K) = (I) - (J)	(L)	(M)	(N) = (L)-(M)	(O)	(P) = (H)+(K)+(N)+(O)	(Q) = (G) + (P)
				-	Projected A	RR For 2016 I	From WS-F		True-Up ARR CY20	15 From Worksh	eet G (includes adj	ustment	for SPP	Collections)			
									Base	e ARR			Incentive	e ARR			
<u>Line</u> <u>No.</u>	<u>Sheet</u> <u>Name</u>	<u>Owner</u>	Project Description	<u>Year in</u> Service	Base ARR (WS-F)	Incentive	<u>Total</u>	<u>TRUE-UP</u> <u>Adjustment</u> (WS-G)	Adjusted ARR from Prior Update	<u>As Billed</u> <u>by SPP</u> (for Prior Yr T-Service)	<u>COLLECTION</u> Adjustment	<u>True-</u> up	<u>As</u> Billed	<u>Change</u>	INTEREST Adjustment	Total Adjustments (True-Up, Billing, & Interest)	<u>Total ADJUSTED</u> <u>Revenue</u> <u>Requirement</u> <u>Effective</u> <u>7/1/2016</u>
1	OKT.001	OKT S	Snyder 138 kV Terminal Addition	2010	84,948	-	84,948	8,439	95,308	77,283	18,024	-	-	- 1	2,479	28,943	113,891
2	OKT.002	OKT C	Coffeyville T to Dearing 138 kV Rebuild - 1.1 miles	2010	114,496	-	114,496	11,649	128,938	104,554	24,385	-	-	-	3,375	39,408	153,904
3	OKT.003	ΟΚΤ Τ	ulsa Power Station Reactor	2011	72,978	-	72,978	7,330	80,710	65,447	15,264	-	-	-	2,116	24,710	97,688
4	OKT.004	OKT B	Bartlesville SE to Coffeyville T Rebuild	2011	1,305,682	-	1,305,682	39,434	1,552,001	1,258,490	293,511	-	-	-	31,188	364,133	1,669,816
5	OKT.005		nstall 345kV terminal at Valliant***	2012	-	-	-	-		-	-	-	-	-	-	-	-
6	OKT.006	OKT C	Canadian River - McAlester City 138 kV Line Conversion	2013	3,542,256	-	3,542,256	186,480	4,279,364	3,470,059	809,305	-	-	-	93,279	1,089,063	4,631,320
7	OKT.007	OKT C	Cornville Station Conversion	2014	1,260,843	-	1,260,843	68,297	1,119,866	908,079	211,787	-	-	-	26,236	306,320	1,567,163
8	OKT.008	OKT C	Coweta 69 kV Capacitor	2014	231,618	-	231,618	145,196	173,631	140,794	32,837	-	-	-	16,677	194,709	426,328
9	OKT.009	OKT P	Prattville-Bluebell 138 kV	2015	1,060,998	-	1,060,998	(12,001)	578,000	468,690	109,310	-	-	-	9,115	106,424	1,167,422
10	OKT.010	OKT V	Vapanucka Customer Connection	2013	883,444	-	883,444	88,415	841,053	681,995	159,058	-	-	-	23,182	270,655	1,154,099
11	OKT.011	OKT G	Grady Customer Connection	2014	2,512,365	-	2,512,365	255,022	2,255,402	1,828,865	426,537	-	-	-	63,844	745,403	3,257,768
12	OKT.012	OKT D	Darlington-Red Rock 138 kV line	2013	1,622,010	-	1,622,010	162,428	1,544,167	1,252,137	292,030	-	-	-	42,571	497,029	2,119,039
13	OKT.013	OKT E	Ilis 138 kV	2013	500,108	-	500,108	50,081	476,107	386,066	90,040	-	-	-	13,126	153,247	653,355
14	OKT.014	OKT V	′alliant-NW Texarkana 345 kV	2016	283,462	-	283,462	-		-	-	-	-	-	-	-	283,462
		c	DKT Total	-	13,475,209	-	13,475,209	1,010,768	13,124,547	10,642,458	2,482,089	-	-	-	327,188	3,820,045	17,295,254
4.4	S/M/T 004	SWT															
14	SWT.001	5001			-	-	-	-	-	-	-	-	-	-	-	-	-
15			SWT Total	-		-						-	-	-			

*<\$100K investment *** Project became BPU ineligible (see Project's Notes)

AEPTCo - SPP Formula Rate Schedule 11 Revenue Requirements Page: 4 of 69

AEP West (SPP Zone-1)

Network Load for January Through December, 2015 Based on West Zone-SPP Monthly Transmission System Firm Peak Demands [1] for the Twelve Months Ended December 31, 2015

									•)						
	Peak Day	1/8/2015	2/27/2015	3/6/2015	4/7/2015	5/27/2015	6/24/2015	7/29/2015	8/7/2015	9/8/2015	10/15/2015	11/23/2015	12/18/2015	12 Month	
Line	Peak Hour	800	800	800	1700	1700	1700	1 700	1600	1500	1700	800	800	Average MW	LRS
No. SF	P Load Responsibility													-	
1	PSO (2)	3,016	2,790	2,517	2,592	2,879	3,811	4,055	4,199	3,776	2,996	2,192	2,442	3,105.4	37.8%
2	SWEPCO (2)	3,257	2,984	3,011	2,401	2,827	3,436	3,776	3,765	3,462	2,872	2,378	2,436	3,050.4	37.2%
3	AECC (3)	526	565	498	309	498	563	640	619	494	375	399	425	492.6	6.0%
4	AECC-MISO	318	196	168	111	103	189	205	241	225	193	140	173	188.5	2.3%
5	WFEC (3)	35	34	33	21	26	30	36	37	34	27	31	30	31.2	0.38%
6	OMPA (3)	94	85	77	89	91	137	155	156	143	112	69	77	107.1	1.3%
7	OG&E (3)	20	19	22	21	8	9	12	11	14	13	13	13	14.6	0.18%
8	NTEC (3)	849	736	780	378	467	635	695	702	603	466	572	570	621.1	7.6%
9	ETEC (3)	108	85	91	48	59	80	92	91	77	61	75	75	78.5	1.0%
10	TEXLA (3)	121	106	109	80	70	103	113	109	96	37	84	86	92.8	1.1%
11	Greenbelt (3)	8	7	6	7	4	7	14	12	12	8	4	7	8.0	0.10%
12	Lighthouse (3)	2	2	1	1	1	1	3	3	2	1	1	2	1.7	0.02%
13	Bentonville, AR (3)	112	102	95	87	115	144	153	153	141	106	81	92	115.1	1.4%
14	Prescott, AR (Entergy) (3)	11	12	13	12	12	13	14	15	14	12	12	12	12.7	0.15%
15	Minden, LA (Entergy) (3)	25	23	23	22	26	35	39	39	36	27	18	19	27.7	0.34%
16 17	Hope, AR (3) SWEPCO-Valley (6)	46 180	43 158	45	40	44	58 140	56 149	61 149	57 125	45 105	39 122	39 118	47.8 131.8	0.58% 1.61%
17	Coffeyville, KS (3)	105	82	161 101	81 86	94 108	140	31	41	94	63	90	96	83.7	1.0%
10	coneyvine, KS (5)	105	02	101	00	100	107	51	41	54	03	90	90	03.7	1.0 /0
19 Zc	ne 1 - System Firm Peak Demands	8,833	8,029	7,751	6,386	7,432	9,498	10,238	10,403	9,405	7,519	6,320	6,712	8,211	
	Supporting Data														
20 P S		2,974	2,750	2,488	2,578	2,855	3,775	4,015	4,164	3,749	2,979	2,174	2,428		
21	КАМО	39	36	30	22	28	41	43	41	32	25	26	29		
22	GRDA load on PSO	16	14	11	5	7	11	12	12	10	7	8	0		
23	PSO load on WFEC	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6		
24 25	Allen Holdenville PSO Load Responsibility	- 7 3016	-4 2790	- <u>6</u> 2517	- <u>7</u> 2592	- <u>5</u> 2879	-10 3811	- <u>9</u> 4055	-12 4199	- <u>9</u> 3776	- <u>9</u> 2996	-10 2192	- <u>9</u> 2442		
20	PSO Load Responsibility	3010	2790	2317	2392	2019	3011	4055	4199	3//0	2990	2192	2442		
	VEPCO: SWEPCO Native Load (2) (5)	3,437	3,142	3,172	2,481	2,916	3,576	3,925	3,914	3,587	2,977	2,500	2,554		
27	Dolet Hills Aux. Load (4)	0	0	0	1	5	0	0	0	0	0	0	0		
28	SWEPCO-Valley (6)	-180	-158	-161	-81	-94	-140	-149	-149	-125	-105	-122	-118		
29	VEMCO (SPA Hydro Replacement) (7)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	SWEPCO Load Responsibility	3257	2984	3011	2401	2827	3436	3776	3765	3462	2872	2378	2436		

Historical Combined Load Worksheet (SPP Zone - 1)

Notes:

(1) MW, at the time of the AEP-SPP Internal (MLR) Peak

(2) At the generator, includes transmission losses.

(3) At the generator. Transmission losses added to metered values which include appropriate dist.& xfmr losses.

(4) Not self-generated

(5) Includes SWEPCO-Valley (formerly VEMCO) load connected to Entergy/CLECO system. SWEPCO purchased VEMCO Oct. 1, 2010.

(6) Effective Jan 1, 2015, the entire SWEPCO Valley load (formerly VEMCO) power supply is supplied from SWEPCO's SPP fleet and listed separately on OATT customer list for reporting purposes.

(7) included in SWEPCO-Valley.

AEP - SPP Formula Rate Load Worksheet Page: 5 of 69

AEP West SPP Member Companies 2016 Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016

Line No. 1	REVENUE REQUIREMENT (w/o incentives)	(In 119)	Total	AI	locator	Transmission Amount 65,470,116
2	REVENUE CREDITS	(Note A)	1 700 000		4 00000	4 700 000
3	Transmission Credits Assoc. Business Development	(Worksheet H) (Worksheet H)	1,793,628	DA DA	1.00000 1.00000	1,793,628
4 5	Total Revenue Credits		1,793,628	DA	1.00000	1,793,628
· ·			.,			
6	REVENUE REQUIREMENT For All Company Facilities	(In 1 less In 5)				63,676,488
7	Revenue Requirement for SPP BPU Regional Facilities ((Worksheet F)	· · ·	the total on line 6. 13,475,209	DA	1.00000	13,475,209
8	NET PLANT CARRYING CHARGE (w/o incentives Annual Rate					12.42%
9 10	Monthly Rate	(In 1/ (Sum of Ins 46, 47, 48, 49, 51)) x 100% (In 9 / 12)				1.03%
11 12	NET PLANT CARRYING CHARGE ON LINE 9 , W/O DE Annual Rate	PRECIATION (w/o incentives) (Note B) ((In 1 - 94 - In 95) / (Sum of Ins 46, 47, 48, 49, 51)) x ²	100%			10.79%
13 14	NET PLANT CARRYING CHARGE ON LINE 11, W/O IN Annual Rate	NCOME TAXES, RETURN (Note B) ((In 1 - In 94 - In 95- In 116 - In 117) / (Sum of Ins 46, -	47, 48, 49, 51)) x 100%			1.66%
15	ADDITIONAL REVENUE REQUIREMENT for projects w	/ incentive ROE's (Note C) (Worksheet F)				0.00%

AEPTCo - SPP Formula Rate OKT Projected TCOS - Projected Page: 7 of 69

AEP West SPP Member Companies 2016 Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016

	(1)	(2)	(3)		(4)	(5)
	RATE BASE CALCULATION	Data Sources <u>(See "General Notes")</u>	TO Total	<u>All</u>	<u>ocator</u>	Total <u>Transmission</u>
Line No. 16	GROSS PLANT IN SERVICE Line Deliberately Left Blank		<u>NOTE D</u>			
17	Line Deliberately Left Blank Transmission	(Worksheet A In 3.C &		DA		440,281,744
18 19	Less: Transmission ARO (Enter Negative)	Hist. Template Ln 183) (Worksheet A In 4.C)	440,281,744	TP	1.00000	
20 21 22	Plus: Transmission Plant-in-Service Additions (Worl Plus: Additional Trans Plant on Transferred Assets	ksheet B)	113,005,329	DA TP	1.00000 1.00000	113,005,329
22	Line Deliberately Left Blank Line Deliberately Left Blank					
24	General Plant	(Worksheet A In 7.C)	-	W/S	0.99847	-
25 26	Less: General Plant ARO (Enter Negative) Intangible Plant	(Worksheet A In 8.C) (Worksheet A In 9.C)	- 2,489,437	W/S W/S	0.99847 0.99847	- 2,485,622
27	TOTAL GROSS PLANT	(sum lns 16 to 26)	555,776,510		0.000 17	555,772,695
28	ACCUMULATED DEPRECIATION AND AMORTIZATIO	ON				
29 30	Line Deliberately Left Blank		-	NA NA	0.00000 0.00000	-
30	Line Deliberately Left Blank	(Worksheet A In 14.C &	-		0.00000	-
31	Transmission	28.C)	17,365,983	TP1=	1.00000	17,365,983
32	Less: Transmission ARO (Enter Negative)	(Worksheet A In 15.C)	-	TP1=	1.00000	-
33 34	Plus: Transmission Plant-in-Service Additions (Worl Plus: Additional Projected Deprec on Transferred A		437,093	DA DA	1.00000 1.00000	437,093
35	Plus: Additional Transmission Depreciation for 2016		8,143,315	TP1	1.00000	8,143,315
36	Plus: Additional General & Intangible Depreciation f		391,955	W/S	0.99847	391,354
37 38	Plus: Additional Accum Deprec on Transferred Asse Line Deliberately Left Blank	ets (Worksheet B)	-	DA	1.00000	-
39	Line Deliberately Left Blank					
40	General Plant	(Worksheet A In 18.C)	-	W/S	0.99847	-
41 42	Less: General Plant ARO (Enter Negative) Intangible Plant	(Worksheet A In 19.C) (Worksheet A In 20.C)	- 763,558	W/S W/S	0.99847 0.99847	- 762,388
42	TOTAL ACCUMULATED DEPRECIATION	(sum lns 29 to 42)	27,101,904	00/5	0.99047	27,100,133
44	NET PLANT IN SERVICE					
45	Line Deliberately Left Blank					
46	Transmission	(In 18 + In 19 - In 31 - In 32)	422,915,761			422,915,761
47	Plus: Transmission Plant-in-Service Additions (In 20	-	112,568,236			112,568,236
48 49	Plus: Additional Trans Plant on Transferred Assets Plus: Additional Transmission Depreciation for 2016		- (8,143,315)			- (8,143,315)
50	Plus: Additional General & Intangible Depreciation f		(391,955)			(391,354)
51	Plus: Additional Accum Deprec on Transferred Asse	ets (Worksheet B) (-In 37)	-			-
52 53	<i>Line Deliberately Left Blank</i> General Plant	(ln 24 + ln 25 - ln 40 - ln 41)	<u>.</u>			-
54	Intangible Plant	(ln 26 - ln 42)	1,725,879			1,723,234
55	TOTAL NET PLANT IN SERVICE	(sum lns 45 to 54)	528,674,606			528,672,562
56	DEFERRED TAX ADJUSTMENTS TO RATE BASE	(Note E)				
57	Account No. 281.1 (enter negative)	272-273.8.k	-	NA		-
58	Account No. 282.1 (enter negative)	(Worksheet C, In 1.C & In 3.J)	(85,517,575)	DA		(85,514,036)
59 60	Account No. 283.1 (enter negative) Account No. 190.1	(Worksheet C, In 10.C & In 12.J) (Worksheet C, In 19.C & In 21.J)	(19,395,717) 16,529,862	DA DA		(15,518,351) 5,431,423
61	Account No. 255 (enter negative)	(Worksheet C, In 28.C & In 30.J)	-	DA		
62	TOTAL ADJUSTMENTS	(sum lns 57 to 61)	(88,383,431)			(95,600,964)
63	PLANT HELD FOR FUTURE USE	(Worksheet A In 29.C & In 30.C)	-	DA		-
63a	REGULATORY ASSETS	(Worksheet A In NOTE 1 . (C))	-	DA		-
64	WORKING CAPITAL	(Note F)				
65	Cash Working Capital	(1/8 * ln 80) (Note G)	314,584			314,584
66 67	Transmission Materials & Supplies	(Worksheet D, In 2.(D))	-	TP W/S	1.00000	-
67 68	A&G Materials & Supplies Stores Expense	(Worksheet D, In 3.(D)) (Worksheet D, In 4.(D))	-	W/S GP(h)	0.99847 1.00000	-
69	Prepayments (Account 165) - Labor Allocated	(Worksheet D, In 5.G)	-	W/S	0.99847	-
70	Prepayments (Account 165) - Gross Plant	(Worksheet D, In 5.F)	56,307	GP(h)	1.00000	56,307
71 72	Prepayments (Account 165) - Transmission Only Prepayments (Account 165) - Unallocable	(Worksheet D, In 5.E) (Worksheet D, In 5.D)	17,800	DA NA	1.00000 0.00000	17,800
72	TOTAL WORKING CAPITAL	(sum lns 65 to 72)	388,691		0.00000	388,691
74	IPP CONTRIBUTIONS FOR CONSTRUCTION	(Note H) (Worksheet E, In 7.(B))	-	DA	1.00000	-
75	RATE BASE (sum lns 55, 62, 63, 73, 74)		440,679,867			433,460,289
-			, -,			,,

AEPTCo - SPP Formula Rate OKT Projected TCOS - Projected Page: 8 of 69

AEP West SPP Member Companies 2016 Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016

	(1)	(2)	(3)		(4)	(5)
	EXPENSE, TAXES, RETURN & REVENUE REQUIREMENTS CALCULATION	Data Sources (See "General Notes")	<u>TO Total</u>	Alla	ocator	Total Transmission
Line	REQUIREMENTO OREGOE/THOM		<u>10 10tu</u>	<u>/ ////</u>	<u>oodtor</u>	<u>Indificition</u>
No.	OPERATION & MAINTENANCE EXPENSE					
76	Transmission	321.112.b	2,568,852			
77	Less: Total Account 561	(Note I) 321.84-92.b	52,177			
78	Less: Account 565	(Note J) 321.96.b	-			
79	Less: expenses 100% assigned to TO billed custom		-			
80	Total O&M Allocable to Transmission	(lns 76 - 77 - 78 - 79)	2,516,675	TP	1.00000	2,516,675
81	Administrative and General	323.197.b (Note K)	1,596,498			
82	Less: Acct. 924, Property Insurance	323.185.b	87,696			
83	Acct. 928, Reg. Com. Exp.	323.189.b	-			
84	Acct. 930.1, Gen. Advert. Exp.	323.191.b	-			
85	Acct. 930.2, Misc. Gen. Exp.	323.192.b	39,614			
86	Balance of A & G	(In 81 - sum In 82 to In 85)	1,469,188	W/S	1.00000	1,469,188
87	Plus: Acct. 924, Property Insurance	(ln 82)	87,696	GP(h)	1.00000	87,696
88	Acct. 928 - Transmission Specific	Worksheet J In 9.(E) (Note L)	-	TP	1.00000	-
89	Acct 930.1 - Only safety related ads -Direct	Worksheet J In 26.(E) (Note L)	-	TP	1.00000	-
90	Acct 930.2 - Misc Gen. Exp Trans	Worksheet J In 32.(E) (Note L)	-	DA	1.00000	-
90a	PBOP Adjustment	Worksheet O In 16.B	149,931	DA	1.00000	149,931
91	A & G Subtotal	(sum lns 86 to 90 less ln 90a)	1,706,815			1,706,815
92	TOTAL O & M EXPENSE	(ln 80 + ln 91)	4,223,490			4,223,490
93	DEPRECIATION AND AMORTIZATION EXPENSE					
94	Transmission	336.7.f	8,143,315	TP	1.00000	8,143,315
95	Plus: Transmission Plant-in-Service Additions (Wor	ksheet B)	437,093	DA	1.00000	437,093
95a	Plus: Formation Costs Amortization	(Worksheet A In 39.C)	-	DA	1.00000	-
96	General	336.10.f	-	W/S	1.00000	-
97	Intangible	336.1.f	391,955	W/S	1.00000	391,955
98	TOTAL DEPRECIATION AND AMORTIZATION	(sum lns 94 to 97)	8,972,363			8,972,363
99	TAXES OTHER THAN INCOME	(Note N)				
100	Labor Related					
101	Payroll	Worksheet L, Col. D	-	W/S	1.00000	-
102	Plant Related			_		
103	Property	Worksheet L, Col. C	4,142,000	GP(h)	1.00000	4,142,000
104	Gross Receipts/Sales & Use	Worksheet L, Col. F	-	NA	0.00000	-
105	Other	Worksheet L, Col. E	20,373	GP(h)	1.00000	20,373
106	TOTAL OTHER TAXES	(sum lns 101 to 105)	4,162,373			4,162,373

107	INCOME TAXES	(Note O)				
108	T=1 - {[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)} =		38.68%			
109	EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =		46.68%			
110	where $WCLTD = (In 146)$ and $WACC = (In 149)$					
111	and FIT, SIT & p are as given in Note O.					
112	GRCF=1 / (1 - T) = (from ln 108)		1.6308			
113	Amortized Investment Tax Credit (enter negative)	(FF1 p.114, ln 19.c)	-			
115		(i i i p.i i 4; iii 13.6)				
114	Income Tax Calculation	(ln 109 * ln 117)	15,566,008			15,310,993
115	ITC adjustment	(ln 112 * ln 113)	-	NP(h)	1.00000	-
116	TOTAL INCOME TAXES	· · · · · · · · · · · · · · · · · · ·	15 566 008			15,310,993
110	TOTAL INCOME TAXES	(sum Ins 114 to 115)	15,566,008			15,310,995
117	RETURN ON RATE BASE (Rate Base*WACC)	(In 75 * In 149)	33,347,219			32,800,897
		(1173 11143)	55,547,215			52,000,037
118	INTEREST ON IPP CONTRIBUTION FOR CONST. (N	lote F) (Worksheet F In 2)	<u>-</u>	DA	1.00000	_
110				Bit	1.00000	
119	REVENUE REQUIREMENT BEFORE TEXAS GROSS	S MARGIN TAX	66,271,452		-	65,470,116
120			00,211,102		=	00,110,110
120	(sum lns 92, 98, 106, 116, 117, 118)					
121	TEXAS GROSS MARGIN TAX (Note P) (Worksheet K)		DA		
121)	-	DA		-
122	REVENUE REQUIREMENT INCLUDING GROSS MA		66,271,452		-	65,470,116
IZZ	REVENUE REQUIREMENT INCLUDING GR035 MA		00,271,452		=	03,470,110

AEPTCo - SPP Formula Rate OKT Projected TCOS - Projected Page: 9 of 69

AEP West SPP Member Companies 2016 Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016

AEP OKLAHOMA TRANSMISSION COMPANY, INC

SUPPORTING CALCULATIONS

ln No	TRANSMISSION PLANT INCLUDED IN SPP TARIFF	-							
No. 123	Total transmission plant	- (In 18, 19, 20, 21)							553,287,073
123	Less transmission plant excluded from SPP Tariff (I								
125	Less transmission plant included in OATT Ancillary		I. (C)) (Note R)						-
126	Transmission plant included in SPP Tariff	(ln 123 - ln 124 - ln 125)							553,287,073
127	Percent of transmission plant in SPP Tariff	(ln 126 / ln 123)						TP=	1.0000
				Dev					
100		(Noto S)	Direct Douroll	•	oll Billed from	Total			
128 129	WAGES & SALARY ALLOCATOR (W/S) Line Deliberately Left Blank	(Note S)	Direct Payroll	AEP	Service Corp.	Total			
129	Transmission	354.21.b		0	669,060	669,060	TP	1.00000	669,060
131	Regional Market Expenses	354.22.b		0	- 003,000	-	NA	0.00000	-
132	Line Deliberately Left Blank	001.22.0		Ū			147 (0.00000	
133	Other (Excludes A&G)	354.24,25,26.b		0	1,027	1,027	NA	0.00000	-
134	Total	(sum lns 129 to 133)		0	670,087	670,087			669,060
135	Transmission related amount							W/S=	0.9985
	STAND ALONE (Note T)								
136	WEIGHTED AVERAGE COST OF CAPITAL (WACC)							\$
137		Long Term Interest (Works	neet M. In. 24. col. (D`))					8,069,540
138		Preferred Stock Dividends (,,					-
139	Development of Common S								
140		Proprietary Capital (112.16.	c)						213,669,471
141		Less Preferred Stock (In 14	7)						-
142		Less Account 216.1 (112.12	,						-
143		Less Account 219.1 (112.15	,						-
144		Common Stock (In 140 - In	141 - In 142 - In 143)						213,669,471
4.45		^		Cap	bital Structure Pe			Cost	
145		\$			Actual	Cap Limit		(Note T)	Weighted
146	Long Term Debt (Worksheet M, In. 24, col. (B))	205,100,000			48.98%	0.500		3.93%	1.97%
147 148	Preferred Stock (Worksheet M, In. 30, col. (B)) Common Stock (In 144) (Note U)	- 213,669,471			0.00% 51.02%	- 0.500		- 11.2%	0.00% 5.60%
140	Total (sum lns 146 to 148)	418,769,471			51.0270	0.500		WACC=	7.57%
143		410,709,471						WACCE	1.51 /0
150	Capital Structure Equity Limit (Note U)	50.0%							
	PUBLIC SERVICE COMPANY OF OKLAHOMA (No	o <u>te T)</u>		ΝΟΤΕ	E: All WACC rela	ated entries b	elow so	ourced from PSO's FF	1 or Template
. . .		N N N N N N N N N N N N N N N N N N N							^

WEIGHTED AVERAGE COST OF CAPITAL (WACC) 151

\$ 61,279,457

152	· · · · · · · · · · · · · · · · · · ·	Long Term Interest (PSO FR Worksheet I	VI, In. 17, col. (D))			61,279,457
153		Preferred Stock Dividends (PSO FR Work	(sheet M, In. 21, col. (D))			-
154	Development of Comm	on Stock:				
155		Proprietary Capital (112.16.c)				1,119,986,871
156		Less Preferred Stock (In 162)				-
157		Less Account 216.1 (112.12.c)				-
158		Less Account 219.1 (112.15.c)				4,184,017
159		Common Stock (In 155 - In 156 - In 157 -	ln 158)			1,115,802,854
			Capital Structure F	Percentages	Cost	
160		\$	Actual	Cap Limit	(Note T)	Weighted
161	Long Term Debt (257.33.h)	1,293,562,544	53.69%	-	4.74%	2.54%
162	Preferred Stock (251.f)	-	0.00%	-	-	0.00%
163	Common Stock (In 159) (Note U)	1,115,802,854	46.31%	-	11.2%	5.19%
164	Total (sum Ins 161 to 163)	2,409,365,398			WACC=	7.73%
165	Capital Structure Equity Limit (Note U)	52.5%				

AEPTCo - SPP Formula Rate OKT Projected TCOS - Projected Page: 10 of 69

AEP West SPP Member Companies 2016 Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016

AEP OKLAHOMA TRANSMISSION COMPANY, INC

<u>Letter</u>

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<u>Notes</u>

General Notes: a) References to data from FERC Form 1 are indicated as: page#.line#.col.#

- b) If transmission owner ("TO") functionalizes its costs to transmission on its books, those costs are shown above and on any supporting work papers rather than using the allocations above.
- A The revenue credits shall include a) amounts received directly from the SPP for PTP transmission services, b) direct assignment charges for transmission facilities, the cost of which has been included in the TCOS, and c) amounts from customers taking service under grandfathered agreements, where the demand is not included in the rate divisor. Revenues associated with FERC annual charges, gross receipts taxes, ancillary services or facilities excluded from the TCOS are not included as revenue credits. Revenue from Transmission Customers whose coincident peak loads are included in the DIVISOR of the load-ratio share calculation are not included as revenue credits. See Worksheet A for details.
- B The annual and monthly net plant carrying charges on page 1 are used to compute the revenue requirement for facilities and any upgrades.
- C This additional revenue requirement is determined using a net plant carrying charge (fixed carrying charge or FCR) approach. Worksheet G shows the calculation of the projected revenue requirement for each project, based on an FCR rate caclulated from inputs on the Historic TCOS. Line 15 shows the incremental ARR for projects receiving incentives as accepted by FERC. These individual additional revenue requirements are summed for the true-up year, and included here.
- D The gross plant, accumulated depreciation, and deferred tax balances included in rate base are reduced by the removal of balances related to Asset Retirement Obligations (AROs). This is to comply with the requirements of FERC Rulemaking RM02-7-000.
- 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 as discussed in Note N. 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. Transmission allocations are shown on Worksheet B.
- F Identified as being transmission related or functionally booked to transmission.
- G Cash Working Capital assigned to transmission is one-eighth of O&M allocated to transmission on line 80.
- H Consistent with Paragraph 657 of Order 2003-A, the amount on line 74 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 118.
- I Removes the expense booked to transmission accounts included in the development of OATT ancillary services rates, including all of Account No. 561.
- J Removes cost of transmission service provided by others to the extent such service is not incurred to provide the SPP service at issue.
- K General Plant and Administrative & General expenses may be functionalized based on allocators other then the W/S allocator. Full documentation must be provided.
- L Expense 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 D 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 The Post-employment Benefit Other than Pension (PBOP) expense is fixed based on an approved ratio of PBOP expense to direct labor expense.
- N Includes only FICA, unemployment, property and other assessments charged in the current year. Gross Receipts tax, Sales & Use taxes, and taxes related to income are excluded.
 - 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". If the utility is taxed in more than one state it must attach a work paper showing the name of each state and how the blended or composite SIT was developed. Furthermore, 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 108) multiplied by (1/1-T). If the applicable tax rates are zero enter 0. Inputs Required: P = SIT = S.66% (State Income Tax Rate or Composite SIT. Worksheet K)) p = 0.00% (percent of federal income tax deductible for state purposes)
- P Effective January 1, 2007, Texas instituted a gross margin tax. This tax is calculated on the Texas allocated revenue of the Company, reduced by 30% to derive a "Gross Margin" for the Company. The tax rate of one percent is assessed on the resulting amount. The jurisdictional allocator is based on transmission demand allocators.
- Q Removes plant excluded from the OATT because it does not meet the SPP's definition of Transmission Facilities or is otherwise ineligible to be recovered under the OATT.
- R 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 Q.
- S Includes functional wages & salaries incurred by parent company service corporation for support of the operating company.
- T The Capital Structure of AEP OKLAHOMA TRANSMISSION COMPANY, INC will be based on the Capital Structure of PSO until AEP OKLAHOMA TRANSMISSION COMPANY, INC establishes a stand alond capital structure computed on Worksheet M for the Projected TCOS or Worksheet N for the True-up TCOS. Long Term Debt cost rate = long-term interest (ln 152) / long term debt (ln 161). Preferred Stock cost rate = preferred dividends (ln 153) / preferred outstanding (ln 162).

