AEP Transmission Formula Rate Template
Utilizing FERC Form 1 Data
For rates effective July 1, 2016
SPP Zone 1 Projected AEP Revenue Requirements
Line
A. AEP Network Integration Transmission Service (NITS) 1 REVENUE REQUIREMENT (w/o incentives)

LESS: REVENUE CREDITS
CURRENT YEAR ZONE 1 AEP NETWORK SERVICE REVENUE REQUIREMENT
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
9 EXISTING ZONAL ATRR (W/O INCENTIVES)
10 INCENTIVE REVENUE REQUIREMENT FOR ZONAL PROJECTS
11 EXISTING ZONAL ATRR FOR SPP OATT ATTACHMENT H, SEC. 1, COL. 3
122015 Historic AEP West Zone 1 SPP Average 12-Mo. Peak Demand, MW
13 AEP Monthly NITS Rate in \$/MW - Month

|  | AEP Annual Revenue Requirement | PSO Annual Revenue Requirement | SWEPCO Revenue Requirement |
| :---: | :---: | :---: | :---: |
| (TCOS Line 1) | 246,683,321 | \$91,596,170 | \$155,087,151 |
| (TCOS Line 5 ) | 16,165,289 | \$6,818,274 | \$9,347,015 |
| (TCOS Line 6) | \$230,518,032 | $\begin{aligned} & \hline \$ 84,777,896 \\ & 36.777 \% \end{aligned}$ | $\begin{gathered} \hline \$ 145,740,136 \\ 63.223 \% \end{gathered}$ |
| (TCOS Line 7) | 70,531,855 | 6,774,890 | 63,756,965 |
| (Worksheet F) | - | - | - |
| (Worksheet F) |  |  |  |
|  | 70,531,855 | 6,774,890 | 63,756,965 |
| (Line 3- Line 8) | 159,986,178 | 78,003,006 | 81,983,172 |
| (TCOS Line 15 ) | - | - | - |
| (Ln $9+$ Ln 10) | \$159,986,178 | \$78,003,006 | \$81,983,172 |
| (Load WS, In 19) | 8,211 | 8,211 | 8,211 |
| 11 / Line 12) / 12 | \$1,623.70 | \$791.65 | \$832.05 |

B. Point-to-Point Service

| 14 | Annual Point-to-Point Rate in \$/MW - Year |
| :--- | :--- |
| 15 | Monthly Point-to-Point Rate in $\$ / \mathrm{MW}$ - Month |
| 16 | Weekly Point-to-Point Rate in \$/MW - Weekly |
| 17 | Daily On-Peak Point-to-Point Rate in \$/MW - Day |
| 18 | Daily Off-Peak Point-to-Point Rate in \$/MW - Day |
| 19 | Hourly On-Peak Point-to-Point Rate in $\$ / \mathrm{MW}$ - Hour |
| 20 | Hourly Off-Peak Point-to-Point Rate in $\$ / \mathrm{MW}$ - Hour |

(Line 11 / Line 12)
(Line 14 / 12)
(Line 14 / 52)
(Line 14 / 260)
(Line 14 / 365)
(Line 14 / 4160)
(Line 14 / 8760)
$\$ 19,484.37$
$\$ 1,623.70$
$\$ 1,623.70$
$\$ 374.70$
$\$ 74.94$
$\$ 53.38$
\$4.68
$\$ 2.22$
$\$ 9,499.82$
$\$ 791.65$
$\$ 182.69$
$\$ 36.54$
$\$ 26.03$
$\$ 2.28$
$\$ 1.08$
AEP Transmission Formula Rate Template
Utilizing FERC Form 1 Data
For rates effective July 1, 2016

## SPP SCHEDULE 1 AEP Revenue Requirements

| AEP Annual | PSO Annual | SWEPCO Annual |
| :---: | :---: | :---: |
| Revenue | Revenue | Revenue |
| Requirement | Requirement | Requirement |

A. Schedule 1 ARR For 2016 Projected Year

| 1 | Total Load Dispatch \& Scheduling (Account 561) (TCOS Line 77) |  | \$30,698,829 | \$15,009,855 | \$15,688,974 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Less: Load Dispatch - Scheduling, System Control and Dispatch Services (321.88.b) |  | \$22,154,223 | \$11,043,371 | \$11,110,852 |
| 3 | Less: Load Dispatch - Reliability, Planning \& Standards Development Services (321.92.b) |  | \$2,120,246 | \$1,054,895 | \$1,065,351 |
| 4 | Total 561 Internally Developed Costs | (Line 1 - Line 2 - Line 3) | \$6,424,360 | \$2,911,589 | \$3,512,771 |
| 5 | Less: PTP Service Credit (prior year Sched 1 revenue from PTP transactions) |  | 487,415 | \$229,827 | \$257,588 |
| 6 | PROJECTED ZONAL ARR FOR 2016 | (Line 4 - Line 5) | \$5,936,945 | \$2,681,762 | \$3,255,183 |

B. Schedule 1 Projected 7/1/2016 Rate Calculations

| (Line $6 /$ Line 7) | $\$ 723.05$ |
| :--- | ---: |
| (Line $8 / 12$ ) | $\$ 60.25$ |
| (Line $8 / 52$ ) | $\$ 13.90$ |
| (Line $8 / 365$ ) | $\$ 1.98$ |
| (Line $8 / 8760$ ) | $\$ 0.08$ |

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 (if such had been effective)
Line
No.
AEP Annual
Revenue
Requirement

| PSO Annual | SWEPCO Annual |
| :---: | :---: |
| Revenue | Revenue |
| Requirement | Requirement |

A. Network Service

| 1 | TRUE-UP YEAR 2015 REVENUE REQUIREMENT (w/o incentives) | (True-Up TCOS Line 1 ) | 233,663,607 | \$91,021,133 | \$142,642,474 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | LESS: REVENUE CREDITS | (True-Up TCOS Line 5 ) | 16,165,289 | \$6,818,274 | \$9,347,015 |
| 3 | TRUE-UP YEAR ZONE 1 AEP NETWORK SERVICE REVENUE REQUIREMENT | (True-Up TCOS Line 6 ) | \$217,498,319 | $\$ 84,202,859$ <br> 38.714\% | $\$ 133,295,459$ <br> 61.286\% |
| 4 | LESS: REVENUE REQUIREMENTS INCLUDED IN LINE 1 FOR: |  |  |  |  |
| 5 | BASE PLAN UPGRADES (W/O INCENTIVES) | (True-Up TCOS Line 7 ) | 62,542,079 | 7,037,772 | 55,504,307 |
| 6 | REQUESTED UPGRADES (W/O INCENTIVES) | (Worksheet G) | - | - | - |
| 7 | ECONOMIC UPGRADES (W/O INCENTIVES) | (Worksheet G) | - - | - | - |
| 8 | SUBTOTAL |  | 62,542,079 | 7,037,772 | 55,504,307 |
| 9 | EXISTING ZONAL ATRR (W/O INCENTIVES) | (Line 3- Line 8) | 154,956,240 | 77,165,087 | 77,791,152 |
| 10 | INCENTIVE REVENUE REQUIREMENT FOR ZONAL PROJECTS | (True-Up TCOS Line 15 ) | - | - | - |
| 11 | TRUED-UP ZONAL ATRR (WI INCENTIVES) FOR 2015 | (Line 9 + Line 10) | 154,956,240 | 77,165,087 | 77,791,152 |
| 12 | 2015 Historic AEP West Zone SPP Average 12-Mo. Peak Demand, MW | (Load WS, In 19) | 8,211 | 8,211 | 8,211 |
| 13 | Monthly NITS Rate in \$/MW - Month | (Line 11 / Line 12) /12 | 1,572.65 | 783.1 | 789.5 |

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

## PUBLIC SERVICE COMPANY OF OKLAHOMA

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.


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

## SOUTHWESTERN ELECTRIC POWER 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 ( $(0$ ), 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) | (J) | ( K$)=(\mathrm{l})-(\mathrm{J})$ | (L) | (M) | ( N ) $=(\mathrm{L})$-(M) | (0) | $(\mathrm{P})=(\mathrm{H})+(\mathrm{K})+(\mathrm{N})+(\mathrm{O})$ | $(\mathrm{R})=(\mathrm{G})+(\mathrm{P})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Projected | R For 2016 | rom WS-F |  |  | p ARR CY2015 | om Worksheet G | cludes adj | ustment | or SPP Colle | tions) |  |  |
| Sheet | Owner Project Description |  | $\frac{\text { Year in }}{\text { Service }}$ | Base ARR | Incentive | Total | Base ARR |  |  |  | Incentive ARR |  |  | Interest | Total Adjustments | Total ADJUSTED$\frac{\text { Revenue }}{\text { Requirement }}$$\frac{\text { Effective }}{7 / 1 / 2016}$ |
|  |  |  |  |  |  |  | Projected ARR from Prior Update | $\begin{aligned} & \frac{\text { As Billed }}{\text { by PPP }} \\ & \text { (for Prior Yr } \\ & \text { T-Service) } \end{aligned}$ | $\xrightarrow{\text { COLLECTION }}$ | True-up | $\frac{\text { As }}{\text { Billed }}$ | Change |  |  |  |
| s. 001 | SWE | Arsenal Hill Auto xfmr \& AH to Water Works line |  | 2009 | 2,329,004 |  | 2,329,004 | 34,765 | 2,575,887 | 2,391,849 | 184,038 |  |  |  | 19,667 | 238,470 | 2,567,474 |
| S. 002 | SWE | SW Shreveport (sub work \& tap) | 2009 | 1,068,935 |  | 1,068,935 | 28,795 | 1,199,018 | 1,113,352 | 85,666 |  | - |  | 10,288 | 124,749 | 1,193,684 |
| S. 003 | SWE | [NW Ark Area Improve - 2009] E. Centerton-Flint Crk, E Rogers-N Rogers, Centerton | 2009 | 1,807,676 |  | 1,807,676 | 9,158 | 1,977,293 | 1,836,022 | 141,271 | - | - | - | 13,521 | 163,949 | 1,971,626 |
| S. 004 | SWE | Rebuild N . Magazine - Danville 161 kV Line | 2009 | 1,517,566 |  | 1,517,566 | 11,466 | 1,664,768 | 1,545,826 | 118,942 |  | - |  | 11,722 | 142,130 | 1,659,696 |
| S. 005 | SWE | [Greenwood, AR Area Improve] N Huntington, Greenwood, Reeves, Bonanza | 2009 | 393,031 |  | 393,031 | 5,907 | 434,552 | 403,505 | 31,047 | - | - |  | 3,322 | 40,276 | 433,307 |
| S. 006 | SWE | Port Robson-Caplis Line (SW 138 kV Loop -- 2009) | 2009 | 5,006,432 |  | 5,006,432 | 109,829 | 5,612,120 | 5,211,154 | 400,966 |  |  |  | 45,913 | 556,708 | 5,563,140 |
| S. 007 | SWE | Linwood 138 Station Switch Replacement* | 2009 | 10,098 |  | 10,098 | 173 | 11,199 | 10,399 | 800 |  | - |  | 87 | 1,060 | 11,158 |
| s. 008 | SWE | Dyess to S. Fayetteville 69 kV Convert to 161 kV (multiprojects) | 2008 | 1,231,942 |  | 1,231,942 | 28,454 | 1,375,901 | 1,277,598 | 98,303 | - | - | - | 11,393 | 138,151 | 1,370,092 |
| S. 009 | SWE | Northwest Texarkana-Bann-Alumax Tap 138kV -reconductor | 2008 | 364,572 | - | 364,572 | 1,873 | 398,968 | 370,463 | 28,505 | - | - | - | 2,730 | 33,108 | 397,680 |
| S. 010 | SWE | Tontitown - Elm Springs REC 161 kV line*** | 2008 |  |  |  |  |  |  |  |  | - |  |  |  |  |
| S. 011 | swe | Siloam Springs - Chamber Springs 161 kV line*** | 2007 | - |  |  |  |  |  |  |  |  |  |  |  |  |
| S. 012 | SWE | Knox Lee - Oak Hill \#2 138 kV line, S. Shreveport (SWE Minor Proj II) | 2007 | 23,816 |  | 23,816 | (16) | 25,894 | 24,044 | 1,850 | - | - |  | 165 | 1,999 | 25,815 |
| S. 013 | SWE | Carthage REC - Carthage T 138 kV | 2006 | 728,248 |  | 728,248 | 15,349 | 1,137,892 | 1,056,594 | 81,298 |  |  |  | 8,687 | 105,335 | 833,582 |
| S. 014 | SWE | NW Henderson - Oak Hill 138 kV line ${ }^{*}$ | 2007 | 10,398 |  | 10,398 | 153 | 11,506 | 10,684 | 822 | - | - |  | 88 | 1,063 | 11,461 |
| S. 015 | SWE | Arsenal Hill 138 kV Device (Cap. Bank) | 2007 | 45,989 |  | 45,989 | 330 | 50,490 | 46,883 | 3,607 |  |  |  | 354 | 4,291 | 50,280 |
| S. 016 | SWE | Daingerfield - Jenkins REC 69 kV CB Repl** | 2008 | 50,522 |  | 50,522 | 1,466 | 56,777 | 52,720 | 4,057 |  |  |  | 496 | 6,019 | 56,541 |
| s. 017 | SWE | Linwood-McWillie 138 kV Rebuild | 2008 | 250,146 |  | 250,146 | 1,676 | 274,266 | 254,671 | 19,595 |  |  |  | 1,912 | 23,183 | 273,329 |
| S. 018 S. 019 | SWE | Port Robson (SW 138 kV Loop -- 2008 ) Wallace Lake-Prt Robson-Red Point 138 kV Loop | 2009 2008 |  | - |  | 3,224 |  | 584,542 | 44,977 | - | - |  | 4,332 | 52,533 | 627,402 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 627,402 |
| S. 020 | SWE | Rogers, Shipe Road Stations | 2008 | - | - | - | - | - |  | - | - | - |  | - | - | - |
| S. 021 | SWE | Reconductor 4 mi. of McNabb-Turk | 2010 | 218,211 |  | 218,211 | 4,243 | 243,210 | 225,833 | 17,376 | - |  |  | 1,943 | 23,562 | 241,774 |
| S. 022 | SWE | Longwood: r\&r switches, upgrade bus | 2010 | 27,491 | - | 27,491 | 360 | 30,335 | 28,168 | 2,167 |  | - |  | 227 | 2,754 | 30,245 |
| S. 023 | WE | Reconductor: Greggton-Lake Lamond \& QuitmanWestwood 69 kV lines | 2010 | 640,170 | - | 640,170 | 8,840 | 706,968 | 656,458 | 50,510 | - | - |  | 5,335 | 64,685 | 704,854 |
| S. 024 | SWE | Rebuild/reconductor Dyess-Elm Springs REC [Dyess Station-Flint Creek] | 2010 | 700,696 | - | 700,696 | 9,982 | 774,197 | 718,883 | 55,314 | - | - |  | 5,869 | 71,164 | 771,860 |
| S. 025 | swe | Replace switch at Diana* | 2010 | 12,014 |  | 12,014 | 151 | 13,246 | 12,300 | 946 | - | - |  | 99 | 1,196 | 13,210 |
| S. 026 | SWE | Whitney repl CB and Switches | 2011 | 34,482 |  | 34,482 | 14 | 37,478 | 34,801 | 2,678 | - | - |  | 242 | 2,934 | 37,416 |
| S. 027 | SWE | Linwood - Powell Street 138 kV | 2012 | 58,895 |  | 58,895 | 744 | 63,440 | 58,908 | 4,533 |  | - | - | 474 | 5,751 | 64,646 |
| S. 028 | SWE | Bloomburg-Texarkana Plant | 2012 | 736,485 | - | 736,485 | 9,435 | 812,303 | 754,266 | 58,036 | - | - |  | 6,065 | 73,536 | 810,021 |
| S. 029 | SWE | Knox Lee - Pirkey 138 kV / Pirkey - Whitney 138 kV Replace Breaker, Wavetraps, and reset relays and CT's | 2012 | 266,274 | - | 266,274 | 3,079 | 293,063 | 272,125 | 20,938 | - | - |  | 2,159 | 26,176 | 292,450 |
| s. 030 | SWE | NW Texarkana - Turk 345 | 2012 | 6,697,218 | - | 6,697,218 | 76,298 | 7,418,314 | 6,888,301 | 530,012 | - | - |  | 54,498 | 660,808 | 7,358,026 |
| S. 031 | swe | Lone Star South - Pittsburg 138 kV - Replace Wavetraps, reset CT's and Relays | 2012 | 32,211 |  | 32,211 | 459 | 35,591 | 33,048 | 2,543 | - | - |  | 270 | 3,272 | 35,483 |
| S. 032 | SWE | Howell-Kilgore 69 kV rebuild | 2012 | 584,572 | - | 584,572 | 6,544 | 646,121 | 599,958 | 46,163 | - | - | - | 4,738 | 57,445 | 642,017 |
| S. 033 | SWE | Flint Creek-Shipe Road 345 kV Line | 2012 | 8,548,841 | - | 8,548,841 | 120,036 | 9,620,054 | 8,932,735 | 687,319 |  |  |  | 72,569 | 879,924 | 9,428,765 |
| S. 034 | SWE | Bann - LS Ordnance - Hooks 69 kV - Rebuild 7.1 mi | 2013 | 1,230,726 | - | 1,230,726 | 68,803 | 1,334,885 | 1,239,512 | 95,373 | - | - |  | 14,757 | 178,933 | 1,409,659 |
| S. 035 | SWE | Diana - Replace North Autotransformer \#3 | 2013 | 628,862 |  | 628,862 | 95,824 | 683,312 | 634,492 | 48,820 |  |  |  | 13,001 | 157,646 | 786,508 |
| s. 036 | SWE | Osburn 161 kV Line Work | 2013 | 932,066 | - | 932,066 | 609,294 | 656,525 | 609,619 | 46,906 | - | - |  | 58,982 | 715,183 | 1,647,249 |
| S. 037 | SWE | SW Shreveport to Spring Ridge REC 138 kV Line Rebuild | 2013 | 722,908 | - | 722,908 | 68,519 | 789,516 | 733,107 | 56,408 | - | - |  | 11,229 | 136,156 | 859,064 |
| S. 038 | SWE | Eastex Switching Station - Whitney 138 kV Station Rebuild 2.5 miles of 138 Kv | 2013 | 376,402 |  | 376,402 | $(55,407)$ | 394,658 | 366,461 | 28,197 | - | - |  | $(2,446)$ | $(29,656)$ | 346,746 |

