AEP Transmission Formula Rate Template
Calculation of Schedule 11 Revenue Requirements For AEP Transmission Projects
For Calendar Year 2015 and Projected Year 2016

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

SOUTHWESTERN TRANSMISSION COMPANY

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)	(I)	(J)	(K) = (I) - (J)	(L)	(M)	(N) = (L)-(M)	(O)	(P) = (H)+(K)+(N)+(O)	(Q) = (G) + (P)
				Projected ARR For 2016 From WS-F			**True-Up ARR CY2015 From Worksheet G (includes adjustment for SPP Collections)**									
							Base ARR				**Incentive ARR**					
Sheet Name	**Owner**	**Project Description**	**Year in Service**	**Base ARR** (WS-F)	**Incentive**	**Total**	**TRUE-UP Adjustment** (WS-G)	**Adjusted ARR from Prior Update**	**As Billed by SPP** (for Prior Yr T-Service)	**COLLECTION Adjustment**	**True-up**	**As Billed**	**Change**	**Interest**	**Total Adjustments** (True-Up, Billing, & Interest)	**Total ADJUSTED Revenue Requirement Effective 7/1/2016**
SWT.001	SWT	insert project name here	2015	-	-	-	-	-	-	-	-	-	-	-	-	-
		SWT Total		-	-	-	-	-	-	-	-	-	-	-	-	$ -

*<$100K investment

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
SOUTHWESTERN TRANSMISSION COMPANY

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

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 (Enter as whole number)	0	basis points
ROE with additional 0 basis point incentive	11.20%	**<==Incentive ROE Cannot Exceed 12.45%**

Determine R (cost of long term debt, cost of preferred stock and percent is from Projected TCOS, lns 158 through160)

	%	Cost	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	0.0552
		R =	0.0825

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

Rate Base (Projected TCOS, ln 75)	5,758
R (fom 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, ln 108)	39.80%
EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =	44.29%
Income Tax Calculation (Return x EIT)	210
ITC Adjustment (Projected TCOS, ln 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, ln 122)	136,455
Return (Projected TCOS, ln 117)	475
Income Taxes (Projected TCOS, ln 116)	210
Gross Margin Taxes (Projected TCOS, ln 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, ln 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 Basis Point ROE increase (II B. above)	136,455
Apportionment Factor to Texas (Worksheet K, ln 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, lns 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, ln 12)	13.01%
Incremental FCR with 0 Basis Point ROE increase, less Depreciation	-13.01%

III. Calculation of Composite Depreciation Rate

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

SUMMARY OF PROJECTED ANNUAL BASE PLAN AND NON-BASE PLAN REVENUE REQUIREMENTS

		Rev Require	W Incentives	Incentive 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 1: Until SOUTHWESTERN TRANSMISSION COMPANY establishes Transmission plant in service the depreciation expense component of the carrying charge will be calculated as in the Operating Company formula approved in Docket No. ER07-1069. The calculation for SOUTHWESTERN TRANSMISSION COMPANY is based on Plant Balances and Depreciation Expense for PSO and shown 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
SOUTHWESTERN TRANSMISSION COMPANY

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

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

ROE w/o incentives (True-Up TCOS, ln 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 Exceed 12.45%**

Determine R (cost of long term debt, cost of preferred stock and percent is from True-Up TCOS, lns 158 through 160)

	%	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	0.0557
		R =	0.0835

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

Rate Base (True-Up TCOS, ln 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, ln 95)	39.80%
EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =	44.16%
Income Tax Calculation (Return x EIT)	456
ITC Adjustment (True-Up TCOS, ln 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, ln 109)	137,807
Return (True-Up TCOS, ln 104)	1,032
Income Taxes (True-Up TCOS, ln 103)	456
Gross Margin Taxes (True-Up TCOS, ln 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 0 Basis Point ROE Increase (II C. below)	-
Revenue Requirement w/ Gross Margin Taxes	137,807
Less: Depreciation (True-Up TCOS, ln 82)	-
Net Rev. Req, w/0 Basis Point ROE increase, less Depreciation	137,807

C. Determine Gross Margin Tax with hypothetical 0.112 basis point increase in ROE.

Net Revenue Requirement before Gross Margin Taxes, with 0 Basis Point ROE increase (II B. above)	137,807
Apportionment Factor to Texas (Worksheet K, ln 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, ln 39)	0
Net Revenue Requirement, with 0 Basis Point ROE increase	137,807
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, ln 12)	0.00%
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, ln 58)	1,300,777,651	<==From Input on Worksheet B
Transmission Plant @ End of Period (P.207, ln 58)	1,387,776,696	<==From Input on Worksheet B
	2,688,554,347	
Transmission Plant Average Balance for 2015	1,344,277,173	
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Composite Depreciation Rate	2.36%	
Depreciable Life for Composite Depreciation Rate	42.31	
Round to nearest whole year	42	

SUMMARY OF TRUED-UP ANNUAL REVENUE REQUIREMENTS FOR SPP BPU & NON-BPU PROJECTS

TRUE-UP YEAR	2015	Rev Require	W Incentives	Incentive Amounts
	∑ Prior Year Projected (WS-F)	$ -	$ -	$ -
	∑ Prior Year True-Up (WS-G)	$ -	$ -	$ -
	True-up Adjustment 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.