Common Stock cost rate (ROE) = 11.2%, the rate accepted by FERC in Docket Nos. ER07-1069 and ER10-355. It includes an additional 50 basis points for remaining a member of the SPP RTO.

U Per Settlement, equity is limited to 50% of AEP OKLAHOMA TRANSMISSION COMPANY, INC's Capital Structure. If the percentage of equity exceeds the cap, the excess is included in long term debt in the cap structure. This value can only change via an approved 205 or 206 filing.

AEPTCo - SPP Formula Rate OKT Historic TCOS - Historic Page: 11 of 69

AEP TRANSMISSION HOLDING COMPANY Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances

Line No. 166	REVENUE REQUIREMENT (w/o incentives)	(In 284)	Total	Allo	ocator	Transmission Amount 53,486,119
167 168	REVENUE CREDITS Transmission Credits	(Note A) (Worksheet H)	1 702 628		1.00000	1 702 629
169	Assoc. Business Development	(Worksheet H)	1,793,628	DA DA	1.00000	1,793,628
170	Total Revenue Credits		1,793,628	271		1,793,628
171	REVENUE REQUIREMENT For All Company Facilities	(In 166 less In 170)				51,692,491
MEMO:	The Carrying Charge Calculations on lines 174 to 179 total non-incentive revenue requirements	below is used in calculating project revenue reference for these projects shown on line 172 is include	-	edule 11. The		
172	Revenue Requirement for SPP BPU Regional Facilities ((Worksheet F)	(w/o incentives)	13,475,209	DA	1.00000	13,475,209
173	NET PLANT CARRYING CHARGE (w/o incentives					
174	Annual Rate	(In 166/ In 211 x 100%)				12.65%
175	Monthly Rate	(In 174 / 12)				1.05%
176 177	NET PLANT CARRYING CHARGE ON LINE 174, W/O					10.72%
177	Annual Rate	((ln 166 - ln 259) / ln 211 x 100%)				10.72%
178	NET PLANT CARRYING CHARGE ON LINE 176, W/O	INCOME TAXES, RETURN (Note B)				
179	Annual Rate	((ln 166 - ln 259 - ln 281 - ln 282) / ln 211 x 100	%)			2.08%
180	ADDITIONAL REVENUE REQUIREMENT for projects w/	incentive ROE's (Note C) (Worksheet F)				0.00%

AEPTCo - SPP Formula Rate OKT Historic TCOS - Historic Page: 12 of 69

AEP TRANSMISSION HOLDING COMPANY Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances

	(1)	(2)	(3)	(4)	(5)
	(1)		(3)	(4)	
Ling	RATE BASE CALCULATION	Data Sources (See "General Notes")	TO Total	Allocator	Total <u>Transmission</u>
Line No. 181	GROSS PLANT IN SERVICE Line Deliberately Left Blank		<u>NOTE D</u>		
182	Line Deliberately Left Blank				
	Transmission	(Worksheet A In 3.C & Ln		DA	440,281,744
183		291)	440,281,744		++0,201,7++
184 185	Less: Transmission ARO (Enter Negative) Plus: Transmission Plant-in-Service Additions (Wor	(Worksheet A In 4.C)	- N/A	TP 1.00000 NA 0.00000	- N/A
186	Plus: Additional Trans Plant on Transferred Assets		N/A	NA 0.00000	N/A
187	Line Deliberately Left Blank	(110110110012)			
188	Line Deliberately Left Blank				
189	General Plant	(Worksheet A In 7.C) (Worksheet A In 8.C)	-	W/S 1.00000 W/S 1.00000	-
190 191	Less: General Plant ARO (Enter Negative) Intangible Plant	(Worksheet A In 9.C)	- 2,489,437	W/S 1.00000 W/S 1.00000	- 2,489,437
192	TOTAL GROSS PLANT	(sum lns 181 to 191)	442,771,181	GP(h)= 1.000000	442,771,181
				GTD= 1.00000	
193	ACCUMULATED DEPRECIATION AND AMORTIZATIO	ON			
194 195	Line Deliberately Left Blank Line Deliberately Left Blank				
100		(Worksheet A In 14.C &			
196	Transmission	28.C)	17,365,983	TP1= 1.00000	17,365,983
197	Less: Transmission ARO (Enter Negative)	(Worksheet A In 15.C)	<u> </u>	TP1= 1.00000	
198	Plus: Transmission Plant-in-Service Additions (Wor	•	N/A	DA 1.00000	N/A
199	Plus: Additional Projected Deprec on Transferred A		N/A	DA 1.00000	N/A
200 201	Plus: Additional Transmission Depreciation for 2016 Plus: Additional General & Intangible Depreciation f		N/A N/A	TP1 1.00000 W/S 1.00000	N/A N/A
201	Plus: Additional Accum Deprec on Transferred Asse		N/A	DA 1.00000	N/A
203	Line Deliberately Left Blank				
204	Line Deliberately Left Blank	$(M_{\rm ext})$		W/C 4 00000	
205 206	General Plant Less: General Plant ARO (Enter Negative)	(Worksheet A In 18.C) (Worksheet A In 19.C)	-	W/S 1.00000 W/S 1.00000	-
207	Intangible Plant	(Worksheet A In 20.C)	763,558_	W/S 1.00000	763,558
208	TOTAL ACCUMULATED DEPRECIATION	(sum Ins 194 to 207)	18,129,541		18,129,541
209	NET PLANT IN SERVICE				
210	Line Deliberately Left Blank				
211	Transmission	(ln 183 + ln 184 - ln 196 - ln 197)	422,915,761		422,915,761
212	Plus: Transmission Plant-in-Service Additions (In 18	,	N/A		N/A
213 214	Plus: Additional Trans Plant on Transferred Assets Plus: Additional Transmission Depreciation for 2016	· · · · · · · · · · · · · · · · · · ·	N/A N/A		N/A N/A
215	Plus: Additional General & Intangible Depreciation f		N/A		N/A
216	Plus: Additional Accum Deprec on Transferred Asse	ets (Worksheet B) (-In 202)	N/A		N/A
217	<i>Line Deliberately Left Blank</i> General Plant	(ln 180 ; ln 100 ln 205 ln 206)			
218 219	Intangible Plant	(ln 189 + ln 190 - ln 205 - ln 206) (ln 191 - ln 207)	- 1,725,879		- 1,725,879
220	TOTAL NET PLANT IN SERVICE	(sum lns 210 to 219)	424,641,640	NP(h)= 1.000000	424,641,640
221 222	DEFERRED TAX ADJUSTMENTS TO RATE BASE Account No. 281.1 (enter negative)	(Note E) 272-273.8.k		NA	
222	Account No. 282.1 (enter negative)	(Worksheet C, In 1.C & In 3.J)	(85,517,575)	DA	- (85,514,036)
224	Account No. 283.1 (enter negative)	(Worksheet C, In 10.C & Ln 12.J)	(19,395,717)	DA	(15,518,351)
225	Account No. 190.1	(Worksheet C, In 19.C & Ln 21.J)	16,529,862	DA	5,431,423
226 227	Account No. 255 (enter negative) TOTAL ADJUSTMENTS	(Worksheet C, In 28.C & Ln 30.J) (sum Ins 222 to 226)	- (88,383,431)	DA	- (95,600,964)
221		(30111113 222 (0 220)	(00,000,401)		(33,000,304)
228	PLANT HELD FOR FUTURE USE	(Worksheet A In 29.C & In 30.C)	-	DA	-
228a	REGULATORY ASSETS	(Worksheet A In NOTE 1 . (C))	-	DA	-
229		(Note F)	a		• • • • • •
230 231	Cash Working Capital	(1/8 * In 245) (Note G) (Workshoot D. In 2 (D))	314,584	TP 1.00000	314,584
231 232	Transmission Materials & Supplies A&G Materials & Supplies	(Worksheet D, In 2.(D)) (Worksheet D, In 3.(D))	-	W/S 1.00000	-
233	Stores Expense	(Worksheet D, In 4.(D))	-	GP(h) 1.00000	-
234	Prepayments (Account 165) - Labor Allocated	(Worksheet D, In 5.G)	-	W/S 1.00000	
235 236	Prepayments (Account 165) - Gross Plant Prepayments (Account 165) - Transmission Only	(Worksheet D, In 5.F) (Worksheet D, In 5.E)	56,307 17,800	GP(h) 1.00000 DA 1.00000	56,307 17,800
236 237	Prepayments (Account 165) - Transmission Only Prepayments (Account 165) - Unallocable	(Worksheet D, In 5.D)	-	NA 0.00000	
238	TOTAL WORKING CAPITAL	(sum Ins 230 to 237)	388,691		388,691
239	IPP CONTRIBUTIONS FOR CONSTRUCTION	(Note H) (Worksheet E, In 7.(B))	_	DA 1.00000	_
			-		-
240	RATE BASE (sum Ins 220, 227, 228, 238, 239)		336,646,900		329,429,367

AEPTCo - SPP Formula Rate OKT Historic TCOS - Historic Page: 13 of 69

AEP TRANSMISSION HOLDING COMPANY Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances

	(1)	(2)	(3)	(4)	(5)
	EXPENSE, TAXES, RETURN & REVENUE	Data Sources				Total
	REQUIREMENTS CALCULATION	(See "General Notes")	<u>TO Total</u>	<u>Allo</u>	<u>cator</u>	<u>Transmission</u>
Line						
No.	OPERATION & MAINTENANCE EXPENSE		0.500.050			
241	Transmission	321.112.b	2,568,852			
242	Less: Total Account 561	(Note I) 321.84-92.b	52,177			
243	Less: Account 565	(Note J) 321.96.b	-			
244	Less: expenses 100% assigned to TO billed custom		-			0 = 40 0==
245	Total O&M Allocable to Transmission	(Ins 241 - 242 - 243 - 244)	2,516,675	TP	1.00000	2,516,675
246	Administrative and General	323.197.b (Note K)	1,596,498			
247	Less: Acct. 924, Property Insurance	323.185.b	87,696			
248	Acct. 928, Reg. Com. Exp.	323.189.b	-			
249	Acct. 930.1, Gen. Advert. Exp.	323.191.b	-			
250	Acct. 930.2, Misc. Gen. Exp.	323.192.b	39,614			
251	Balance of A & G	(In 246 - sum In 247 to In 250)	1,469,188	W/S	1.00000	1,469,188
252	Plus: Acct. 924, Property Insurance	(ln 247)	87,696	GP(h)	1.00000	87,696
253	Acct. 928 - Transmission Specific	Worksheet J In 9.(E) (Note L)	-	TP	1.00000	-
254	Acct 930.1 - Only safety related ads -Direct	Worksheet J In 26.(E) (Note L)	-	TP	1.00000	-
255	Acct 930.2 - Misc Gen. Exp Trans	Worksheet J In 32.(E) (Note L)	-	DA	1.00000	-
255a	PBOP Adjustment	Worksheet O In 16.B	149,931	DA	1.00000	149,931
256	A & G Subtotal	(sum lns 251 to 255 less ln 255a)	1,706,815			1,706,815
257	TOTAL O & M EXPENSE	(In 245 + In 256)	4,223,490			4,223,490
258	DEPRECIATION AND AMORTIZATION EXPENSE					
259	Transmission	336.7.f	8,143,315	TP	1.00000	8,143,315
260	Plus: Transmission Plant-in-Service Additions (Wor	ksheet B)	N/A			N/A
260a	Plus: Formation Costs Amortization	(Worksheet A In 37.C)	-	DA	1.00000	-
261	General	336.10.f	-	W/S	1.00000	-
262	Intangible	336.1.f	391,955	W/S	1.00000	391,955
263	TOTAL DEPRECIATION AND AMORTIZATION	(sum Ins 259 to 262)	8,535,270			8,535,270
264	TAXES OTHER THAN INCOME	(Note N)				
265	Labor Related					
266	Payroll	Worksheet L, Col. D	-	W/S	1.00000	-
267	Plant Related					
268	Property	Worksheet L, Col. C	4,142,000	GP(h)	1.00000	4,142,000
269	Gross Receipts/Sales & Use	Worksheet L, Col. F	-	NA	0.00000	, , ,
270	Other	Worksheet L, Col. E	20,373	GP(h)	1.00000	20,373
271	TOTAL OTHER TAXES	(sum lns 266 to 270)	4,162,373	· · ·		4,162,373
		· · · ·	, - ,			, - , - 2

272 273 274 275 276 277	INCOME TAXES $T=1 - \{[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)\} =$ EIT=(T/(1-T)) * (1-(WCLTD/WACC)) = where WCLTD=(In 311) and WACC = (In 314) and FIT, SIT & p are as given in Note O. GRCF=1 / (1 - T) = (from In 273)	(Note O)	38.68% 46.68% 1.6308			
278	Amortized Investment Tax Credit (enter negative)	(FF1 p.114, ln 19.c)	-			
279 280 281	Income Tax Calculation ITC adjustment TOTAL INCOME TAXES	(In 274 * In 282) (In 277 * In 278) (sum Ins 279 to 280)	11,891,281 11,891,281	NP(h)	1.00000	11,636,339 11,636,339
282	RETURN ON RATE BASE (Rate Base*WACC)	(In 240 * In 314)	25,474,814.50			24,928,647.82
283	INTEREST ON IPP CONTRIBUTION FOR CONST. (N	ote E) (Worksheet E, In 2)	-	DA	1.00000	-
284 285	REVENUE REQUIREMENT BEFORE TEXAS GROSS (sum Ins 257, 263, 271, 281, 282, 283)	MARGIN TAX	54,287,229			53,486,119
286	TEXAS GROSS MARGIN TAX (Note P) (Worksheet K)		-	DA		-
287	REVENUE REQUIREMENT INCLUDING GROSS MAP	RGIN TAX	54,287,229			53,486,119

AEPTCo - SPP Formula Rate OKT Historic TCOS - Historic Page: 14 of 69

AEP TRANSMISSION HOLDING COMPANY Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances

AEP OKLAHOMA TRANSMISSION COMPANY, INC

SUPPORTING CALCULATIONS

In No. 288 289 290	TRANSMISSION PLANT INCLUDED IN SPP TARIFF Total transmission plant Less transmission plant excluded from SPP Tariff (No Less transmission plant included in OATT Ancillary S	ervices (Worksheet A, In 23, C	Col. (C)) (Note R)						440,281,744 - -
291	Transmission plant included in SPP Tariff	(ln 288 - ln 289 - ln 290)							440,281,744
292	Percent of transmission plant in SPP Tariff	(ln 291 / ln 288)						TP=	1.0000
293 294	WAGES & SALARY ALLOCATOR (W/S) Line Deliberately Left Blank	(Note S)	Direct Payroll	•	roll Billed from Service Corp.	Total			
295 296	Transmission Regional Market Expenses	354.21.b 354.22.b		0 0	669,060	669,060	TP NA	1.00000 0.00000	669,060
290 297	Line Deliberately Left Blank	554.22.0		0	-	-	INA	0.00000	-
298	Other (Excludes A&G)	354.24,25,26.b		0	1,027	1,027	NA	0.00000	-
299	Total	(sum lns 294 to 298)		0	670,087	670,087			669,060
300	Transmission related amount							W/S=	0.9985
	STAND ALONE (Note T)								
301	WEIGHTED AVERAGE COST OF CAPITAL (WACC)								\$
302 303		Long Term Interest (Works Preferred Stock Dividends							8,069,540
303 304	Development of Common St), COI. (D	())				
305		Proprietary Capital (112.16	-						213,669,471
306		Less Preferred Stock (In 3	,						-
307 308		Less Account 216.1 (112.1 Less Account 219.1 (112.1							
309		Common Stock (In 305 - In	,	;)					213,669,471
		Υ.			pital Structure F	Percentages		Cost	
310		\$			Actual	Cap Limit		(Note T)	Weighted
311 312	Long Term Debt (Worksheet M, In. 24, col. (B)) Preferred Stock (Worksheet M, In. 30, col. (B))	205,100,000			48.98% 0.00%	0.500		3.93%	1.97% 0.00%
312	Common Stock (In 309) (Note U)	213,669,471			51.02%	0.500		- 11.2%	5.60%
314	Total (sum Ins 311 to 313)	418,769,471						WACC=	7.57%
315	Capital Structure Equity Limit (Note U)	50.0%							

PUBLIC SERVICE COMPANY OF OKLAHOMA (Note T)

316 WEIGHTED AVERAGE COST OF CAPITAL (WACC)

316	WEIGHTED AVERAGE COST OF CAPITAL (WACC)					\$
317		Long Term Interest (PSO FR Worksheet	t M, In. 17, col. (D))		_	61,279,457
318		Preferred Stock Dividends (PSO FR Wo	rksheet M, In. 21, col. (D))			-
319	Development of Common St	tock:				
320		Proprietary Capital (112.16.c)				1,119,986,871
321		Less Preferred Stock (In 327)				-
322		Less Account 216.1 (112.12.c)				-
323		Less Account 219.1 (112.15.c)				4,184,017
324		Common Stock (In 320 - In 321 - In 322 -	- In 323)			1,115,802,854
			Capital Structure	Percentages	Cost	
325		\$	Actual	Cap Limit	(Note T)	Weighted
326	Long Term Debt (PSO WS-M, In. 17, col. (B))	1,293,562,544	53.69%	-	4.74%	2.54%
327	Preferred Stock (PSO WS-M, In. 21, col. (B))		0.00%	-	-	0.00%
328	Common Stock (In 324) (Note U)	1,115,802,854	46.31%	-	11.2%	5.19%
329	Total (sum Ins 326 to 328)	2,409,365,398			WACC=	7.73%
330	Capital Structure Equity Limit (Note U for PSO)	52.5%				

AEPTCo - SPP Formula Rate OKT Historic TCOS - Historic Page: 15 of 69

AEP TRANSMISSION HOLDING COMPANY Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances

AEP OKLAHOMA TRANSMISSION COMPANY, INC

<u>Letter</u>

<u>Notes</u>

General Notes: a) References to data from FERC Form 1 are indicated as: page#.line#.col.#

- b) If transmission owner ("TO") functionalizes its costs to transmission on its books, those costs are shown above and on any supporting work papers rather than using the allocations above.
- A The revenue credits shall include a) amounts received directly from the SPP for PTP transmission services, b) direct assignment charges for transmission facilities, the cost of which has been included in the TCOS, and c) amounts from customers taking service under grandfathered agreements, where the demand is not included in the rate divisor. Revenues associated with FERC annual charges, gross receipts taxes, ancillary services or facilities excluded from the TCOS are not included as revenue credits. Revenue from Transmission Customers whose coincident peak loads are included in the DIVISOR of the load-ratio share calculation are not included as revenue credits. See Worksheet A for details.
- B The annual and monthly net plant carrying charges on page 1 are used to compute the revenue requirement for facilities and any upgrades.
- C This additional revenue requirement is determined using a net plant carrying charge (fixed carrying charge or FCR) approach. Worksheet G shows the calculation of the projected revenue requirement for each project, based on an FCR rate caclulated from inputs on this TCOS. Line 180 shows the incremental ARR for projects receiving incentives as accepted by FERC. These individual additional revenue requirements are summed for the true-up year, and included here.
- D The gross plant, accumulated depreciation, and deferred tax balances included in rate base are reduced by the removal of balances related to Asset Retirement Obligations (AROs). This is to comply with the requirements of FERC Rulemaking RM02-7-000.
- E 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 as discussed in Note N. 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. Transmission allocations are shown on Worksheet B.
- F Identified as being transmission related or functionally booked to transmission.
- G Cash Working Capital assigned to transmission is one-eighth of O&M allocated to transmission on line 245.
- H Consistent with Paragraph 657 of Order 2003-A, the amount on line 239 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 283.
- I Removes the expense booked to transmission accounts included in the development of OATT ancillary services rates, including all of Account No. 561.
- J Removes cost of transmission service provided by others to the extent such service is not incurred to provide the SPP service at issue.
- K General Plant and Administrative & General expenses may be functionalized based on allocators other then the W/S allocator. Full documentation must be provided.
- L Expense 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 D 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 The Post-employment Benefit Other than Pension (PBOP) expense is fixed based on an approved ratio of PBOP expense to direct labor expense.
- N Includes only FICA, unemployment, property and other assessments charged in the current year. Gross Receipts tax, Sales & Use taxes, 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". If the utility is taxed in more than one state it must attach a work paper showing the name of each state and how the blended or composite SIT was developed. Furthermore, 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)

 $(\ln 273)$ multiplied by (1/1-T). If the applicable tax rates are zero enter 0.

Inputs Required:	FIT =	35.00%	
	SIT=	5.66%	(State Income Tax Rate or Composite SIT. Worksheet K))
	p =	0.00%	(percent of federal income tax deductible for state purposes)

- P Effective January 1, 2007, Texas instituted a gross margin tax. This tax is calculated on the Texas allocated revenue of the Company, reduced by 30% to derive a "Gross Margin" for the Company. The tax rate of one percent is assessed on the resulting amount. The jurisdictional allocator is based on transmission demand allocators.
- Q Removes plant excluded from the OATT because it does not meet the SPP's definition of Transmission Facilities or is otherwise ineligible to be recovered under the OATT.
- R 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 Q.
- S Includes functional wages & salaries incurred by parent company service corporation for support of the operating company.
- T The Capital Structure of AEP OKLAHOMA TRANSMISSION COMPANY, INC will be based on the Capital Structure of PSO until AEP OKLAHOMA TRANSMISSION COMPANY, INC establishes a stand alone capital structure computed on Worksheet M for the Projected TCOS or Worksheet N for the True-up TCOS.
 Long Term Debt cost rate = long-term interest (In 317) / long term debt (In 326). Preferred Stock cost rate = preferred dividends (In 318) / preferred outstanding (In 327).
 Common Stock cost rate (ROE) = 11.2%, the rate accepted by FERC in Docket Nos. ER07-1069 and ER10-355. It includes an additional 50 basis points for remaining a member of the SPP RTO.
- U Per Settlement, AEP OKLAHOMA TRANSMISSION COMPANY, INC equity is limited to 50% of AEP OKLAHOMA TRANSMISSION COMPANY, INC's Capital Structure. If the percentage of equity exceeds the cap, the excess is included in long term debt in the cap structure. This value can only change via an approved 205 or 206 filing.

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances

Line No.						T	ransmission Amount
1	REVENUE REQUIREMENT (w/o incentives)	(ln 106)					\$50,287,062
			Total	Allo	cator		
2	REVENUE CREDITS	(Note A)					
3	Transmission Credits	(Worksheet H)	1,793,628	DA	1.00000	\$	1,793,628
4	Assoc. Business Development	(Worksheet H)	<u> </u>	DA	1.00000	\$	-
5	Total Revenue Credits		1,793,628			\$	1,793,628
6	REVENUE REQUIREMENT For All Company Facilities	(In 1 less In 5)					\$48,493,434
MEN	IO: The Carrying Charge Calculations on lines 9 to 14 b revenue requiremen	below is used in calculating project revenue requirement ts for these projects shown on line 7 is included in the		on-incentive			
7	Trued-Up Revenue Requirement for SPP BPU Regional G)	Facilities (w/o incentives) (Worksheet	13,185,393	DA	1.00000	\$	13,185,393
8	NET PLANT CARRYING CHARGE (w/o incentives) (Not	te B)					
9	Annual Rate	(ln 1/ ln 39 x 100%)					13.28%
10	Monthly Rate	(ln 9 / 12)					1.11%
11	NET PLANT CARRYING CHARGE ON LINE 9 , W/O DE	PRECIATION (w/o incentives) (Note B)					
12	Annual Rate	((ln 1 - ln 82) / ln 39 x 100%)					11.13%
13	NET PLANT CARRYING CHARGE ON LINE 11, W/O IN	ICOME TAXES, RETURN (Note B)					
14	Annual Rate	((ln 1 - ln 82 - ln 103 - ln 104) / ln 39 x 100%)					2.32%
15	ADDITIONAL REVENUE REQUIREMENT for projects w	incentive ROE's (Note C) (Worksheet G)					-

AEPTCo - SPP Formula Rate OKT True-Up TCOS - True-Up Page: 17 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances

	(1)	(2)	(3)	(4	.)	(5)
Line	RATE BASE CALCULATION	Data Sources (See "General Notes")	<u>TO Total</u> NOTE D	Alloc	ator	Total <u>Transmission</u>
No.	GROSS PLANT IN SERVICE					
16	Line Deliberately Left Blank					
17	Line Deliberately Left Blank					
18	Transmission	(Worksheet A In 3.E & Ln 113)	391,892,633	DA		391,892,633
19	Less: Transmission ARO (Enter Negative)	(Worksheet A In 4.E)	-	TP	1.00000	-
20	Line Deliberately Left Blank					
21	Line Deliberately Left Blank			14/0	4 00000	
22	General Plant	(Worksheet A In 7.E)	-	W/S	1.00000	-
23 24	Less: General Plant ARO (Enter Negative) Intangible Plant	(Worksheet A In 8.E) (Worksheet A In 9.E)	2,030,619	W/S W/S	1.00000 1.00000	- 2,030,619
24 25	TOTAL GROSS PLANT	(worksheet A in 9.2) (sum lns 16 to 24)	393,923,252	GP(TU)=	1.00000	393,923,252
23	TOTAL GROSS FLANT	(30111113-10 (0 24)	393,923,232	GF(10)= GTD=	1.00000	595,925,252
26	ACCUMULATED DEPRECIATION AND AMORTIZATIO	ON		010-	1.00000	
27	Line Deliberately Left Blank					
28	Line Deliberately Left Blank					
29	Transmission	(Worksheet A In 14.E & 28.E)	13,342,707	TP1=	1.00000	13,342,707
30	Less: Transmission ARO (Enter Negative)	Worksheet A In 15.E)	-	TP1=	1.00000	-
31	Line Deliberately Left Blank					
32	Line Deliberately Left Blank					
33	General Plant	(Worksheet A In 18.E)	-	W/S	1.00000	-
34	Less: General Plant ARO (Enter Negative)	(Worksheet A In 19.E)	-	W/S	1.00000	-
35	Intangible Plant	(Worksheet A In 20.E)	567,581	W/S	1.00000	567,581
36	TOTAL ACCUMULATED DEPRECIATION	(sum Ins 27 to 35)	13,910,287			13,910,287
27	NET PLANT IN SERVICE					
37 38	Line Deliberately Left Blank					
39	Transmission	(ln 18 + ln 19 - ln 29 - ln 30)	378,549,927			378,549,927
40	Line Deliberately Left Blank		370,043,327			010,040,021
41	General Plant	(ln 22 + ln 23 - ln 33 - ln 34)	<u>-</u>			-
42	Intangible Plant	(ln 24 - ln 35)	1,463,038			1,463,038
43	TOTAL NET PLANT IN SERVICE	(sum Ins 38 to 42)	380,012,965	NP(TU)=	1.00000	380,012,965
44 45	DEFERRED TAX ADJUSTMENTS TO RATE BASE	(Note E) 272-273.8.k		NA		
40 46	Account No. 281.1 (enter negative) Account No. 282.1 (enter negative)	(Worksheet C, In 7.C & In 9.J)	- (74,439,935)	DA		- (74,437,281)
40	Account No. 283.1 (enter negative)	(Worksheet C, In 16.C & Ln 18.J)	(16,954,186)	DA		(13,499,346)
48	Account No. 190.1	(Worksheet C, In 25.C & Ln 27.J)	14,615,686	DA		4,724,771
49	Account No. 255 (enter negative)	(Worksheet C, In 34.C & Ln 36.J)	-	DA		-
50	TOTAL ADJUSTMENTS	(sum Ins 45 to 49)	(76,778,436)			(83,211,856)
- /				5.		
51	PLANT HELD FOR FUTURE USE	(Worksheet A In 29.E & In 30.E)	-	DA		-
51a	REGULATORY ASSETS	(Worksheet A In NOTE 1 . (E))	-	DA		-
52	WORKING CAPITAL	(Note F)				
53	Cash Working Capital	(1/8 * ln 68) (Note G)	314,584			314,584
54	Transmission Materials & Supplies	(Worksheet D, In 2.(F))	-	TP	1.00000	-
55	A&G Materials & Supplies	(Worksheet D, In 3.(F))	-	W/S	1.00000	-
56	Stores Expense	(Worksheet D, In 4.(F))	-	GP(TU)	1.00000	-
57	Prepayments (Account 165) - Labor Allocated	(Worksheet D, In 7.G)	-	W/S	1.00000	-
58 50	Prepayments (Account 165) - Gross Plant	(Worksheet D, In 7.F)	57,862	GP(TU)	1.00000	57,862
59 60	Prepayments (Account 165) - Transmission Only Prepayments (Account 165) - Unallocable	(Worksheet D, In 7.E) (Worksheet D, In 7.D)	15,650	DA NA	1.00000 0.00000	15,650
60 61	TOTAL WORKING CAPITAL	(sum lns 53 to 60)	388,097	INA	0.00000	388,097
UT			300,097			300,037
62	IPP CONTRIBUTIONS FOR CONSTRUCTION	(Note H) (Worksheet E, In 8.(B))	-	DA	1.00000	-
00						007 400 005
63	RATE BASE (sum Ins 43, 50, 51, 61, 62)		303,622,625			297,189,205

AEPTCo - SPP Formula Rate OKT True-Up TCOS - True-Up Page: 18 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances