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

## SOUTHWESTERN ELECTRIC POWER 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 ( 0 ), but no projected ARR will be shown in columns (E) through ( $G$ ) for the current year.

$*<\$ 100 \mathrm{~K}$ investment, **AI xfer, ***Non-BPU (to be removed from list in future).

```
PSO Total 
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| $6,774,890$ | - | $6,774,890$ |  | $(762,979)$ | $6,983,150$ | $6,484,229$ | 498,921 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $70,531,855$ | - | $70,531,855$ | $\#$ | $(2,678,811)$ | $66,215,287$ | $61,484,438$ | 4,73084 |

$\begin{array}{rr}26,397 & (237,661) \\ 234,577 & 2,286,616\end{array}$
${ }_{\substack{6,537,230 \\ \hline 2,818,411}}$

## AEP West (SPP Zone-1)

Based on West Zone-SPP Monthly Transmission System Firm Peak Demands [1] for the Twelve Months Ended December 31, 2015
Historical Combined Load Worksheet (SPP Zone - 1)


Notes:
(1) MW, at the time of the AEP-SPP Internal (MLR) Pea
(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 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
PUBLIC SERVICE COMPANY OF OKLAHOMA


|  | 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 PUBLIC SERVICE COMPANY OF OKLAHOMA |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) |  |  | (5) |
|  | RATE BASE CALCULATION | Data Sources (See "General Notes") | TO Total |  |  | Total <br> Transmission |
| $\begin{aligned} & \text { Line } \\ & \text { No } \end{aligned}$ | GROSS PLANT IN SERVICE |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 17 | Production Less: Production ARO (Enter Negative) | (Worksheet A In 1.C) (Worksheet A I $2 . C$ ) | ${ }_{(34,973,963)}$ | NA | 0.00000 |  |
| 18 | Transmission | (Worksheet A In 3.C \& Hist. Template Ln 169) | 815,430,062 | DA |  | 761,511,035 |
| 19 | Less: Transmission ARO (Enter Negative) | (Worksheet A In 4.C) |  | TP | 0.93624 |  |
| 20 | Plus: Transmission Plant-in-Service Additions (Worksheet B) |  | 30,288,573 | DA | 1.00000 | 30,288,573 |
| 21 | Plus: Additional Trans Plant on Transferred Assets (Worksheet B) |  |  | TP | 0.93624 |  |
| 22 | Distribution | (Worksheet A in 5.C) | 2,206,508,992 | NA | 0.00000 |  |
| 23 | Less: Distribution ARO (Enter Negative) | (Worksheet A In 6.C) |  | NA | 0.00000 |  |
| 24 | General Plant | (Worksheet A In 7.C) | 157,148,220 | W/S | 0.10128 | 15,916,552 |
| 25 | Less: General Plant ARO (Enter Negative) | (Worksheet A In 8.C) | $(518,435)$ | W/S | 0.10128 | $(52,509)$ |
| 26 | Intangible Plant | (Worksheet A In 9.C) | 38,844,829 | w/s | 0.10128 | 3,934,348 |
| 27 | TOTAL GROSS PLANT | (sum Ins 16 to 26) | 4,688,230,960 |  |  | 811,597,999 |
| 28 | ACCUMULATED DEPRECIATION AND AMORTIZATION |  |  |  |  |  |
| 29 | Production | (Worksheet A In 12.C) | 759,321,650 | NA | 0.00000 |  |
| 30 | Less: Production ARO (Enter Negative) | (Worksheet A In 13.C) | $(4,972,667)$ | NA | 0.00000 |  |
| 31 | Transmission | (Worksheet A $\ln 14 . C$ \& 28.C) | 208,745,843 | TP1= | 0.90617 | 189,160,149 |
| 32 | Less: Transmission ARO (Enter Negative) | (Worksheet A In 15.C) |  | TP1= | 0.90617 |  |
| 33 | Plus: Transmission Plant-in-Service Additions (Worksheet B) |  | 167,297 | DA | 1.00000 | 167,297 |
| 34 | Plus: Additional Projected Deprec on Transferred Assets (Worksheet B) |  |  | DA | 1.00000 |  |
| 35 | Plus: Additional Transmission Depreciation for 2016 (In 95) |  | 15,385,707 | TP1 | 0.90617 | 13,942,135 |
| 36 | Plus: Additional General \& Intangible Depreciation for ( l 97+In 98) |  | 14,457,016 | w/s | 0.10128 | 1,464,260 |
| 37 | Plus: Additional Accum Deprec on Transferred Assets (Worksheet B) |  |  | DA | 1.00000 |  |
| 38 | Distribution | (Worksheet A In 16.C) | 554,330,144 | NA | 0.00000 |  |
| 39 | Less: Distribution ARO (Enter Negative) | (Worksheet A In 17.C) |  | NA | 0.00000 |  |
| 40 | General Plant | (Worksheet A In 18.C) | 67,375,992 | W/S | 0.10128 | 6,824,089 |
| 41 | Less: General Plant ARO (Enter Negative) | (Worksheet A In 19.C) | $(395,275)$ | W/S | 0.10128 | $(40,035)$ |
| 42 | Intangible Plant | (Worksheet $\mathrm{A} \ln 20 . \mathrm{C})$ | 21,128,855 | w/s | 0.10128 | 2,140,008 |
| 43 | TOTAL ACCUMULATED DEPRECIATION | (sum Ins 29 to 42) | 1,635,544,562 |  |  | 213,657,903 |
| 44 | NET PLANT IN SERVICE |  |  |  |  |  |
| 45 | Production | ( $\ln 16+\ln 17-\ln 29-\ln 30)$ | 686,179,736 |  |  |  |
| 46 | Transmission | $(\ln 18+\ln 19-\ln 31-\ln 32)$ | 606,684,219 |  |  | 572,350,886 |
| 47 | Plus: Transmission Plant-in-Service Additions (In $20-\ln 33$ ) |  | 30,121,276 |  |  | 30,121,276 |
| 48 | Plus: Additional Trans Plant on Transferred Assets ( $\mathrm{l} 21-\mathrm{In} 34$ ) |  |  |  |  |  |
| 49 | Plus: Additional Transmission Depreciation for 2016 ( $-\ln 35$ ) |  | (15,385,707) |  |  | (13,942,135) |
| 50 | Plus: Additional General \& Intangible Depreciation for 2016 (-In 36) |  | $(14,457,016)$ |  |  | $(1,464,260)$ |
| 51 | Plus: Additional Accum Deprec on Transferred Assets (Worksheet B) (-ln 37) |  |  |  |  |  |
| 52 | Distribution | ( $\ln 22+\ln 23-\ln 38-\ln 39)$ | 1,652,178,848 |  |  |  |
| 53 | General Plant | $(\ln 24+\ln 25-\ln 40-\ln 41)$ | 89,649,068 |  |  | 9,079,989 |
| 54 | Intangible Plant | ( $\ln 26-\ln 42)$ | 17,715,974 |  |  | 1,794,339 |
| 55 | TOTAL NET PLANT IN SERVICE | (sum Ins 45 to 54) | 3,052,686,398 |  |  | 597,940,096 |
| 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 negativ) | (Worksheet C, In 1.C \& In 3.J) | $(863,023,268)$ | DA |  | $(146,752,106)$ |
| 59 | Account No. 283.1 (enter negative) | (Worksheet C, In 10.C \& In 12.J) | $(224,981,753)$ | DA |  | $(31,272,653)$ |
| 60 | Account No. 190.1 | (Worksheet $\mathrm{C}, \ln 19 . \mathrm{C}$ \& $\ln 21 . \mathrm{J})$ | 128,137,563 | DA |  | 9,673,185 |
| 61 | Account No. 255 (enter negative) | (Worksheet C, In 28.C \& In 30.J) | (53,780) | DA |  | $(9,020)$ |
| 62 | TOTAL ADJUSTMENTS | (sum Ins 57 to 61) | (959,921,238) |  |  | (168,360,594) |
| 63 | PLANT HELD FOR FUTURE USE | (Worksheet A In 29.C \& In 30.C) | 225,408 | DA |  |  |
| 64 | WORKING CAPITAL | (Note F) |  |  |  |  |
| 65 | Cash Working Capital | (1/8*In 80) (Note G) | 1,992,358 |  |  | 1,865,335 |
| 66 | Transmission Materials \& Supplies | (Worksheet D, In 2.(D)) | 637,007 | TP | 0.93624 | 596,394 |
| 67 | A\&G Materials \& Supplies | (Worksheet D, in 3.(D)) | 231,880 | w/s | 0.10128 | 23,486 |
| 68 | Stores Expense | (Worksheet D, In 4.(D)) |  | GP(h) | 0.16773 |  |
| 69 | Prepayments (Account 165) - Labor Allocated | (Worksheet D, in 5.G) | 104,773,318 | w/s | 0.10128 | 10,611,829 |
| 70 | Prepayments (Account 165) - Gross Plant | (Worksheet D, in 5.F) | 3,386,442 | GP(h) | 0.16773 | 567,995 |
| 71 | Prepayments (Account 165) - Transmission Only | (Worksheet D D In 5.E) |  | DA | 1.00000 |  |
| 72 73 | Prepayments (Account 165) - Unallocable | ( Worksheet D, In 5.D) | (102,502,956) | NA | 0.00000 |  |
| 73 | TOTAL WORKING CAPITAL | (sum Ins 65 to 72) | 8,518,049 |  |  | 13,665,039 |
| 74 | IPP CONTRIBUTIONS FOR CONSTRUCTION | (Note H) (Worksheet E, In 7.(B)) | $(1,020,696)$ | DA | 1.00000 | $(1,020,696)$ |
| 75 | RATE BASE (sum Ins 55, 62, 63, 73, 74) |  | 2,100,487,921 |  |  | 442,223,845 |

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) <br> EXPENSE, TAXES, RETURN \& REVENUE REQUIREMENTS CALCULATION

## OPERATION \& MAINTENANCE EXPENSE

Transmission
Less: Total Account 561
Less: Account 565
Less: expenses 100\% assigned to TO billed customers (Worksheet I, In 14) Total O\&M Allocable to Transmission

Administrative and General
Less: Acct. 924, Property Insurance Acct. 928, Reg. Com. Exp Acct. 930.1, Gen. Advert. Exp. Acct. 930.2, Misc. Gen. Exp.
Balance of $A$ \& $G$
Plus: Acct. 924, Property Insurance Acct. 928 - Transmission Specific Acct 930.1 - Only safety related ads -Direct Acct 930.2 - Misc Gen. Exp. - Trans
Less: PBOP Expense In Acct. 926 Adjustment A \& G Subtotal

TOTAL O \& M EXPENSE
DEPRECIATION AND AMORTIZATION EXPENSE
Transmission
Plus: Transmission Plant-in-Service Additions (Worksheet B)
General
Intangible
TOTAL DEPRECIATION AND AMORTIZATION
TAXES OTHER THAN INCOME
Labor Related Payroll
Plant Related
Property
Gross Receipts/Sales \& Use Other
TOTAL OTHER TAXES
INCOME TAXES
$\mathrm{T}=1-\{[(1-\mathrm{SIT})$ * $(1-\mathrm{FIT})] /(1-\mathrm{SIT} * \mathrm{FIT} * \mathrm{p})\}=$
EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =
where WCLTD=(ln 147) and WACC $=(\ln 150)$
and FIT, SIT \& $p$ are as given in Note O .
GRCF=1 / (1-T) = (from In 109)
Amortized Investment Tax Credit (enter negative)
ncome Tax Calculation
ITC adjustment
TOTAL INCOME TAXES
RETURN ON RATE BASE (Rate Base*WACC)
INTEREST ON IPP CONTRIBUTION FOR CONST. (Note E) (Worksheet E, In 2)
REVENUE REQUIREMENT BEFORE TEXAS GROSS MARGIN TAX (sum Ins 93, 99, 107, 117, 118, 119)

TEXAS GROSS MARGIN TAX (Note P) (Worksheet K)
REVENUE REQUIREMENT INCLUDING GROSS MARGIN TAX

PUBLIC SERVICE COMPANY OF OKLAHOMA
(2)

## Data Sources (See "General Notes")

(4)

Allocator
(5)

### 321.112.b

(Note I) 321.84-92.b
(Note J) 321.96.b
(Ins 76-77-78-79)

### 323.197.b (Note K)

### 323.185.b <br> 323.189.b

323.191.b
323.192.b
(ln 81 - sum In 82 to In 85)
(In 82)
Worksheet J In 20.(E) (Note L)
Worksheet J In 34.(E) (Note L)
Worksheet J In 43.(E) (Note L)
Worksheet J In 10.C (Note M)
(sum Ins 86 to 90 less $\ln 91$ )
(ln $80+\ln 92)$
(3)

TO Total

(sum Ins 95 to 98)
(Note N)

| Worksheet L, Col. D | 4,754,650 | W/S | 0.10128 | 481,569 |
| :---: | :---: | :---: | :---: | :---: |
| Worksheet L, Col. C | 32,133,476 | GP(h) | 0.16773 | 5,389,628 |
| Worksheet L, Col. F | 168,591 | NA | 0.00000 | - |
| Worksheet L, Col. E | 150,218 | GP(h) | 0.16773 | 25,196 |
| (sum Ins 102 to 106) | 37,206,935 |  |  | 5,896,392 |
| (Note O) |  |  |  |  |
|  | 38.56\% |  |  |  |
|  | 42.11\% |  |  |  |
| (FF1 p.114, In 19.c) | $\begin{gathered} 1.6276 \\ (1,868,433) \end{gathered}$ |  |  |  |
| $\begin{aligned} & (\ln 110 * \ln 118) \\ & (\ln 113 * \ln 114) \end{aligned}$ | $\begin{aligned} & 68,371,888 \\ & (3,040,985) \end{aligned}$ | $N P(h)$ | 0.19106 | $\begin{array}{r} 14,394,598 \\ (581,015) \end{array}$ |
| (sum Ins 115 to 116) | 65,330,903 |  |  | 13,813,583 |
| $(\ln 75 * \ln 150)$ | 162,372,451 |  |  | 34,184,900 |
|  | 32,510 | DA | 1.00000 | 32,510 |
|  | 373,885,053 |  |  | 91,596,170 |

## 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
PUBLIC SERVICE COMPANY OF OKLAHOMA
SUPPORTING CALCULATIONS


## PUBLIC SERVICE COMPANY OF OKLAHOMA

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.

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. made contributions toward the construction of System upgrades, and includes accrued interest and unreturned balance of contributions. The annual interes expense is included on line 119

I Removes the expense booked to transmission accounts included in the development of OATT ancillary services rates, including all of Account No. 561.
hese expense items. Acct $9 \& 8$ accounts will be included in the cost of service only to the extent they are directy assignable to解 expenses incurred by the transmission function for Associated Business Development revenues given as a credit to the TCOS on Worksheet E.