	(1)	(2)	(3)	(4	4)	(5)
	EXPENSE, TAXES, RETURN & REVENUE REQUIREMENTS CALCULATION	Data Sources (See "General Notes")	<u>TO Total</u>	Alloc	cator	Total Transmission
Line		<u> </u>				
No.	OPERATION & MAINTENANCE EXPENSE					
64	Transmission	321.112.b	2,568,852			
65	Less: Total Account 561	(Note I) 321.84-92.b	52,177			
66	Less: Account 565	(Note J) 321.96.b				
67	Less: expenses 100% assigned to TO billed customers	s (Worksheet I, In 14)	\$0			
68	Total O&M Allocable to Transmission	(Ins 64 - 65 - 66 - 67)	2,516,675	TP	1.00000	2,516,675
69	Administrative and General	323.197.b (Note K)	1,596,498			
70	Less: Acct. 924, Property Insurance	323.185.b	87,696			
71	Acct. 928, Reg. Com. Exp.	323.189.b	-			
72	Acct. 930.1, Gen. Advert. Exp.	323.191.b	-			
73	Acct. 930.2, Misc. Gen. Exp.	323.192.b	39,614			
74	Balance of A & G	(In 69 - sum In 70 to In 73)	1,469,188	W/S	1.00000	1,469,188
75	Plus: Acct. 924, Property Insurance	(In 70)	87,696	GP(TU)	1.00000	87,696
76	Acct. 928 - Transmission Specific	(Note I) 321.84-92.b		Τ̈́P	1.00000	-
77	Acct 930.1 - Only safety related ads -Direct	(Note J) 321.96.b	-	GP(TU)	1.00000	-
78	Acct 930.2 - Misc Gen. Exp Trans	Worksheet J In 32.(E) (Note L)	-	DA	1.00000	-
78a	PBOP Adjustment	Worksheet O In 16.B	149,931	DA	1.00000	149,931
79	A & G Subtotal	(sum lns 74 to 78 less In 78a)	1,706,815			1,706,815
80	TOTAL O & M EXPENSE	(In 68 + In 79)	4,223,490			4,223,490
81	DEPRECIATION AND AMORTIZATION EXPENSE					
82	Transmission	336.7.f	8,143,315	TP	1.00000	8,143,315
83	General	336.10.f	-	W/S	1.00000	-
83a	Plus: Formation Costs Amortization	(Worksheet A In 37.E)	-	DA	1.00000	-
84	Intangible	336.1.f	391,955	W/S	1.00000	391,955
85	TOTAL DEPRECIATION AND AMORTIZATION	(sum Ins 82 to 84)	8,535,270			8,535,270
86	TAXES OTHER THAN INCOME	(Note N)				
87	Labor Related					
88	Payroll	Worksheet L, Col. D	-	W/S	1.00000	-
89	Plant Related					
90	Property	Worksheet L, Col. C	4,142,000	GP(TU)	1.00000	4,142,000
91	Gross Receipts/Sales & Use	Worksheet L, Col. F	-	NA	0.00000	-
92	Other	Worksheet L, Col. E	20,373	GP(TU)	1.00000	20,373
93	TOTAL OTHER TAXES	(sum Ins 88 to 92)	4,162,373	· · ·		4,162,373

94 95 96 97 98	INCOME TAXES T=1 - {[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)} = EIT=(T/(1-T)) * (1-(WCLTD/WACC)) = where WCLTD=(In 133) and WACC = (In 136) and FIT, SIT & p are as given in Note O.	(Note O)	38.68% 45.90%			
99	GRCF=1 / (1 - T) = (from ln 95)		1.6308			
100	Amortized Investment Tax Credit (enter negative)	(FF1 p.114, ln 19.c)	-			
101 102	Income Tax Calculation ITC adjustment	(In 96 * In 104) (In 99 * In 100)	10,724,774	NP(TU)	1.00000	10,497,529
103	TOTAL INCOME TAXES	(sum lns 101 to 102)	10,724,774		_	10,497,529
104	RETURN ON RATE BASE (Rate Base*WACC)	(In 63 * In 136)	23,363,445.73			22,868,401
105	INTEREST ON IPP CONTRIBUTION FOR CONST. (No	ote E) (Worksheet E, In 2)	-	DA	1.00000	-
106 107	REVENUE REQUIREMENT BEFORE TEXAS GROSS (sum Ins 80, 85, 93, 103, 104, 105)	MARGIN TAX	51,009,353		=	50,287,062
108	TEXAS GROSS MARGIN TAX (Note P) (Worksheet K)		-	DA		-
109	REVENUE REQUIREMENT INCLUDING GROSS MAR	GIN TAX	51,009,353		-	50,287,062

AEPTCo - SPP Formula Rate OKT True-Up TCOS - True-Up Page: 19 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances

AEP OKLAHOMA TRANSMISSION COMPANY, INC

SUPPORTING CALCULATIONS

No. TRANSMISSION PLANT INCLUDED IN SPP TARIFF 110 Total transmission plant (In 18) 111 Less transmission plant excluded from SPP Tariff (Note Q) 112 Less transmission plant excluded from SPP Tariff (Note Q)		391,892,633 - -
111 Less transmission plant excluded from SPP Tariff (Note Q)	_	-
	-	- -
		-
112 Less transmission plant included in OATT Ancillary Services (Worksheet A, In 23, Col. (C)) (Note R)		201 002 622
113 Transmission plant included in SPP Tariff (In 110 - In 111 - In 112)		391,892,633
114 Percent of transmission plant in SPP Tariff (In 113 / In 110)	TP=	1.00000
Payroll Billed from		
115 WAGES & SALARY ALLOCATOR (W/S) (Note S) Direct Payroll AEP Service Corp. Total		
116 Line Deliberately Left Blank		
117 Transmission 354.21.b 0 669,108 TP	1.00000	669,108
118Regional Market Expenses354.22.b0-NA	0.00000	-
119 Line Deliberately Left Blank		
120 Other (Excludes A&G) 0 - NA	0.00000	-
121 Total (sum lns 116 to 120) 0 669,108 669,108		669,108
122 Transmission related amount	W/S=	1.00000
STAND ALONE (Note T)		
123 WEIGHTED AVERAGE COST OF CAPITAL (WACC)		\$
124 Long Term Interest Long Term Interest (Worksheet N, In. 18, col. (E))		8,069,540
125 Preferred Dividends Preferred Stock Dividends (Worksheet N, In. 47, col. (E))		-
126 Development of Common Stock:		Average
127 Proprietary Capital (Worksheet N, In. 1, col. (E))		202,912,017
128 Less Preferred Stock (In 134) (Worksheet N, In. 2, col. (E))		-
129 Less Account 216.1 (Worksheet N, In. 3, col. (E))		-
130 Less Account 219 (Worksheet N, In. 4, col. (E))		-
131 Common Stock (In 127 - In 128 - In 129 - In 130)		202,912,017
	Cost	
132 2016 Avg Balances Actual Cap Limit (No	Note S)	Weighted
133 Avg Long Term Debt (Worksheet N, In. 10, col. (E)) 192,600,000 48.70% 50.00%	4.19%	0.0209
134 Avg Preferred Stock (Worksheet N, In. 46, col. (E)) - 0.00% 0.00%	0.00%	0.0000
135 Avg Common Stock (In 131) (Note U) 202,912,017 51.30% 50.00%	11.20%	0.0560
136 Total (sum Ins 133 to 135) 395,512,017	WACC=	0.0769
137 Capital Structure Equity Limit (Note U) 50.0%		

PUBLIC SERVICE COMPANY OF OKLAHOMA (Note T)

NOTE: All WACC related entries below sourced from PSO's FF1 or Template

138	WEIGHTED AVERAGE COST OF CAPITAL (WACC)					\$
139	Long Term Interest	Long Term Interest (PSO FR Worksheet N, In. 19, col. (E))				61,327,406
140	Preferred Dividends	Preferred Stock Dividends (PSO FR Worksheet N, In. 47, col. (E))				-
141	Development of Common Stock:					Average
142	Proprietary Capital	(PSO Worksheet N, In. 1, col. (E))				1,074,100,599
143	Less Preferred Stock (In 149)	(PSO Worksheet N, In. 2, col. (E))				
144	Less Account 216.1	(PSO Worksheet N, In. 3, col. (E))				
145	Less Account 219	(PSO Worksheet N, In. 4, col. (E))				4,563,327
146	Common Stock	(In 142 - In 143 - In 144 - In 145)				1,069,537,272
			Capital Structure	Percentages	Cost	
147		2015 Avg Balances	Actual	Cap Limit	(Note S)	Weighted
148	Avg Long Term Debt (PSO WS-N, In. 10, col. (E))	1,168,776,136	52.22%	0.00%	5.25%	0.0274
149	Avg Preferred Stock (PSO WS-N, In. 46, col. (E))	en e	0.00%	0.00%	0.00%	0.0000
150	Avg Common Stock (In 146) (Note U)	1,069,537,272	47.78%	0.00%	11.20%	0.0535
151	Total (sum Ins 148 to 150)	2,238,313,408			WACC=	0.0809
152	Capital Structure Equity Limit (PSO Note U)	52.5%				

AEPTCo - SPP Formula Rate OKT True-Up TCOS - True-Up Page: 20 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances

AEP OKLAHOMA TRANSMISSION COMPANY, INC

Letter

<u>Notes</u>

General Notes: a) References to data from FERC Form 1 are indicated as: page#.line#.col.#

b) If transmission owner ("TO") functionalizes its costs to transmission on its books, those costs are shown above and on any supporting work papers rather than using the allocations above.

- A The revenue credits shall include a) amounts received directly from the SPP for PTP transmission services, b) direct assignment charges for transmission facilities, the cost of which has been included in the TCOS, and c) amounts from customers taking service under grandfathered agreements, where the demand is not included in the rate divisor. Revenues associated with FERC annual charges, gross receipts taxes, ancillary services or facilities excluded from the TCOS are not included as revenue credits. Revenue from Transmission Customers whose coincident peak loads are included in the DIVISOR of the load-ratio share calculation are not included as revenue credits. See Worksheet A for details.
- B The annual and monthly net plant carrying charges on page 1 are used to compute the revenue requirement for facilities and any upgrades.
- C This additional revenue requirement is determined using a net plant carrying charge (fixed carrying charge or FCR) approach. Worksheet G shows the calculation of the trued-up revenue requirement for each project, based on an FCR rate caclulated from inputs on this TCOS. Line 15 shows the incremental ARR for projects receiving incentives as accepted by FERC. These individual additional revenue requirements are summed for the true-up year, and included here.
- D The gross plant, accumulated depreciation, and deferred tax balances included in rate base are reduced by the removal of balances related to Asset Retirement Obligations (AROs). This is to comply with the requirements of FERC Rulemaking RM02-7-000.
- E 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 as discussed in Note N. 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. Transmission allocations are shown on Worksheet C.
- F Identified as being transmission related or functionally booked to transmission.
- G Cash Working Capital assigned to transmission is one-eighth of O&M allocated to transmission on line 68.
- H Consistent with Paragraph 657 of Order 2003-A, the amount on line 62 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 105.
- I Removes the expense booked to transmission accounts included in the development of OATT ancillary services rates, including all of Account No. 561.
- J Removes cost of transmission service provided by others to the extent such service is not incurred to provide the SPP service at issue.
- K General Plant and Administrative & General expenses may be functionalized based on allocators other then the W/S allocator. Full documentation must be provided.
- L Expense 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 D 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 The Post-employment Benefit Other than Pension (PBOP) expense is fixed based on an approved ratio of PBOP expense to direct labor expense.
- Ν

Includes only FICA, unemployment, property and other assessments charged in the current year. Gross Receipts tax, Sales & Use taxes, 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". If the utility is taxed in more than one state it must attach a work paper showing the name of each state and how the blended or composite SIT was developed. Furthermore, 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 95) multiplied by (1/1-T). If the applicable tax rates are zero enter 0. Inputs Required:

 FIT =
 35.00%

 SIT =
 35.00%

 SIT =
 5.66% (State Income Tax Rate or Composite SIT. Worksheet K)
 - p = 0.00% (percent of federal income tax deductible for state purposes)
- P Effective January 1, 2007, Texas instituted a gross margin tax. This tax is calculated on the Texas allocated revenue of the Company, reduced by 30% to derive a "Gross Margin" for the Company. The tax rate of one percent is assessed on the resulting amount. The jurisdictional allocator is based on transmission demand allocators.
- Q Removes plant excluded from the OATT because it does not meet the SPP's definition of Transmission Facilities or is otherwise ineligible to be recovered under the OATT.
- R 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 Q.
- S Includes functional wages & salaries incurred by parent company service corporation for support of the operating company.
- T The Capital Structure of AEP OKLAHOMA TRANSMISSION COMPANY, INC will be based on the Capital Structure of PSO until AEP OKLAHOMA TRANSMISSION COMPANY, INC establishes a stand alond capital structure computed on Worksheet M for the Projected TCOS or Worksheet N for the True-up TCOS.
 Long Term Debt cost rate = long-term interest (ln 139) / long term debt (ln 148). Preferred Stock cost rate = preferred dividends (ln 140) / preferred outstanding (ln 149).
 Common Stock cost rate (ROE) = 11.2%, the rate accepted by FERC in Docket Nos. ER07-1069 and ER10-355. It includes an additional 50 basis points for remaining a member of the SPP RTO.
- U Per Settlement, equity is limited to 50% of AEP OKLAHOMA TRANSMISSION COMPANY, INC's Capital Structure. If the percentage of equity exceeds the cap, the excess is included in long term debt in the cap structure. This value can only change via an approved 205 or 206 filing.

AEPTCo - SPP Formula Rate OKT WS A RB Support Page: 21 of 69

AEP West SPP Member Companies 2016 Cost of Service Formula Rate Worksheet A - Detail Plant Balances AEP OKLAHOMA TRANSMISSION COMPANY, INC

Line	(A)	(B)	(C) Balances @	(D) <u>Balances</u>	(E) Average Balance for
Number	Rate Base Item & Supporting Balance	Source of Data	12/31/2015	12/31/2014	2015
NOTE: Func	tional ARO investment and accumulated depreciation bal	ances shown below are included in the total functional b	alances shown here.		
Plant Investn	nent Balances				
1	Line Deliberately Left Blank				
2	Line Deliberately Left Blank				
3	Transmission Plant In Service	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 58	440,281,744	343,503,522	391,892,633
4	Transmission Asset Retirement Obligation	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 57	-	-	-
5	Line Deliberately Left Blank				
6	Line Deliberately Left Blank				
7	General Plant In Service	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 99		-	-
8	General Asset Retirement Obligation	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 98		•	-
9	Intangible Plant In Service	FF1, page 205 Col.(g) & pg. 204 Col. (b), In 5	2,489,437	1,571,800	2,030,619
10	Total Property Investment Balance	(Sum of Lines: 3, 7, 9)	442,771,181	345,075,322	393,923,252
11	Total ARO Balance (included in total on line 10)	(Sum of Lines: 4, 8)		-	<u> </u>
Accumulated	Depreciation & Amortization Balances				
12	Line Deliberately Left Blank				
13	Line Deliberately Left Blank				
14	Transmission Accumulated Depreciation	FF1, page 219, In 25, Col. (b)	17,365,983	9,319,430	13,342,707
15	Transmission ARO Accumulated Depreciation	Company Records	•	•	-
16	Line Deliberately Left Blank				
17	Line Deliberately Left Blank				
18	General Accumulated Depreciation	FF1, page 219, In 28, Col. (b)	•	-	-
19	General ARO Accumulated Depreciation	Company Records	•	•	-
20	Intangible Accumulated Amortization	FF1, page 200, In 21, Col. (b)	763,558	371,603	567,581
21	Total Accumulated Depreciation or Amortization	(Sum of Lines: 14, 18, 20)	18,129,541	9,691,033	13,910,287
22	Total ARO Balance (included in total on line 21)	(Sum of Lines: 15, 19)	-	-	-

Generation Step-Up Units

23	GSU Investment Amount	Company Records	•	-	-
24	GSU Accumulated Depreciation	Company Records	-	•	-
25	GSU Net Balance	(Line 23 - Line 24)		-	-
<u>Transmissio</u>	on Accumulated Depreciation Net of GSU Accumulated De	epreciation			
26	Transmission Accumulated Depreciation	(Line 14 Above)	17,365,983	9,319,430	13,342,707
27	Less: GSU Accumulated Depreciation	(Line 24 Above)	-	-	-
28	Subtotal of Transmission Net of GSU	(Line 26 - Line 27)	17,365,983	9,319,430	13,342,707
Plant Held F					
29	Plant Held For Future Use	FF1, page 214, In 47, Col. (d)	•	-	-
30	Transmission Plant Held For Future	Company Records	•	-	-
Regulatory	Assets and Liabilities Approved for Recovery In Ratebase Note: Regulatory Assets & Liabilities can only be include				
31	Beginning Balance of Regulatory Asset (Note 1)	a in facebase pursuant to a 205 ming with the FERC.	•		0
32	Amortization in Months	(line 24 / line 22)	-	0	-
33 34	Monthly Amortization Months in 2015 to be amortized	(line 31 / line 32)	0	0	-
34 35	Amortization Expense in 2015 Year	(line 33 X line 34)	0	0	-
36	Months in 2016 to be amortized		-	-	-
37	Amortization Expense in 2016 Year	(line 33 X line 36)	0	0	-
38	Ending Balance of Regulatory Asset	(line 31 - line 35)	0	0	-
39	Average Balance of Regulatory Asset	(line 31 + line 38)/2	0	0	-
40	Unamortized Balance of Regulatory Asset at YE 2015 (N		0	0	-
41	Total Regulatory Deferrals Included in Ratebase		0	0	0

NOTE 1 Formation costs through 6/30/2010 are includable at 50% with 48 month amortization and no return on the unamortized balance. The balance on line 41 may not include unamortized formation costs.

AEPTCo - SPP Formula Rate OKT WS B Projected Plant Page: 22 of 69

AEP TRANSMISSION HOLDING COMPANY 2016 Cost of Service Formula Rate Projected on 2015 FF1 Balances Worksheet B - Projected Transmission Plant in Service Additions AEP OKLAHOMA TRANSMISSION COMPANY, INC

I. Calculation of Composite Depreciation Rate

	STAND ALONE (Note 1)	
1	Transmission Plant @ Beginning of Historic Period (2015) (P.206, In 58,(b)):	343,503,522
2	Transmission Plant @ End of Historic Period (2015) (P.207, In 58,(g)):	440,281,744
3		783,785,266
4	Average Balance of Transmission Investment	391,892,633
5	Annual Depreciation Expense, Historic TCOS, In 259	8,143,315
6	Composite Depreciation Rate	2.08%
7	Average Depreciable Life (Years)	48
	PUBLIC SERVICE COMPANY OF OKLAHOMA (Note 1)	
8	Transmission Plant @ Beginning of Historic Period (2015) (P.206, In 58,(b)):	\$ 788,910,811
9	Transmission Plant @ End of Historic Period (2015) (P.207, In 58,(g)):	\$ 815,430,062
10		1,604,340,873
11	Average Balance of Transmission Investment	802,170,437
12	Annual Depreciation Expense, PSO Historic TCOS, In 246	\$ 15,385,707
13	Composite Depreciation Rate	1.92%
14	Average Depreciable Life (Years)	52

II. Calculation of Property Placed in Service by Month and the Related Depreciation Expense

15	Month in Service	Capi	talized Balance	Composite Annual Depreciation Rate	De	Annual epreciation	Мо	onthly Depreciation	No. Months Depreciation	First Year Depreciation Expense
16	January	\$	1,612,776	2.08%	\$	33,516	\$	2,793	11	\$ 30,723
17	February	\$	2,415,354	2.08%	\$	50,194	\$	4,183	10	\$ 41,829
18	March	\$	10,098,224	2.08%	\$	209,855	\$	17,488	9	\$ 157,391
19	April	\$	1,612,776	2.08%	\$	33,516	\$	2,793	8	\$ 22,344
20	May	\$	8,557,454	2.08%	\$	177,836	\$	14,820	7	\$ 103,737
21	June	\$	1,612,776	2.08%	\$	33,516	\$	2,793	6	\$ 16,758
22	July	\$	1,613,374	2.08%	\$	33,528	\$	2,794	5	\$ 13,970
23	August	\$	1,612,776	2.08%	\$	33,516	\$	2,793	4	\$ 11,172
24	September	\$	5,876,817	2.08%	\$	122,128	\$	10,177	3	\$ 30,532
25	October	\$	1,687,296	2.08%	\$	35,064	\$	2,922	2	\$ 5,844
26	November	\$	1,612,776	2.08%	\$	33,516	\$	2,793	1	\$ 2,793
27	December	\$	74,692,927	2.08%	\$	1,552,222	\$	129,352	0	\$ -
28	Investment	\$	113,005,329					Depr	eciation Expense	\$ 437,093
III. Pla	nt Transferred									
29		\$		<== This input a	rea	is for origina	al co	st plant		

29	\$ -	<== This input area is for original cost plant
30	\$ -	<== This input area is for accumulated depreciation that may be associated with capital
		expenditures. It would have an impact if a company had assets transferred from a subsidiary.
31 (Ln 14 * Ln 29)	\$ -	<== This input area is for additional Depreciation Expense

Note 1: Until AEP OKLAHOMA TRANSMISSION COMPANY, INC establishes Transmission plant in service the carrying charge will be calculated as in the Operating Company formula approved in Docket No. ER07-1069. The calculation for AEP OKLAHOMA TRANSMISSION COMPANY, INC is based on Plant Balances and Depreciation Expense for PSO and shown on lines 8 through 14.

AEPTCo - SPP Formula Rate OKT WS C RB Tax Page: 23 of 69

AEP TRANSMISSION HOLDING COMPANY 2016 Cost of Service Formula Rate Worksheet C - ADIT Balances used in Projection & True-Up AEP OKLAHOMA TRANSMISSION COMPANY, INC

Line <u>No.</u>	(A) <u>Acc. No.</u>	(B) <u>Description</u>	(C) <u>YE Balance</u>	(E) <u>Exclusions *</u>	(F) 100% Transmission <u>Related</u>	(G) PTD Plant <u>Related</u>	(H) Transmission <u>Plant Related</u>	(I) Labor <u>Related</u>	(J) Total Included in Rate base <u>(E)+(F)+(G)+(H)</u>
		Account 282 - Form-1 page 274-275, Ln 2 Col. (k)							
		282 Balance to Use in Projection							
	1 282.1	2015 Year End Tax Deferrals - Ws C-1	(85,517,575)	(2,654)	(84,937,377)	-	-	(577,544)	
		Transmission Allocator from Historic TCOS [GP or W/S] Allocated Total		<u>0.0000%</u> 0	<u>100.0000%</u> (84,937,377)	<u>100.0000%</u> 0	<u>100.0000%</u> 0	<u>99.8467%</u> (576,659)	(85,514,036)
	0 202.1			Ŭ	(01,001,011)	Ŭ	0		
	4 000 4	282 Balance to Use in True-Up		(0.05.4)	(04 007 077)				
	4 282.1 5 282.1	2015 Year End Tax Deferrals - Ws C-1 2014 Year End Tax Deferrals - Ws C-2	(85,517,575) (63,362,295)	(2,654) (2,654)	(84,937,377) (62,981,455)	-	-	(577,544) (378,186)	
	0 202.1		(00,002,200)	(2,001)	(02,001,100)			(0/0,100)	
		Subtotal	(148,879,870)	(5,308)	(147,918,832)	-	-	(955,731)	
		Average Balance Transmission Allocator from True-Up TCOS [GP or W/S]	(74,439,935)	(2,654) <u>0.0000%</u>	(73,959,416) 100.0000%	0 <u>100.0000%</u>	0 <u>100.0000%</u>	(477,865) <u>100.0000%</u>	
	-	Allocated Total		0.000078	(73,959,416)	0	0	(477,865)	(74,437,281)
								_	
		Account 283 - Form-1 page 276-277, Ln 9, Col (k)							
		283 Balance to Use in Projection							
	0 283.1	2015 Year End Tax Deferrals - Ws C-1	(19,395,717)	(3,877,366)	(15,518,351)	-	-	-	
		Transmission Allocator from Historic TCOS [GP or W/S]		<u>0.0000%</u>	<u>100.000%</u>	<u>100.0000%</u>	<u>100.0000%</u>	<u>99.8467%</u>	
1	2 283.1	Allocated Total		0	(15,518,351)	0	0	0	(15,518,351)
		283 Balance to Use in True-Up							
		2015 Year End Tax Deferrals - Ws C-1	(19,395,717)	(3,877,366)	(15,518,351)	-	-	-	
1	4 283.1	2014 Year End Tax Deferrals - Ws C-2	(14,512,655)	(3,032,314)	(11,480,341)	-	-	-	
1	5	Subtotal	(33,908,373)	(6,909,681)	(26,998,692)	-	-	-	
		Average Balance	(16,954,186)	(3,454,840)	(13,499,346)	0	0	0	
1 1		Transmission Allocator from True-Up TCOS [GP or W/S] Allocated Total		<u>0.0000%</u> 0	<u>100.0000%</u> (13,499,346)	<u>100.0000%</u>	<u>100.0000%</u> 0	<u>100.0000%</u> 0 Г	(13,499,346)
	0	Allocateu Fotai		0	(13,+33,340)	0	0	0	(13,433,340)
		<u> Account 190 - Form-1 page 234, Ln 8, Col. (c)</u>							
1	9 190.1	2015 Year End Tax Deferrals - Ws C-1	16,529,862	11,098,439	5,431,423		_		
		Transmission Allocator from Historic TCOS [GP or W/S]	10,029,002	<u>0.0000%</u>	<u>100.0000%</u>	<u>-</u> <u>100.0000%</u>	<u>-</u> <u>100.0000%</u>	<u>-</u> <u>99.8467%</u>	

20 190.1 Transmission Allocator from Historic TCOS [GP or W/S] <u>0.0000%</u> 100.0000% <u>JU%</u> <u>JU%</u> 100.00 21 190.1 Allocated Total 5,431,423 0 5,431,423 0 0 0 190 Balance to Use in True-Up 2015 Year End Tax Deferrals - Ws C-1 16,529,862 22 190.1 11,098,439 5,431,423 -2014 Year End Tax Deferrals - Ws C-2 12,701,510 8,683,391 23 190.1 4,018,119 -Subtatal 24 20 221 10 701 020 0 110 5

24	Subtotal	29,231,372	19,781,830	9,449,542	-	-	-	
25	Average Balance	14,615,686	9,890,915	4,724,771	0	0	0	
26	Transmission Allocator from True-Up TCOS [GP or W/S]		<u>0.0000%</u>	<u>100.0000%</u>	<u>100.0000%</u>	<u>100.0000%</u>	<u>100.0000%</u>	
27	Allocated Total		0	4,724,771	0	0	0	4,724,771

	Account 255 - Form-1 page 266-267 255 Balance to Use in Projection			Pre 1971 ITC Ludable in Rate Base		
28 255.0 29 255.0 30 255.0	Acc Defrd ITC - Federal - 12/31/2015 (FF1 p. 267, Ln 2.h) Transmission Allocator from Historic TCOS [GP or W/S] Allocated Total	- <u>N/A</u>	<u>N/A</u>	<u>-</u> <u>100.0000%</u> 0 <u>N/A</u>	<u>N/A</u>	0
31 255.0 32 255.0	255 Balance to Use in True-Up Acc Defrd ITC - Federal - 12/31/2015 (FF1 p. 267, Ln 2.h) Acc Defrd ITC - Federal - 12/31/2014 (FF1 p. 266, Ln 2.b)	-		-		
33 34 35 36	Subtotal Average Balance Transmission Allocator from True-Up TCOS [GP or W/S] Allocated Total	- 0 <u>N/A</u>	<u>N/A</u>	- 0 <u>100.0000%</u> 0 <u>N/A</u>	<u>N/A</u>	0

* Exclusions: Non-utility, fuel supply, off-system sales and other items as specified related to costs not included in rates.