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 109) multiplied by (1/1-T). If the applicable tax rates are zero enter 0.
$\begin{array}{ll}\text { Inputs Required: } & \text { FIT }= \\ \text { SIT } & 35.00 \%\end{array}$

| SIT= | $35.00 \%$ | (State Income Tax Rate or Composite SIT. Worksheet K)) |
| :--- | ---: | :--- |
| $\mathrm{p}=$ | $5.47 \%$ | (tare |
|  | $0.00 \%$ | (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.

T Long Term Debt cost rate $=$ long-term interest ( $\ln 138$ ) / long term debt (ln 147). Preferred Stock cost rate $=$ preferred dividends (In 139) / preferred outstanding (In 148). Common Stock cost rate $($ ROE $)=11.2 \%$, the rate accepted by FERC in Docket No. ER07-XXX. It includes an additional 50 basis points for remaining a member of the SPP RTO.
 can only be changed via an approved 205 or 206 filing.



|  | AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances <br> PUBLIC SERVICE COMPANY OF OKLAHOMA |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) |  |  | (5) |
|  | EXPENSE, TAXES, RETURN \& REVENUE REQUIREMENTS CALCULATION | Data Sources <br> (See "General Notes") | TO Total |  |  | Total Transmission |
| Line $\mathrm{No}$. OPERATION \& MAINTENANCE EXPENSE |  |  |  |  |  |  |
| 227 | Transmission | 321.112.b | 100,058,261 |  |  |  |
| 228 | Less: Total Account 561 | (Note I) 321.84-92.b | 15,009,855 |  |  |  |
| 229 | Less: Account 565 | (Note J) 321.96.b | 69,109,539 |  |  |  |
| 230 | Less: expenses 100\% assigned to TO billed customers (Worksheet I, In 14) |  | - |  |  |  |
| 231 | Total O\&M Allocable to Transmission | (Ins 227-228-229-230) | 15,938,867 | TP | 0.93388 | 14,884,935 |
| 232 | Administrative and General | 323.197.b (Note K) | 56,457,051 |  |  |  |
| 233 | Less: Acct. 924, Property Insurance | 323.185.b | 1,754,843 |  |  |  |
| 234 | Acct. 928, Reg. Com. Exp. | 323.189.b | 4,155,085 |  |  |  |
| 235 | Acct. 930.1, Gen. Advert. Exp. | 323.191.b | 242,278 |  |  |  |
| 236 | Acct. 930.2, Misc. Gen. Exp. | 323.192.b | 1,872,537 |  |  |  |
| 237 | Balance of A \& G | (In 232 - sum In 233 to In 236) | 48,432,308 | W/S | 0.10103 | 4,892,995 |
| 238 | Plus: Acct. 924, Property Insurance | (ln 233) | 1,754,843 | GP(h) | 0.16773 | 294,333 |
| 239 | Acct. 928 - Transmission Specific | Worksheet J In 20.(E) (Note L) |  | TP | 0.93388 |  |
| 240 | Acct 930.1- Only safety related ads -Direct | Worksheet J In 34.(E) (Note L) | - | TP | 0.93388 | - |
| 241 | Acct 930.2 - Misc Gen. Exp. - Trans | Worksheet J In 43.(E) (Note L) | 236,964 | DA | 1.00000 | 236,964 |
| 242 | Less: PBOP Expense In Acct. 926 Adjustment | Worksheet J In 10.C (Note M) | $(12,569,252)$ | W/S | 0.10103 | $(1,269,840)$ |
| 243 | A \& G Subtotal | (sum Ins 237 to 241 less In 242) | 62,993,367 |  |  | 6,694,133 |
| 244 | TOTAL O \& M EXPENSE | $(\ln 231+\ln 243)$ | 78,932,234 |  |  | 21,579,067 |
| 245 | DEPRECIATION AND AMORTIZATION EXPENSE |  |  |  |  |  |
| 246 | Transmission | 336.7.f | 15,385,707 | TP | 0.93388 | 14,368,351 |
| 247 | Plus: Transmission Plant-in-Service Additions (Worksheet B) |  | N/A |  |  | N/A |
| 248 | General | 336.10.f | 4,524,493 | W/S | 0.10103 | 457,098 |
| 249 | Intangible | 336.1.f | 9,932,523 | W/S | 0.10103 | 1,003,458 |
| 250 | TOTAL DEPRECIATION AND AMORTIZATION | (sum Ins 246 to 249) | 29,842,723 |  |  | 15,828,908 |
| 251 | TAXES OTHER THAN INCOME | (Note N) |  |  |  |  |
| 252 | Labor Related |  |  |  |  |  |
| 253 | Payroll | Worksheet L, Col. D | 4,754,650 | W/S | 0.10103 | 480,350 |
| 254 | Plant Related |  |  |  |  |  |
| 255 | Property | Worksheet L, Col. C | 32,133,476 | GP(h) | 0.16773 | 5,389,628 |
| 256 | Gross Receipts/Sales \& Use | Worksheet L, Col. F | 168,591 | NA | 0.00000 | - |
| 257 | Other | Worksheet L, Col. E | 150,218 | GP(h) | 0.16773 | 25,196 |
| 258 | TOTAL OTHER TAXES | (sum Ins 253 to 257) | 37,206,935 |  |  | 5,895,174 |
| 259 | INCOME TAXES | (Note O) |  |  |  |  |
| 260 | $\mathrm{T}=1-\{[(1-\mathrm{SIT}) *(1-\mathrm{FIT})] /(1-\mathrm{SIT} * \mathrm{FIT} * \mathrm{p})\}=$$\mathrm{EIT}=(\mathrm{T} /(1-\mathrm{T}))^{*}(1-(\mathrm{WCLTD} / \mathrm{WACC}))=$ |  | 38.56\% |  |  |  |
| 261 |  |  | 42.11\% |  |  |  |
| 262 | where WCLTD $=(\ln 298)$ and WACC $=(\ln 301)$ |  |  |  |  |  |
| 263 | and FIT, SIT \& p are as given in Note O. |  |  |  |  |  |
| 264 | GRCF $=1 /(1-\mathrm{T})=($ from In 260)Amortized Investment Tax Credit (enter negative) | (FF1 p.114, In 19.c) | 1.6276 |  |  |  |
| 265 |  |  | $(1,868,433)$ |  |  |  |
| 266 | Income Tax Calculation | $(\ln 261 * \ln 269)$ | 68,362,821 |  |  | 13,913,648 |
| 267 | ITC adjustment | (ln 264 * $\ln 265)$ | $(3,040,985)$ | NP(h) | 0.19106 | $(581,015)$ |
| 268 | TOTAL INCOME TAXES | (sum Ins 266 to 267) | 65,321,836 |  |  | 13,332,633 |
| 269 | RETURN ON RATE BASE (Rate Base*WACC) | $(\ln 226$ * $\ln 301)$ | 162,350,919 |  |  | 33,042,720 |
| 270 | INTEREST ON IPP CONTRIBUTION FOR CONST. (Note E) (Worksheet E, In 2) |  | 32,510 | DA | 1.00000 | 32,510 |
| 271 | REVENUE REQUIREMENT BEFORE TEXAS GROSS MARGIN TAX (sum Ins 244, 250, 258, 268, 269, 270) |  | 373,687,156 |  |  | 89,711,012 |
| 272 |  |  |  |  |  |  |
| 273 | TEXAS GROSS MARGIN TAX (Note P) (Worksheet K) |  | - | DA |  | - |
| 274 | REVENUE REQUIREMENT INCLUDING GROSS MARGIN TAX |  | 373,687,156 |  |  | 89,711,012 |

## AEP West SPP Member Companies

Transmission Cost of Service Formula Rate
Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances
PUBLIC SERVICE COMPANY OF OKLAHOMA

## SUPPORTING CALCULATIONS

| In |
| :---: |
| No. |
| 275 |
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| 302 |



| WAGES \& SALARY ALLOCATOR (W/S) | (Note S) |
| :--- | :--- |
| Production | $354.20 . \mathrm{b}$ |
| Transmission | $354.21 . \mathrm{b}$ |
| Regional Market Expenses | $354.22 . \mathrm{b}$ |
| Distribution | $354.23 . \mathrm{b}$ |
| Other (Excludes A\&G) | $354.24,25,26 . \mathrm{b}$ |
| Total | (sum Ins 281 to 285) |


|  | Payroll Billed from |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Direct Payroll | AEP Service Corp. | Total |  |  |
| $25,536,755$ | $10,291,839$ | $35,828,594$ | NA |  |
| $3,780,846$ | $4,481,855$ | $8,262,701$ | TP |  |
| 0 | 0 | - | NA |  |
| $18,659,637$ | $1,645,866$ | $20,305,503$ | NA |  |
| $6,307,209$ | $5,674,627$ | $11,981,836$ | NA |  |
| $54,284,447$ | $22,094,187$ | $76,378,634$ |  |  |

ransmission related amoun

WEIGHTED AVERAGE COST OF CAPITAL (WACC)

Development of Common Stock:

Long Term Debt (Worksheet M, In. 18, col. (B))
Preferred Stock (Worksheet M, In. 22, col. (B))
Common Stock (In 296) (Note U)
Total (sum Ins 298 to 300)
2,409,365,398
Long Term Interest (Worksheet M, In. 18, col. (D))
Preferred Stock Dividends (Worksheet M, In. 22, col. (D))

| Proprietary Capital (112.16.c) |  |  |
| :---: | :---: | :---: |
| Less Preferred Stock (In 299) |  |  |
| Less Account 216.1 (112.12.c) |  |  |
| Less Account 219.1 (112.15.c) |  |  |
| Common Stock (In 292 - In 293 - In 294 - In 295) |  |  |
|  | Capital Structure | rcentages |
| \$ | Actual | Cap Limit |
| 1,293,562,544 | 53.69\% | 0.00\% |
| - | 0.00\% | 0.00\% |
| 1,115,802,854 | 46.31\% | 0.00\% |

Capital Structure Equity Limit (Note U)

# AEP West SPP Member Companies <br> Transmission Cost of Service Formula Rate <br> Utilizing Historic Cost Data for 2015 with Year-End Rate Base Balances <br> PUBLIC SERVICE COMPANY OF OKLAHOMA 

Letter
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 166 shows the incremental ARR for of the projected revenue requirement for each project, based on an FCR rate caclulated from inputs on this TCOS. Line 166 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 231.
H Consistent with Paragraph 657 of Order 2003-A, the amount on line 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 270.
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 This line complies with FERC requirement that Other Post Employment Benefits remain constant from an initial test year. Changes in this base amount can only occur via approval of a 205 filing.

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 $\mathrm{p}=$
"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 260) multiplied by (1/1-T). If the applicable tax rates are zero enter 0 .

Inputs Required: $\quad$ FIT $=\quad 35.00 \%$

| SIT $=$ | $5.47 \%$ | (State Income Tax Rate or Composite SIT. Worksheet K)) |
| :--- | ---: | :--- |
| $\mathrm{p}=$ | $0.00 \%$ | (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 Long Term Debt cost rate = long-term interest (ln 289) / long term debt (In 298). Preferred Stock cost rate = preferred dividends (In 290) / preferred outstanding (In 299). Common Stock cost rate $($ ROE $)=11.2 \%$, the rate accepted by FERC in Docket No. ER07-XXX. It includes an additional 50 basis points for remaining a member of the SPP RTO.
 After this date it can only be changed 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

## PUBLIC SERVICE COMPANY OF OKLAHOMA

| Line No. | REVENUE REQUIREMENT (w/o incentives) | (In 107) | Total |  |  | Transmission Amount |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  | \$91,021,133 |  |
|  |  |  |  | Allocator |  |  |  |
| 2 | REVENUE CREDITS | (Note A) |  |  |  |  |  |
| 3 | Transmission Credits | (Worksheet H) | 6,621,737 | DA | 1.00000 | \$ | 6,621,737 |
| 4 | Assoc. Business Development | (Worksheet H) | 196,537 | DA | 1.00000 | \$ | 196,537 |
| 5 | Total Revenue Credits |  | 6,818,274 |  |  | \$ | 6,818,274 |
| 6 | REVENUE REQUIREMENT For All Company Facilities | ( In 1 less $\ln 5$ ) |  |  |  |  | \$84,202,859 |
| MEMO: The Carrying Charge Calculations on lines 9 to 14 below is used in calculating project revenue requirements billed on SPP Schedule 11. The total non-incentive revenue requirements for these projects shown on line 7 is included in the total on line 6. | The Carrying Charge Calculations on lines 9 to 14 below is used in calculating project revenue requirements billed on SPP Schedule 11. The total non-incentive revenue requirements for these projects shown on line 7 is included in the total on line 6. |  |  |  |  |  |  |
| 7 |  |  | 7,037,772 | DA | 1.00000 | \$ | 7,037,772 |
| Trued-Up Revenue Requirement for SPP BPU Regional Facilities (w/o incentives) (Worksheet G) |  |  |  |  |  |  |  |
| 8 | NET PLANT CARRYING CHARGE (w/o incentives) (Note B) |  |  |  |  |  |  |
| 9 | Annual Rate | ( $\mathrm{ln} 1 / \mathrm{ln} 39 \times 100 \%$ ) |  |  |  |  | 16.20\% |
| 10 | Monthly Rate | ( $\mathrm{l} 9 / 12$ ) |  |  |  |  | 1.35\% |
| 11 | NET PLANT CARRYING CHARGE ON LINE 9 , W/O DEPRECIATION (w/o incentives) (Note B) |  |  |  |  |  |  |
| 12 | Annual Rate | ( ( $\ln 1-\ln 83) / \mathrm{ln} 39 \times 100 \%)$ |  |  |  |  | 13.64\% |
| 13 | NET PLANT CARRYING CHARGE ON LINE 11, W/O INCOME TAXES, RETURN (Note B) |  |  |  |  |  |  |
| 14 | Annual Rate | ( ( $\ln 1-\ln 83-\ln 104-\ln 105) / \mathrm{ln} 39 \times 100 \%)$ |  |  |  |  | 5.15\% |
| 15 | ADDITIONAL REVENUE REQUIREMENT for projects w | centive ROE's (Note C) (Worksheet G) |  |  |  |  |  |


|  | AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PUBLIC SERVICE COMPANY OF OKLAHOMA |  |  |  |  |  |
|  | (1) | (2) | (3) |  |  | (5) |
|  | RATE BASE CALCULATION | Data Sources (See "General Notes") | TO Total |  |  | $\begin{array}{c}\text { Total } \\ \text { Transmission }\end{array}$ |
| Line No. | GROSS PLANT IN SERVICE |  | NOTED |  |  |  |
| 16 | Production | (Worksheet A In 1.E) | 1,456,355,647 | NA | 0.00000 |  |
| 17 | Less: Production ARO (Enter Negative) | (Worksheet A In 2.E) | (31,179,794) | NA | 0.00000 |  |
| 18 | Transmission | (Worksheet A In 3.E \& Ln 114) | 802,170,437 | DA |  | 748,310,251 |
| 19 | Less: Transmission ARO (Enter Negative) | (Worksheet A In 4.E) |  | TP | 0.93286 |  |
| 20 | Distribution | (Worksheet A In 5.E) | 2,143,246,717 | NA | 0.00000 |  |
| 21 | Less: Distribution ARO (Enter Negative) | (Worksheet A In 6.E) |  | NA | 0.00000 |  |
| 22 | General Plant | (Worksheet A In 7.E) | 160,710,492 | w/s | 0.10092 | 16,218,453 |
| 23 | Less: General Plant ARO (Enter Negative) | (Worksheet A In 8.E) | $(536,044)$ | w/s | 0.10092 | $(54,096)$ |
| 24 | Intangible Plant | (Worksheet A In 9.E) | 44,448,977 | W/S | 0.10092 | 4,485,666 |
| 25 | TOTAL GROSS PLANT | (sum Ins 16 to 24) | 4,575,216,431 | $\begin{array}{r} \text { GP(TU)}= \\ \text { GTD }= \end{array}$ | $\begin{gathered} 0.16807 \\ 0.27235 \end{gathered}$ | 768,960,274 |
| 26 | ACCUMULATED DEPRECIATION AND AMORTIZATION |  |  |  |  |  |
| 27 | Production | (Worksheet A In 12.E) | 751,534,285 | NA | 0.00000 |  |
| 28 | Less: Production ARO (Enter Negative) | (Worksheet $\mathrm{A} \ln 13 . \mathrm{E}$ ) | $(4,345,834)$ | NA | 0.00000 |  |
| 29 | Transmission | (Worksheet A In 14.E \& 28.E) | 205,502,361 | TP1= | 0.90703 | 186,397,551 |
| 30 | Less: Transmission ARO (Enter Negative) | (Worksheet A In 15.E) |  | TP1= | 0.90703 |  |
| 31 | Distribution | (Worksheet A In 16.E) | 538,492,118 | NA | 0.00000 |  |
| 32 | Less: Distribution ARO (Enter Negative) | (Worksheet A In 17.E) |  | NA | 0.00000 |  |
| 33 | General Plant | (Worksheet A In 18.E) | 73,098,015 | w/s | 0.10092 | 7,376,847 |
| 34 | Less: General Plant ARO (Enter Negative) | (Worksheet A In 19.E) | $(382,999)$ | w/s | 0.10092 | $(38,651)$ |
| 35 | Intangible Plant | ( Worksheet A In 20.E) | 26,669,662 | w/s | 0.10092 | 2,691,428 |
| 36 | TOTAL ACCUMULATED DEPRECIATION | (sum Ins 27 to 35) | 1,590,567,606 |  |  | 196,427,174 |
| 37 | NET PLANT IN SERVICE |  |  |  |  |  |
| 38 | Production | (ln $16+\ln 17-\ln 27-\ln 28)$ | 677,987,403 |  |  |  |
| 39 | Transmission | (ln $18+\ln 19-\ln 29-\ln 30)$ | 596,668,076 |  |  | 561,912,700 |
| 40 | Distribution | (ln $20+\ln 21-\ln 31-\ln 32)$ | 1,604,754,599 |  |  |  |
| 41 | General Plant | (ln $22+\ln 23-\ln 33-\ln 34)$ | 87,459,432 |  |  | 8,826,161 |
| 42 | Intangible Plant | ( $\ln 24-\ln 35$ ) | 17,779,316 |  |  | 1,794,239 |
| 43 | TOTAL NET PLANT IN SERVICE | (sum Ins 38 to 42) | 2,984,648,825 | NP(TU)= | 0.19183 | 572,533,099 |
| 44 | DEFERRED TAX ADJustments to rate base | (Note E) |  |  |  |  |
| 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) | $(831,871,937)$ | DA |  | $(142,034,553)$ |
| 47 | Account No. 283.1 (enter negative) | (Worksheet C, In 16.C \& Ln 18.J) | (211,094,715) | DA |  | $(30,514,437)$ |
| 48 | Account No. 190.1 | (Worksheet C, In 25.C \& Ln 27.J) | 112,028,116 | DA |  | 9,328,035 |
| 49 | Account No. 255 (enter negative) | (Worksheet C, In 34.C \& Ln 36.J) | $(81,692)$ | DA |  | (13,730) |
| 50 | TOTAL ADJUSTMENTS | (sum Ins 45 to 49) | (931,020,227) |  |  | (163,234,685) |
| 51 | PLANT HELD FOR FUTURE USE | (Worksheet A In 29.E \& In 30.E) | 230,714 | DA |  |  |
| 52 | WORKING CAPITAL | (Note F) |  |  |  |  |
| 53 | Cash Working Capital | (1/8* $\ln 68$ ) (Note G) | 1,992,358 |  |  | 1,858,585 |
| 54 | Transmission Materials \& Supplies | (Worksheet D, In 2.(F)) | 756,978 | TP | 0.93286 | 706,152 |
| 55 | A\&G Materials \& Supplies | (Worksheet D, in 3.(F)) | 256,085 | W/S | 0.10092 | 25,843 |
| 56 | Stores Expense | (Worksheet D, In 4.(F)) |  | GP(TU) | 0.16807 |  |
| 57 | Prepayments (Account 165) - Labor Allocated | (Worksheet D, in 7.G) | 103,257,425 | W/S | 0.10092 | 10,420,450 |
| 58 | Prepayments (Account 165) - Gross Plant | (Worksheet D, In 7.F) | 3,314,147 | GP(TU) | 0.16807 | 557,011 |
| 59 | Prepayments (Account 165) - Transmission Only | (Worksheet D, In 7.E) |  | DA | 1.00000 |  |
| 60 | Prepayments (Account 165) - Unallocable | (Worksheet D, In 7. ${ }^{\text {( }}$ ) | $(100,950,103)$ | NA | 0.00000 |  |
| 61 | TOTAL WORKING CAPITAL | (sum Ins 53 to 60) | 8,626,890 |  |  | 13,568,042 |
| 62 | IPP CONTRIBUTIONS FOR CONSTRUCTION | (Note H) (Worksheet E, In 8.(B)) | $(1,055,633)$ | DA | 1.00000 | $(1,055,633)$ |
| 63 | RATE BASE (sum Ins 43, 50, 51, 61, 62) |  | 2,061,430,568 |  |  | 421,810,823 |

## AEP West SPP Member Companies <br> Transmission Cost of Service Formula Rate

Utilizing Actual Cost Data for 2015 with Average Ratebase Balances
PUBLIC SERVICE COMPANY OF OKLAHOMA
(1)

EXPENSE, TAXES, RETURN \& REVENUE REQUIREMENTS CALCULATION
(2)

Data Sources
(See "General Notes") TO Total
(4)

Allocator

OPERATION \& MAINTENANCE EXPENSE Transmission
Less: Total Account 561
Less: Account 565
$\begin{array}{lr}\text { 321.112.b } & 100,058,261 \\ \text { (Note I) 321.84-92.b } & 15,009,855 \\ \text { (Note J) 321.96.b } & 69,109,539\end{array}$

## Less: expenses



Total O\&M Allocable to Transmission
(Ins 64-65-66-67)
Administrative and General
Less: Acct. 924, Property Insurance
323.197.b (Note K)
$\begin{array}{r}\$ 0 \\ \hline 15,938,867\end{array}$
323.185.b Acct. 928, Reg. Com. Exp. Acct. 930.1, Gen. Advert. Exp
Acct. 930.2, Misc. Gen. Exp. Acct. 930.2 ,
ance of A \& G
Plus: Acct. 924, Property Insurance
Acct. 928 - Transmission Specific
Acct 930.1 - Only safety related ads -Direct Acct 930.2 - Misc Gen. Exp. - Trans
Less: PBOP Expense In Acct. 926 Adjustment A \& G Subtotal
323.191.b
323.192.b
(ln 69 - sum $\ln 70$ to $\ln 73$ )
( $\ln 70$ )
(Note I) 321.84-92.b
(Note J) 321.96.b
Worksheet J In 43.(E) (Note L)
Worksheet J In 10.C (Note M)
(sum Ins 74 to 78 less In 79)
TOTAL O \& M EXPENSE
$(\ln 68+\ln 80)$


DEPRECIATION AND AMORTIZATION EXPENSE Transmission
General
Intangible
TOTAL DEPRECIATION AND AMORTIZATION
TAXES OTHER THAN INCOME
Labor Related
Payroll
Property
Property
Gross Receipts/Sales \& Use
Other
INCOME TAXES
336.7.f
336.10.f
336.1.f
(sum Ins 83 to 85)
(Note N)

Worksheet L, Col. C
Worksheet L, Col. E
(sum Ins 89 to 93 )
$\mathrm{T}=1-\{[(1-\mathrm{SIT})$ * $(1-\mathrm{FIT})] /(1-\mathrm{SIT}$ * FIT * p$)\}=$
EIT=(T/(1-T)) * (1-(WCLTD/WACC)) =
(Note O)
38.56\%
where WCLTD $=(\ln 134)$ and WACC $=(\ln 137)$
and FIT, SIT \& p are as given in Note O .
GRCF $=1 /(1-\mathrm{T})=($ from $\ln 96)$
Amortized Investment Tax Credit (enter negative)
(FF1 p.114, In 19.c)
1.6276

Income Tax Calculation (ln 97 * $\ln 105)$
ITC adjustment
TOTAL INCOME TAXES
$(\ln 100 * \ln 101)$
(sum Ins 102 to 103)
RETURN ON RATE BASE (Rate Base*WACC)
( In 63 * $\ln$ 137)
INTEREST ON IPP CONTRIBUTION FOR CONST. (Note E) (Worksheet E, In 2)
REVENUE REQUIREMENT BEFORE TEXAS GROSS MARGIN TAX
$(1,868,433)$
$\begin{array}{r}69,233,506 \\ (3,040,985) \\ \hline\end{array}$
$\frac{(3,040,985)}{66,192,521}$
166,802,912
TP
0.93286

14,868,683
GP(TU)
TP
GP(TU)
DA
W/S
0.10092
0.16807
0.93286
0.16007
1.0000
0.10092

## $\begin{array}{r}15,385,707 \\ 4,524,493 \\ 9,932,523 \\ \hline 29,842,723\end{array}$

| $4,754,650$ |
| ---: |
| $32,133,476$ |
| 168,591 |
| 150,218 |
| $37,206,935$ |


| $38.56 \%$ |
| ---: |
| $41.51 \%$ |
| 1.6276 |
| $(1,868,433)$ |
| $69,233,506$ |
| $(3,040,985)$ |
| $66,192,521$ |
| $166,802,912$ |
| 32,510 |
| $379,009,835$ |


|  | $21,556,691$ <br> 0.93286 <br> 0.10092 |
| :--- | ---: |
| 0.10092 | $14,352,663$ |
|  | 456,599 |
|  | $1,002,362$ |
| 0.10092 | $15,81,625$ |
| 0.16807 | 479,826 |
| 0.00000 | $5,400,699$ |
| 0.16807 | 25,247 |
|  |  |
|  | $5,905,772$ |


| W/S | 0.10092 | 479,826 |
| :---: | ---: | ---: |
|  |  |  |
| GP(TU) | 0.16807 | $5,400,699$ |
| NA | 0.00000 | - |
| GP(TU) | 0.16807 | 25,247 |
|  |  | $5,905,772$ |

(sum Ins 81, 86, 94, 104, 105, 106)
379,009,835
1.00000
0.19183

| $14,166,590$ |
| ---: |
| $(583,340)$ |
| $13,583,250$ |
| $34,131,285$ |
| 32,510 |
| $91,021,133$ |

91,021,133

TEXAS GROSS MARGIN TAX (Note P) (Worksheet K)
DA
REVENUE REQUIREMENT INCLUDING GROSS MARGIN TAX

## AEP West SPP Member Companies

Transmission Cost of Service Formula Rate
Utilizing Actual Cost Data for 2015 with Average Ratebase Balances
PUBLIC SERVICE COMPANY OF OKLAHOMA
SUPPORTING CALCULATIONS

| In |
| :---: |
| No. |
| 111 |
| 112 |
| 113 |
| 114 |

[^0]| (Note S) |  | Direct Payroll | Payroll Billed from AEP Service Corp. | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 354.20.b |  | 25,536,755 | 10,291,839 | 35,828,594 | NA |
| 354.21.b |  | 3,780,846 | 4,481,855 | 8,262,701 | TP |
| 354.22.b |  | 0 | 0 | - | NA |
| 354.23.b |  | 18,659,637 | 1,645,866 | 20,305,503 | NA |
|  | 0 | 6,307,209 | 5,674,627 | 11,981,836 | NA |
| (sum Ins 117 to 121) |  | 54,284,447 | 22,094,187 | 76,378,634 |  |


| 0.00000 | $\overline{-}$ |
| ---: | ---: |
| 0.93286 | $7,707,918$ |
| 0.00000 | - |
| 0.00000 | - |
| 0.00000 | $7,707,918$ |

Transmission related amount

|  |  |  | W/S= | 0.10092 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | \$ |
| Long Term Interest (Worksheet N, In. 19, col. (E)) |  |  |  | 61,327,406 |
| Preferred Stock Dividends (Worksheet $\mathrm{N}, \mathrm{In} .47$, col. (E)) |  |  |  | Average |
|  |  |  |  | Average |
| (Worksheet N, In. 1, col. (E)) |  |  |  | 1,074,100,599 |
| (Worksheet $\mathrm{N}, \mathrm{ln} .2, \mathrm{col} .(\mathrm{E})$ ) |  |  |  | - |
| (Worksheet N, In. 3, col. (E)) |  |  |  | - |
| (Worksheet $\mathrm{N}, \mathrm{In} .4, \mathrm{col}$. (E)) |  |  |  | 4,563,327 |
| $(\ln 128-\ln 129-\ln 130-\ln 131)$ |  |  |  | 1,069,537,272 |
|  | Capital Structure Percentages |  | $\begin{gathered} \text { Cost } \\ (\text { Note S) } \end{gathered}$ |  |
| 2015 Avg Balances | Actual | Cap Limit |  | Weighted |
| 1,168,776,136 | 52.22\% | 0.00\% | 5.25\% | 0.0274 |
| - | 0.00\% | 0.00\% | 0.00\% | 0.0000 |
| 1,069,537,272 | 47.78\% | 0.00\% | 11.20\% | 0.0535 |
| 2,238,313,408 |  |  | WACC= | 0.0809 |

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

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 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 106.

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.

This line complies with FERC requirement that Other Post Employment Benefits remain constant from an initial test year. Changes in this base amount can only occur via approval of a 205 filing.

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 96) multiplied by (1/1-T). If the applicable tax rates are zero enter 0 .
Inputs Required: FIT =
35.00\%

| SIT $=$ | $35.00 \%$ |
| :--- | :--- |
| $=$ | $5.47 \%$ (State Income Tax Rate or Composite SIT. Worksheet K) |