Worksheet C-1 - ADIT & ITC Details

AEP OKLAHOMA TRANSMISSION COMPANY DETAIL OF DEFERRED INCOME TAX BALANCES AS OF DECEMBER 31, 2015

Allocation Method

				Allocation		100%	Line Deliberately	Deliberately	
Account	Line #	Description	Balance	Basis	Exclusions	Transmission	Left Blank	Left Blank	Labor
2821001	230A	ACRS BENEFIT NORMALIZED	(87,106,518)	т		(87,106,518)			
2821001	230X	R & D DEDUCTION - SEC 174	(2,654)	E	(2,654)				
2821001	295A	GAIN/LOSS ON ACRS/MACRS PROPERTY	45,368	т		45,368			
2821001	320A	ABFUDC	(2,077,595)	т		(2,077,595)			
2821001	380J	INT EXP CAPITALIZED FOR TAX	4,259,236	Т		4,259,236			
2821001	712K	CAPITALIZED SOFTWARE COST-BOOK	(577,544)	Labor					(577,544)
2821001	910K	REMOVAL CST	(57,868)	Т		(57,868)			
2821001		TOTAL ELECTRIC ACCOUNT SUBTOTAL	(85,517,575)		(2,654)	(84,937,377)	0	0	(577,544)
(absolute	e value Total Co	ompany Amount Ties to FF1 p.275(k) Acct 282 Electric)	85,517,575						
				_					
2831001	014C-DSIT	NOL-STATE C/F-DEF STATE TAX ASSET-L/T	(3,877,366)	E	(3,877,366)				
2831001	664J	REG ASSET-TRANSCO PRE-FORMATION COSTS	(0)	Т		(0)			
2024002	911Q-DSIT		(45 540 254)	т		(15 510 251)			
2831002	9110-0511	DSIT ENTRY - NORMALIZED	(15,518,351)	1		(15,518,351)			
2831001		TOTAL ELECTRIC ACCOUNT SUBTOTAL	(19,395,717)	-	(3,877,366)	(15,518,351)	0	0	0
	e value Total Co	ompany Amount Ties to FF1 p.277(k) Acct 283 Electric)	19,395,717	-		(10,010,001)	•	Ŭ	<u> </u>
(0.0001010			,,						
1901001	011C-DFIT	TAX CREDIT C/F - DEF TAX ASSET	613	E	613				
1901001	011C-MJE	TAX CREDIT C/F - DEF TAX ASSET- MJE	612	E	612				
1901001	911Q-DSIT	DSIT ENTRY - NORMALIZED	5,431,423	Т		5,431,423			
1901001	960E	AMT CREDIT - DEFERRED	19,024	E	19,024				
1901002	014C-DSIT	NOL-STATE C/F-DEF STATE TAX ASSET-L/T	11,078,190	E	11,078,190				
4004004			40 500 000	-	44,000,400	E 404 400			
1901001		TOTAL ELECTRIC ACCOUNT SUBTOTAL	16,529,862	-	11,098,439	5,431,423	0	0	0
		(Total Company Amount Ties to FF1 p.234(c) Electric)	16,529,862						

AEPTCo - SPP Formula Rate OKT WS C-1 DFIT WP 12-31-15 Page: 24 of 69

Line

	0 (577,544)
--	-----	----------

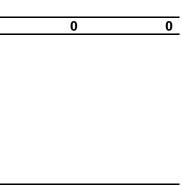
Worksheet C-2 - ADIT & ITC Details

AEP OKLAHOMA TRANSMISSION COMPANY DETAIL OF DEFERRED INCOME TAX BALANCES AS OF DECEMBER 31, 2014

Allocation Method

				Allocation Method					
				Allocation		100%	Line Deliberately	Line Deliberately	
Account	line #	Description	Balance	Basis	Exclusions		Line Deliberately	Left Blank	Labar
Account	Line #	Description	Dalance	Dasis	Exclusions	Transmission	Left Diank	Left Diank	Labor
2821001	230A	ACRS BENEFIT NORMALIZED	(64,434,806)	т		(64,434,806)			
2821001	230X	R & D DEDUCTION - SEC 174	(2,654)	E	(2,654)	(-,,-,,-,,			
2821001	295A	GAIN/LOSS ON ACRS/MACRS PROPERTY	237	Ŧ	(_,)	237			
2821001	320A	ABFUDC	(1,392,380)	т		(1,392,380)			
2821001	380J	INT EXP CAPITALIZED FOR TAX	2,897,665	т		2,897,665			
2821001	712K	CAPITALIZED SOFTWARE COST-BOOK	(378,186)	Labor					(378,186)
2821001	910K	REMOVAL CST	(52,172)	т		(52,172)			
2821001		TOTAL ELECTRIC ACCOUNT SUBTOTAL	(63,362,295)		(2,654)	(62,981,455)	0	0	(378,186)
(absolute	e value Total C	ompany Amount Ties to FF1 p.275(k) Acct 282 Electric)	63,362,295	-					
2831001	014C-DSIT	NOL-STATE C/F-DEF STATE TAX ASSET-L/T	(3,032,314)	E	(3,032,314)				
2831001	664J	REG ASSET-TRANSCO PRE-FORMATION COSTS	(0)	Т		(0)			
2831002	911Q-DSIT	DSIT ENTRY - NORMALIZED	(11,480,341)	Т		(11,480,341)			
			(1 1 5 1 0 0 5 5)	-	(0.000.04.4)	(11,100,011)			
2831			(14,512,655)	-	(3,032,314)	(11,480,341)	0	0	0
(absolute	e value Total C	ompany Amount Ties to FF1 p.277(k) Acct 283 Electric)	14,512,655						
1901001	011C	TAX CREDIT C/F - DEF TAX ASSET- MJE	612	Е	612				
1901001	911Q-DSIT	DSIT ENTRY - NORMALIZED	4,018,119	T	012	4,018,119			
1001001	960E	AMT CREDIT - DEFERRED	19,024	Ē	19,024	1,010,110			
1901001	960Z	NOL - DEFERRED TAX ASSET RECLASS	0	Ŧ	10,021	0			
						· ·			
1901002	014C-DSIT	NOL-STATE C/F-DEF STATE TAX ASSET-L/T	8,663,755	Е	8,663,755				
1901001		TOTAL ELECTRIC ACCOUNT SUBTOTAL	12,701,510	_	8,683,391	4,018,119	0	0	0
		(Total Company Amount Ties to FF1 p.234(c) Electric)	12,701,510	-					

AEPTCo - SPP Formula Rate OKT WS C-2 DFIT WP 12-31-14 Page: 25 of 69



AEP West SPP Member Companies 2016 Cost of Service Formula Rate Worksheet D - Working Capital Rate Base Adjustments AEP OKLAHOMA TRANSMISSION COMPANY, INC

	(A)	(B)	(C)	(D)	(E)
			Mate	rials & Supplies	
<u>Line</u> Number			Source	<u>Balance @</u> <u>December 31, 2015</u> FF1, p. 227, Col. (c)	Balance @ December 31, 2014 FF1, p. 227, Col. (b)
1					
2	Transmiss	sion Materials & Supplies	FF1, p. 227, ln 8, Col. (c & b)	0	0
3	General N	laterials & Supplies	FF1, p. 227, ln 11, Col. (c & b)	0	0
4	Stores Ex	pense (Undistributed)	FF1, p. 227, ln 16, Col. (c & b)	0	0

		Prepayment Balance Summary		
		Average of YE Balance	Excludable Balances	100% Transmission <u>Related</u>
5	Totals as of December 31, 2015	74,107	0	17,800
6	Totals as of December 31, 2014	72,917	0	13,500
7	Average Balance	73,512	0	15,650

Prepayments Account 165 - Balance @ 12/31/2015

8	Acc. No.	Description	2015 <u>YE Balance</u>	Excludable Balances	100% Transmission <u>Related</u>
9	1650001	Prepaid Insurance	34,960	0	
10	1650021	Prepaid Insurance - EIS	21,347		
11	1650023	Prepaid Lease	17,800		17,800
12					
13					
14					
15					
16					
17					
18					

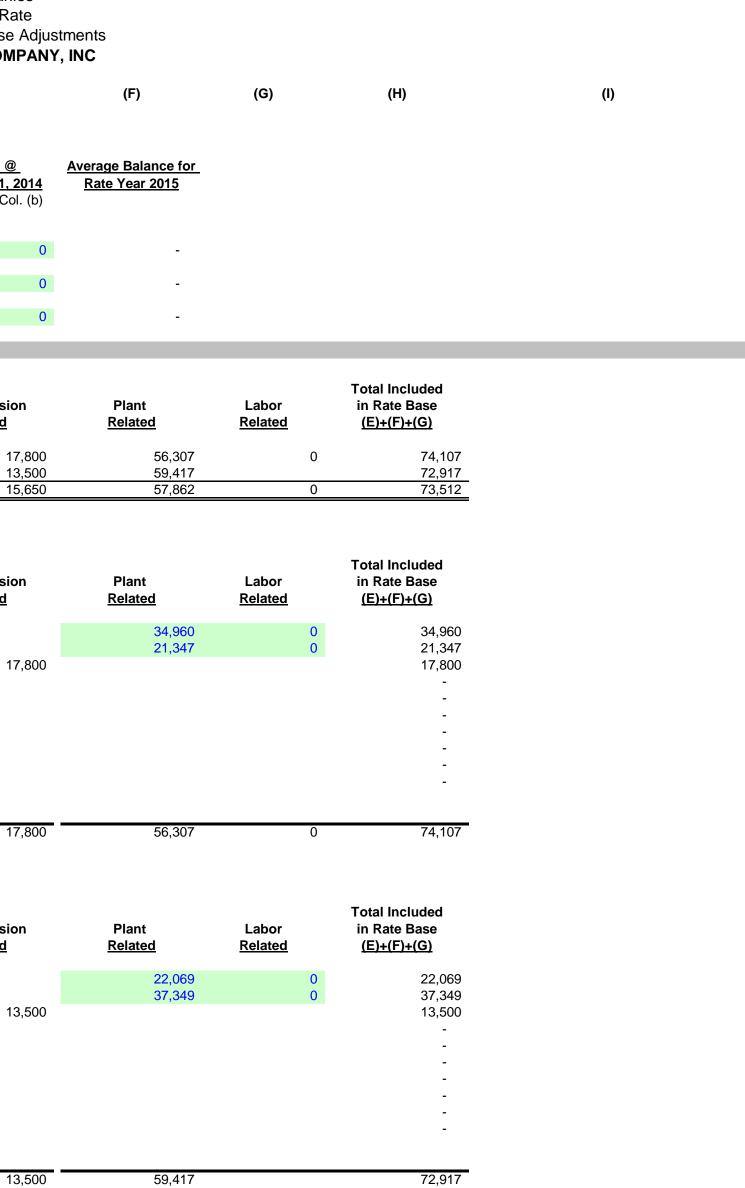
Subtotal - Form 1, p 111.57.c

74,107 0

Prepayments Account 165 - Balance @ 12/31/2014

19	<u>Acc. No.</u>	Description	2014 <u>YE Balance</u>	Excludable <u>Balances</u>	100% Transmission <u>Related</u>
20	1650001	Prepaid Insurance	22,069		
21	1650021	Prepaid Insurance - EIS	37,349		
22	1650023	Prepaid Lease	13,500		13,500
23					
24					
25					
26					
27					
28					
29					
30		Subtotal - Form 1, p 111.57.c	72,917	0	13,500

AEPTCo - SPP Formula Rate OKT WS D Working Capital Page: 26 of 69



AEPTCo - SPP Formula Rate OKT WS E IPP Credits Page: 27 of 69

AEP West SPP Member Companies 2016 Cost of Service Formula Rate Worksheet E - IPP Credits AEP OKLAHOMA TRANSMISSION COMPANY, INC

<u>Line</u> Number	(A) Description	(B) <u>2015</u>
1	Net Funds from IPP Customers @ 12/31/2014 (2015 FORM 1, P269, (B))	
2	Interest Accrual (company records)	
3	Revenue Credits to Generators (company records)	
4 5 6	Other Adjustments (company records) Accounting Adjustment	1
7	Net Funds from IPP Customers 12/31/2015 (2015 FORM 1, P269, (F))	-
8	Average Balance for 2015 ((In 1 + In 7) / 2)	

AEP TRANSMISSION HOLDING COMPANY 2016 Cost of Service Formula Rate Projected on 2015 FF1 Balances Worksheet F - Calculation of PROJECTED Annual Revenue Requirement for BPU and Special-billed Projects Based on a Carrying Charge Derived from Historic 2015 Data AEP OKLAHOMA TRANSMISSION COMPANY, INC

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

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

ROE w/o incentives (Projected	TCOS, ln 163)		11.20%	
Project ROE Incentive Adder (E	nter as whole nur	mber)	<mark>0</mark> basis	points
ROE with additional 0 basis poir	nt incentive		11.20% <==In	centive RO
Determine R (cost of long term	debt, cost of pref	ferred stock and percent i	s from Projected TCOS, Ins	46 through
	<u>%</u>	Cost	Weighted cost	
Long Term Debt	50.00%	0.0393	0.0197	
Preferred Stock	0.00%	0.0000	0.0000	
Common Stock	50.00%	0.1120	<u>0.0560</u>	
		R =	0.0757	

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

Rate Base (Projected TCOS, In 75)	433,460,289
R (fom A. above)	0.0757
Return (Rate Base x R)	32,800,897

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

Return (from B. above)	32,800,897
Tax Rate (Projected TCOS, In 105)	38.68%
EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =	46.68%
Income Tax Calculation (Return x EIT)	15,310,993
ITC Adjustment (Projected TCOS, In 115)	-
Income Taxes	15,310,993

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

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

Net Revenue Requirement (Projected TCOS, In 122)	65,470,116
Return (Projected TCOS, In 117)	32,800,897
Income Taxes (Projected TCOS, In 116)	15,310,993
Gross Margin Taxes (Projected TCOS, In 121)	-
Net Revenue Requirement, Less Return and Taxes	17,358,226

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

Net Revenue Requirement, Less Return and Taxes	17,358,226
Return (from I.B. above)	32,800,897
Income Taxes (from I.C. above)	15,310,993
Net Revenue Requirement, with 0 Basis Point ROE increase	65,470,116
Gross Margin Tax with 0 Basis Point ROE Increase (II C. below)	-
Revenue Requirement w/ Gross Margin Taxes	65,470,116
Less: Depreciation (Projected TCOS, In 94)	8,143,315
Net Rev. Req, w/0 Basis Point ROE increase, less Depreciation	57,326,801

C. Determine Gross Margin Tax with hypothetical 0 basis point increase in ROE. GE 470 116 Cross Margin T with O

Net Revenue Requirement before Gross Margin Taxes, with 0	65,470,116
Basis Point ROE increase (II B. above)	
Apportionment Factor to Texas (Worksheet K, In 12)	0.00%
Apportioned Texas Revenues	-
Taxable Percentage of Revenue (70%)	70%
Taxable, Apportioned Margin	-
Texas Gross Margin Tax Rate	1%
Texas Gross Margin Tax Expense	-
Gross-up Required for Gross Margin Tax Expense	
Total Additional Gross Margin Tax Revenue Requirement	-

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

Net Transmission Plant (Projected TCOS, Ins 46, 47, 48, 49, 51)	527,340,682
Net Revenue Requirement, with 0 Basis Point ROE increase	65,470,116
FCR with 0 Basis Point increase in ROE	12.42%
Net Rev. Req, w / 0 Basis Point ROE increase, less Dep. FCR with 0 Basis Point ROE increase, less Depreciation FCR less Depreciation (Projected TCOS, ln 12)	57,326,801 10.87% <u>10.79%</u> 0.08%

Incremental FCR with 0 Basis Point ROE increase, less Depreciation **III.** Calculation of Composite Depreciation Rate

Transmission Plant @ Beginning of Period (P.206, In 58)	343,503,522	<==From Input or
Transmission Plant @ End of Period (P.207, In 58)	440,281,744	<==From Input or
	783,785,266	-
Transmission Plant Average Balance for 2015	391,892,633	
Annual Depreciation Expense (Historic TCOS, In 259)	8,143,315	
Composite Depreciation Rate	2.08%	
Depreciable Life for Composite Depreciation Rate	48.12	
Round to nearest whole year	48	

ROE Cannot Exceed 12.45% gh <mark>148</mark>)

SUMMARY OF PROJECTED ANNUAL BASE PLAN AND NON-BASE PLAN REVENUE REQUIREMENTS						
		Rev Require	W Incentives	Incentive Amounts		
PROJECTED YEAR	2016	13,475,209	13,475,209	\$-		

Note: Review formulas in summary to ensure the proper year's revenue requirement is being accumulated for each project from the tables below.

NOTE: PART IV --- BPU Project Tables are contained in separate *.xls file

t on Worksheet B t on Worksheet B

> Note 1: Until AEP OKLAHOMA TRANSMISSION COMPANY, INC 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. ER07-1069. The calculation for AEP OKLAHOMA TRANSMISSION COMPANY, INC is based on Plant Balances and Depreciation Expense for PSO and shown on lines 8 through 14 of Worksheet B.

AEP TRANSMISSION HOLDING COMPANY 2016 Cost of Service Formula Rate Projected on 2015 FF1 Balances Worksheet G - Calculation of TRUED-UP Annual Revenue Requirement for BPU and Special-billed Projects Based on a Carrying Charge Derived from Trued-Up 2015 Data AEP OKLAHOMA TRANSMISSION COMPANY, INC

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

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

ROE w/o incentives (True-Up TCOS, In 150)			11.20%		
Project ROE Incentive Adder (Enter as whole number)		0 basis points			
ROE with additional 0 basis	point incentive		11.20% <==Incentive ROE Ca	nnot Exce	
Determine R (cost of long t	erm debt, cost of pr	eferred stock and perce	cent is from True-Up TCOS, Ins 133 through 13	5)	
	<u>%</u>	Cost	Weighted cost		
Long Term Debt	50.00%	0.0419	0.0209		
Preferred Stock	0.00%	0.0000	0.0000		
Common Stock	50.00%	0.1120	<u>0.0560</u>		
		R =	= 0.0769		

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

Rate Base (True-Up TCOS, In 63)	297,189,205
R (fom A. above)	0.0769
Return (Rate Base x R)	22,868,401

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

Return (from B. above)	22,868,401
Tax Rate (True-Up TCOS, In 95)	38.68%
EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =	45.90%
Income Tax Calculation (Return x EIT)	10,497,529
ITC Adjustment (True-Up TCOS, In 102)	-
Income Taxes	10,497,529

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

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

Net Revenue Requirement (True-Up TCOS, In 109)	50,287,062
Return (True-Up TCOS, In 104)	22,868,401
Income Taxes (True-Up TCOS, In 103)	10,497,529
Gross Margin Taxes (True-Up TCOS, In 108)	-
Net Revenue Requirement, Less Return and Taxes	16,921,133

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

Net Revenue Requirement, Less Return and Taxes	16,921,133
Return (from I.B. above)	22,868,401
Income Taxes (from I.C. above)	10,497,529
Net Revenue Requirement, with 0 Basis Point ROE increase	50,287,062
Gross Margin Tax with Basis Point ROE Increase (II C. below)	-
Revenue Requirement w/ Gross Margin Taxes	50,287,062
Less: Depreciation (True-Up TCOS, In 82)	<u> </u>
Net Rev. Req, w/0 Basis Point ROE increase, less Depreciation	42,143,747

C. Determine Gross Margin Tax with hypothetical 0 basis point increase in ROE.

• •	-
Net Revenue Requirement before Gross Margin Taxes, with 0	50,287,062
Basis Point ROE increase (II B. above)	
Apportionment Factor to Texas (Worksheet K, In 12)	0.00%
Apportioned Texas Revenues	-
Taxable Percentage of Revenue (70%)	70%
Taxable, Apportioned Margin	-
Texas Gross Margin Tax Rate	1%
Texas Gross Margin Tax Expense	-
Gross-up Required for Gross Margin Tax Expense	-
Total Additional Gross Margin Tax Revenue Requirement	-

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

Net Transmission Plant (True-Up TCOS, In 39)	378,549,927
Net Revenue Requirement, with 0 Basis Point ROE increase	50,287,062
FCR with 0 Basis Point increase in ROE	13.28%
Net Rev. Req, w / 0 Basis Point ROE increase, less Dep.	42,143,747
FCR with 0 Basis Point ROE increase, less Depreciation	11.13%
FCR less Depreciation (True-Up TCOS, In 12)	<u>11.13%</u>
Incremental FCR with 0 Basis Point ROE increase, less Depreciation	0.00%

III. Calculation of Composite Depreciation Rate

Tran	smission Plant @ Beginning of Period (P.206, In 58)	343,503,522	<==From Input on Worksheet B
Tran	smission Plant @ End of Period (P.207, In 58)	440,281,744	<==From Input on Worksheet B
		783,785,266	-
Tran	smission Plant Average Balance for 2015	391,892,633	
Ann	ual Depreciation Expense (True-Up TCOS, In 82)	8,143,315	Note 1: Until
Com	posite Depreciation Rate	2.08%	depreciation
Depi	reciable Life for Composite Depreciation Rate	48.12	approved in [
Rou	nd to nearest whole year	48	based on Pla

ceed 12.45%

SUMMARY OF TRUED-UP ANNUAL REVENUE REQUIREMENTS FOR SPP BPU & NON-BPU PROJECTS						
	Rev	Require	Ψl	ncentives	Incentive Amounts	
TRUE-UP YEAR 2015						
\sum Prior Year Projected (WS-F)	\$	12,174,626	\$	12,174,626	\$	-
Σ Prior Year True-Up (WS-G)	\$	13,185,393	\$	13,185,393	\$	-
True-up Adjustment For 201	5	1,010,768		1,010,768		-

Note: Review formulas in summary to ensure the proper year's revenue requirement is being accumulated for each project from the tables below.

NOTE: PART IV --- BPU Project Tables are contained in separate *.xls file

ntil AEP OKLAHOMA TRANSMISSION COMPANY, INC establishes Transmission plant in service the on expense component of the carrying charge will be calculated as in the Operating Company formula n Docket No. ER07-1069. The calculation for AEP OKLAHOMA TRANSMISSION COMPANY, INC is Plant Balances and Depreciation Expense for PSO and shown on lines 8 through 14 of Worksheet B.

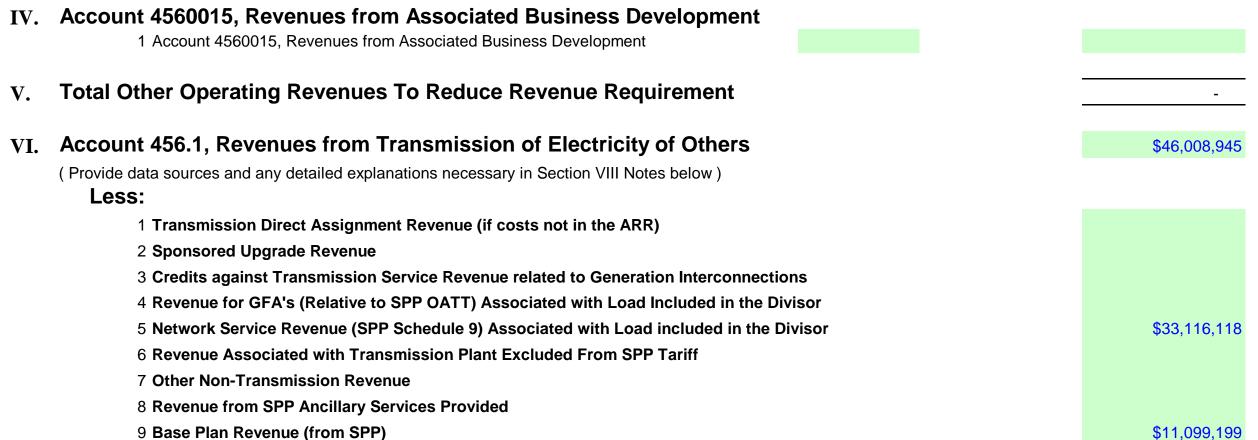
AEPTCo - SPP Formula Rate OKT WS H Rev Credits Page: 30 of 69

AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances Worksheet H - Revenue Credits for Historic Period AEP OKLAHOMA TRANSMISSION COMPANY, INC

Revenue Credits for

		Total Company	Non- Transmission	Transmission
I.	Account 450, Forfeited Discounts		-	-
II.	Account 451, Miscellaneous Service Revenues		-	
III.	Account 454, Rent from Electric Property 1 Account 4540001 - Rent from Elect Property-Aff 2 Account 4540002 - Rent from Elect Property - Non-Aff 3 Account 4540003 - Rent from Elect Property - ABD - Aff 4 Account 4540004 - Rent from Elect Property - ABD - Non-Aff 5 Total Rents from Electirc Property	-	- - -	-

(Revenue related to transmission facilities for pole attachments, rentals, etc. Provide data sources and explanations in Section VIII, Notes below)



9 Base Plan Revenue (from SPP)	\$11,099,199
10 Flow Through of ERCOT Ancillary Charges	
11 Other	
Net Transmission Credits	\$1,793,628
VII. Total Worksheet A Revenue Credits	\$1,793,628
VIII. Data Sources:	

Data for this worksheet came from the FERC Form 1 and the Company's General Ledger.

AEPTCo - SPP Formula Rate OKT WS I Exp Adj F1 Balances Page: 31 of 69

AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances Worksheet I - Supporting Transmission Expense Adjustments AEP OKLAHOMA TRANSMISSION COMPANY, INC

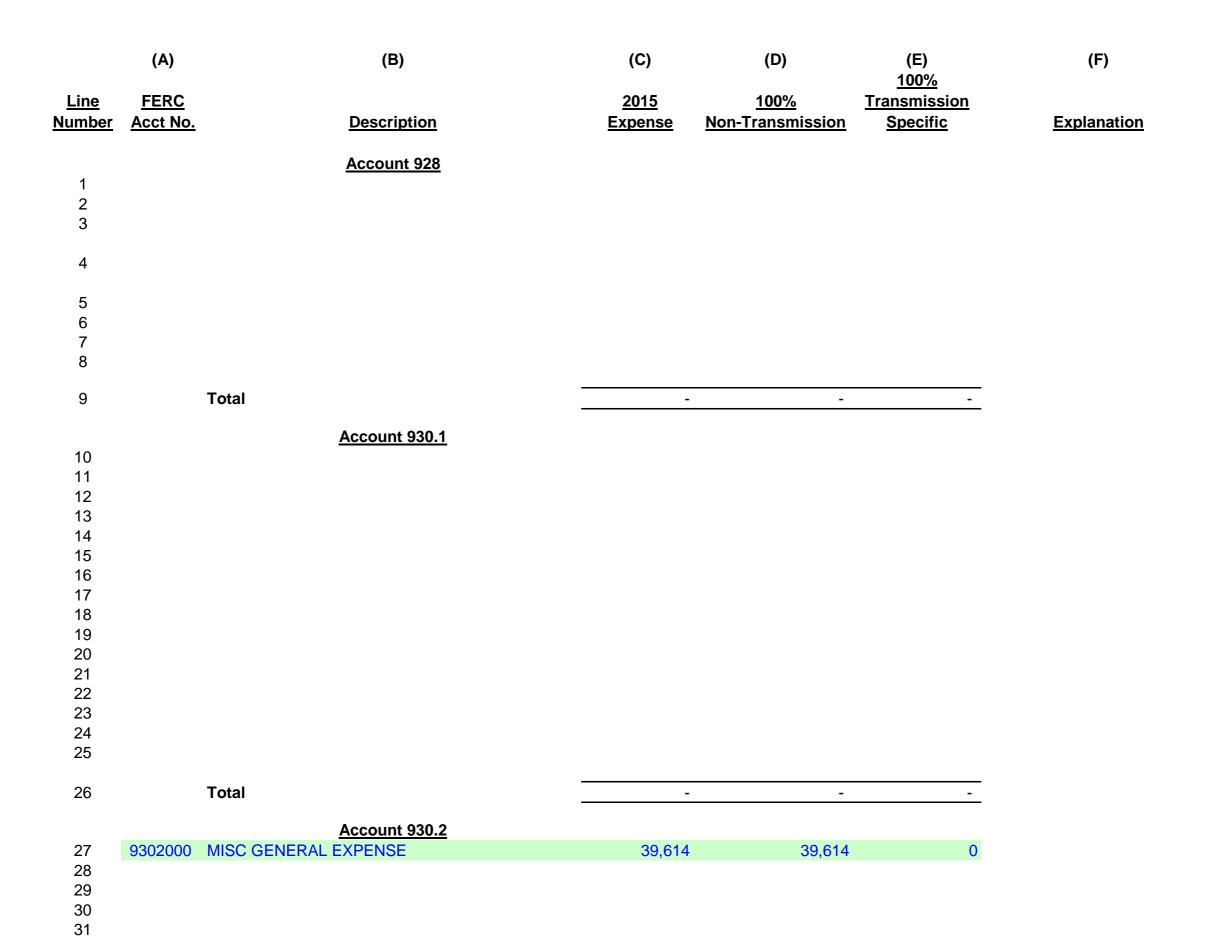
1	Other Expenses		
2	Direct Assignment Charge	\$	0
3	Sponsored Upgrades Charge	\$	0
4	Firm and Non-Firm Point-To-Point Charges	\$	0
5	Base Plan Charges	\$	0
6	Schedule 9 Charges	\$	0
7	SPP Schedule 12 - FERC Assessment	\$	0
8	SPP Schedule 1-A	\$	0
9	SPP Annual Assessment	\$	0
10	Ancillary Services Expenses	\$	0
11	Other	\$	0
12	Other	\$	0
13	Other	\$	0
14	Total	(sum of lines 2 through 13)\$	0

Adjustment to charges that are booked to transmission accounts that are the responsibility of the TO's LSE.

NOTE: Exclusion of Accounts 561 and 565 from O&M Expense in the TCOS templates eliminates the need to use this worksheet.

AEPTCo - SPP Formula Rate OKT WS J Misc Exp Page: 32 of 69

AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances Worksheet J - Allocation of Specific O&M or A&G Expenses



32	Total	39,614	39,614	-

AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances Worksheet K - Development of Composite State Income Tax Rate AEP OKLAHOMA TRANSMISSION COMPANY, INC

I. DEVELOPMENT OF COMPOSITE STATE INCOME TAX RATES FOR 2015

State Income Tax Rate - Oklahoma Apportionment Factor Effective State Income Tax Rate	Note 1	5.66% 100.00%	5.6600%
State Income Tax Rate - Ohio Apportionment Factor Tax Phase-out Factor		0.0000% 0.0000% 0.0000%	
Effective State Income Tax Rate			0.0000%
Total Effective State Income Tax Rate		-	5.6600%

Note 1 --- The Oklahoma State Income Tax Rate of 6% is reduced to 5.66% due to the deductibility of Oklahoma State Income Taxes on the Oklahoma State Income Tax Return.