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 Long Term Debt cost rate $=$ long-term interest (ln 125) / long term debt (In 134). Preferred Stock cost rate $=$ preferred dividends (In 126) / preferred outstanding (In 135). Common Stock cost rate (ROE) $=11.2 \%$, the rate accepted by FERC in Docket No. ERO7-XXX. It includes an additional 50 basis points for remaining a member of the SPP RTO.
 can only be changed via an approved 205 or 206 filing.

AEP West SPP Member Companies
Page: 23 of 69
2016 Cost of Service Formula Rate
Worksheet A - Detail Plant Balances
PUBLIC SERVICE COMPANY OF OKLAHOMA

|  | (A) | (B) | (C) | (D) | (E) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line |  |  | Balances @ | Balances | Average Balance for |
| Number | Rate Base Item \& Supporting Balance | Source of Data | 12/31/2015 | 12/31/2014 | 2015 |

NOTE: Functional ARO investment and accumulated depreciation balances shown below are included in the total functional balances shown here.

| Plant Investment Balances |  |
| :--- | :--- |
| 1 | Production Plant In Service |
| 2 | Production Asset Retirement Obligation (ARO) |
| 3 | Transmission Plant In Service |
| 4 | Transmission Asset Retirement Obligation |
| 5 | Distribution Plant In Service |
| 6 | General Plant In Service |
| 7 | General Asset Retirement Obligation |
| 9 | Intangible Plant In Service |
| 10 | Total Property Investment Balance |
| 11 | Total ARO Balance (included in total on line 10) |

FF1, page 205 Col.(g) \& pg. 204 Col. (b), In 46
FF1, page $205 \& 204$, Col.(g)\&(b), Ins 15,24,34,44
FF1, page 207 Col.(g) \& pg. 206 Col. (b), In 58
FF1, page 207 Col.(g) \& pg. 206 Col. (b), In 57
FF1, page 207 Col.(g) \& pg. 206 Col. (b), In 75
FF1, page 207 Col.(g) \& pg. 206 Col. (b), In 74
FF1, page 207 Col.(g) \& pg. 206 Col. (b), In 99
FF1, page 207 Col.(g) \& pg. 206 Col. (b), In 98
FF1, page 205 Col.(g) \& pg. 204 Col. (b), In 5
(Sum of Lines: 1, 3, 5, 7, 9)
(Sum of Lines: 2, 4, 6, 8)

| 1,475,502,682 | 1,437,208,612 | 1,456,355,647 |
| :---: | :---: | :---: |
| 34,973,963 | 27,385,625 | 31,179,794 |
| 815,430,062 | 788,910,811 | 802,170,437 |
| - | - | - |
| 2,206,508,992 | 2,079,984,442 | 2,143,246,717 |
| - | - | - |
| 157,148,220 | 164,272,763 | 160,710,492 |
| 518,435 | 553,653 | 536,044 |
| 38,844,829 | 50,053,125 | 44,448,977 |
| 4,693,434,785 | 4,520,429,753 | 4,606,932,269 |
| 35,492,398 | 27,939,278 | 31,715,838 |


| Accumulated Depreciation \& Amortization Balances |  |
| :---: | :--- |
| 12 | Production Accumulated Depreciation |
| 13 | Production ARO Accumulated Depreciation |
| 14 | Transmission Accumulated Depreciation |
| 15 | Transmission ARO Accumulated Depreciation |
| 16 | Distribution Accumulated Depreciation |
| 17 | Distribution ARO Accumulated Depreciation |
| 18 | General Accumulated Depreciation |
| 19 | General ARO Accumulated Depreciation |
| 20 | Intangible Accumulated Amortization |
| 21 | Total Accumulated Depreciation or Amortization |
| 22 | Total ARO Balance (included in total on line 21) |

FF1, page 219, Ins 20-24, Col. (b)
Company Records

| 759,321,650 | 743,746,919 | 751,534,285 |
| :---: | :---: | :---: |
| 4,972,667 | 3,719,001 | 4,345,834 |
| 208,745,843 | 202,258,878 | 205,502,361 |
| - | - | - |
| 554,330,144 | 522,654,092 | 538,492,118 |
| - | - | - |
| 67,375,992 | 78,820,037 | 73,098,015 |
| 395,275 | 370,722 | 382,999 |
| 21,128,855 | 32,210,468 | 26,669,662 |
| 1,610,902,484 | 1,579,690,394 | 1,595,296,439 |
| 5,367,942 | 4,089,723 | 4,728,833 |

Generation Step-Up Units

| 23 | GSU Investment Amount |
| :--- | :--- |
| 24 | GSU Accumulated Depreciation |
| 25 | GSU Net Balance |

Company Records
25 GSU Accumulate

Transmission Plant Excluded from SPP Tariff (see TCOS Note Q)

| $23 a$ | Excluded Facilities Investment Amount |
| :--- | :--- |
| $24 a$ | Excluded Facilities Accumulated Depreciation |
| $25 a$ | Excluded Facilities Net Balance |

Company Records
Company Records
(Line 23a - Line 24a)

|  |  |  |
| ---: | ---: | ---: |
| $17,998,194$ | $17,880,512$ | $17,939,353$ |
| $3,911,553$ | $3,638,749$ | $3,775,151$ |
| $14,086,641$ | $14,241,763$ | $14,164,202$ |
|  |  |  |
| $35,920,833$ | $35,920,833$ | $35,920,833$ |
| $15,674,141$ | $14,985,176$ | $15,329,659$ |
| $20,246,692$ | $20,935,657$ | $20,591,174$ |
|  |  |  |
| $208,745,843$ | $202,258,878$ | $205,502,361$ |
|  | $18,623,925$ | $19,104,810$ |
| $19,585,694$ | $183,634,953$ | $186,397,551$ |
| $189,160,149$ |  |  |

## Plant Held For Future Use

| 225,408 | 236,021 |
| :---: | :---: |
| - | - |

## AEP West SPP Member Companies

## I. Calculation of Composite Depreciation Rate

| 1 | Transmission Plant @ Beginning of Historic Period (2015) (P.206, In 58,(b)): | $788,910,811$ |
| :--- | :--- | ---: |
| 2 | Transmission Plant @ End of Historic Period (2015) (P.207, In 58,(g)): | $815,430,062$ |
|  |  | $1,604,340,873$ |
| 4 | Average Balance of Transmission Investment | $802,170,437$ |
| 5 | Annual Depreciation Expense, Historic TCOS, In 246 | $15,385,707$ |
| 6 | Composite Depreciation Rate | $1.92 \%$ |
| 7 | Round to 2\% to Reflect a Composite Life of 50 Years | $2.00 \%$ |

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

| 8 | Month in Service | Capitalized Balance |  | Composite Annual Depreciation Rate | Annual Depreciation |  | Monthly Depreciation |  | No. Months Depreciation | First Year Depreciation Expense |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | January | \$ | 873,323 | 2.00\% | \$ | 17,466 | \$ | 1,456 | 11 | \$ | 16,016 |
| 10 | February | \$ | 1,022,209 | 2.00\% | \$ | 20,444 | \$ | 1,704 | 10 | \$ | 17,040 |
| 11 | March | \$ | 4,629,256 | 2.00\% | \$ | 92,585 | \$ | 7,715 | 9 | \$ | 69,435 |
| 12 | April | \$ | 906,628 | 2.00\% | \$ | 18,133 | \$ | 1,511 | 8 | \$ | 12,088 |
| 13 | May | \$ | 873,323 | 2.00\% | \$ | 17,466 | \$ | 1,456 | 7 | \$ | 10,192 |
| 14 | June | \$ | 1,814,694 | 2.00\% | \$ | 36,294 | \$ | 3,024 | 6 | \$ | 18,144 |
| 15 | July | \$ | 873,323 | 2.00\% | \$ | 17,466 | \$ | 1,456 | 5 | \$ | 7,280 |
| 16 | August | \$ | 966,378 | 2.00\% | \$ | 19,328 | \$ | 1,611 | 4 | \$ | 6,444 |
| 17 | September | \$ | 936,489 | 2.00\% | \$ | 18,730 | \$ | 1,561 | 3 | \$ | 4,683 |
| 18 | October | \$ | 1,116,665 | 2.00\% | \$ | 22,333 | \$ | 1,861 | 2 | \$ | 3,722 |
| 19 | November | \$ | 1,351,781 | 2.00\% | \$ | 27,036 | \$ | 2,253 | 1 | \$ | 2,253 |
| 20 | December | \$ | 14,924,509 | 2.00\% | \$ | 298,490 | \$ | 24,874 | 0 | \$ | - |
| 21 | Investment | \$ | 30,288,573 |  |  |  |  | Dep | ciation Expense | \$ | 167,297 |

## III. Plant Transferred

22
23
$24(\operatorname{Ln} 7 * \operatorname{Ln} 22)$

| $\$$ | - | $<==$ This input area is for original cost plant |
| :--- | :--- | :--- |
| $\$$ | - | $<==$ 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. <br> $\$$ |
| $==$ This input area is for additional Depreciation Expense |  |  |

## AEP West SPP Member Companies

| Line No. | (A) Acc. No. | (B) Description | (C) YE Balance | (E) Exclusions * | (F) <br> 100\% <br> Transmission <br> Related | (G) <br> PTD <br> Plant <br> Related | $(\mathrm{H})$ <br>  <br> Distribution <br> Plant Related | (I) <br> Labor <br> Related | (J) Total Included in Rate base $(\mathrm{E})+(\mathrm{F})+(\mathrm{G})+(\mathrm{H})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 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 | $(863,023,268)$ | 15,603,336 | - | $(869,381,067)$ | - | $(9,245,537)$ |  |
| 2 | 282.1 | Transmission Allocator from Historic TCOS [GP or W/S] |  | 0.0000\% | 100.0000\% | 16.7726\% | 26.9837\% | 10.1028\% |  |
| 3 | 282.1 | Allocated Total |  | 0 | 0 | $(145,818,052)$ | 0 | $(934,054)$ | (146,752,106) |
|  |  | 282 Balance to Use in True-Up |  |  |  |  |  |  |  |
| 4 | 282.1 | 2015 Year End Tax Deferrals - WS C-1 | $(863,023,268)$ | 15,603,336 | - | (869,381,067) | - | $(9,245,537)$ |  |
| 5 | 282.1 | 2014 Year End Tax Deferrals - WS C-2 | $(800,720,606)$ | 17,146,475 | - | (811,299,020) | - | $(6,568,061)$ |  |
| 6 |  | Subtotal | (1,663,743,874) | 32,749,812 | - | (1,680,680,088) | - | $(15,813,598)$ |  |
| 7 |  | Average Balance | $(831,871,937)$ | 16,374,906 | 0 | (840,340,044) | 0 | $(7,906,799)$ |  |
| 8 |  | Transmission Allocator from True-Up TCOS [GP or W/S] |  | 0.0000\% | 100.0000\% | 16.8071\% | 27.2345\% | 10.0917\% |  |
| 9 |  | Allocated Total |  | 0 | 0 | $(141,236,621)$ | 0 | $(797,932)$ | (142,034,553) |
|  |  | Account 283 - Form-1 page 276-277, Ln 9, Col (k) |  |  |  |  |  |  |  |
|  |  | 283 Balance to Use in Projection |  |  |  |  |  |  |  |
| 10 | 283.1 | 2015 Year End Tax Deferrals - WS C-1 | (224,981,753) | $(27,169,935)$ | - - | $(165,205,160)$ | $(1,594,919)$ | $(31,011,740)$ |  |
| 11 | 283.1 | Transmission Allocator from Historic TCOS [GP or W/S] |  | 0.0000\% | 100.0000\% | 16.7726\% | 26.9837\% | 10.1028\% |  |
| 12 | 283.1 | Allocated Total |  | 0 | 0 | $(27,709,247)$ | $(430,368)$ | $(3,133,039)$ | (31,272,653) |
|  |  | 283 Balance to Use in True-Up |  |  |  |  |  |  |  |
| 13 | 283.1 | 2015 Year End Tax Deferrals - WS C-1 | $(224,981,753)$ | $(27,169,935)$ | - | $(165,205,160)$ | $(1,594,919)$ | $(31,011,740)$ |  |
| 14 | 283.1 | 2014 Year End Tax Deferrals - WS C-2 | $(197,207,676)$ | $(8,695,658)$ | - | $(156,368,818)$ | $(1,014,363)$ | $(31,128,836)$ |  |
| 15 |  | Subtotal | $(422,189,429)$ | $(35,865,593)$ | - | (321,573,978) | $(2,609,282)$ | $(62,140,576)$ |  |
| 16 |  | Average Balance | $(211,094,715)$ | $(17,932,796)$ | 0 | $(160,786,989)$ | $(1,304,641)$ | $(31,070,288)$ |  |
| 17 |  | Transmission Allocator from True-Up TCOS [GP or W/S] |  | 0.0000\% | 100.0000\% | 16.8071\% | 27.2345\% | 10.0917\% |  |
| 18 |  | Allocated Total |  | 0 | 0 | $(27,023,597)$ | $(355,313)$ | $(3,135,526)$ | $(30,514,437)$ |

## Account 190 - Form-1 page 234, Ln 8, Col. (c)



[^1]
$\qquad$

| Account | Line \# |
| :---: | :---: |
| 2821001 | 210 E |
| 2821001 | 230A |
| 2821001 | 230 G |
| 2821001 | 2301 |
| 2821001 | 2303 |
| 2821001 | 230x |
| 2821001 | 280 H |
| 2821001 | 295A |
| 2821001 | 295 C |
| 2821001 | 320A |
| 2821001 | 380 J |
| 2821001 | 390A |
| 2821001 | 510 H |
| 2821001 | 532A |
| 2821001 | 532 C |
| 2821001 | 532 D |
| 2821001 | 534A |
| 2821001 | 630 R |
| 2821001 | 651A |
| 2821001 | 710 H |
| 2821001 | 710T |
| 2821001 | 7100 |
| 2821001 | 710 V |
| 2821001 | 711 J |
| 2821001 | 711 N |
| 2821001 | 7110 |
| 2821001 | 711R |
| 2821001 | 712K |
| 2821001 | 910K |
| 2821001 | 910N |
| 2821001 | 930A |
| 2821001 | 930 J |
| 2821001 | 9401 960F-Xs |
| 2821001 |  |


| Description | Balance | Allocation Basis | Exclusions | $\begin{gathered} 100 \% \\ \text { Transmission } \\ \hline \end{gathered}$ | PTD Plant | T\&D |  | Labor |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LIBERALIZED DEPR-ELIG DFL | $(186,118,660)$ | PTD |  |  | $(186,118,660)$ |  |  |  |
| ACRS BENEFIT NORMALIZED | $(418,008,327)$ | PTD |  |  | $(418,008,327)$ |  |  |  |
| ACRS-ACCRUED BK REMOVAL COSTS | $(16,947,671)$ | PTD |  |  | (16,947,671) |  |  |  |
| CAPD INTEREST-SECTION 481(a)-CHANGE IN METHD | $(1,257,723)$ | PTD |  |  | $(1,257,723)$ |  |  |  |
| RELOCATION CST-SECTION 481(a)-CHANGE IN METHD | 92,625 | PTD |  |  | 92,625 |  |  |  |
| R \& D DEDUCTION - SEC 174 | $(3,199,785)$ | PTD |  |  | $(3,199,785)$ |  |  |  |