II. CALCULATION OF TEXAS GROSS MARGIN TAX

	Projected		Historic		True-Up	
Line # REVENUE REQUIREMENT BEFORE TEXAS GROSS MARGIN TAX (In 117 of Template)	Total Company 66,271,452	Trans. Only 65,470,116	Total Company 54,287,229	Trans. Only 53,486,119	Total Company 51,009,353	Trans. Only 50,287,062
1 Apportionment Factor to Texas (In12)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2 Apportioned Texas Revenues	\$0	\$0	\$0	\$0	\$0	\$0
3 Taxable Percentage of Revenue (70%)	70%	70%	70%	70%	70%	70%
4 Taxable, Apportioned Margin	-	-	-	-	-	-
5 Texas Gross Margin Tax Rate (1%)	1%	1%	1%	1%	1%	1%
6 Texas Gross Margin Tax Expense	-	-	-	-	-	-
7 Gross-up Required for Texas Gross Margin Expense ((In 6 * In 3 * In 1)/(1- In 5) * In 5)	-	-	-	-	-	-
8 Total Additional Gross Margin Tax Revenue Requirement	-	-	-	-	-	-

9 WHOLESALE LOAD ALLOCATOR (For Use in Gross Margin Tax Allocator)

10 Texas Jurisdictional Load		-	KW
11 Total Load	_	-	KW
12 Allocation Percentage	(ln 10 / ln 11)	0.00%	

AEPTCo - SPP Formula Rate OKT WS K State Taxes Page: 33 of 69

AEPTCo - SPP Formula Rate OKT WS L Other Taxes Page: 34 of 69

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AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances **Worksheet L** - Taxes Other than Income **AEP OKLAHOMA TRANSMISSION COMPANY, INC**

HISTORIC PERIOD EXPENSE (2015) - TO BE USED ON TRUE-UP TEMPLATE

	(A)	(B)	(C)	(D)	(E)	(F)
Line No.	Account	Total Company	Property	Labor	Other	Non-Allocable

1	<u>Revenue Taxes</u>
---	----------------------

2		

3 Real Estate and Personal Property Taxes

4	OK Ad Valorem - 2015	4,142,000	4,142,000
5			-
6			-
7			-

8 Payroll Taxes

9	
10	
11	

12 Line Deliberately Left Blank

13	-
14	-

15 Miscellaneous Taxes

16	Sales/Use	-		-
17	OK Franchise Tax	20,000	20,000	
18	Sales/Use	373	373	
19				
20			 A second s	
21			 A second se	
22				-
23			 A second se	

24						
25					-	
26					-	
26					-	
27	Total Taxes by Allocable Basis	4,162,373	4,142,000	-	20,373	-
	(Total Company Amount Ties to FFI p.114, Ln 14,(c))	4,162,373				

AEPTCo - SPP Formula Rate OKT WS M Cost of Debt for Proj. Page: 35 of 69

AEP TRANSMISSION HOLDING COMPANY Cost of Service Formula Rate Using 2015 FF1 Balances Worksheet M - Cost of Debt Based on Outstanding Balances as of 12/31/2015 AEP OKLAHOMA TRANSMISSION COMPANY, INC

(A)	(B)	(C)	(D)	(E)
<u>Issuance</u> Long Term Debt (FF1.p. 256-257.h)	Principle Amount FF1.p. 257.x (h)	Interest Rate	<u>Annual Expense</u>	<u>Notes</u>
1 <u>Bonds - Acc 221</u> 2			-	
3 <u>Other Long Term Debt</u> 4 Credit Facility	25,000,000		26,886	p256 L19(h)
4 5			-	
6 <u>Advances from Assoc Companies</u> 7 Senior Notes, Series A, Tranche D	75,000,000	4.78%	3,585,000	p256 L5(h)
8 Senior Notes, Series A, Tranche E9 Senior Notes, Series B, Tranche A	7,500,000 9,250,000	4.83% 2.73%	362,250 252,525	p256 L6(h) p256 L7(h)
10 Senior Notes, Series B, Tranche B11 Senior Notes, Series B, Tranche C12 Senior Notes, Series B, Tranche D	11,100,000 11,100,000 18,500,000	4.05% 4.38% 5.32%	486,180	p256 L8(h) p256 L9(h) p256 L10(h)
13 Senior Notes, Series B, Tranche E14 Senior Notes, Series B, Tranche F	5,550,000 5,000,000	5.42% 5.52%	299,974 275,233	p256 L11(h) p256 L12(h)
15 Senior Notes, Series C, Tranche A16 Senior Notes, Series C, Tranche B17 Senior Notes, Series C, Tranche C	9,100,000 5,300,000 10,200,000	2.68% 3.18% 3.56%	168,540	p256 L13(h) p256 L14(h) p256 L15(h)
18 Senior Notes, Series C, Tranche F19 Senior Notes, Series C, Tranche H	5,900,000 2,300,000	3.81% 4.05%	224,790 93,150	p256 L16(h) p256 L17(h)
20 Senior Notes, Series C, Tranche I Issuance Discount, Premium, & Expenses:	4,300,000	4.53%	194,790	p256 L18(h)
20 Amort of Debt Discount and Expenses 21 Less: Amor of Debt Premimums	FF1.p. 117.63.c FF1.p. 117.65.c		59,472	
Reacquired Debt: 22 Amortization of Loss	FF1.p. 117.64.c		-	
23 Less: Amortization of Gain24 Total Interest on Long Term Debt	FF1.p. 117.66.c	3.93%	- 8,069,540	1
Preferred Stock (FF1.p. 250-251)	Preferred Balance Outstanding		2,200,010	1
25 26 27			-	
28 29			-	
30 Dividends on Preferred Stock	-	0.00%	-]

AEP TRANSMISSION HOLDING COMPANY Cost of Service Formula Rate Using 2015 FF1 Balances AEP OKLAHOMA TRANSMISSION COMPANY, INC

Calculation of Capital Structure and Weighted Average Cost of Capital Based on Average of Balances At 12/31/2014 and 12/31/2015

(A)	(B)	(C) <u>Balances @</u>	(D) <u>Balances @</u>	(E)	
<u>Line</u> Develop	ment of Average Balance of Common Equity	<u>12/31/2015</u>	<u>12/31/2014</u>	Average	
4	Total Proprietary Capital (p. 112.16.c&d)	213,669,471	100 151 500	202 012 017	
	Less Preferred Stock from Ln 46 below	213,009,471	192,154,562 0	202,912,017	
	B Less Account 216.1 (p. 112.12.c&d)	0	0	-	
	Less Account 219.1 (p. 112.15.c&d)	0	0	-	
5	Average Balance of Common Equity	213,669,471	192,154,562	202,912,017	
Develop	ment of Cost of Long Term Debt Based on Ave	erage Outstanding Ba	lance		
6	6 Bonds (221) (p. 112.18.c&d)	0	0	-	
	Less: Reacquired Bonds (222) (p. 112.19.c&d)	0	0	-	
	Advances from Assoc. Companies (223) (p112.20.c&d)	205,100,000	180,100,000	192,600,000	
	Senior Unsecured Notes (224) (p. 112.21.c&d)	0	0	-	
10	Total Average Debt	205,100,000	180,100,000	192,600,000	
	Annual Interest Expense for 2016				
12	2 Coupon Interest on Long Term Debt (256-257.33.i)			8,010,068	
	Less: Total Hedge (Gain)/Expense Accumulated from p 25	6-257, col (i) of FERC			
-	Form 1 included in Ln 12 and shown in Ln 30 below.			-	
	Amort of Debt Discount & Expense (428) (p. 117.63.c)			59,472	
	Amort of Loss on Reacquired Debt (428.1) (p. 117.64.c)			0	
	5 Less: Amort of Premium on Debt (429) (p. 117.65.c) 7 Less: Amort of Gain on Reacquired Debt (429.1) (p. 117.6	e o)		0	
	B Total Interest Expense (Ln 12 - Ln 14 + Ln 15 - Ln 16 - L	,		Ĵ	
18	6 Total Interest Expense (Ln 12 - Ln 14 + Ln 15 - Ln 16 - L	.n 17)		8,069,540	
19	Average Cost of Debt for 2016 (Ln 18/Ln 10)			4.19%	
	CALCULATION OF HEDGE GAINS/LOSSES TO BE EXC	CLUDED FROM TCOS			
20	AEP OKTCo may not include costs or gains related to	o interest hedging activition	es.		.
			Remaining	Amortization F	-erio
	HEDGE AMOUNTS BY ISSUANCE (FROM p. 256-257	Total Hedge	Unamortized		
	(i) of the FERC Form 1)	(Gain)/Loss for 2015	Balance	Beginning	Er
			Dalariee	Dogining	
21					

24 25 26

27 28 29

23

30 Total Hedge Amortization to be Removed

-

Development of Cost of Preferred Stock

Preferred Stock

31 0% Series - 0 - Dividend Rate (p. 250-251. 9.a)

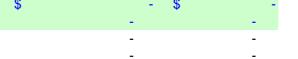


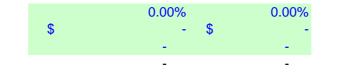
32 0% Series - 0 - Par Value (p. 250-251. 9.c) 33 0% Series - 0 - Shares O/S (p.250-251. 9.e) 34 0% Series - 0 - Monetary Value (Ln 32 * Ln 33) 35 0% Series - 0 - Dividend Amount (Ln 31 * Ln 34)

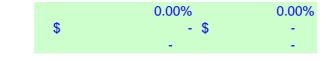
36 0% Series - 0 - Dividend Rate (p. 250-251. 10.a) 37 0% Series - 0 - Par Value (p. 250-251. 10.c) 38 0% Series - 0 - Shares O/S (p.250-251. 10.e) 39 0% Series - 0 - Monetary Value (Ln 37 * Ln 38) 40 0% Series - 0 - Dividend Amount (Ln 36 * Ln 39)

41 0% Series - 0 - Dividend Rate (p. 250-251.) 42 0% Series - 0 - Par Value (p. 250-251.) 43 0% Series - 0 - Shares O/S (p.250-251.) 44 0% Series - 0 - Monetary Value (Ln 42 * Ln 43) 45 0% Series - 0 - Dividend Amount (Ln 41 * Ln 44)

46 Balance of Preferred Stock (Lns 34, 39, 44) 47 Dividens on Preferred Stock (Lns 35, 40, 45) 48 Average Cost of Preferred Stock (Ln 47/46)







-	-	-
-	-	-
0.00%	0.00%	0.00%

_

AEPTCo subsidiaries in SPP Cost of Service Formula Rate Using 2015 FF1 Balances Calculation of Post-employment Benefits Other than Pensions Expenses Allocable to Transmission Service Worksheet O - PBOP Support AEP OKLAHOMA TRANSMISSION COMPANY, INC

PBOP	(A)	(B)
1	Calculation of PBOP Expenses	
2	AEP TransCo - AEP Service Corp Employees	
3		(02 222 969)
	Total AEP System PBOP expenses	(92,333,868)
4	Base Year relating to retired personnel	\$0
5	Amount allocated on Labor	-\$92,333,868
6	Total AEP System Direct Labor Expense	\$1,314,167,144
7	AEP System PBOP expense per dollar of direct labor (PBOP Rate)	-\$0.070
8	Currently Approved PBOP Rate	\$0.094
9	Base PBOP TransCo labor expensed in current year	\$1,197,768
10	Allowable TransCo PBOP Expense for current year (Line 8 * Line 9)	\$112,590
11	Direct DROD Expense per Actuarial Report	02
	Direct PBOP Expense per Actuarial Report	\$0 \$0
12	Additional PBOP Ledger Entry (From Company Records)	\$0
13	Medicare Credit	\$0
14	PBOP Expenses From AEP Affiliates (From Company Records)	-\$37,341
15	Actual PBOP Expense (Sum Lines 11-14)	-\$37,341
16	PBOP Adjustment Line 10 less Line 15	\$149,931

AEPTCo - SPP Formula Rate SWT Projected TCOS Page: 38 of 69

AEP West SPP Member Companies 2016 Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016

Line No. 1	REVENUE REQUIREMENT (w/o incentives)	(In 119)	Total	All	ocator	ansmission Amount \$136,455
2	REVENUE CREDITS	(Note A)				
3	Transmission Credits	(Worksheet H)	5,682	DA	1.00000	\$ 5,682
4	Assoc. Business Development	(Worksheet H)		DA	1.00000	\$ -
5	Total Revenue Credits		5,682			\$ 5,682
6	REVENUE REQUIREMENT For All Company Facilities	(In 1 less In 5)				 \$130,773
MEMO:	The Carrying Charge Calculations on lines 9 to 14 bel non-incentive revenue requirements	ow is used in calculating project revenue requirement for these projects shown on line 7 is included in the		The total		
7	Revenue Requirement for SPP BPU Regional Facilities ((Worksheet F)	(w/o incentives)	-	DA	1.00000	\$ -
8	NET PLANT CARRYING CHARGE (w/o incentives	s) (Note B)	(using SWEPCO FCRs p	er Note 1 of W	orksheet B)	
9	Annual Rate	(In 1/ (Sum of Ins 46, 47, 48, 49, 51)) x 100%				16.14%
10	Monthly Rate	(ln 9 / 12)				1.35%
11	NET PLANT CARRYING CHARGE ON LINE 9 , W/O DE	PRECIATION (w/o incentives) (Note B)				
12	Annual Rate	((In 1 - In 94 - In 95) / (Sum of Ins 46, 47, 48, 49, 51)) x	(100%			13.01%
13	NET PLANT CARRYING CHARGE ON LINE 11, W/O	ICOME TAXES, RETURN (Note B)				
14	Annual Rate	((In 1 - In 94 - In 95 - In 116 - In 117) / (Sum of Ins 46, 4	47, 48, 49, 51)) x 100%			4.16%
15	ADDITIONAL REVENUE REQUIREMENT for projects w	/ incentive ROE's (Note C) (Worksheet F)				-

AEPTCo - SPP Formula Rate SWT Projected TCOS Page: 39 of 69

AEP West SPP Member Companies 2016 Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016

	(1)	(2)	(3)	(4)		(5)
	RATE BASE CALCULATION	Data Sources (See "General Notes")	<u>TO Total</u>	۵Ш	ocator	Total <u>Transmission</u>
Line	KATE BASE CALCOLATION	(See General Notes)	NOTE D	<u>Aiii</u>		<u>118113111331011</u>
<u>No.</u> 16 17	GROSS PLANT IN SERVICE Line Deliberately Left Blank Line Deliberately Left Blank					
	Transmission	(Worksheet A In 3.C &		DA		-
18 19	Less: Transmission ARO (Enter Negative)	Hist. Template Ln 183) (Worksheet A In 4.C)	-	TP	0.00000	-
20 21	Plus: Transmission Plant-in-Service Additions (Work Plus: Additional Trans Plant on Transferred Assets ((sheet B)	-	DA TP	1.00000	-
22	Line Deliberately Left Blank					
23 24	<i>Line Deliberately Left Blank</i> General Plant	(Worksheet A In 7.C)	<u>_</u>	W/S	1.00000	<u>-</u>
25	Less: General Plant ARO (Enter Negative)	(Worksheet A In 8.C)	-	W/S	1.00000	-
26 27	Intangible Plant TOTAL GROSS PLANT	(Worksheet A In 9.C) (sum Ins 16 to 26)	-	W/S	1.00000	
28	ACCUMULATED DEPRECIATION AND AMORTIZATIO	NC				
29 30	Line Deliberately Left Blank Line Deliberately Left Blank					
31	Transmission	(Worksheet A In 14.C & 28.C)	-	TP1=	0.00000	
31	Less: Transmission ARO (Enter Negative)	(Worksheet A In 15.C)	<u>-</u>	TP1=	0.00000	-
33	Plus: Transmission Plant-in-Service Additions (Work	(sheet B)	-	DA	1.00000	-
34 35	Plus: Additional Projected Deprec on Transferred As Plus: Additional Transmission Depreciation for 2016		-	DA TP1	1.00000 0.00000	-
36	Plus: Additional General & Intangible Depreciation for		-	W/S	1.00000	-
37	Plus: Additional Accum Deprec on Transferred Asse		-	DA	1.00000	-
38 39	Line Deliberately Left Blank Line Deliberately Left Blank					
40	General Plant	(Worksheet A In 18.C)	-	W/S	1.00000	-
41	Less: General Plant ARO (Enter Negative)	(Worksheet A In 19.C)	-	W/S	1.00000	-
42 43	Intangible Plant TOTAL ACCUMULATED DEPRECIATION	(Worksheet A In 20.C) (sum Ins 29 to 42)	<u> </u>	W/S	1.00000	
44	NET PLANT IN SERVICE					
45	Line Deliberately Left Blank					
46 47	Transmission Plus: Transmission Plant-in-Service Additions (In 20	(ln 18 + ln 19 - ln 31 - ln 32) - ln 33)	-			-
48	Plus: Additional Trans Plant on Transferred Assets		-			-
49	Plus: Additional Transmission Depreciation for 2016		-			-
50 51	Plus: Additional General & Intangible Depreciation for Plus: Additional Accum Deprec on Transferred Asse					-
52	Line Deliberately Left Blank					
53 54	General Plant Intangible Plant	(ln 24 + ln 25 - ln 40 - ln 41) (ln 26 - ln 42)	<u>-</u>			-
54 55	TOTAL NET PLANT IN SERVICE	($\sin 20^{\circ} \sin 42$) (sum lns 45 to 54)				-
FO	DEFERRED TAX ADJUSTMENTS TO RATE BASE	(Nata E)				
56 57	Account No. 281.1 (enter negative)	(Note E) 272-273.8.k	-	NA		-
58	Account No. 282.1 (enter negative)	(Worksheet C, In 1.C & In 3.J)	-	DA		-
59 60	Account No. 283.1 (enter negative) Account No. 190.1	(Worksheet C, In 10.C & Ln 12.J) (Worksheet C, In 19.C & Ln 21.J)	1,493 23,549	DA DA		1,493
60 61	Account No. 255 (enter negative)	(Worksheet C, In 28.C & Ln 21.3) (Worksheet C, In 28.C & Ln 30.J)	23,549	DA		4,265
62	TOTAL ADJUSTMENTS	(sum lns 57 to 61)	25,042			5,758
63	PLANT HELD FOR FUTURE USE	(Worksheet A In 29.C & In 30.C)	-	DA		-
63a	REGULATORY ASSETS	(Worksheet A In NOTE 1 . (C))	-	DA	1.00000	-
64 65	WORKING CAPITAL	(Note F) (1/8 * In 80) (Note G)	60			
65 66	Cash Working Capital Transmission Materials & Supplies	(1/8 * ln 80) (Note G) (Worksheet D, ln 2.(D))	62	TP	0.00000	-
67	A&G Materials & Supplies	(Worksheet D, In 3.(D))	-	W/S	1.00000	-
68 60	Stores Expense Prenavments (Account 165) - Labor Allocated	(Worksheet D, In 4.(D))	-	GP(h) W/S	0.00000 1.00000	-
69 70	Prepayments (Account 165) - Labor Allocated Prepayments (Account 165) - Gross Plant	(Worksheet D, In 5.G) (Worksheet D, In 5.F)	-	VV/S GP(h)	0.00000	-
71	Prepayments (Account 165) - Transmission Only	(Worksheet D, In 5.E)	-	DÀ	1.00000	-
72 73	Prepayments (Account 165) - Unallocable TOTAL WORKING CAPITAL	(Worksheet D, In 5.D) (sum Ins 65 to 72)	62	NA	0.00000	-
73	IPP CONTRIBUTIONS FOR CONSTRUCTION	(Note H) (Worksheet E, In 7 (B))	02	DA	1.00000	-
74 75	RATE BASE (sum lns 55, 62, 63, 73, 74)	(INOLE II) (VVOIKSILEELE, III I (D))	25,104	DA	1.00000	5,758
15	(301111000, 02, 00, 10, 14)		23,104			0,700

AEPTCo - SPP Formula Rate SWT Projected TCOS Page: 40 of 69

AEP West SPP Member Companies 2016 Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016

	(1)	(2)	(3)		(4)	(5)
	EXPENSE, TAXES, RETURN & REVENUE REQUIREMENTS CALCULATION	Data Sources <u>(See "General Notes")</u>	<u>TO Total</u>	Alle	ocator	Total <u>Transmission</u>
Line		<u></u>				
No.	OPERATION & MAINTENANCE EXPENSE					
76	Transmission	321.112.b	499			
77	Less: Total Account 561	(Note I) 321.84-92.b	-			
78	Less: Account 565	(Note J) 321.96.b	-			
79	Less: expenses 100% assigned to TO billed custom	ers (Worksheet I, In 14)	\$0			
80	Total O&M Allocable to Transmission	(Ins 76 - 77 - 78 - 79)	499	TP	0.00000	-
81	Administrative and General	323.197.b (Note K)	131,052			
82	Less: Acct. 924, Property Insurance	323.185.b	-			
83	Acct. 928, Reg. Com. Exp.	323.189.b	-			
84	Acct. 930.1, Gen. Advert. Exp.	323.191.b	-			
85	Acct. 930.2, Misc. Gen. Exp.	323.192.b				
86	Balance of A & G	(In 81 - sum In 82 to In 85)	131,052	W/S	1.00000	131,052
87	Plus: Acct. 924, Property Insurance	(ln 82)	-	GP(h)	0.00000	-
88	Acct. 928 - Transmission Specific	Worksheet J In 5.(E) (Note L)	-	TP	0.00000	-
89	Acct 930.1 - Only safety related ads -Direct	Worksheet J In 19.(E) (Note L)	-	TP	0.00000	-
90	Acct 930.2 - Misc Gen. Exp Trans	Worksheet J In 25.(E) (Note L)	-	DA	1.00000	-
90a	PBOP Adjustment	(Worksheet O In 16.D)	4,718	DA	1.00000	4,718
91	A & G Subtotal	(sum lns 86 to 90 less ln 90a)	135,770			135,770
92	TOTAL O & M EXPENSE	(In 80 + In 91)	136,269			135,770
93	DEPRECIATION AND AMORTIZATION EXPENSE					
94	Transmission	336.7.f	-	TP	0.00000	-
95	Plus: Transmission Plant-in-Service Additions (Wor		-	DA	1.00000	-
95a	Plus: Formation Costs Amortization	(Worksheet A In 37.E)	-	DA	1.00000	-
96	General	336.10.f	-	W/S	1.00000	-
97	Intangible	336.1.f	-	W/S	1.00000	
98	TOTAL DEPRECIATION AND AMORTIZATION	(sum lns 94 to 97)	-			-
99	TAXES OTHER THAN INCOME	(Note N)				
100	Labor Related					
101	Payroll	Worksheet L, Col. D	-	W/S	1.00000	-
102	Plant Related					
103	Property	Worksheet L, Col. C	-	GP(h)	0.00000	-
104	Gross Receipts/Sales & Use	Worksheet L, Col. F	-	NA	0.00000	-
105	Other	Worksheet L, Col. E	51	GP(h)	0.00000	-
106	TOTAL OTHER TAXES	(sum lns 101 to 105)	51			-

107 108 109 110 111	INCOME TAXES $T=1 - \{[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)\} =$ EIT=(T/(1-T)) * (1-(WCLTD/WACC)) = where WCLTD=(In 161) and WACC = (In 164) and FIT, SIT & p are as given in Note O.	(Note O)	39.80% 44.29%			
112 113	GRCF=1 / (1 - T) = (from In 108) Amortized Investment Tax Credit (enter negative)	(FF1 p.114, ln 19.c)	1.6612			
114 115 116	Income Tax Calculation ITC adjustment TOTAL INCOME TAXES	(In 109 * In 117) (In 112 * In 113) (sum Ins 114 to 115)	917 917	NP(h)	0.00000	210 210
117	RETURN ON RATE BASE (Rate Base*WACC)	(ln 75 * ln 164)	2,070			475
118	INTEREST ON IPP CONTRIBUTION FOR CONST. (N	lote E) (Worksheet E, In 2)	-	DA	1.00000	-
119 120	REVENUE REQUIREMENT BEFORE TEXAS GROS (sum lns 92, 98, 106, 116, 117, 118)	S MARGIN TAX	139,307			136,455
121	TEXAS GROSS MARGIN TAX (Note P) (Worksheet K	()	-	DA		-
122	REVENUE REQUIREMENT INCLUDING GROSS MA	RGIN TAX	139,307			136,455

AEPTCo - SPP Formula Rate SWT Projected TCOS Page: 41 of 69

\$

AEP West SPP Member Companies 2016 Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016

AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

SUPPORTING CALCULATIONS

ln No.	TRANSMISSION PLANT INCLUDED IN SPP TARIFF								
123	Total transmission plant	(In 18, 19, 20, 21)							-
124	Less transmission plant excluded from SPP Tariff (No	te Q)							-
125	Less transmission plant included in OATT Ancillary Se	-	(C)) (Note R)						-
126	Transmission plant included in SPP Tariff	(ln 123 - ln 124 - ln 125)							-
127	Percent of transmission plant in SPP Tariff	(ln 126 / ln 123)						TP=	0.00000
				Payroll	Billed from				
128	WAGES & SALARY ALLOCATOR (W/S)	(Note S)	Direct Payroll	AEP Se	rvice Corp.	Total			
129	Line Deliberately Left Blank								
130	Transmission	354.21.b		0	1,178	1,178	TP	0.00000	-
131	Regional Market Expenses	354.22.b		0	0	-	NA	0.00000	-
132	Line Deliberately Left Blank								
133	Other (Excludes A&G)	354.24,25,26.b		0	0	-	NA	0.00000	-
134	Total	(sum lns 129 to 133)		0	1,178	1,178			-
135	Transmission related amount							W/S=	1.00000
	STAND ALONE (Note T)								
136	WEIGHTED AVERAGE COST OF CAPITAL (WACC)								\$
137		Long Term Interest (Workshe	et M, In. 20, col. (D))					-
138		Preferred Stock Dividends (W	Vorksheet M, In. 26,	col. (D))					-
139	Development of Common Sto	ck:							
140		Proprietary Capital (112.16.c))						(831,371)
141		Less Preferred Stock (In 147)							-
142		Less Account 216.1 (112.12.0							-
143		Less Account 219.1 (112.15.0							-
144		Common Stock (In 140 - In 14	41 - ln 142 - ln 143)						(831,371)
					al Structure Pe			Cost	
145		\$		A	ctual	Cap Limit		(Note T)	Weighted
146	Long Term Debt (Worksheet M, In. 20, col. (B))	-			0.00%	0.00%		-	0.0000
147	Preferred Stock (Worksheet M, In. 26, col. (B))	-			0.00%	0.00%		-	0.0000
148	Common Stock (In 144) (Note U)	(831,371)			0.00%	0.00%		11.2%	0.0000
149	Total (sum lns 146 to 148)	(831,371)						WACC=	0.0000
150	Capital Structure Equity Limit (Note U)	50.0%							
	SOUTHWESTERN ELECTRIC POWER COMPANY (N	lote T)	OTE: All WACC rel	ated entries	below sourced	d from SWEP	CO's FF	1 or Template	
454		<u> </u>							¢

WEIGHTED AVERAGE COST OF CAPITAL (WACC) 151

101						Ψ
152		Long Term Interest (Worksheet M, In. 20, col. (D)))			118,777,528
153		Preferred Stock Dividends (Worksheet M, In. 26, o	col. (D))			-
154	Development of Common S	Stock:				
155		Proprietary Capital (112.16.c)				2,169,212,700
156		Less Preferred Stock (In 162)				-
157		Less Account 216.1 (112.12.c)				27,601,852
158		Less Account 219.1 (112.15.c)				(9,331,734)
159		Common Stock (In 155 - In 156 - In 157 - In 158)				2,150,942,582
			Capital Structure F	Percentages	Cost	
160		\$	Actual	Cap Limit	(Note T)	Weighted
161	Long Term Debt (Worksheet M, In. 20, col. (B))	2,210,200,000	50.68%	0.00%	5.37%	0.0272
162	Preferred Stock (Worksheet M, In. 26, col. (B))	-	0.00%	0.00%	-	0.0000
163	Common Stock (In 159) (Note U)	2,150,942,582	49.32%	0.00%	11.2%	0.0552
164	Total (sum Ins 161 to 163)	4,361,142,582			WACC=	0.0825
165	Capital Structure Equity Limit (Note U)	52.5%				

AEP West SPP Member Companies 2016 Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016

AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

Letter

<u>Notes</u>

General Notes: a) References to data from FERC Form 1 are indicated as: page#.line#.col.#

- b) If transmission owner ("TO") functionalizes its costs to transmission on its books, those costs are shown above and on any supporting workpapers rather than using the allocations above.
- A The revenue credits shall include a) amounts received directly from the SPP for PTP transmission services, b) direct assignment charges for transmission facilities, the cost of which has been included in the TCOS, and c) amounts from customers taking service under grandfathered agreements, where the demand is not included in the rate divisor. Revenues associated with FERC annual charges, gross receipts taxes, ancillary services or facilities excluded from the TCOS are not included as revenue credits. Revenue from Transmission Customers whose coincident peak loads are included in the DIVISOR of the load-ratio share calculation are not included as revenue credits. See Worksheet A for details.
- B The annual and monthly net plant carrying charges on page 1 are used to compute the revenue requirement for facilities and any upgrades.
- C This additional revenue requirement is determined using a net plant carrying charge (fixed carrying charge or FCR) approach. Worksheet G shows the calculation of the projected revenue requirement for each project, based on an FCR rate caclulated from inputs on the Historic TCOS. Line 15 shows the incremental ARR for projects receiving incentives as accepted by FERC. These individual additional revenue requirements are summed for the true-up year, and included here.
- D The gross plant, accumulated depreciation, and deferred tax balances included in rate base are reduced by the removal of balances related to Asset Retirement Obligations (AROs). This is to comply with the requirements of FERC Rulemaking RM02-7-000.
- E 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 as discussed in Note N. 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. Transmission allocations are shown on Worksheet B.
- F Identified as being transmission related or functionally booked to transmission.
- G Cash Working Capital assigned to transmission is one-eighth of O&M allocated to transmission on line 80.
- H Consistent with Paragraph 657 of Order 2003-A, the amount on line 74 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 118.
- Removes the expense booked to transmission accounts included in the development of OATT ancillary services rates, including all of Account No. 561.
- J Removes cost of transmission service provided by others to the extent such service is not incurred to provide the SPP service at issue.
- K General Plant and Administrative & General expenses may be functionalized based on allocators other then the W/S allocator. Full documentation must be provided.
- L Expense 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 D 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 The Post-employment Benefit Other than Pension (PBOP) expense is fixed based on an approved ratio of PBOP expense to direct labor expense.
- N Includes only FICA, unemployment, property and other assessments charged in the current year. Gross Receipts tax, Sales & Use taxes, 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". If the utility is taxed in more than one state it must attach a work paper showing the name of each state and how the blended or composite SIT was developed. Furthermore, 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 108) multiplied by (1/1-T). If the applicable tax rates are zero enter 0.

Inputs Required:	FIT =	35.00%
	SIT=	7.39% (State Income Tax Rate or Composite SIT. Worksheet K))
	p =	0.00% (percent of federal income tax deductible for state purposes)

- P Effective January 1, 2007, Texas instituted a gross margin tax. This tax is calculated on the Texas allocated revenue of the Company, reduced by 30% to derive a "Gross Margin" for the Company. The tax rate of one percent is assessed on the resulting amount. The jurisdictional allocator is based on transmission demand allocators.
- Q Removes plant excluded from the OATT because it does not meet the SPP's definition of Transmission Facilities or is otherwise ineligible to be recovered under the OATT.
- R 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 Q.
- S Includes functional wages & salaries incurred by parent company service corporation for support of the operating company.
- The Capital Structure of AEP SOUTHWESTERN TRANSMISSION COMPANY, INC. will be based on the Capital Structure of SWEPCO until AEP SOUTHWESTERN TRANSMISSION COMPANY, INC. establishes a stand alone capital structure computed on Worksheet M for the Projected TCOS or Worksheet N for the True-up TCOS.
 Long Term Debt cost rate = long-term interest (ln 152) / long term debt (ln 161). Preferred Stock cost rate = preferred dividends (ln 153) / preferred outstanding (ln 162).

Common Stock cost rate (ROE) = 11.2%, the rate accepted by FERC in Docket Nos. ER07-1069 and ER10-355. It includes an additional 50 basis points for remaining a member of the SPP RTO.

U Per Settlement, equity is limited to 50% of AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.'s Capital Structure. If the percentage of equity exceeds the cap, the excess is included in long term debt in the cap structure. This value can only change via an approved 205 or 206 filing.