| BK PLANT IN SERVICE - SFAS 143 - ARO | $(7,196,299)$ | E | $(7,196,299)$ |  |  |  |  |  |
| GAIN/LOSS ON ACRS/MACRS PROPERTY | $(16,439,634)$ | PTD |  |  | (16,439,634) |  |  |  |
| GAIN/LOSS-ACRS/MACRS-BK/TX UNIT PROP | 3,128,710 | PTD |  |  | 3,128,710 |  |  |  |
| AbFUDC | $(6,908,733)$ | PTD |  |  | $(6,908,733)$ |  |  |  |
| INT EXP CAPITALIZED FOR TAX | 11,798,702 | PTD |  |  | 11,798,702 |  |  |  |
| CIAC - BOOK RECEIPTS | 15,274,379 | , | 15,274,379 |  |  |  |  |  |
| PROPERTY TAX-NEW METHOD-BOOK | $(66,677)$ | PTD |  |  | $(66,677)$ |  |  |  |
| PERCENT REPAIR ALLOWANCE | $(22,694,348)$ | PTD |  |  | (22,694,348) |  |  |  |
| BOOKITAX UNIT OF PROPERTY ADJ | $(38,777,608)$ | PTD |  |  | $(38,777,608)$ |  |  |  |
| BK/TX UNIT OF PROPERTY ADJ-SEC 481 ADJ | $(22,290,407)$ | PTD |  |  | $(22,290,407)$ |  |  |  |
| CAPITALIZED RELOCATION COSTS | $(14,072,724)$ | PTD |  |  | (14,072,724) |  |  |  |
| ACCRD ENERGY CONSERV EXPEND | $(178,005)$ | PTD |  |  | $(178,005)$ |  |  |  |
| IMPAIRED ASSETS RES-FAS 121-BK | 10,996,441 | E | 10,996,441 |  |  |  |  |  |
| AMORT ELEC PLT ACQ ADJS | 51,037 | E | 51,037 |  |  |  |  |  |
| AMORT CHELSEA MUN AUTH-TX | 31,820 | E | 31,820 |  |  |  |  |  |
| CHELSEA ACQUSITON ADJ-25 YR TX | 134,172 | E | 134,172 |  |  |  |  |  |
| PLANT ACQUSITION ADJ-CSIAP-TX | 150,789 | E | 150,789 |  |  |  |  |  |
| CASUALTY LOSS-STORMS | $(3,658,324)$ | PTD |  |  | $(3,658,324)$ |  |  |  |
| CAPITALIZED SOFTWARE COSTS-TAX | 7,754 | Labor |  |  |  |  |  | 7,754 |
| BOOK LEASES CAPITALIZED FOR TAX | $(1,310,934)$ | PTD |  |  | $(1,310,934)$ |  |  |  |
| CAPITALIZED LEASES - A/C 1011 ASSETS |  | PTD |  |  | 0 |  |  |  |
| CAPITALIZED SOFTWARE COST-BOOK | $(6,575,815)$ | Labor |  |  |  |  |  | (6,575,815) |
| REMOVAL CST | $(82,546,267)$ | PTD |  |  | $(82,546,267)$ |  |  |  |
| ACCRUED BK REMOVAL COST - ACRS | 14,486,761 | PTD |  |  | 14,486,761 |  |  |  |
| BOOK > TAX BASIS-PRTSHP INVEST | $(2,940,256)$ | E | $(2,940,256)$ |  |  |  |  |  |
| PROV FOR WRITEDOWN OF INVEST | 644,392 | E | 644,392 |  |  |  |  |  |
| 1985-1987 IRS AUDIT SETTLEMENT | $(135,065)$ | PTD |  |  | (135,065) |  |  |  |
| EXCESS ADFIT 282 | $(6,194,927)$ | PTD |  |  | (6,194,927) |  |  |  |
| TOTAL ELECTRIC ACCOUNT SUBTOTAL | $(800,720,606)$ |  | 17,146,475 |  | (811,299,020) |  | 0 | (6,568,061) |


| 2831001 | 014A-DSITC |
| :---: | :---: |
| 2831001 | 014C-DSIT |
| 2831001 | 433в |
| 2831001 | 5331 |
| 2831001 | 575 E |
| 2831001 | 576E |
| 2831001 | 605B |
| 2831001 | 605 C |
| 2831001 | 612E |
| 2831001 | 630 J |
| 2831001 | 630M |
| 2831001 | 632 U |
| 2831001 | 638A |
| 2831001 | 660M |
| 2831001 | 660N |
| 2831001 | 660R |
| 2831001 | 661R |
| 2831001 | 6615 |
| 2831001 | $661 T$ |
| 2831001 | 661 V |
| 2831001 | 663 C |
| 2831001 | 665G |
| 2831001 | 667 F |
| 2831001 | 668X |
| 2831001 | 669B |
| 2831001 | 900A |
| 2831001 | 906A |
| 2831001 | 906D |
| 2831001 | 9062 |
| 2831001 | 913Y |
| 2831001 | 960X |


| ADSITC STATE C/F-DEF STATE TAX ASSET-L/T | $(2,081,387)$ | E |
| :---: | :---: | :---: |
| NOL-STATE C/F-DEF STATE TAX ASSET-L/T | $(3,427,453)$ | E |
| INTEREST-FUEL OVER/UNDER RECOVERY | 1,490 | E |
| INDIAN RESERVATION SECTION 481a ADJUSTMENT | $(16,524,283)$ | PTD |
| mTM BK GAIN-A/L-TAX DEFL | 131,988 | E |
| MARK \& SPREAD-DEFL-283-A/L | 39,581 | E |
| ACCRUED bK PENSION EXPENSE | (31,510,648) | Labor |
| ACCRUED BK PENSION COSTS - SFAS 158 | 35,618,186 | E |
| ACCRUED RAIL SETTLEMENT - BNFS | 0 | E |
| DEFD Storm damage | $(2,156,522)$ | PTD |
| RATE CASE DEFD CHGS | (259,657) | PTD |
| BK DEFL-DEMAND SIDE MNGMT EXP | $(3,206,708)$ | PTD |
| BOOK > TAX BASIS - EMA-A/C 283 | 8,024 | E |
| REG ASSET-CARRY COST ON STRANDED COST | 0 | E |
| REG ASSET-DEFD CARRY COST ON STRANDED COST | (0) | PTD |
| REG ASSET-DEFD ACCR VEGETATION MGT EXPENSE | $(1,014,363)$ | T\&D |
| REG ASSET-SFAS 158 - PENSIONS | $(35,618,186)$ | E |
| REG ASSET-SFAS 158 - SERP | $(493,714)$ | E |
| REG ASSET-SFAS 158 - OPEB | 4,735,199 | E |
| REG ASSET-RED ROCK FACILITY | $(1,765,865)$ | E |
| REG ASSET-GENERATION MAINTENANCE EXP | $(466,675)$ | E |
| REG ASSET-UND/REC PSO BPF |  | E |
| REG ASSET-PSO ENVIRONMENTAL COMPLIANCE COSTS | $(295,818)$ | E |
| REG ASSET-WIND RECOVERABLE COSTS | $(81,881)$ | E |
| REG ASSET-DEFERRED SRR RIDER EXPENSES | $(2,903,522)$ | E |
| LOSS ON REACQUIRED DEBT | $(2,795,290)$ | PTD |
| ACCRD SFAS 106 PST RETIRE EXP | $(3,029,803)$ | Labor |
| SFAS 106 PST RETIRE EXP - NON-DEDUCT CONT | 5,126,317 | Labor |
| SFAS 106 - MEDICARE SUBSIDY - (PPACA)-REG ASSET | $(1,714,703)$ | Labor |
| BK DEFL-MERGER COSTS | 0 | E |
| STATE NOL CURRENT BENEFIT | $(2,095,625)$ | E |


| ADSITC STATE C/F-DEF STATE TAX ASSET-L/T | $(2,081,387)$ | E |
| :---: | :---: | :---: |
| NOL-STATE C/F-DEF STATE TAX ASSET-L/T | $(3,427,453)$ | E |
| INTEREST-FUEL OVER/UNDER RECOVERY | 1,490 | E |
| INDIAN RESERVATION SECTION 481a ADJUSTMENT | $(16,524,283)$ | PTD |
| MTM BK GAIN-ALL-TAX DEFL | 131,988 | E |
| MARK \& SPREAD-DEFL-283-A/L | 39,581 | E |
| ACCRUED BK PENSION EXPENSE | (31,510,648) | Labor |
| ACCRUED BK PENSION COSTS - SFAS 158 | 35,618,186 | E |
| ACCRUED RAIL SETTLEMENT - BNFS | 0 | E |
| DEFD Storm damage | $(2,156,522)$ | PTD |
| RATE CASE DEFD CHGS | $(259,657)$ | PTD |
| BK DEFL-DEMAND SIDE MNGMT EXP | $(3,206,708)$ | PTD |
| BOOK > TAX BASIS - EMA-AIC 283 | 8,024 | E |
| REG ASSET-CARRY COST ON STRANDED COST | 0 | E |
| REG ASSET-DEFD CARRY COST ON STRANDED COST | (0) | PTD |
| REG ASSET-DEFD ACCR VEGETATION MGT EXPENSE | $(1,014,363)$ | T\&D |
| REG ASSET-SFAS 158 - PENSIONS | $(35,618,186)$ | E |
| REG ASSET-SFAS 158 - SERP | $(493,714)$ | E |
| REG ASSET-SFAS 158 - OPEB | 4,735,199 | E |
| REG ASSET-RED ROCK FACILITY | $(1,765,865)$ | E |
| REG ASSET-GENERATION MAINTENANCE EXP | $(466,675)$ | E |
| REG ASSET-UND/REC PSO BPF |  | E |
| REG ASSET-PSO ENVIRONMENTAL COMPLIANCE COSTS | $(295,818)$ | E |
| REG ASSET-WIND RECOVERABLE COSTS | $(81,881)$ | E |
| REG ASSET-DEFERRED SRR RIDER EXPENSES | $(2,903,522)$ | E |
| LOSS ON REACQUIRED DEBT | $(2,795,290)$ | PTD |
| ACCRD SFAS 106 PST RETIRE EXP | $(3,029,803)$ | Labor |
| SFAS 106 PST RETIRE EXP - NON-DEDUCT CONT | 5,126,317 | Labor |
| SFAS 106 - MEDICARE SUBSIDY - (PPACA)-REG ASSET | $(1,714,703)$ | Labor |
| BK DEFL - MERGER COSTS | 0 | E |
| STATE NOL CURRENT BENEFIT | $(2,095,625)$ | E |

$(2,081,387)$
$(3,427,453)$

TOTAL ELECTRIC ACCOUNT SUBTOTA
(131,426,358) PTD
0
$(2,095,625)$
$(35,618,186)$
$(493,714)$
$(35,(439,714)$
$4,735,199$
$4,735,199$
$(1,765,865)$
$(466,675)$
$(466,675)$
0
$(295,818)$
$(21,881)$
$(81,881)$
$(2,903,522)$

| $(2,795,290)$ | $(3,029,803)$ |
| :---: | :---: |
| $5,126,317$ |  |
| 5 |  |

$5,126,317$
$(1,714,703)$


| 011C | TAX CREDIT CIF - DEF TAX ASSET- MJE | 659,755 | E |
| :---: | :---: | :---: | :---: |
| 014A | ACCUM DITC-STATE-A/C 2550002 | 3,741,754 | E |
| 433F | PSO-FUEL O/U RECOVERY-WSLE | (12,494,499) | E |
| 460A | UNBILLED REVENUE | 4,798,066 | E |
| 520 A | PRovs poss rev refds-A/L | (0) | PTD |
| 576F | MARK \& SPREAD-DEFL-190-A/L | 469,359 | E |
| 602A | PROV WORKER'S COMP | 447,184 | Labor |
| 605E | SUPPLEMENTAL EXECUTIVE RETIREMENT PLAN | 475,757 | Labor |
| 605F | ACCRD SUP EXEC RETIR PLAN COSTS-SFAS 158 | 493,714 | E |
| 6051 | ACCRD BK SUP. SAVINGS PLAN EXP | 449,157 | Labor |
| 605 J | Employer Savings plan match | 0 | E |
| 6050 | ACCRUED PSI PLAN EXP | 1,201,774 | Labor |
| 610 A | BK PROV UNCOLL ACCTS - ST | 51,654 | PTD |
| 610 V | PROV-FAS 157 - A/L | (0) | E |
| 612 G | ACCRD COMPANY INCENT PLAN-ENGAGE TO GAIN |  | Labor |
| $612 Y$ | ACCRD COMPANYWIDE INCENTV PLAN | 3,343,380 | Labor |
| 613E | ACCRUED BOOK VACATION PAY | 2,097,815 | Labor |
| 613K | (ICDP)-INCENTIVE COMP DEFERRAL PLAN | 760,464 | Labor |
| 613Y | ACCRUED BK SEVERANCE BENEFITS | 47,070 | Labor |
| 615B | ACCRUED INTEREST-LONG-TERM - FIN 48 | $(912,087)$ | E |
| 615B-MJE | ACCRD INTRST-TAX RES-LIT-FIN 48-MJE | 1,009,033 | E |
| 615 C | ACCRUED INTEREST-SHORT-TERM - FIN 48 | 197,866 | E |
| 615C-MJE | ACCRD INTRST-TAX RES-S/T-FIN 48-MJE | $(197,866)$ | E |
| 615 E | ACCRUED STATE INCOME TAX EXP | $(206,580)$ | E |
| 6150 | BK DFL RAIL TRANS REVIEXP | 0 | E |
| 639 A | DEFD BK GAIN-NON-AFF SALE-EMA | $(8,884)$ | E |
| 6411 | ADVANCE RENTAL INC (CUR MO) | 282,921 | PTD |
| 652 G | REG LIAB-UNREAL MTM GAIN-DEFL | $(131,988)$ | E |
| $663 \cup$ | REG ASSET-DEFERRED BASE LOAD PUR PWR | 0 | E |
| 7008 | TAX DEFL-FRAN COSTS | - | PTD |
| 712 P | PROF SERVICES CAPITALIZED-TX | 1,681 | PTD |
| 906F | ACCRD OPEB COSTS - SFAS 158 | $(4,735,199)$ | E |
| 906K | ACCRD SFAS 112 PST EMPLOY BEN | 1,590,706 | Labor |
| 906P | ACCRD BOOK ARO EXPENSE - SFAS 143 | 13,306,933 | E |
| 911F-FIN48 | FIN 48 DSIT | 0 | E |
| 911Q-DSIT | DSIT ENTRY - NORMALIZED | 45,999,225 | PTD |
| 911 V | ACCRD SIT TX RESERVE-LNG-TERM-FIN 48 | $(232,243)$ | E |
| $911 \mathrm{~V}-\mathrm{MJE}$ | ACCRD SIT TX RES-LNG-TERM-FIN 48-MJE | 693,998 | E |
| 911W | ACCRD SIT TX RESERVE-SHRT-TERM-FIN 48 |  | E |
| $940 \times$ | IRS CAPITALIZATION ADJUSTMENT | 763,562 | PTD |
| 960E | AMT CREDIT - DEFERRED | 21,539 | E |
| 014A | ACCUM DITC-STATE-AIC 2550002-MJE | 16,194,103 | E |
| 014A-DSITC | ADSITC STATE C/F-DEF STATE TAX ASSET-L/T | 5,946,820 | E |
| 014C-DSIT | NOL-STATE C/F-dEF STATE TAX ASSET-L/T | 9,792,722 | E |

> 659,755 $3,741,754$ $(12,494,499)$


TOTAL ELECTRIC ACCOUNT SUBTOTAL

| (Total Company Amount Ties to FF1 p.234(c) -- Electric) | $95,918,669$ |
| :--- | :--- |
| 95918,669 |  |



# AEP West SPP Member Companies <br> 2016 Cost of Service Formula Rate <br> Worksheet E-IPP Credits <br> PUBLIC SERVICE COMPANY OF OKLAHOMA 

| Line | (A) | (B) |
| :---: | :---: | :---: |
| Number | Description | $\underline{2015}$ |
| 1 | Net Funds from IPP Customers @ 12/31/2014 (2015 FORM 1, P269, (B)) | 1,090,569 |
| 2 | Interest Accrual (company records) | 32,510 |
| 3 | Revenue Credits to Generators (company records) | $(128,795)$ |
| 4 | Other Adjustments (company records) |  |
| 5 | Accounting Adjustment | 26,412 |
| 6 |  |  |
| 7 | Net Funds from IPP Customers 12/31/2015 (2015 FORM 1, P269, (F)) | 1,020,696 |
| 8 | Average Balance for $2015((\ln 1+\ln 7) / 2)$ | 1,055,633 |

AEP West SPP Member Companies
2016 Cost of Service Formula Rate Projected on 2015 FF1 Balances
and Special-billed Projects Based on a Carrying Charge Derived from Historic 2015 Data PUBLIC SERVICE COMPANY OF OKLAHOMA
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

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

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

$34,184,900$
$38.56 \%$

 | $38.560^{3}$ |
| :--- |
| 42.1110 |

TTC Adiustment (Projected TCOS, In 116) $\begin{array}{r}\text { (58810.05) } \\ \hline\end{array}$
II. Calculate Net Plant Carrying Charge Rate (Fixed Charge Rate or FCR) with hypothetical 0 basis point ROE increas
A. Determine Net Revenue Requirement less return and Income Taxes,

Net Revenue Requirement, Less Resurn and Taxes
$91,596,170$
34,184000
1.3815583 $\begin{array}{r}34,1,84,900 \\ 13,81,583 \\ \hline\end{array}$
B. Determine Net Revenue Requirement with hypothetical 0 basis point increase in ROE