AEPTCo - SPP Formula Rate SWT Historic TCOS Page: 43 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances

Line No. 166	REVENUE REQUIREMENT (w/o incentives)	(In 284)	Total	Allo	ocator	Tra	ansmission Amount \$136,455
167	REVENUE CREDITS	(Note A)					
168	Transmission Credits	(Worksheet H)	5,682	DA	1.00000	\$	5,682
169	Assoc. Business Development	(Worksheet H)	<u> </u>	DA	1.00000	<u>\$</u> \$	-
170	Total Revenue Credits		5,682			\$	5,682
171	REVENUE REQUIREMENT For All Company Facilities	(In 166 less In 170)				\$	130,773
		ts for these projects shown on line is included in	-		4 00000	<u>^</u>	
172	Revenue Requirement for SPP BPU Regional Facilities ((Worksheet F)	(W/O Incentives)	-	DA	1.00000	\$	-
173	NET PLANT CARRYING CHARGE (w/o incentives	s) (Note B)					
174	Annual Rate	(In 166/ In 211 x 100%)					0.00%
175	Monthly Rate	(ln 174 / 12)					0.00%
176	NET PLANT CARRYING CHARGE ON LINE 174 , W/O	DEPRECIATION (w/o incentives) (Note B)					
177	Annual Rate	((ln 166 - ln 259) / ln 211 x 100%)					0.00%
178	NET PLANT CARRYING CHARGE ON LINE 176, W/O	INCOME TAXES, RETURN (Note B)					
179	Annual Rate	((In 166 - In 259 - In 281 - In 282) / In 211 x 100%))				0.00%
180	ADDITIONAL REVENUE REQUIREMENT for projects w	/ incentive ROE's (Note C) (Worksheet F)					-

AEPTCo - SPP Formula Rate SWT Historic TCOS Page: 44 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances

	(1)	(2)	(3)	(4)	(5)
	RATE BASE CALCULATION	Data Sources (See "General Notes")	<u>TO Total</u>	Allocator	Total Transmission
Line		<u>,</u>	NOTE D	<u></u>	<u></u>
No.	GROSS PLANT IN SERVICE				
181 182	Line Deliberately Left Blank Line Deliberately Left Blank				
	Transmission	(Worksheet A In 3.C & Ln		DA	_
183		(1)	-		
184 185	Less: Transmission ARO (Enter Negative) Plus: Transmission Plant-in-Service Additions (Wor	(Worksheet A In 4.C) ksheet B)	N/A	TP 0.00000 NA 0.00000	- N/A
186	Plus: Additional Trans Plant on Transferred Assets		N/A	NA 0.00000	N/A
187	Line Deliberately Left Blank				
188 189	Line Deliberately Left Blank General Plant	(Worksheet A In 7.C)		W/S 1.00000	_
190	Less: General Plant ARO (Enter Negative)	(Worksheet A In 8.C)		W/S 1.00000	-
191	Intangible Plant	(Worksheet A In 9.C)	<u> </u>	W/S 1.00000	
192	TOTAL GROSS PLANT	(sum Ins 181 to 191)	-	GP(h)= 0.000000	-
193	ACCUMULATED DEPRECIATION AND AMORTIZATION	ON		GTD= -	
194	Line Deliberately Left Blank				
195	Line Deliberately Left Blank	$(M_{\rm ext})$			
196	Transmission	(Worksheet A In 14.C & 28.C)	<u> </u>	TP1= 0.00000	_
197	Less: Transmission ARO (Enter Negative)	(Worksheet A In 15.C)	-	TP1= 0.00000	-
198	Plus: Transmission Plant-in-Service Additions (Wor	ksheet B)	N/A	DA 1.00000	N/A
199	Plus: Additional Projected Deprec on Transferred A	, , , , , , , , , , , , , , , , , , ,	N/A	DA 1.00000	N/A
200 201	Plus: Additional Transmission Depreciation for 2016 Plus: Additional General & Intangible Depreciation		N/A N/A	TP1 0.00000 W/S 1.00000	N/A N/A
202	Plus: Additional Accum Deprec on Transferred Asse		N/A	DA 1.00000	N/A
203	Line Deliberately Left Blank				
204 205	Line Deliberately Left Blank General Plant	(Worksheet A In 18.C)		W/S 1.00000	
205	Less: General Plant ARO (Enter Negative)	(Worksheet A In 19.C)	-	W/S 1.00000 W/S 1.00000	-
207	Intangible Plant	(Worksheet A In 20.C)	<u> </u>	W/S 1.00000	
208	TOTAL ACCUMULATED DEPRECIATION	(sum Ins 194 to 207)	-		-
209	NET PLANT IN SERVICE				
210	Line Deliberately Left Blank				
211 212	Transmission Plus: Transmission Plant-in-Service Additions (In 18	(In 183 + In 184 - In 196 - In 197)	- N/A		- N/A
212	Plus: Additional Trans Plant on Transferred Assets	,	N/A N/A		N/A
214	Plus: Additional Transmission Depreciation for 2016	· · · · · · · · · · · · · · · · · · ·	N/A		N/A
215	Plus: Additional General & Intangible Depreciation		N/A		N/A
216 217	Plus: Additional Accum Deprec on Transferred Asso Line Deliberately Left Blank	ets (Worksheet B) (-In 202)	N/A		N/A
217	General Plant	(ln 189 + ln 190 - ln 205 - ln 206)	-		-
219	Intangible Plant	(In 191 - In 207)	<u> </u>		
220	TOTAL NET PLANT IN SERVICE	(sum Ins 210 to 219)	-	NP(h)= 0.000000	-
004					
221 222	DEFERRED TAX ADJUSTMENTS TO RATE BASE Account No. 281.1 (enter negative)	(Note E) 272-273.8.k	-	NA	-
223	Account No. 282.1 (enter negative)	(Worksheet C, In 1.C & In 3.J)	-	DA	-
224	Account No. 283.1 (enter negative)	(Worksheet C, In 10.C & Ln 12.J)	1,493	DA	1,493
225 226	Account No. 190.1 Account No. 255 (enter negative)	(Worksheet C, In 19.C & Ln 21.J) (Worksheet C, In 28.C & Ln 30.J)	23,549	DA DA	4,265
227	TOTAL ADJUSTMENTS	(sum Ins 222 to 226)	25,042		5,758
228	PLANT HELD FOR FUTURE USE	(Worksheet A In 29.C & In 30.C)	-	DA	-
228a	REGULATORY ASSETS	(Worksheet A In 41.(C))	-	DA	-
200		(Noto E)			
229 230	WORKING CAPITAL Cash Working Capital	(Note F) (1/8 * In 245) (Note G)	62		-
231	Transmission Materials & Supplies	(Worksheet D, In 2.(D))	-	TP 0.00000	-
232	A&G Materials & Supplies	(Worksheet D, In 3.(D))	-	W/S 1.00000	-
233 234	Stores Expense Prepayments (Account 165) - Labor Allocated	(Worksheet D, In 4.(D)) (Worksheet D, In 5.G)	-	GP(h) 0.00000 W/S 1.00000	-
235	Prepayments (Account 165) - Gross Plant	(Worksheet D, In 5.F)	-	GP(h) 0.00000	-
236	Prepayments (Account 165) - Transmission Only	(Worksheet D, In 5.E)	-	DA 1.00000	-
237 238	Prepayments (Account 165) - Unallocable TOTAL WORKING CAPITAL	(Worksheet D, In 5.D) (sum Ins 230 to 237)	62	NA 0.00000	-
200		(3011111320010201)	UZ.		-
239	IPP CONTRIBUTIONS FOR CONSTRUCTION	(Note H) (Worksheet E, In 7.(B))	-	DA 1.00000	-
240	RATE BASE (sum Ins 220, 227, 228, 238, 239)		25,104		5,758
			_		



AEPTCo - SPP Formula Rate SWT Historic TCOS Page: 45 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances

	(1)	(2)	(3)	(4	4)	(5)
	EXPENSE, TAXES, RETURN & REVENUE REQUIREMENTS CALCULATION	Data Sources (See "General Notes")	<u>TO Total</u>	Allo	cator	Total <u>Transmission</u>
Line						
No.	OPERATION & MAINTENANCE EXPENSE					
241	Transmission	321.112.b	499			
242	Less: Total Account 561	(Note I) 321.84-92.b				
243	Less: Account 565	(Note J) 321.96.b				
244	Less: expenses 100% assigned to TO billed custom	ners (Worksheet I, In 14)	\$0			
245	Total O&M Allocable to Transmission	(Ins 241 - 242 - 243 - 244)	499	TP	0.00000	-
246	Administrative and General	323.197.b (Note K)	131,052			
247	Less: Acct. 924, Property Insurance	323.185.b				
248	Acct. 928, Reg. Com. Exp.	323.189.b	-			
249	Acct. 930.1, Gen. Advert. Exp.	323.191.b	-			
250	Acct. 930.2, Misc. Gen. Exp.	323.192.b				
251	Balance of A & G	(In 246 - sum In 247 to In 250)	131,052	W/S	1.00000	131,052
252	Plus: Acct. 924, Property Insurance	(ln 247)	-	GP(h)	0.00000	-
253	Acct. 928 - Transmission Specific	Worksheet J In 5.(E) (Note L)	-	TP	0.00000	-
254	Acct 930.1 - Only safety related ads -Direct	Worksheet J In 19.(E) (Note L)	-	TP	0.00000	-
255	Acct 930.2 - Misc Gen. Exp Trans	Worksheet J In 25.(E) (Note L)	-	DA	1.00000	-
255a	PBOP Adjustment	(Worksheet O In 16.D)	4,718	DA	1.00000	4,718
256	A & G Subtotal	(sum lns 251 to 255 less ln 255a)	135,770			135,770
257	TOTAL O & M EXPENSE	(In 245 + In 256)	136,269			135,770
258	DEPRECIATION AND AMORTIZATION EXPENSE					
259	Transmission	336.7.f	-	TP	0.00000	-
260	Plus: Transmission Plant-in-Service Additions (Wor	ksheet B)	N/A			N/A
260a	Plus: Formation Costs Amortization	(Worksheet A In 35.C)	<u>-</u>	DA	1.00000	-
261	General	336.10.f	-	W/S	1.00000	-
262	Intangible	336.1.f		W/S	1.00000	-
263	TOTAL DEPRECIATION AND AMORTIZATION	(sum lns 259 to 262)	-			-
264	TAXES OTHER THAN INCOME	(Note N)				
265	Labor Related					
266	Payroll	Worksheet L, Col. D	-	W/S	1.00000	-
267	Plant Related					
268	Property	Worksheet L, Col. C	-	GP(h)	0.00000	-
269	Gross Receipts/Sales & Use	Worksheet L, Col. F	-	NA	0.00000	-
270	Other	Worksheet L, Col. E	51	GP(h)	0.00000	-
271	TOTAL OTHER TAXES	(sum Ins 266 to 270)	51			-

272 273 274 275 276 277	INCOME TAXES T=1 - {[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)} = EIT=(T/(1-T)) * (1-(WCLTD/WACC)) = where WCLTD=(In 326) and WACC = (In 329) and FIT, SIT & p are as given in Note O. GRCF=1 / (1 - T) = (from In 273)	(Note O)	39.80% 44.29% 1.6612			
278	Amortized Investment Tax Credit (enter negative)	(FF1 p.114, ln 19.c)				
279 280 281	Income Tax Calculation ITC adjustment TOTAL INCOME TAXES	(In 274 * In 282) (In 277 * In 278) (sum Ins 279 to 280)	917 917	NP(h)	0.00000	210 210
282	RETURN ON RATE BASE (Rate Base*WACC)	(ln 240 * ln 329)	2,070			475
283	INTEREST ON IPP CONTRIBUTION FOR CONST. (N	ote E) (Worksheet E, In 2)	-	DA	1.00000	-
284 285	REVENUE REQUIREMENT BEFORE TEXAS GROSS (sum lns 257, 263, 271, 281, 282, 283)	MARGIN TAX	139,307			136,455
286	TEXAS GROSS MARGIN TAX (Note P) (Worksheet K		-	DA		-
287	REVENUE REQUIREMENT INCLUDING GROSS MAR	RGIN TAX	139,307			136,455

AEPTCo - SPP Formula Rate SWT Historic TCOS Page: 46 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances

AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

SUPPORTING CALCULATIONS

ln No.	TRANSMISSION PLANT INCLUDED IN SPP TARIFI	F							
288	Total transmission plant	(ln 183)							-
289	Less transmission plant excluded from SPP Tariff (
290 201	Less transmission plant included in OATT Ancillary	-	$(\mathbf{C}) \in (\mathbf{NO} \in \mathbf{R})$						-
291	Transmission plant included in SPP Tariff	(ln 288 - ln 289 - ln 290)							-
292	Percent of transmission plant in SPP Tariff	(ln 291 / ln 288)						TP=	0.00000
				Payroll Bill	led from				
293	WAGES & SALARY ALLOCATOR (W/S)	(Note S)	Direct Payroll	AEP Servic		Total			
294	Line Deliberately Left Blank	(********)							
295	Transmission	354.21.b		0	1,178	1,178	TP	0.00000	-
296	Regional Market Expenses	354.22.b		0	0	-	NA	0.00000	-
297	Line Deliberately Left Blank								
298	Other (Excludes A&G)	354.24,25,26.b		0	0	-	NA	0.00000	-
299	Total	(sum Ins 294 to 298)		0	1,178	1,178			-
300	Transmission related amount							W/S=	1.00000
	STAND ALONE (Note T)								
301	WEIGHTED AVERAGE COST OF CAPITAL (WACC	.)							\$
302		Long Term Interest (Works	heet M, In. 20, col. (C))					-
303		Preferred Stock Dividends	(Worksheet M, In. 26	col. (D))					-
304	Development of Common	Stock:							
305		Proprietary Capital (112.16							(831,371)
306		Less Preferred Stock (In 31	2)						-
307	B07 Less Account 216.1 (112.12.c)								
			'						-
308		Less Account 219.1 (112.1	5.c)						-
			5.c)		Structure D			Cost	- - (831,371)
308 309		Less Account 219.1 (112.1) Common Stock (In 305 - In	5.c)	<u>Capital S</u>	Structure Pe			Cost	
308 309 310	Long Term Debt (Worksbeet M. In. 20. col. (B))	Less Account 219.1 (112.1	5.c)		al	Cap Limit		Cost (Note T)	Weighted
308 309 310 311	Long Term Debt (Worksheet M, In. 20, col. (B)) Preferred Stock (Worksheet M, In. 26, col. (B))	Less Account 219.1 (112.1) Common Stock (In 305 - In	5.c)	<u>Capital S</u>	al 0.00%	Cap Limit 0.00%			Weighted 0.0000
308 309 310 311 312	Preferred Stock (Worksheet M, In. 26, col. (B))	Less Account 219.1 (112.1) Common Stock (In 305 - In \$ - -	5.c)	<u>Capital S</u>	al 0.00% 0.00%	Cap Limit 0.00% 0.00%		(Note T) - -	Weighted 0.0000 0.0000
308 309 310 311 312 313	Preferred Stock (Worksheet M, In. 26, col. (B)) Common Stock (In 309) (Note U)	Less Account 219.1 (112.1) Common Stock (In 305 - In \$ - - (831,371)	5.c)	<u>Capital S</u>	al 0.00%	Cap Limit 0.00%		(Note T) - - 11.2%	Weighted 0.0000 0.0000 0.0000
308 309 310 311 312	Preferred Stock (Worksheet M, In. 26, col. (B))	Less Account 219.1 (112.1) Common Stock (In 305 - In \$ - -	5.c)	<u>Capital S</u>	al 0.00% 0.00%	Cap Limit 0.00% 0.00%		(Note T) - -	Weighted 0.0000 0.0000
308 309 310 311 312 313	Preferred Stock (Worksheet M, In. 26, col. (B)) Common Stock (In 309) (Note U)	Less Account 219.1 (112.1) Common Stock (In 305 - In \$ - - (831,371)	5.c)	<u>Capital S</u>	al 0.00% 0.00%	Cap Limit 0.00% 0.00%		(Note T) - - 11.2%	Weighted 0.0000 0.0000 0.0000

SOUTHWESTERN ELECTRIC POWER COMPANY (Note T) WEIGHTED AVERAGE COST OF CAPITAL (WACC)

316

NOTE: All WACC related entries below sourced from SWEPCO's FF1 or Template



317		Long Term Interest (SWE FR Workshee	t M, In. 21, col. (D))		_	118,777,528	
318		Preferred Stock Dividends (SWE FR Wo	orksheet M, In. 25, col. (D))			-	
319	Development of Common Stor	ck:					
320		Proprietary Capital (112.16.c)				2,169,212,700	
321		Less Preferred Stock (In 327)				-	
322		Less Account 216.1 (112.12.c)					
323	Less Account 219.1 (112.15.c)						
324		Common Stock (In 320 - In 321 - In 322 -	· In 323)		_	2,150,942,582	
			Capital Structure P	Percentages	Cost		
325		\$	Actual	Cap Limit	(Note T)	Weighted	
326	Long Term Debt (SWEPCO WS-M, In. 21, col. (B))	2,210,200,000	50.68%	0.00%	5.37%	0.0272	
327	Preferred Stock (SWEPCO WS-M, In. 22, col. (B))		0.00%	0.00%	-	0.0000	
328	Common Stock (In 324) (Note U)	2,150,942,582	49.32%	0.00%	11.2%	0.0552	
329	Total (sum Ins 326 to 328)	4,361,142,582			WACC=	0.0825	
330	Capital Structure Equity Limit (Note U for SWEPCO)	52.5%					

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances

AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

<u>Letter</u>

<u>Notes</u>

- General Notes: a) References to data from FERC Form 1 are indicated as: page#.line#.col.#
 - b) If transmission owner ("TO") functionalizes its costs to transmission on its books, those costs are shown above and on any supporting workpapers rather than using the allocations above.
- A The revenue credits shall include a) amounts received directly from the SPP for PTP transmission services, b) direct assignment charges for transmission facilities, the cost of which has been included in the TCOS, and c) amounts from customers taking service under grandfathered agreements, where the demand is not included in the rate divisor. Revenues associated with FERC annual charges, gross receipts taxes, ancillary services or facilities excluded from the TCOS are not included as revenue credits. Revenue from Transmission Customers whose coincident peak loads are included in the DIVISOR of the load-ratio share calculation are not included as revenue credits. See Worksheet A for details.
- B The annual and monthly net plant carrying charges on page 1 are used to compute the revenue requirement for facilities and any upgrades.
- C This additional revenue requirement is determined using a net plant carrying charge (fixed carrying charge or FCR) approach. Worksheet G shows the calculation of the projected revenue requirement for each project, based on an FCR rate caclulated from inputs on this TCOS. Line 180 shows the incremental ARR for projects receiving incentives as accepted by FERC. These individual additional revenue requirements are summed for the true-up year, and included here.
- D The gross plant, accumulated depreciation, and deferred tax balances included in rate base are reduced by the removal of balances related to Asset Retirement Obligations (AROs). This is to comply with the requirements of FERC Rulemaking RM02-7-000.
- E 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 as discussed in Note N. 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. Transmission allocations are shown on Worksheet B.
- F Identified as being transmission related or functionally booked to transmission.
- G Cash Working Capital assigned to transmission is one-eighth of O&M allocated to transmission on line 245.
- H Consistent with Paragraph 657 of Order 2003-A, the amount on line 239 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 283.
- I Removes the expense booked to transmission accounts included in the development of OATT ancillary services rates, including all of Account No. 561.
- J Removes cost of transmission service provided by others to the extent such service is not incurred to provide the SPP service at issue.
- K General Plant and Administrative & General expenses may be functionalized based on allocators other then the W/S allocator. Full documentation must be provided.
- L Expense 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 D 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 The Post-employment Benefit Other than Pension (PBOP) expense is fixed based on an approved ratio of PBOP expense to direct labor expense.
- N Includes only FICA, unemployment, property and other assessments charged in the current year. Gross Receipts tax, Sales & Use taxes, 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". If the utility is taxed in more than one state it must attach a work paper showing the name of each state and how the blended or composite SIT was developed. Furthermore, 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 273) multiplied by (1/1-T). If the applicable tax rates are zero enter 0.

Inputs Required:	FIT =	35.00%	
	SIT=	7.39%	(State Income Tax Rate or Composite SIT. Worksheet K)
	p =	0.00%	(percent of federal income tax deductible for state purposes)

- P Effective January 1, 2007, Texas instituted a gross margin tax. This tax is calculated on the Texas allocated revenue of the Company, reduced by 30% to derive a "Gross Margin" for the Company. The tax rate of one percent is assessed on the resulting amount. The jurisdictional allocator is based on transmission demand allocators.
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AEPTCo - SPP Formula Rate SWT True-UP TCOS Page: 48 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances

Line No.						nsmission Amount
1	REVENUE REQUIREMENT (w/o incentives)	(ln 106)				\$137,807
			Total	Alloc	cator	
2	REVENUE CREDITS	(Note A)				
3	Transmission Credits	(Worksheet H)	5,682	DA	1.00000	\$ 5,682
4	Assoc. Business Development	(Worksheet H)	<u> </u>	DA	1.00000	\$ -
5	Total Revenue Credits		5,682			\$ 5,682
6	REVENUE REQUIREMENT For All Company Facilities	(In 1 less In 2)				 \$132,125
MEMO	D: The Carrying Charge Calculations on lines 9 to 14 be revenue requirement	elow is used in calculating project revenue requiremen s for these projects shown on line 7 is included in the		on-incentive		
7	Trued-Up Revenue Requirement for SPP BPU Regional G)	Facilities (w/o incentives) (Worksheet	-	DA	1.00000	\$ -
8	NET PLANT CARRYING CHARGE (w/o incentives) (No	e B)				
9	Annual Rate	(ln 1/ ln 39 x 100)				0%
10	Monthly Rate	(ln 9 / 12)				0.00%
11	NET PLANT CARRYING CHARGE ON LINE 9 , W/O DE	PRECIATION (w/o incentives) (Note B)				
12	Annual Rate	((ln 1 - ln 82) / ln 39 x 100)				0.00%
13	NET PLANT CARRYING CHARGE ON LINE 11, W/O IN	ICOME TAXES, RETURN (Note B)				
14	Annual Rate	((ln 1 - ln 82 - ln 103 - ln 104) / ln 39 x 100)				0.00%
15	ADDITIONAL REVENUE REQUIREMENT for projects w	incentive ROE's (Note C) (Worksheet G)				-

AEPTCo - SPP Formula Rate SWT True-UP TCOS Page: 49 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances

	(1)	(2)	(3)	(4)	(5)
Line	RATE BASE CALCULATION	Data Sources (See "General Notes")	<u>TO Total</u> NOTE D	Alloc	<u>ator</u>	Total <u>Transmission</u>
No.	GROSS PLANT IN SERVICE					
16	Line Deliberately Left Blank					
17	Line Deliberately Left Blank					
18	Transmission	(Worksheet A In 3.E & Ln 114)	0	DA		0
19	Less: Transmission ARO (Enter Negative)	(Worksheet A In 4.E)	-	TP	1.00000	-
20	Line Deliberately Left Blank					
21	Line Deliberately Left Blank					
22	General Plant	(Worksheet A In 7.E)	-	W/S	1.00000	-
23	Less: General Plant ARO (Enter Negative)	(Worksheet A In 8.E)	-	W/S	1.00000	-
24	Intangible Plant	(Worksheet A In 9.E)	<u> </u>	W/S	1.00000	
25	TOTAL GROSS PLANT	(sum Ins 16 to 24)	0	GP(TU)=	1.00000	0
26	ACCUMULATED DEPRECIATION AND AMORTIZATIO			GTD=	1.00000	
20	Line Deliberately Left Blank					
28	Line Deliberately Left Blank					
29	Transmission	(Worksheet A In 14.E & 28.E)	<u>-</u>	TP1=	0.00000	_
30	Less: Transmission ARO (Enter Negative)	(Worksheet A In 15.E)	_	TP1=	0.00000	
31	Line Deliberately Left Blank		-		0.00000	_
32	Line Deliberately Left Blank					
33	General Plant	(Worksheet A In 18.E)	<u>.</u>	W/S	1.00000	_
34	Less: General Plant ARO (Enter Negative)	(Worksheet A In 19.E)		W/S	1.00000	_
35	Intangible Plant	(Worksheet A In 20.E)	-	W/S	1.00000	-
36	TOTAL ACCUMULATED DEPRECIATION	(sum lns 27 to 35)	<u>_</u>	W/O	1.00000	-
07						
37	NET PLANT IN SERVICE					
38	Line Deliberately Left Blank		0			2
39	Transmission	(In 18 + In 19 - In 29 - In 30)	0			0
40	Line Deliberately Left Blank					
41	General Plant	(ln 22 + ln 23 - ln 33 - ln 34)	-			-
42	Intangible Plant	(In 24 - In 35)			4 00000	
43	TOTAL NET PLANT IN SERVICE	(sum Ins 38 to 42)	0	NP(TU)=	1.00000	0
44	DEFERRED TAX ADJUSTMENTS TO RATE BASE	(Note E)				
45	Account No. 281.1 (enter negative)	272-273.8.k	-	NA		-

45	Account No. 281.1 (enter negative)	272-273.8.k	-	NA		-
46	Account No. 282.1 (enter negative)	(Worksheet C, In 7.C & In 9.J)	-	DA		-
47	Account No. 283.1 (enter negative)	(Worksheet C, In 16.C & Ln 18.J)	741	DA		741
48	Account No. 190.1	(Worksheet C, In 25.C & Ln 27.J)	11,988	DA		11,557
49	Account No. 255 (enter negative)	(Worksheet C, In 34.C & Ln 36.J)	-	DA		-
50	TOTAL ADJUSTMENTS	(sum Ins 45 to 49)	12,729			12,298
51	PLANT HELD FOR FUTURE USE	(Worksheet A In 29.E & In 30.E)	-	DA		-
51a	REGULATORY ASSETS	(Worksheet A In 38. (C))	-	DA		-
52	WORKING CAPITAL	(Note F)				
53	Cash Working Capital	(1/8 * In 68) (Note G)	62			62
54	Transmission Materials & Supplies	(Worksheet D, In 2.(F))	-	TP	1.00000	-
55	A&G Materials & Supplies	(Worksheet D, In 3.(F))	-	W/S	1.00000	-
56	Stores Expense	(Worksheet D, In 4.(F))	-	GP(TU)	1.00000	-
57	Prepayments (Account 165) - Labor Allocated	(Worksheet D, In 7.G)	-	W/S	1.00000	-
58	Prepayments (Account 165) - Gross Plant	(Worksheet D, In 7.F)	-	GP(TU)	1.00000	-
59	Prepayments (Account 165) - Transmission Only	(Worksheet D, In 7.E)	-	DA	1.00000	-
60	Prepayments (Account 165) - Unallocable	(Worksheet D, In 7.D)	-	NA	0.00000	-
61	TOTAL WORKING CAPITAL	(sum Ins 53 to 60)	62			62
62	IPP CONTRIBUTIONS FOR CONSTRUCTION	(Note H) (Worksheet E, In 8.(B))	-	DA	1.00000	-
63	RATE BASE (sum Ins 43, 50, 51, 61, 62)		12,792		_	12,361

AEPTCo - SPP Formula Rate SWT True-UP TCOS Page: 50 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances

AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

	(1)	(2)	(3)	(4	4)	(5)
	EXPENSE, TAXES, RETURN & REVENUE <u>REQUIREMENTS CALCULATION</u>	Data Sources <u>(See "General Notes")</u>	<u>TO Total</u>	Alloc	cator_	Total <u>Transmission</u>
Line						
No.	OPERATION & MAINTENANCE EXPENSE					
64	Transmission	321.112.b	499			
65	Less: Total Account 561	(Note I) 322.84-92.b	-			
66	Less: Account 565	(Note J) 322.96.b	-			
67	Less: expenses 100% assigned to TO billed customer		<u> </u>			
68	Total O&M Allocable to Transmission	(Ins 64 - 65 - 66 - 67)	499	TP	1.00000	499
69	Administrative and General	323.197.b (Note K)	131,052			
70	Less: Acct. 924, Property Insurance	323.185.b	-			
71	Acct. 928, Reg. Com. Exp.	322.189.b	-			
72	Acct. 930.1, Gen. Advert. Exp.	322.191.b	-			
73	Acct. 930.2, Misc. Gen. Exp.	322.192.b	<u> </u>			
74	Balance of A & G	(In 69 - sum In 70 to In 73)	131,052	W/S	1.00000	131,052
75	Plus: Acct. 924, Property Insurance	(ln 70)	-	GP(TU)	1.00000	-
76	Acct. 928 - Transmission Specific	Worksheet J In 5.(E) (Note L)	-	TP	1.00000	-
77	Acct 930.1 - Only safety related ads -Direct	Worksheet J In 19.(E) (Note L)	-	GP(TU)	1.00000	-
78	Acct 930.2 - Misc Gen. Exp Trans	Worksheet J In 25.(E) (Note L)	-	DA	1.00000	-
78a	PBOP Adjustment	(Worksheet O In 16.D)	4,718	DA	1.00000	4,718
79	A & G Subtotal	(sum lns 74 to 78 less ln 78a)	135,770			135,770
80	TOTAL O & M EXPENSE	(ln 68 + ln 79)	136,269			136,269
81	DEPRECIATION AND AMORTIZATION EXPENSE					
82	Transmission	336.7.f	-	TP	1.00000	-
83	General	336.10.f	-	W/S	1.00000	-
84a	Plus: Formation Costs Amortization	(Worksheet A In 35.E)	-		1.00000	-
84	Intangible	336.1.f	<u> </u>	W/S	1.00000	
85	TOTAL DEPRECIATION AND AMORTIZATION	(sum lns 82 to 84)	-			-
86	TAXES OTHER THAN INCOME	(Note N)				
87	Labor Related					
88	Payroll	Worksheet L, Col. D	-	W/S	1.00000	-
89	Plant Related					
90	Property	Worksheet L, Col. C	-	GP(TU)	1.00000	-
91	Gross Receipts/Sales & Use	Worksheet L, Col. F	-	NA	0.00000	-
92	Other	Worksheet L, Col. E	51_	GP(TU)	1.00000	51
93	TOTAL OTHER TAXES	(sum Ins 88 to 92)	51			51

94 95 96 97 98 99	INCOME TAXES $T=1 - \{[(1 - SIT) * (1 - FIT)] / (1 - SIT * FIT * p)\} =$ EIT=(T/(1-T)) * (1-(WCLTD/WACC)) = where WCLTD=(In 148) and WACC = (In 151) and FIT, SIT & p are as given in Note O. GRCF=1 / (1 - T) = (from In 95)	(Note O)	39.80 44.10 1.66	5%		
100	Amortized Investment Tax Credit (enter negative)	(FF1 p.114, ln 19.c)		-		
101 102 103	Income Tax Calculation ITC adjustment TOTAL INCOME TAXES	(In 96 * In 104) (In 99 * In 100) (sum Ins 101 to 102)	4	71 - NP(TU) 71	1.00000	456 456
104	RETURN ON RATE BASE (Rate Base*WACC)	(ln 63 * ln 151)	1,00	58		1,032
105	INTEREST ON IPP CONTRIBUTION FOR CONST. (No	ote E) (Worksheet E, In <mark>2</mark>)		- DA	1.00000	-
106 107	REVENUE REQUIREMENT BEFORE TEXAS GROSS (sum Ins 80, 85, 93, 103, 104, 105)	MARGIN TAX	137,85	59		137,807
108	TEXAS GROSS MARGIN TAX (Note P) (Worksheet K)		-	DA		-
109	REVENUE REQUIREMENT INCLUDING GROSS MAR	RGIN TAX	137,85	59		137,807

AEPTCo - SPP Formula Rate SWT True-UP TCOS Page: 51 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances

AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

SUPPORTING CALCULATIONS

In									
No.	TRANSMISSION PLANT INCLUDED IN SPP TARIFF								
110	Total transmission plant	(ln 18)							0
111	Less transmission plant excluded from SPP Tariff (No								-
112	Less transmission plant included in OATT Ancillary Se	rvices (Worksheet A, In 23, Col. (C	C)) (Note R)						-
113	Transmission plant included in SPP Tariff	(In 110 - In 111 - In 112)							0
114	Percent of transmission plant in SPP Tariff	(ln 113 / ln 110)						TP=	1.00000
				Pay	roll Billed from				
115	WAGES & SALARY ALLOCATOR (W/S)	(Note S)	Direct Pa	yroll AEP	Service Corp.	Total			
116	Line Deliberately Left Blank								
117	Transmission	354.21.b		0	1,178	1,178	TP	1.00000	1,178
118	Regional Market Expenses	354.22.b		0	0	-	NA	0.00000	-
119	Line Deliberately Left Blank								
120	Other (Excludes A&G)		0	0	0	-	NA	0.00000	-
121	Total	(sum Ins 116 to 120)		0	1,178	1,178			1,178
122	Transmission related amount							W/S=	1.00000
	STAND ALONE (Note T)								
123	WEIGHTED AVERAGE COST OF CAPITAL (WACC)								\$
124	Long Term Interest	Long Term Interest (Worksheet	N, In. 18, col. (E))						-
125	Preferred Dividends	Preferred Stock Dividends (Wo		(E))					-
126	Development of Common Stock:	,		(<i>)</i> /					Average
127	Proprietary Capital	(Worksheet N, In. 1, col. (E))							(770,868)
128	Less Preferred Stock (In 134)	(Worksheet N, In. 2, col. (E))							-
129	Less Account 216.1	(Worksheet N, In. 3, col. (E))							-
130	Less Account 219	(Worksheet N, In. 4, col. (E))							-
131	Common Stock	(In 142 - In 143 - In 144 - In 145)						(770,868)
			,	<u>C</u>	Capital Structure P	ercentages		Cost	
132		2016 Avg Balances			Actual	Cap Limit		(Note S)	Weighted
133	Avg Long Term Debt (Worksheet N, In. 10, col. (E))		-		0.00%	0.00%	-	0.00%	0.0000
134	Avg Preferred Stock (Worksheet N, In. 46, col. (E))		-		0.00%	0.00%		0.00%	0.0000
135	-)		0.000/				0 0000
	Avg Common Stock (In 131) (Note U)	(770	,868 <u>)</u>		0.00%	0.00%		11.20%	0.0000
136	Avg Common Stock (In 131) (Note U) Total (sum Ins 133 to 135)		9 <u>,868)</u> 9,868)		0.00%	0.00%		WACC=	0.0000

SOUTHWESTERN ELECTRIC POWER COMPANY (Note T)

NOTE: All WACC related entries below sourced from SWEPCO's FF1 or Template

138	WEIGHTED AVERAGE COST OF CAPITAL (WACC)				-	\$
139	Long Term Interest	Long Term Interest (SWE FR Worksheet N, In. 19, col. (E))				117,829,681
140	Preferred Dividends	Preferred Stock Dividends (SWE FR Worksheet N, In. 46, col. (E))				-
141	Development of Common Stock:					Average
142	Proprietary Capital	(SWE Worksheet N, In. 1, col. (E))				2,132,999,583
143	Less Preferred Stock (In 149)	(SWE Worksheet N, In. 2, col. (E))				-
144	Less Account 216.1	(SWE Worksheet N, In. 3, col. (E))				25,668,744
145	Less Account 219	(SWE Worksheet N, In. 4, col. (E))				(8,399,879)
146	Common Stock	(ln 142 - ln 143 - ln 144 - ln 145)				2,115,730,718
			Capital Structure	Percentages	Cost	
147		2015 Avg Balances	Actual	Cap Limit	(Note S)	Weighted
148	Avg Long Term Debt (SWE WS-N, In. 10, col. (E))	2,135,200,000	50.23%	0.00%	5.52%	0.0277
149	Avg Preferred Stock (SWE WS-N, In. 46, col. (E))		0.00%	0.00%	0.00%	0.0000
150	Avg Common Stock (In 146) (Note U)	2,115,730,718	49.77%	0.00%	11.20%	0.0557
151	Total (sum Ins 148 to 150)	4,250,930,718			WACC=	0.0835
152	Capital Structure Equity Limit (Note U for SWEPCO)	52.5%				

AEPTCo - SPP Formula Rate SWT True-UP TCOS Page: 52 of 69

AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances

AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

Letter

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Notes

General Notes: a) References to data from FERC Form 1 are indicated as: page#.line#.col.#

- b) If transmission owner ("TO") functionalizes its costs to transmission on its books, those costs are shown above and on any supporting workpapers rather than using the allocations above.
- A The revenue credits shall include a) amounts received directly from the SPP for PTP transmission services, b) direct assignment charges for transmission facilities, the cost of which has been included in the TCOS, and c) amounts from customers taking service under grandfathered agreements, where the demand is not included in the rate divisor. Revenues associated with FERC annual charges, gross receipts taxes, ancillary services or facilities excluded from the TCOS are not included as revenue credits. Revenue from Transmission Customers whose coincident peak loads are included in the DIVISOR of the load-ratio share calculation are not included as revenue credits. See Worksheet A for details.
- B The annual and monthly net plant carrying charges on page 1 are used to compute the revenue requirement for facilities and any upgrades.
- C This additional revenue requirement is determined using a net plant carrying charge (fixed carrying charge or FCR) approach. Worksheet G shows the calculation of the trued-up revenue requirement for each project, based on an FCR rate caclulated from inputs on this TCOS. Line 15 shows the incremental ARR for projects receiving incentives as accepted by FERC. These individual additional revenue requirements are summed for the true-up year, and included here.
- D The gross plant, accumulated depreciation, and deferred tax balances included in rate base are reduced by the removal of balances related to Asset Retirement Obligations (AROs). This is to comply with the requirements of FERC Rulemaking RM02-7-000.
- E 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 as discussed in Note N. 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. Transmission allocations are shown on Worksheet C.
- F Identified as being transmission related or functionally booked to transmission.
- G Cash Working Capital assigned to transmission is one-eighth of O&M allocated to transmission on line 68.
- H Consistent with Paragraph 657 of Order 2003-A, the amount on line 62 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 105.
- Removes the expense booked to transmission accounts included in the development of OATT ancillary services rates, including all of Account No. 561.
- J Removes cost of transmission service provided by others to the extent such service is not incurred to provide the SPP service at issue.
- K General Plant and Administrative & General expenses may be functionalized based on allocators other then the W/S allocator. Full documentation must be provided.
- L Expense 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 D 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 The Post-employment Benefit Other than Pension (PBOP) expense is fixed based on an approved ratio of PBOP expense to direct labor expense.
- N Includes only FICA, unemployment, property and other assessments charged in the current year. Gross Receipts tax, Sales & Use taxes, and taxes related to income are excluded.
 - 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". If the utility is taxed in more than one state it must attach a work paper showing the name of each state and how the blended or composite SIT was developed. Furthermore, 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 95) multiplied by (1/1-T). If the applicable tax rates are zero enter 0. Inputs Required: p = 517 = 35.00% 7.39% (State Income Tax Rate or Composite SIT. Worksheet K) 0.00% (percent of federal income tax deductible for state purposes)
- P Effective January 1, 2007, Texas instituted a gross margin tax. This tax is calculated on the Texas allocated revenue of the Company, reduced by 30% to derive a "Gross Margin" for the Company. The tax rate of one percent is assessed on the resulting amount. The jurisdictional allocator is based on transmission demand allocators.
- Q Removes plant excluded from the OATT because it does not meet the SPP's definition of Transmission Facilities or is otherwise ineligible to be recovered under the OATT.
- R 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 Q.
- S Includes functional wages & salaries incurred by parent company service corporation for support of the operating company.
- The Capital Structure of AEP SOUTHWESTERN TRANSMISSION COMPANY, INC. will be based on the Capital Structure of SWEPCO until AEP SOUTHWESTERN TRANSMISSION COMPANY, INC. establishes a stand alone capital structure computed on Worksheet M for the Projected TCOS or Worksheet N for the True-up TCOS.
 Long Term Debt cost rate = long-term interest (ln 139) / long term debt (ln 148). Preferred Stock cost rate = preferred dividends (ln 140) / preferred outstanding (ln 149).
 Common Stock cost rate (ROE) = 11.2%, the rate accepted by FERC in Docket Nos. ER07-1069 and ER10-355. It includes an additional 50 basis points for remaining a member of the SPP RTO.
- U Per Settlement, equity is limited to 50% of AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.'s Capital Structure. If the percentage of equity exceeds the cap, the excess is included in long term debt in the cap structure. This value can only change via an approved 205 or 206 filing.

AEPTCo - SPP Formula Rate SWT WS A - RB Support Page: 53 of 69

AEP West SPP Member Companies 2016 Cost of Service Formula Rate **Worksheet A** - Detail Plant Balances AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

Lino	(A)	(B)	(C) Balances @_	(D) Balances A	(E) verage Balance for					
<u>Line</u> Number	Rate Base Item & Supporting Balance	Source of Data	<u>12/31/2015</u>	<u>12/31/2014</u>	2015					
NOTE: Func	NOTE: Functional ARO investment and accumulated depreciation balances shown below are included in the total functional balances shown here.									
Plant Investr 1	nent Blalances Line Deliberately Left Blank									
2	Line Deliberately Left Blank									
3	Transmission Plant In Service	FF1, page 207 Col.(g) & pg. 206 Col. (b), ln 58	-	0	0					
4	Transmission Asset Retirement Obligation	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 57	-	-	-					
5	Line Deliberately Left Blank									
6	Line Deliberately Left Blank									
7	General Plant In Service	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 99	-	•	-					
8	General Asset Retirement Obligation	FF1, page 207 Col.(g) & pg. 206 Col. (b), In 98	-	-	-					
9	Intangible Plant In Service	FF1, page 205 Col.(g) & pg. 204 Col. (b), In 5	-	-	-					
10	Total Property Investment Balance	(Sum of Lines: 3, 7, 9)	-	0	0					
11	Total ARO Balance (included in total on line 10)	(Sum of Lines: 4, 8)	-	-	-					
Accumulated	d Depreciation & Amortization Balances Line Deliberately Left Blank									
13	Line Deliberately Left Blank									
14	Transmission Accumulated Depreciation	FF1, page 219, ln 25, Col. (b)	-	-	-					
15	Transmission ARO Accumulated Depreciation	Company Records	-	÷	-					
16	Line Deliberately Left Blank									
17	Line Deliberately Left Blank									
18	General Accumulated Depreciation	FF1, page 219, In 28, Col. (b)	-	-	-					
19	General ARO Accumulated Depreciation	Company Records	-	-	-					
20	Intangible Accumulated Amortization	FF1, page 200, In 21, Col. (b)	-	-	-					
21	Total Accumulated Depreciation or Amortization	(Sum of Lines: 14, 18, 20)	-	-	-					
22	Total ARO Balance (included in total on line 21)	(Sum of Lines: 15, 19)		-	-					
Generation S	<u>Step-Up Units</u> GSU Investment Amount	Company Records			-					

24	GSU Accumulated Depreciation	Company Records	•		-				
25	GSU Net Balance	(Line 23 - Line 24)	-	-	-				
Transmissio	n Accumulated Depreciation Net of GSU Accumulated Depreci	ation							
26	Transmission Accumulated Depreciation	(Line 14 Above)		-	-				
27	Less: GSU Accumulated Depreciation	(Line 24 Above)	-	-	-				
28	Subtotal of Transmission Net of GSU	(Line 26 - Line 27)	-	-	-				
Plant Held For Future Use									
29	Plant Held For Future Use	FF1, page 214, In 47, Col. (d)	•		-				
30	Transmission Plant Held For Future	Company Records		· · ·	-				
Regulatory A	Assets and Liabilities Approved for Recovery In Ratebase								
	Note: Regulatory Assets & Liabilities can only be included in rate	base pursuant to a 205 filing with the FERC.							
31	Regulatory Asset (Note 1)		-	-	0				
32	Amortization in Months		-		-				
33	Monthly Amortization	(line 31 / line 32)	0	0	-				
34	Months in 2015 to be amortized		-	-	-				
35	Amortization Expense in 2015 Year	(line 33 X line 34)	0	0	-				
36	Months in 2016 to be amortized		-		-				
37	Amortization Expense in 2016 Year	(line 33 X line 36)	0	0	-				
38	Balance of Regulatory Asset	(line 31 - line 35)	0	0	-				
39	Average Balance of Regulatory Asset	(line 31 + line 38)/2	0	0	-				
40	Unamortized Balance of Regulatory Asset at YE 2015 (Note 1)		0	0	-				
41	Total Regulatory Deferrals Included in Ratebase		0	0	0				

NOTE 1 Formation costs through 6/30/2010 are includable at 50% with 48 month amortization and no return on the unamortized balance. The balance on line 41 may not include unamortized formation costs.

AEPTCo - SPP Formula Rate SWT WS B Projected Plant Page: 54 of 69

AEP West SPP Member Companies 2016 Cost of Service Formula Rate Projected on 2015 FF1 Balances **Worksheet B** - Projected Transmission Plant in Service Additions **AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.**

I. Calculation of Composite Depreciation Rate

	STAND ALONE (Note 1)	
1	Transmission Plant @ Beginning of Historic Period (2015) (P.206, In 58,(b)):	-
2	Transmission Plant @ End of Historic Period (2015) (P.207, In 58,(g)):	-
3		-
4	Average Balance of Transmission Investment	-
5	Annual Depreciation Expense, Historic TCOS, In 259	-
6	Composite Depreciation Rate	0.00%
7	Average Depreciable Life (Years)	0
	SOUTHWESTERN ELECTRIC POWER COMPANY (Note 1)	
8	Transmission Plant @ Beginning of Historic Period (2015) (P.206, In 58,(b)):	1,300,777,651
9	Transmission Plant @ End of Historic Period (2015) (P.207, In 58,(g)):	1,387,776,696
10		2,688,554,347
11	Average Balance of Transmission Investment	1,344,277,173
12	Annual Depreciation Expense, SWEPCO Historic TCOS, In 246	31,768,930
13	Composite Depreciation Rate	2.36%
14	Average Depreciable Life (Years)	42

II. Calculation of Property Placed in Service by Month and the Related Depreciation Expense

15	Month in Service	Capitalized Balance	Composite Annual Depreciation Rate	Annual Depreciation	n Month	ly Depreciation	No. Months Depreciation
16	January		2.36%	\$-	\$	-	11
17	February		2.36%	\$-	\$	-	10
18	March		2.36%	\$-	\$	-	9
19	April		2.36%	\$-	\$	-	8
20	May		2.36%	\$-	\$	-	7
21	June		2.36%	\$-	\$	-	6
22	July		2.36%	\$-	\$	-	5
23	August		2.36%	\$-	\$	-	4
24	September		2.36%	\$-	\$	-	3
25	October		2.36%	\$-	\$	-	2
26	November		2.36%	\$-	\$	-	1
27	December		2.36%	\$-	\$	-	0
28	Investment	\$ -				Depr	eciation Expense

III. Plant Transferred

29	\$ -	<== This input area is for original cost plant
30	\$ -	<== This input area is for accumulated depreciation that may be associated with capital
31 (Ln 14 * Ln 29)	\$ -	expenditures. It would have an impact if a company had assets transferred from a subsidiary. <== This input area is for additional Depreciation Expense

Note 1: Until AEP SOUTHWESTERN TRANSMISSION COMPANY, INC. establishes Transmission plant in service the carrying charge will be calculated as in the Operating Company formula approved in Docket No. ER07-1069. The calculation for AEP SOUTHWESTERN TRANSMISSION COMPANY, INC. is based on Plant Balances and Depreciation Expense for SWEPCO and shown on lines 8 through 14.

AEPTCo - SPP Formula Rate SWT WS C RB Tax Page: 55 of 69

AEP West SPP Member Companies 2016 Cost of Service Formula Rate Worksheet C - ADIT Balances used in Projection & True-Up AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

Line <u>No.</u>	(A) <u>Acc. No.</u>	(B) <u>Description</u>	(C) <u>YE Balance</u>	(E) <u>Exclusions *</u>	(F) 100% Transmission <u>Related</u>	(G) PTD Plant <u>Related</u>	(H) Transmission <u>Plant Related</u>	(I) Labor <u>Related</u>	(J) Total Included in Ratebase <u>(E)+(F)+(G)+(H)</u>
2	282.1 282.1 282.1	Account 282 - Form-1 page 274-275, Ln 2 Col. (k) 282 Balance to Use in Projection 2015 Year End Tax Deferrals - Ws C-1 Transmission Allocator from Historic TCOS [GP or W/S] Allocated Total	-	- <u>0.0000%</u> 0	- <u>100.0000%</u> 0	- <u>0.0000%</u> 0	- <u>0.0000%</u> 0	- <u>100.0000%</u> 0 [0
	282.1 282.1	282 Balance to Use in True-Up 2015 Year End Tax Deferrals - Ws C-1 2014 Year End Tax Deferrals - Ws C-2	- -	-	- -	-	- -	-	
6 7 8 9		Subtotal Average Balance Transmission Allocator from True-Up TCOS [GP or W/S] Allocated Total	- 0	- 0 <u>0.0000%</u> 0	- 0 <u>100.0000%</u> 0	- 0 <u>100.0000%</u> 0	- 0 <u>100.0000%</u> 0	- 0 <u>100.0000%</u> 0 [0
11	283.1 283.1 283.1	Account 283 - Form-1 page 276-277, Ln 9, Col (k) 283 Balance to Use in Projection 2015 Year End Tax Deferrals - Ws C-1 Transmission Allocator from Historic TCOS [GP or W/S] Allocated Total	1,493	0 <u>0.0000%</u> 0	1,493 <u>100.0000%</u> 1,493	- <u>0.0000%</u> 0	- <u>0.0000%</u> 0	- <u>100.0000%</u> 0 [1,493
	283.1 283.1	283 Balance to Use in True-Up 2015 Year End Tax Deferrals - Ws C-1 2014 Year End Tax Deferrals - Ws C-2	1,493 (11)	0	1,493 (11)	-	- -	-	
15 16 17 18		Subtotal Average Balance Transmission Allocator from True-Up TCOS [GP or W/S] Allocated Total	1,482 741	0 0 <u>0.0000%</u> 0	1,482 741 <u>100.0000%</u> 741	- 0 <u>100.0000%</u> 0	- 0 <u>100.0000%</u> 0	- 0 <u>100.0000%</u> 0 [741
		Account 190 - Form-1 page 234, Ln 8, Col. (c)							
20	190.1 190.1	<u>190 Balance to Use in Projection</u> 2015 Year End Tax Deferrals - Ws C-1 Transmission Allocator from Historic TCOS [GP or W/S]	23,549	431 <u>0.0000%</u>	4,265 <u>100.0000%</u>	18,853 <u>0.0000%</u>	<u>-</u> <u>0.0000%</u>	<u>-</u> <u>100.0000%</u>	4.265

	190 Balance to Use in Projection							
19 190.1	2015 Year End Tax Deferrals - Ws C-1	23,549	431	4,265	18,853	-	-	
20 190.1	Transmission Allocator from Historic TCOS [GP or W/S]		0.0000%	100.0000%	<u>0.0000%</u>	0.0000%	100.0000%	
21 190.1	Allocated Total		0	4,265	0	0	0	4,265
	190 Balance to Use in True-Up							
22 190.1	2015 Year End Tax Deferrals - Ws C-1	23,549	431	4,265	18,853	-	-	
23 190.1	2014 Year End Tax Deferrals - Ws C-2	427	431	(4)	-	-	-	
24	Subtotal	23,976	862	4,261	18,853	-	-	
25	Average Balance	11,988	431	2,131	9,427	0	0	
26	Transmission Allocator from True-Up TCOS [GP or W/S]		0.0000%	<u>100.0000%</u>	<u>100.0000%</u>	<u>100.0000%</u>	100.0000%	
27	Allocated Total		0	2,131	9,427	0	0	11,557

	Account 255 - Form-1 page 266-267	Pre 1971 ITC Includeable in Rate						
28 255 29 255	255 Balance to Use in Projection Acc Defrd ITC - Federal - 12/31/2015 (FF1 p. 267, Ln 2.h) Transmission Allocator from Historic TCOS [GP or W/S]	-		<u>Base</u> - <u>0.0000%</u>				
30 255	Allocated Total	<u>N/A</u>	N/A	0 <u>N/A</u>	<u>N/A</u>	0		
31 255 32 255	255 Balance to Use in True-Up Acc Defrd ITC - Federal - 12/31/2015 (FF1 p. 267, Ln 2.h) Acc Defrd ITC - Federal - 12/31/2014 (FF1 p. 266, Ln 2.b)	-		-				
33 34 35 36	Subtotal Average Balance Transmission Allocator from True-Up TCOS [GP or W/S] Allocated Total	- 0 <u>N/A</u>	<u>N/A</u>	- 0 <u>100.0000%</u> 0 <u>N/A</u>	N/A	0		

* Exclusions: Non-utility, fuel supply, off-system sales and other items as specified related to costs not included in rates.

Worksheet C-1 - ADIT & ITC Details

SOUTHWESTERN TRANSMISSION COMPANY DETAIL OF DEFERRED INCOME TAX BALANCES AS OF DECEMBER 31, 2015

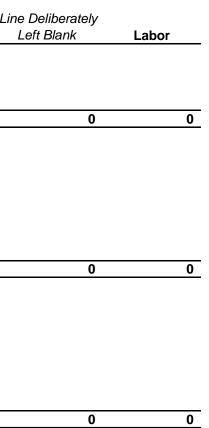
Account	Line #	Description	Balance	Allocation Basis	Exclusions	<u>Alloc</u> 100% Transmission	cation Method Line Deliberately Left Blank	Line Deliberately Left Blank	Labor
2821 (absolu	ite value Total C	TOTAL ELECTRIC ACCOUNT SUBTOTAL	0	-	0	0	0	0	0
2831001 2831001	014C-DSIT 014V-DSIT	NOL-STATE C/F-DEF STATE TAX ASSET-L/T NOL-STATE C/F-VALUATION ALLOWANCE	(28,478) 28,478	E	(28,478) 28,478				
2831002	911Q-DSIT	DSIT ENTRY - NORMALIZED	1,493	Т		1,493			
2831 (absolu	ite value Total C	TOTAL ELECTRIC ACCOUNT SUBTOTAL	1,493 1,493	-	0	1,493	0	0	0
1901001 1901001 1901001	520A 911Q-DSIT 960E	PROVS POSS REV REFDS-A/L DSIT ENTRY - NORMALIZED AMT CREDIT - DEFERRED	18,853 4,265 431	PTD T E	431	4,265	18,853		
1901002	014C-DSIT 014V-DSIT	NOL-STATE C/F-DEF STATE TAX ASSET-L/T NOL-STATE C/F-VALUATION ALLOWANCE	81,366 (81,366)	E	81,366 (81,366)				
1901		TOTAL ELECTRIC ACCOUNT SUBTOTAL (Total Company Amount Ties to FF1 p.234(c) Electric)	23,549 23,549	-	431	4,265	18,853	0	0

Worksheet C-2 - ADIT & ITC Details

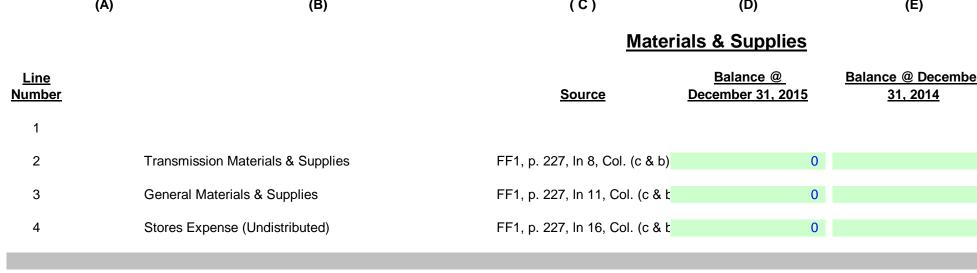
SOUTHWESTERN TRANSMISSION COMPANY DETAIL OF DEFERRED INCOME TAX BALANCES AS OF DECEMBER 31, 2014

Account	Line #	Description	Balance	Allocation Basis	Exclusions	<u>۴</u> 100% Transmission	<u>llocation Method</u> Line Deliberately Left Lir Blank
0 (absolute	e value Total C	TOTAL ELECTRIC ACCOUNT SUBTOTAL ompany Amount Ties to FF1 p.275(k) Acct 282 Electric)	0 0	 	0	0	0
2831001 2831001	014C-DSIT 664J	NOL-STATE C/F-DEF STATE TAX ASSET-L/T REG ASSET-TRANSCO PRE-FORMATION COSTS	0 0	E	0 0		
2831002	911Q-DSIT	DSIT ENTRY - NORMALIZED	(11)	Т		(11))
2831 (absolute	e value Total C	TOTAL ELECTRIC ACCOUNT SUBTOTAL ompany Amount Ties to FF1 p.277(k) Acct 283 Electric)	(11) (11)		0	(11)	0
1901001 1901001 1901001	911Q-DSIT 960E 960Z	DSIT ENTRY - NORMALIZED AMT CREDIT - DEFERRED NOL - DEFERRED TAX ASSET RECLASS	(4) 431 0	T E T	431	(4) 0	
1901002	014C-DSIT	NOL-STATE C/F-DEF STATE TAX ASSET-L/T TOTAL ELECTRIC ACCOUNT SUBTOTAL (Total Company Amount Ties to FF1 p.234(c) Electric)	0 427 427	E	0 431	(4)	0

AEPTCo - SPP Formula Rate SWT WS C-2 DFIT WP 12-31-14 Page: 57 of 69



AEP West SPP Member Companies



	2016 Cost of Service Formula Rate Worksheet D - Working Capital Rate Base Adjustments AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.									
(A)	(В)	(C)	(D)	(E)	(F)	(G)	(H)	(I)		
		<u>Materia</u>	als & Supplies							
<u>r</u>		<u>Source</u>	Balance @ December 31, 2015	Balance @ December <u>31, 2014</u>	Average Balance for Rate Year 2015					
	Transmission Materials & Supplies	FF1, p. 227, ln 8, Col. (c & b)	0	0	-					
	General Materials & Supplies	FF1, p. 227, ln 11, Col. (c & t	0	0	-					
	Stores Expense (Undistributed)	FF1, p. 227, ln 16, Col. (c & t	0	0	-					
		Prepayment	Balance Summa	iry						
		Average of YE Balance	Excludable <u>Balances</u>	100% Transmission <u>Related</u>	Plant <u>Related</u>	Labor <u>Related</u>	Total Included in Rate Base <u>(E)+(F)+(G)</u>			
	Totals as of December 31, 2015 Totals as of December 31, 2014	0	0	0 0	0		0 0			
	Average Balance	0	0	0	0		0 0			
	<u>Pr</u>	epayments Account 165		100%			Total Included			
<u>Acc. I</u>	No. Description	2015 <u>YE Balance</u>	Excludable <u>Balances</u>	Transmission <u>Related</u>	Plant <u>Related</u>	Labor <u>Related</u>	in Rate Base <u>(E)+(F)+(G)</u>			
	Subtotal - Form 1, p 111.57.c	0	0	0	0		0 0			
<u>Acc. I</u>		epayments Account 165 2014 <u>YE Balance</u>	- Balance @ 12/3 [.] Excludable <u>Balances</u>	1/2014 100% Transmission <u>Related</u>	Plant <u>Related</u>	Labor <u>Related</u>	Total Included in Rate Base <u>(E)+(F)+(G)</u>			
							0 0 0 0 0 0 0 0 0 0 0 0			

	2016 Cost of Service Formula Rate Worksheet D - Working Capital Rate Base Adjustments AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
			<u>Materi</u>	als & Supplies					
<u>Line</u> Number			<u>Source</u>	Balance @ December 31, 2015	Balance @ December <u>31, 2014</u>	Average Balance for Rate Year 2015			
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 & t	0	0	-			
4		Stores Expense (Undistributed)	FF1, p. 227, ln 16, Col. (c & t	0	0	-			
			D						
			Average of YE Balance	t Balance Summa Excludable Balances	100% Transmission <u>Related</u>	Plant <u>Related</u>	Labor <u>Related</u>	Total Included in Rate Base <u>(E)+(F)+(G)</u>	
5 6		Totals as of December 31, 2015 Totals as of December 31, 2014	0	0	0 0	0		0 0	
7		Average Balance	0	0	0	0		0 0	
		<u>P</u>	repayments Account 165	<u>- Balance @ 12/3</u>				Tatalasista	
8	Acc. No.	Description	2015 XE Balanco	Excludable	100% Transmission Bolated	Plant <u>Related</u>	Labor <u>Related</u>	Total Included in Rate Base	
o 9	<u>Acc. No.</u>	Description	<u>YE Balance</u>	<u>Balances</u>	<u>Related</u>	Related	Related	<u>(E)+(F)+(G)</u>	
10 11								0	
12 13								0	
14 15								0	
16 17								0	
17								0	
		Subtatal Form 4 in 444 FZ a		0				0	
		Subtotal - Form 1, p 111.57.c	0	0	0	0		0 0	
		<u>P</u>	repayments Account 165	<u>- Balance @ 12/3[.]</u>					
			2014	Excludable	100% Transmission	Plant	Labor	Total Included in Rate Base	
19	<u>Acc. No.</u>	Description	<u>YE Balance</u>	<u>Balances</u>	<u>Related</u>	Related	Related	<u>(E)+(F)+(G)</u>	
20 21								0 0	
22 23								0 0	
24 25								0 0	
26 27								0 0	
28 29								0 0	
								0	