```
n and Taxes
```



```
Net Revenue Requirement.vithon Basis Pooint ROE increase
*)
Revenue Requirmentw/ Wross Margin Taxes
*)
```

| $\begin{aligned} & 43,597,687 \\ & 34,1,84,90 \\ & \text { 1,813,583 } \\ & \hline \end{aligned}$ |
| :---: |
|  |  |
|  |  |
|  |
|  |
| 77,191,383 |

C. Determine Gross Margin Tax with hypothetical 0 basis point increase in ROE
C. Determine Gross Margin Tax with hypothetican
Net Revenue Requirement before Gross Margin Toxes, with 0
Basis Point RoE incease

Basis Point RoE increase (IIB. above)
Apportionment tactor to Texas (Worksheet $K, \ln 12)$

Taxable Percentage of Reve
Taxable, Apportioned Margin


D. Determine FCP with hypothetical 0 basis

Net Transmission Plant (Projected Tcos, Ins 46, 47, 48, 49,51)

Net Rev. Req, w/o Basis Point ROE increase, less Den
FCR with 0 Basis Point ROE increase, less Depre
FCR 1 ess Depreciation (Projected TCOS, 1 I 12 )

$$
\begin{array}{r}
0.00 \% \\
\hline 70 \% \\
\hline 1 \% \\
\hline 1 \%
\end{array}
$$

$\qquad$

Calall
Transmission Plant Average Balance for 2015
Annual Depreciaioon Expense (Historic Tcos, 1246 )

Depreciable Life for Composit
Round to nearest whole year
III. Calculation of Composite Depreciation Rate
Transnission Plant @ Beginning of Period (P.206. In 58 )
Transmision Plant © End of Period (P.207, in
Composite epereciciaion Rate e
Round to nearest whole year


| $588,530,028$ |
| :---: |
| $99.596,170$ |
| 15.5640 |

    77,191,383
    $\begin{array}{r}13.12 \% \\ \frac{13.120}{0.00 \%} \\ \hline\end{array}$


Note: Revie
.en. Revee Tormulas in summary to ensure the

NOTE: PART IV --- BPU Project Table PART IV --- BPU Project Table

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 Proiects Based on a Carrying Charge Derived from Trued-Up 2015
PUBLIC SERVICE COMPANY OF OKLAHOMA
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

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

Rate Base (TTue-Up
R (trom A. above) $\qquad$
R (from A. above)
Reurn (Rate Base $\times$ R) $\square$
C. Determine Income Taxes using Return with hypothetical 0 basis point ROE increase for Identified Projects.
Reurn (from B. above)
Tax Rate (True-Up TCOS, In 106)
ETITTT(1-T)
EIT=(T)(1-T) $*(1-(W C L T D N A C C))=$
ITC Adjustment (True-UP TCOS, In 103)
Income Taxes $\square$
$-(583,34)$

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

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

```
nen, Less Return and Taxes
Return
Mrcome Taxes(trom..... abve) 
N
R Revenu Requirmentw/GToss Margin Taxes
```

$\begin{array}{r}43,30,598 \\ 34,13,285 \\ 13,583,250 \\ \hline\end{array}$
$\begin{array}{r}13,583,250 \\ \hline 91,021,133 \\ \hline\end{array}$
$\begin{array}{r}91,021,133 \\ \hline \\ \hline\end{array}$