	2016 Cost of Service Formula Rate Worksheet D - Working Capital Rate Base Adjustments AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)
			Mater	ials & Supplies					
<u>Line</u> <u>Number</u> 1			<u>Source</u>	Balance @_ December 31, 2015	Balance @ December 31, 2014	Average Balance for Rate Year 2015			
2		Transmission Materials & Supplies	FF1, p. 227, ln 8, Col. (c & b)	0	0	-			
3		General Materials & Supplies	FF1, p. 227, In 11, Col. (c & t	0	0	-			
4		Stores Expense (Undistributed)	FF1, p. 227, ln 16, Col. (c & t	0	0	-			
			Prenavmer	t Balance Summa	۲V				
			Average of YE Balance	Excludable Balances	100% Transmission <u>Related</u>	Plant <u>Related</u>	Labor <u>Related</u>	Total Included in Rate Base <u>(E)+(F)+(G)</u>	
5		Totals as of December 31, 2015	0	0	0	0		0 0	
7		Totals as of December 31, 2014 Average Balance	0	0	0	0		0 0	
		<u>Prepa</u>	ayments Account 165 2015	- Balance @ 12/31 Excludable	1/2015 100% Transmission	Plant	Labor	Total Included in Rate Base	
8	<u>Acc. No.</u>	Description	<u>YE Balance</u>	Balances	Related	Related	Related	<u>(E)+(F)+(G)</u>	
9 10 11 12 13 14 15 16 17 18								0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
		Subtotal - Form 1, p 111.57.c	0	0	0	0		0 0	
19 20 21 22 23 24 25 26 27 28 29	<u>Acc. No.</u>	<u>Prepa</u>	ayments Account 165 2014 YE Balance	<u>- Balance @ 12/31</u> Excludable <u>Balances</u>	1/2014 100% Transmission <u>Related</u>	Plant <u>Related</u>	Labor <u>Related</u>	Total Included in Rate Base (E)+(F)+(G) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
30		Subtotal - Form 1, p 111.57.d		0	0				

AEPTCo - SPP Formula Rate SWT WS D Working Capital Page: 58 of 69

AEPTCo - SPP Formula Rate SWT WS E IPP Credits Page: 59 of 69

AEP West SPP Member Companies 2016 Cost of Service Formula Rate Worksheet E - IPP Credits AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

<u>Line</u> <u>Number</u>	(A) <u>Description</u>	(B) <u>2015</u>
1	Net Funds from IPP Customers @ 12/31/2014 (2015 FORM 1, P269, (B))	
2	Interest Accrual (company records)	
3	Revenue Credits to Generators (company records)	
4 5 6	Other Adjustments (company records) Accounting Adjustment	1
7	Net Funds from IPP Customers 12/31/2015 (2015 FORM 1, P269, (F))	-
8	Average Balance for 2015 ((In 1 + In 7) / 2)	

AEP West SPP Member Companies

2016 Cost of Service Formula Rate Projected on 2015 FF1 Balances

Worksheet F - Calculation of PROJECTED Annual Revenue Requirement for BPU and Special-billed Projects Based on a Carrying Charge Derived from Historic 2015 Data

AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

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

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

ROE w/o incentives (Projecte	ed TCOS, In 163)	11.20%		
Project ROE Incentive Adder	(Enter as whole num	0 b	asis points	
ROE with additional 0 basis po	oint incentive		11.20% <	==Incentive ROE Canno
Determine R (cost of long ter	rm debt, cost of prei	ferred stock and perce	ent is from SWEPCO Pro	jected TCOS, lns 148 thi
	<u>%</u>	<u>Cost</u>	Weighted cost	
Long Term Debt	50.68%	0.0537	0.0272	
Preferred Stock	0.00%	0.0000	0.0000	
Common Stock	49.32%	0.1120	<u>0.0552</u>	
		R =	0.0825	

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

Rate Base (Projected TCOS, In 75)	5,758
R (from A. above)	0.0825
Return (Rate Base x R)	475

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

Return (from B. above)	475
Tax Rate (Projected TCOS, In 108)	39.80%
EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =	44.29%
Income Tax Calculation (Return x EIT)	210
ITC Adjustment (Projected TCOS, In 115)	-
Income Taxes	210

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

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

Net Revenue Requirement (Projected TCOS, In 122)	136,455
Return (Projected TCOS, In 117)	475
Income Taxes (Projected TCOS, In 116)	210
Gross Margin Taxes (Projected TCOS, In 121)	
Net Revenue Requirement, Less Return and Taxes	135,770

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

Net Revenue Requirement, Less Return and Taxes	135,770
Return (from I.B. above)	475
Income Taxes (from I.C. above)	210
Net Revenue Requirement, with 0 Basis Point ROE increase	136,455
Gross Margin Tax with 0 Basis Point ROE Increase (II C. below)	-
Revenue Requirement w/ Gross Margin Taxes	136,455
Less: Depreciation (Projected TCOS, In 94)	
Net Rev. Req, w/0 Basis Point ROE increase, less Depreciation	136,455

C. Determine Gross Margin Tax with hypothetical 0 basis point increase in ROE.

Net Revenue Requirement before Gross Margin Taxes, with 0	136,455
Basis Point ROE increase (II B. above)	
Apportionment Factor to Texas (Worksheet K, In 12)	0.00%
Apportioned Texas Revenues	-
Taxable Percentage of Revenue (70%)	70%
Taxable, Apportioned Margin	-
Texas Gross Margin Tax Rate	1%
Texas Gross Margin Tax Expense	-
Cross up Required for Cross Margin Tax Exposes	

Gross-up Required for Gross Margin Tax Expense Total Additional Gross Margin Tax Revenue Requirement

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

Net Transmission Plant (Projected TCOS, Ins 46, 47, 48, 49, 51)	-
Net Revenue Requirement, with 0 Basis Point ROE increase	136,455
FCR with 0 Basis Point increase in ROE	0.00%
Net Rev. Req, w / 0 Basis Point ROE increase, less Dep.	136,455
FCR with 0 Basis Point ROE increase, less Depreciation	0.00%
FCR less Depreciation (Projected TCOS, In 12)	<u>13.01%</u>
	-13.01%

Incremental FCR with 0 Basis Point ROE increase, less Depreciation **III.** Calculation of Composite Depreciation Rate

Transmission Plant @ Beginning of Period (P.206, In 58)	1,300,777,651	<==From Input on Workshe
Transmission Plant @ End of Period (P.207, In 58)	1,387,776,696	<==From Input on Workshe
	2,688,554,347	Note
Transmission Plant Average Balance for 2015	1,344,277,173	servi
Annual Depreciation Expense (Projected TCOS, In 94)	31,768,930	Com
Composite Depreciation Rate	2.36%	TRAI
Depreciable Life for Composite Depreciation Rate	42.31	show
Round to nearest whole year	42	

AEPTCo - SPP Formula Rate SWT WS F BPU ATRR Projected Page: 60 of 69

not Exceed 12.45% hrough 150)

SUMMARY OF PROJECT	FED ANNUAL	BASE PLAN AND	NON-BASE PLAN RE	VENUE	
REQUIREMENTS		Rev Require	W Incentives	Incenti	ve Amounts
PROJECTED YEAR	2016	-	-	\$	-

-

Note: Review formulas in summary to ensure the proper year's revenue requirement is being accumulated for each project from the tables below.

NOTE: PART IV --- BPU Project Tables are contained in separate *.xls file

heet B heet B te 1: Until AEP SOUTHWESTERN TRANSMISSION COMPANY, INC. establishes Transmission plant in rvice the depreciation expense component of the carrying charge will be calculated as in the Operating mpany formula approved in Docket No. ER07-1069. The calculation for AEP SOUTHWESTERN ANSMISSION COMPANY, INC. is based on Plant Balances and Depreciation Expense for SWEPCO and own on lines 8 through 14 of Worksheet B.

AEP West SPP Member Companies 2016 Cost of Service Formula Rate Projected on 2015 FF1 Balances Worksheet G - Calculation of TRUED-UP Annual Revenue Requirement for BPU and Special-billed Projects Based on a Carrying Charge Derived from Trued-Up 2015 Data AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

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

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

ROE w/o incentives (True-Up TCOS, In 150)			11.20%	
Project ROE Incentive Adder (Enter as whole number)			0	basis points
ROE with additional 0 basis	point incentive		11.20%	<==Incentive ROE Cannot
Determine R (cost of long	term debt, cost of	f preferred stock and pe	rcent is from SWEPCC	True-Up TCOS, Ins 147 th
	<u>%</u>	Cost	Weighted cost	
Long Term Debt	50.23%	0.0552	0.0277	
Preferred Stock	0.00%	0.0000	0.0000	
Common Stock	49.77%	0.1120	<u>0.0557</u>	
		R =	0.0835	

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

Rate Base (True-Up TCOS, In 63)	12,361
R (fom A. above)	0.0835
Return (Rate Base x R)	1,032

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

Return (from B. above)	1,032
Tax Rate (True-Up TCOS, In 95)	39.80%
EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =	44.16%
Income Tax Calculation (Return x EIT)	456
ITC Adjustment (True-Up TCOS, In 102)	
Income Taxes	456

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

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

Net Revenue Requirement(True-Up TCOS, In 109) Return(True-Up TCOS, In 104)	137,807 1.032
Income Taxes (True-Up TCOS, In 103)	456
Gross Margin Taxes (True-Up TCOS, In 108) Net Revenue Requirement, Less Return and Taxes	136,320

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

Net Revenue Requirement, Less Return and Taxes	136,320
Return (from I.B. above)	1,032
Income Taxes (from I.C. above)	456
Net Revenue Requirement, with 0 Basis Point ROE increase	137,807
Gross Margin Tax with Basis Point ROE Increase (II C. below)	-
Revenue Requirement w/ Gross Margin Taxes	137,807
Less: Depreciation (True-Up TCOS, In 82)	
Net Rev. Req, w/0 Basis Point ROE increase, less Depreciation	137,807

C. Determine Gross Margin Tax with hypothetical 0 basis point increase in ROE. Net Revenue Requirement before Gross Margin Taxes with 0 137 807

Net Revenue Requirement before Gross Margin Taxes, with U	137,807
Basis Point ROE increase (II B. above)	
Apportionment Factor to Texas (Worksheet K, In 12)	0.00%
Apportioned Texas Revenues	-
Taxable Percentage of Revenue (70%)	70%
Taxable, Apportioned Margin	-
Texas Gross Margin Tax Rate	1%
Texas Gross Margin Tax Expense	-
Gross-up Required for Gross Margin Tax Expense	-
Total Additional Gross Margin Tax Revenue Requirement	-

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

Net Transmission Plant (True-Up TCOS, In 39)	0
Net Revenue Requirement, with 0 Basis Point ROE increase	<u>137,807</u>
FCR with 0 Basis Point increase in ROE	275614279.05%
Net Rev. Req, w / 0 Basis Point ROE increase, less Dep.	137,807
FCR with 0 Basis Point ROE increase, less Depreciation	275614279.05%
FCR less Depreciation (True-Up TCOS, In 12)	<u>0.00%</u>
Incremental FCR with 0 Basis Point ROE increase, less Depreciation	275614279.05%

III. Calculation of Composite Depreciation Rate

Transmission Plant @ Beginning of Period (P.206, In 58)	1,300,777,651	<==From Input on Worksheet
Transmission Plant @ End of Period (P.207, In 58)	1,387,776,696	<==From Input on Worksheet
	2,688,554,347	
Transmission Plant Average Balance for 2015	1,344,277,173	
Annual Depreciation Expense (True-Up TCOS, In 82)	31,768,930	Note 1:
Composite Depreciation Rate	2.36%	service
Depreciable Life for Composite Depreciation Rate	42.31	Compa
Round to nearest whole year	42	TRANS
		- h

AEPTCo - SPP Formula Rate SWT WS G BPU ATRR True-up Page: 61 of 69

not Exceed 12.45% through 149)

		Rev Require		W Incentives		Incentive	Amounts
FRUE-UP YEAR	2015						
∑ Prior Year Proj	ected (WS-F)	\$	-	\$	-	\$	
∑ Prior Year Tru	e-Up (WS-G)	\$	-	\$	-	\$	
True-up Adju	stment For 2015		-		-		

Note: Review formulas in summary to ensure the proper year's revenue requirement is being accumulated for each project from the tables below.

NOTE: PART IV --- BPU Project Tables are contained in separate *.xls file

eet B eet B

1: Until AEP SOUTHWESTERN TRANSMISSION COMPANY, INC. establishes Transmission plant in ce the depreciation expense component of the carrying charge will be calculated as in the Operating pany formula approved in Docket No. ER07-1069. The calculation for AEP SOUTHWESTERN SMISSION COMPANY, INC. is based on Plant Balances and Depreciation Expense for SWEPCO and shown on lines 8 through 14 of Worksheet B.



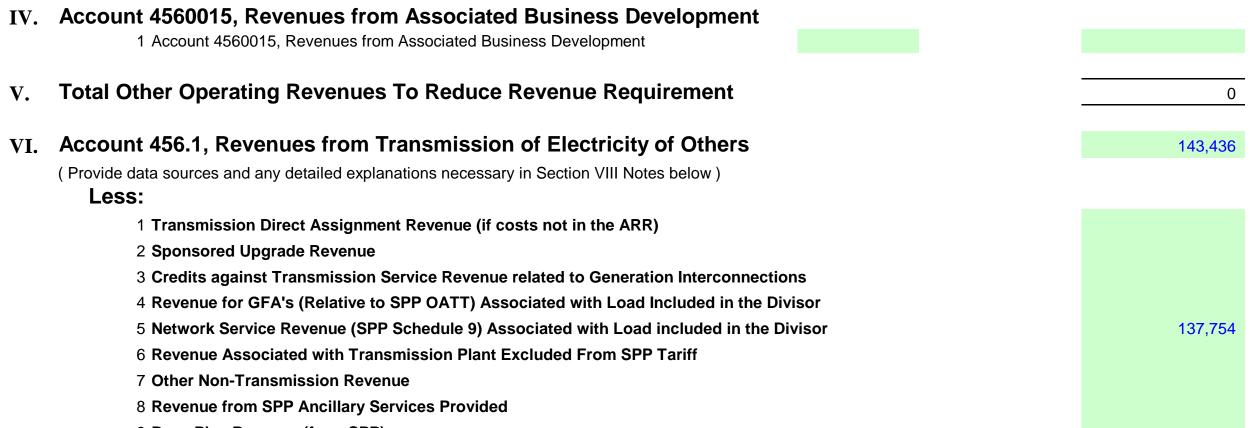
AEPTCo - SPP Formula Rate SWT WS H Rev Credits Page: 62 of 69

AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances Worksheet H - Revenue Credits for Historic Period AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

Revenue Credits for

		Total Company	Non- Transmission	Transmission
I.	Account 450, Forfeited Discounts		-	-
II.	Account 451, Miscellaneous Service Revenues		0	
III.	Account 454, Rent from Electric Property 1 Account 4540001 - Rent from Elect Property-Aff 2 Account 4540002 - Rent from Elect Property - Non-Aff 3 Account 4540003 - Rent from Elect Property - ABD - Aff 4 Account 4540004 - Rent from Elect Property - ABD - Non-Aff 5 Total Rents from Electirc Property	0	0 0 0 0	0

(Revenue related to transmission facilities for pole attachments, rentals, etc. Provide data sources and explanations in Section VIII, Notes below)



 9 Base Plan Revenue (from SPP)

 10 Flow Through of ERCOT Ancillary Charges

 11 Other

 Net Transmission Credits

 \$5,682

VII. Total Worksheet A Revenue Credits

VIII. Data Sources:

Data for this worksheet came from the FERC Form 1 and the Company's General Ledger.

\$5,682

AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances Worksheet I - Supporting Transmission Expense Adjustments AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

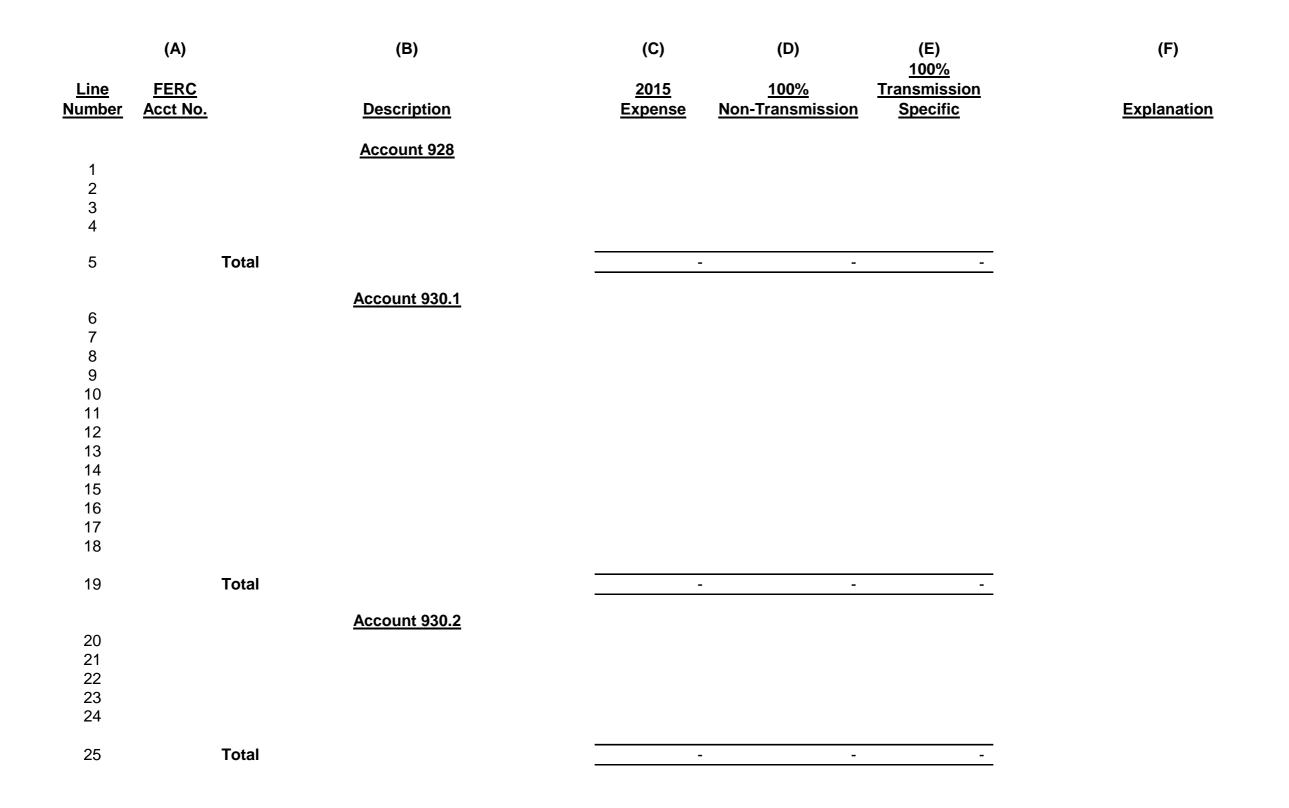
1	Other Expenses		
2	Direct Assignment Charge		\$0
3	Sponsored Upgrades Charge		\$0
4	Firm and Non-Firm Point-To-Point Charges		\$0
5	Base Plan Charges		\$0
6	Schedule 9 Charges		\$0
7	SPP Schedule 12 - FERC Assessment		\$0
8	SPP Schedule 1-A		\$0
9	SPP Annual Assessment		\$0
10	Ancillary Services Expenses		\$0
11	Other		\$0
12	Other		\$0
13	Other		\$0
14	Total	(sum of lines 2 through 13)	\$0

Adjustment to charges that are booked to transmission accounts that are the responsibility of the TO's LSE.

NOTE: Exclusion of Accounts 561 and 565 from O&M Expense in the TCOS templates eliminates the need to use this worksheet.

AEPTCo - SPP Formula Rate SWT WS J Misc Exp Page: 64 of 69

AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances Worksheet J - Allocation of Specific O&M or A&G Expenses AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.



Cost of Service Formula Rate Using 2015 FF1 Balances Worksheet K - Development of Composite State Income Tax Rate AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

I. DEVELOPMENT OF COMPOSITE STATE INCOME TAX RATES FOR 2015

State Income Tax Rate - Louisiana Apportionment Factor Effective Louisiana State Income Tax Rate	8.00% 59.26%	4.7408%
State Income Tax Rate - Arkansas Apportionment Factor Effective Arkansas State Income Tax Rate	6.50% 40.74%	2.6483%
State Income Tax Rate - Oklahoma Apportionment Factor Effective State Income Tax Rate	0.0000% 0.0000%	0.0000%
State Income Tax Rate - Ohio Apportionment Factor Tax Phase-out Factor Effective State Income Tax Rate	0.0000% 0.0000% 0.0000%	0.0000%
State Income Tax Rate - Nebraska Apportionment Factor Effective Nebraska State Income Tax Rate	0.0000% 0.0000%	0.0000%
Total Effective State Income Tax Rate	-	7.3891%

II. CALCULATION OF TEXAS GROSS MARGIN TAX

	Projected		<u>Historic</u>		<u>True-Up</u>	
Line # REVENUE REQUIREMENT BEFORE TEXAS GROSS MARGIN TAX (In 117 of Template)	Total Company 139,307	Trans. Only 136,455	Total Company 139,307	Trans. Only 136,455	Total Company 137,859	Trans. Only 137,807
1 Apportionment Factor to Texas (In12)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2 Apportioned Texas Revenues	\$0	\$0	\$0	\$0	\$0	\$0
3 Taxable Percentage of Revenue (70%)	70%	70%	70%	70%	70%	70%
4 Taxable, Apportioned Margin	-	-	-	-	-	-
5 Texas Gross Margin Tax Rate (1%)	1%	1%	1%	1%	1%	1%
6 Texas Gross Margin Tax Expense	-	-	-	-	-	-
7 Gross-up Required for Texas Gross Margin Expense ((In 6 * In 3 * In 1)/(1- In 5) * In 5)	-	-	-	-	-	-
8 Total Additional Gross Margin Tax Revenue Requirement		-	-	-	-	-

10 Texas Jurisdictional Load		KW
11 Total Load		KW
12 Allocation Percentage	(ln 10 / ln 11)	0.00%

AEPTCo - SPP Formula Rate SWT WS K State Taxes Page: 65 of 69

AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances **Worksheet L** - Taxes Other than Income AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

HISTORIC PERIOD EXPENSE (2015) - TO BE USED ON TRUE-UP TEMPLATE

	(A)	(B)	(C)	(D)	(E)	(F)
Line		Total				
No	Account	Company	Property	Labor	Other	Non-Allocable

<u>Revenue Taxes</u> **Real Estate and Personal Property Taxes** Payroll Taxes Line Deliberately Left Blank Miscellaneous Taxes Franchise Tax

-
-
-
-
-

AEPTCo - SPP Formula Rate SWT WS M Cost of Debt Page: 67 of 69

AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances Worksheet M - Cost of Debt Based on Outstanding Balances as of 12/31/2015 AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

(A)	(B)	(C)	(D)	(E)
<u>Issuance</u> Long Term Debt (FF1.p. 256-257.h) 1 <u>Bonds - Acc 221</u>	Principle Amount FF1.p. 257.x (h)	Interest Rate	Annual Expense FF1.p. 257.x (i)	<u>Notes</u>
2 3			:	
4 <u>Other Long Term Debt</u> 5				
6 7				
8 <u>Senior Notes - Total Account 223</u> 9				
10 11 12			-	
13 14 15			-	
Issuance Discount, Premium, & Expenses: 16 Amort of Debt Discount and Expenses 17 Less: Amor of Debt Premiums	FF1.p. 117.63.c FF1.p. 117.65.c		:	
Reacquired Debt: 18 Amortization of Loss 19 Less: Amortization of Gain	FF1.p. 117.64.c FF1.p. 117.66.c		:	
20 Total Interest on Long Term Debt	-	0.00%	-	
Preferred Stock (FF1.p. 250-251) 21 22 23 24 25	Preferred Balance Outstanding		- - - -	
26 Dividends on Preferred Stock	-	0.00%	-	

0 0

0

0

0

AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances AEP SOUTHWESTERN TRANSMISSION COMPANY, INC.

Calculation of Capital Structure and Weighted Average Cost of Capital Based on Average of Balances At 12/31/2014 and 12/31/2015

(A)	(B)	(C)	(D)	(E)	
Line		Balances @ 12/31/2015	Balances @ 12/31/2014	Average	
Develop	oment of Average Balance of Common Equity				
	Total Proprietary Capital (p. 112.16.c&d)	(831,371)	(710,364)	(770,868)	
	2 Less Preferred Stock from Ln 46 below	0	0	-	
	B Less Account 216.1 (p. 112.12.c&d) E Less Account 219.1 (p. 112.15.c&d)	0	0	-	
	5 Average Balance of Common Equity	(831,371)	(710,364)	(770,868)	
	oment of Cost of Long Term Debt Based on A			(110,000)	
Develop	ment of Cost of Long Term Debt Dased of A	verage Outstanding D			
6	6 Bonds (221) (p. 112.18.c&d)	-	-	-	
	/ Less: Reacquired Bonds (222) (p. 112.19.c&d)	-	-	-	
	Advances from Assoc. Companies (223) (p112.20.c&d)	-		-	
	e Senior Unsecured Notes (224) (p. 112.21.c&d)	-		-	
10) Total Average Debt	-	-	-	
1.1	Annual Interact Expanse for 2015				
	Annual Interest Expense for 2015 2 Coupon Interest on Long Term Debt (256-257.33.i)				
12	Less: Total Hedge Gain/Expense Accumulated from p 250	6 257 col (i) of EEDC			
	Form 1 included in Ln 12 and shown in Ln Development of				
13	below.			-	
	Amort of Debt Discount & Expense (428) (p. 117.63.c)			-	
	5 Amort of Loss on Reacquired Debt (428.1) (p. 117.64.c)			-	
16	E Less: Amort of Premium on Debt (429) (p. 117.65.c)			-	
	' Less: Amort of Gain on Reacquired Debt (429.1) (p. 117.			-	
18	3 Total Interest Expense (Ln 12 - Ln 13 + Ln 14 + Ln 15 ·	- Ln 16 - Ln 17)		-	
4.0			F	0.00%	
19	Average Cost of Debt for 2016 (Ln 18/Ln 10)		L	0.00%	
	CALCULATION OF HEDGE GAINS/LOSSES TO BE EX				
20) AEP SWTCo may not include costs or gains related		ies		
20		to interest nedging delivit		Amortization F	Period
			Remaining		
	HEDGE AMOUNTS BY ISSUANCE (FROM p. 256-257	Total Hedge	Unamortized		
	(i) of the FERC Form 1)	(Gain)/Loss for 2016	Balance	Beginning	Ending
21				0	
22	2			0	
23				0	
24				0	
25				0	
26				0 0	
27				0	

30 Total Hedge Amortization to be Removed

Development of Cost of Preferred Stock

28

29

Preferred Stock	
31 0% Series - 0 - Dividend Rate (p. 250-251. 10.a)	

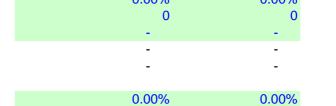
<u>Average</u>			
	0.00%	0.00%	

32 0% Series - 0 - Par Value (p. 250-251. 10.c) 33 0% Series - 0 - Shares O/S (p.250-251. 10.e) 34 0% Series - 0 - Monetary Value (Ln 32 * Ln 33) 35 0% Series - 0 - Dividend Amount (Ln 31 * Ln 34)

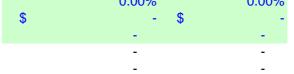
36 0% Series - 0 - Dividend Rate (p. 250-251. 9.a)
37 0% Series - 0 - Par Value (p. 250-251. 9.c)
38 0% Series - 0 - Shares O/S (p.250-251. 9.e)
39 0% Series - 0 - Monetary Value (Ln 37 * Ln 38)
40 0% Series - 0 - Dividend Amount (Ln 36 * Ln 39)

41 0% Series - 0 - Dividend Rate (p. 250-251. 8.a)
42 0% Series - 0 - Par Value (p. 250-251. 8.c)
43 0% Series - 0 - Shares O/S (p.250-251. 8.e)
44 0% Series - 0 - Monetary Value (Ln 42 * Ln 43)
45 0% Series - 0 - Dividend Amount (Ln 41 * Ln 44)

46 Balance of Preferred Stock (Lns 34, 39, 44) 47 Dividens on Preferred Stock (Lns 35, 40, 45) 48 Average Cost of Preferred Stock (Ln 47/46)



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AEPTCo subsidiaries in SPP Cost of Service Formula Rate Using 2015 FF1 Balances Calculation of Post-employment Benefits Other than Pensions Expenses Allocable to Transmission Service Worksheet O - PBOP Support AEP SOUTHWESTERN TRANSMISSION COMPANY

PBOP	(A)	(B)
1	Calculation of PBOP Expenses	
2	AEP TransCo - AEP Service Corp Employees	
3	Total AEP System PBOP expenses	(92,333,868)
4	Base Year relating to retired personnel	\$0
5	Amount allocated on Labor	-\$92,333,868
6	Total AEP System Direct Labor Expense	\$1,314,167,144
7	AEP System PBOP expense per dollar of direct labor (PBOP Rate)	-\$0.070
8	Currently Approved PBOP Rate	\$0.094
9	Base PBOP TransCo labor expensed in current year	\$33,314
10	Allowable TransCo PBOP Expense for current year (Line 8 * Line 9)	\$3,132
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)	-\$1,586
15	Actual PBOP Expense (Sum Lines 11-14)	-\$1,586
16	PBOP Adjustment Line 10 less Line 15	\$4,718