```
Revenue Requirement w Gross Margin Taxes
Less: Depreciaition (Tuue-UpTCOS, In 83)
Net Rev. Req, wo Basis Point RoE increase, less Depreciation
```

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

Basis Point RoE increase (II B . above)
Appotionment Factor to Texas (Worsheet $\mathrm{K}, \mathrm{In} 12)$
Apootioned
Appopioinment Tracas Revevurus
Tpaxalie Percentage of Revenue ( $70 \%$ )

Texas Gross Margin Tax Rate
Texas Gross Margin Tax Expens
Gross-up Required for Gross Marain Tax Expense
Total Additional Gross Margin Tax Revenue Requiren

| $91,021,133$ |
| ---: |
| $0.00 \%$ |
| $70 \%$ |
| $\dot{\sigma}$ |
| $\dot{\square}$ |

D. Determine FCR with hypothetical 0 basis point ROE increase

| Net Transmission Plant (True-Up TCOS, In 39) Net Revenue Requirement, with 0 Basis Point ROE increas | 561,912,700 91,021,133 |
| :---: | :---: |
| FCR with 0 Basis Point increase in ROE |  |
| Net Rev. Req, w/ 0 Basis Point ROE increase, less Dep FCR with 0 Basis Point ROE increase, less Depreciation | 688,470 13640\% |
| less Depreciaion (TTue-Up TCos, In 12) |  |

III. Calculation of Composite Depreciation Rate

| Transmission Plant @ Beginning of Period (P.206, In 58) Transmission Plant @ End of Period (P.207, In 58) | 788,910,811 <=From Input on Workshee |
| :---: | :---: |
|  | 815,430.062 ${ }_{\text {1,604,30.873 }}==$ From Input on Worksh |
| Transmission Plant Average Balan | ${ }_{802,170,437}$ |
| Annua Depreciaion Expense (Tue-Up TCOS | 15,385,707 |
| Composite Depreciaion Rate |  |
| Depreciable Life for Composite Depreciation Rate | 52.14 |
| Round to nearest whole year |  |



Note: Review tormulas in summary to ensure the proper years revenue requirement is being
accumulated for each project from the tables below.

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

| Total Company | NonTransmission | Transmission |
| :---: | :---: | :---: |
| 2,815,695 | 2,815,695 | - |
| 5,183,310 | 5,183,310 | - |
| 2,873,192 | 2,825,963 | 47,229 |
| 134,736 | 110,135 | 24,601 |
| 89,833 | 42,843 | 46,990 |
| 3,599,003 | 3,599,003 | - |
| 6,696,764 |  | 118,820 |

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

|  | 1 Account 4560015, Revenues from Associated Business Development | 2,419,944 | 77,717 |
| :---: | :---: | :---: | :---: |
|  | Total Other Operating Revenues To Reduce Revenue Requirement |  | 196,537 |
| VI. | Account 456.1, Revenues from Transmission of Electricity of Others |  | 38,867,362 |
|  | (Provide data sources and any detailed explanations necessary in Section VIII Notes below ) Less: |  |  |
|  | 1 Transmission Direct Assignment Revenue (if costs not in the ARR) |  |  |
|  | 2 Sponsored Upgrade Revenue |  | - |
|  | 3 Credits against Transmission Service Revenue related to Generation Interconnections |  | 52,043 |
|  | 4 Revenue for GFA's (Relative to SPP OATT) Associated with Load Included in the Divisor |  | 2,110,301 |
|  | 5 Network Service Revenue (SPP Schedule 9) Associated with Load included in the Divisor |  | 13,693,177 |
|  | 6 Revenue Associated with Transmission Plant Excluded From SPP Tariff |  |  |
|  | 7 Distribution and Other Non-Transmission Revenue |  | 258,146 |
|  | 8 Revenue from SPP Ancillary Services Provided |  | 661,538 |
|  | 9 Base Plan Revenue (from SPP) |  | 15,470,420 |
|  | 10 Flow Through of ERCOT Ancillary Charges |  | - |
|  | 11 Other |  |  |


| $\$ 6,621,737$ |
| ---: |
| $\$ 6,818,274$ |

## VIII.Data Sources:

# AEP - SPP Formula Rate PSO TCOS - WS I Page: 33 of 69 

## Cost of Service Formula Rate Using 2015 FF1 Balances <br> Worksheet I - Supporting Transmission Expense Adjustments PUBLIC SERVICE COMPANY OF OKLAHOMA

| Other Expenses | $\$ 0$ |
| :--- | ---: |
| Direct Assignment Charge | $\$ 0$ |
| Sponsored Upgrades Charge | $\$ 0$ |
| Firm and Non-Firm Point-To-Point Charges | $\$ 0$ |
| Base Plan Charges | $\$ 0$ |
| Schedule 9 Charges | $\$ 0$ |
| SPP Schedule 12 - FERC Assessment | $\$ 0$ |
| SPP Schedule 1-A | $\$ 0$ |
| SPP Annual Assessment | $\$ 0$ |
| Ancillary Services Expenses | $\$ 0$ |
| Other | $\$ 0$ |
| Other | $\$ 0$ |
| Other | $\$ 0$ |
|  |  |

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.

## 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
PUBLIC SERVICE COMPANY OF OKLAHOMA


## AEP West SPP Member Companies

Cost of Service Formula Rate Using 2015 FF1 Balances
Worksheet K - Development of Composite State Income Tax Rate PUBLIC SERVICE COMPANY OF OKLAHOMA

## I. DEVELOPMENT OF COMPOSITE STATE INCOME TAX RATES FOR 2015

| State Income Tax Rate - Oklahoma | Note 1 | 5.66\% | 5.4743\% |
| :---: | :---: | :---: | :---: |
| Apportionment Factor $\quad 96.72 \%$ |  |  |  |
|  |  |  |  |
| State Income Tax Rate - Ohio |  | Note 2 |  | 0.00\% | 0.0000\% |
| Apportionment Factor | 0.00\% |  |  |  |
| Tax Phase-out Factor Effective State Income Tax Rate | 0.00\% |  |  |  |
|  |  |  |  |  |
| State Income Tax Rate - West Virginia |  | 6.50\% | 0.0000\% |  |
| Apportionment Factor |  | 0.00\% |  |  |
| Effective State Income Tax Rate |  |  |  |  |
| Total Effective State Income Tax Rate |  |  | 5.4743\% |  |

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.

Note 2 --- The Ohio State Income Tax is being phased-out over a 5 year period and is being replaced with a Commercial Activites Tax. The taxable portion of income is $40 \%$ in 2007.
II. CALCULATION OF TEXAS GROSS MARGIN TAX
ine \# REVENUE REQUIREMENT BEFORE TEXAS GROSS MARGIN TAX (In 118 of Template)

| Projected |  | Historic |  | Actual |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Total Company } \\ & 373,885,053 \end{aligned}$ | Trans. Only 91,596,170 | $\begin{array}{r} \text { Total Company } \\ 373,687,156 \end{array}$ | Trans. Only 89,711,012 | Total Company 379,009,835 | Trans. Only 91,021,133 |
| 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 70\% | 70\% | 70\% | 70\% | 70\% | 70\% |
| - | - | - | - | - | - |
| 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| - | - | - | - | - | - |
| - | - | - | - | - | - |

1 Apportionment Factor to Texas (In12)
2 Apportioned Texas Revenues
3 Taxable Percentage of Revenue (70\%)
4 Taxable, Apportioned Margin
5 Texas Gross Margin Tax Rate (1\%)
6 Texas Gross Margin Tax Expense
7 Gross-up Required for Texas Gross Margin Expense
$((\ln 6 * \ln 3 * \ln 1) /(1-\ln 5) * \ln 5)$
8 Total Additional Gross Margin Tax Revenue Requirement
9 Wholesale load Allocator (For Use in Gross Margin Tax Allocator)
10 Texas Jurisdictional Load
11 Total Load
12 Allocation Percentage
( $\ln 10 / \ln 11)$ $\qquad$

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 | Revenue Taxes |  |  |  |  |  |
| 2 | OH CAT Tax | 1,092 |  |  |  | 1,092 |
| 3 | Real Estate and Personal Property Taxes |  |  |  |  |  |
| 4 | Oklahoma Ad Valorum | 30,919,988 | 30,919,988 |  |  |  |
| 5 | Texas Ad Valorum | 1,212,759 | 1,212,759 |  |  |  |
| 6 | Louisiana Ad Valorum | 729 | 729 |  |  |  |
| 7 |  |  | - |  |  |  |
| 8 | Payroll Taxes |  |  |  |  |  |
| 9 | Federal Insurance Contribution (FICA ) | 4,729,378 |  | 4,729,378 |  |  |
| 10 | Federal Unemployment Tax | 34,959 |  | 34,959 |  |  |
| 11 | State Unemployment Insurance | $(9,687)$ |  | $(9,687)$ |  |  |
| 12 | Production Taxes |  |  |  |  |  |
| 13 |  |  |  |  |  |  |
| 14 |  |  |  |  |  | - |
| 15 | Miscellaneous Taxes |  |  |  |  |  |
| 16 | Federal Excise Tax | 2,220 |  |  |  | 2,220 |
| 17 | Ok State Franchise Tax | 20,000 |  |  | 20,000 |  |
| 18 | Ok Sales \& Use Taxes | 434 |  |  |  | 434 |
| 19 | Ok Local Franchise Tax - 2015 | 173,372 |  |  |  | 173,372 |
| 20 | Ok Lsd PP Tax - 2015 | 118,123 |  |  | 118,123 |  |
| 21 | State License Fee | 67 |  |  | 67 |  |
| 22 | Tx Sales \& Use Taxes | $(8,527)$ |  |  |  | $(8,527)$ |
| 23 | Unemployement TX - 014 | $(8,033)$ |  |  | $(8,033)$ |  |
| 24 | TX Lsd PP Tax - 2015 | 20,000 |  |  | 20,000 |  |
| 25 | Ok Misc Tax | 61 |  |  | 61 |  |
| 26 | MT Misc Tax |  |  |  | - |  |
| 26 | Wy Misc Tax |  |  |  | - |  |
| 27 | Total Taxes by Allocable Basis | 37,206,935 | 32,133,476 | 4,754,650 | 150,218 | 168,591 |
|  | (Total Company Amount Ties to FFI p.114, Ln 14,(c)) | 37,206,935 |  |  |  |  |

# AEP West SPP Member Companies <br> Cost of Service Formula Rate Using 2015 FF1 Balances <br> Worksheet M - Cost of Debt Based on Outstanding Balances as of 12/31/2015 PUBLIC SERVICE COMPANY OF OKLAHOMA 

| (A) | (B) | (C) | (D) | (E) |
| :---: | :---: | :---: | :---: | :---: |
| Issuance | Principle Amount FF1.p. 257.x (h) | Interest Rate | Annual Expense | Notes |
| Long Term Debt (FF1.p. 256-257.h) |  |  |  |  |
| 1 Other Long Term Debt |  |  |  |  |
| 2 Oklahoma Local Revolving Credit Facility | 125,000,000 |  | 1,973,825 | p256.1 L7(h) |
| 3 Pollution Control Bonds |  |  |  |  |
| 4 Pollution Control Bonds - Series 2007 | 12,660,000 | 4.45\% | 563,370 | p257 L23h) |
| 5 Senior Unsecured Notes |  |  |  |  |
| 6 Senior Unsecured Notes - Series F | 150,000,000 | 6.15\% | 9,225,000 | p256 L12(h) |
| 7 Senior Unsecured Notes - Series G | 250,000,000 | 6.625\% | 16,562,500 | p256 L17(h) |
| 8 Senior Unsecured Notes - Series H | 250,000,000 | 5.15\% | 12,875,000 | p256 L20(h) |
| 9 Senior Unsecured Notes - Series I | 250,000,000 | 4.40\% | 11,000,000 | p256.1 L3(h) |
| 10 Senior Unsecured Notes - Series A | 125,000,000 | 3.17\% | 3,449,576 | p256.1 L10(h) |
| 11 Senior Unsecured Notes - Series B | 125,000,000 | 4.09\% | 4,450,715 | p256.1 L13(h) |
| 12 GridSMART Promissory Note | 5,902,544 | 3.00\% | 182,982 | p257 L25(h) |

## Issuance Discount, Premium, \& Expenses:

| 13 Financial Hedges \& Auction Fees | FF1.p. 256 \& 257.Lines Described as Hedges or Fees |  | $(1,167,106)$ | $\begin{aligned} & 256 \operatorname{Ln} 15(\mathrm{i}) \\ & 257 \operatorname{Ln}(\mathrm{i}) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 14 Amort of Debt Discount and Expenses | FF1.p. 117.63.c (also WS-N Ln 15) |  | 960,992 |  |
| 15 Less: Amor of Debt Premimums | FF1.p. 117.65.c (also WS-N Ln 17) |  | - |  |
| Reacquired Debt: |  |  |  |  |
| 16 Amortization of Loss | FF1.p. 117.64.c (also WS-N Ln 16) |  | 1,202,603 |  |
| 17 Less: Amortization of Gain | FF1.p. 117.66.c (also WS-N Ln 18) |  | - |  |
| 18 Total Interest on Long Term Debt | 1,293,562,544 | 4.74\% | 61,279,457 |  |
| Preferred Stock (FF1.p. 250-251) | Preferred Balance Outstanding |  |  |  |
| 19 | Pre - |  | - |  |
| 20 | - |  | - |  |
| 21 |  |  | - |  |
| 22 Dividends on Preferred Stock | - | 0.00\% | - |  |

AEP West SPP Member Companies Cost of Service Formula Rate Using 2015 FF1 Balances PUBLIC SERVICE COMPANY OF OKLAHOMA

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



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



## Development of Cost of Preferred Stock

## Preferred Stock

| 31 __\% Series - - Dividend Rate (p. 250-251. _. .a) |  |
| :---: | :---: |
|  | __\% Series - - Par Value (p. 250-251. |
| 33 __\% Series - - Shares O/S (p.250-251. _.e) |  |
| 34 __\% Series - - Monetary Value (Ln 32 * Ln 33) |  |
| 35 __\% Series - - Dividend Amount (Ln 31 * Ln 34) |  |
| 36 __\% Series - - Dividend Rate (p. 250-251. col(a)) |  |
| 37 __\% Series - __ - Par Value (p. 250-251. col(c)) |  |
| 38 \% Series - 0 - Share O/S (p. 250-251. col(e)) |  |
| 39 __\% Series - - Monetary Value (Ln 37 * Ln 38) |  |
| 40 __\% Series - - Dividend Amount (Ln 36 * Ln 39) |  |
| 41 0\% Series - - Dividend Rate (p. 250-251.) |  |
| 42 0\% Series - - Par Value (p. 250-251.) |  |
| 43 0\% Series - - Shares O/S (p.250-251.) |  |
| $440 \%$ Series - - Monetary Value (Ln 42 * Ln 43) |  |
| 45 0\% Series - - Dividend Amount (Ln 41 * Ln 44) |  |
|  | Balance of Preferred Stock (Lns 34, 39, 44) |
|  | Dividens on Preferred Stock (Lns 35, 40, 45) |
|  |  |



# AEP West SPP Member Companies Transmission Cost of Service Formu <br> 2016 Transmission Cost of Service Formula Rate <br> Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016 <br> SOUTHWESTERN ELECTRIC POWER COMPANY 

| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ |  |  |  |  |  |  | smission <br> mount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | REVENUE REQUIREMENT (w/o incentives) | ( In 120 ) |  |  |  |  | \$155,087,151 |
|  |  |  | Total |  |  |  |  |
| 2 | REVENUE CREDITS | (Note A) |  |  |  |  |  |
| 3 | Transmission Credits | (Worksheet H) | 9,106,191 | DA | 1.00000 | \$ | 9,106,191 |
| 4 | Assoc. Business Development | (Worksheet H) | 240,824 | DA | 1.00000 | \$ | 240,824 |
| 5 | Total Revenue Credits |  | 9,347,015 |  |  | \$ | 9,347,015 |
| 6 | REVENUE REQUIREMENT For All Company Facilities | ( $\ln 1$ less $\ln 5)$ |  |  |  |  | \$145,740,136 |
| MEMO: The Carrying Charge Calculations on lines 9 to 14 below is used in calculating project revenue requirements billed on SPP Schedule 11. The total non-incentive revenue requirements for these projects shown on line 7 is included in the total on line 6. |  |  |  |  |  |  |  |
| 7 |  |  | 63,756,965 | DA | 1.00000 | \$ | 63,756,965 |
|  |  |  |  |  |  |  |  |
| 8 | NET PLANT CARRYING CHARGE (w/o incentives) (Note B) |  |  |  |  |  |  |
| 9 | Annual Rate | (ln 1/ (Sum of In |  |  |  |  | 16.14\% |
| 10 | Monthly Rate | ( $\ln 9 / 12)$ |  |  |  |  | 1.35\% |
| 11 | NET PLANT CARRYING CHARGE ON LINE 9 , W/O DEPRECIATION (w/o incentives) (Note B) |  |  |  |  |  |  |
| 12 | Annual Rate | ( (ln $1-\ln 95) /($ Sum of $\operatorname{lns} 46,47,48,49,51)) \times 100 \%$ |  |  |  | 13.01\% |  |
| 13 | NET PLANT CARRYING CHARGE ON LINE 11, W/O INCOME TAXES, RETURN (Note B) |  |  |  |  |  |  |
| 14 | Annual Rate |  |  |  |  |  |  |
| 15 | ADDITIONAL REVENUE REQUIREMENT for projects w/ incentive ROE's (Note C) (Worksheet F) |  |  |  |  |  |  |



# AEP - SPP Formula Rate 

 SWEPCO TCOS - ProjectedPage: 41 of 69

AEP West SPP Member Companies
2016 Transmission Cost of Service Formula Rate
2016 Transmission Cost of Service Formula Rate
Utilizing Historic Cost Data for 2015 and Projected Net Plant at Year-End 2016
(1)

## EXPENSE, TAXES, RETURN \& REVENUE REQUIREMENTS CALCULATION

## OPERATION \& MAINTENANCE EXPENSE <br> Transmission

Less: Total Account 561
Less: Account 565
Less: expenses $100 \%$ assigned to TO billed customers (Worksheet I, In 14) Total O\&M Allocable to Transmission

Administrative and General
Less: Acct. 924, Property Insurance
Acct. 928, Reg. Com. Exp.
Acct. 930.1 , Gen. Advert. Exp.
Acct. 930.2 , Misc. Gen. Exp.
Balance of $A$ \& $G$
Plus: Acct. 924, Property Insurance
Acct 930.1- Only safety related ads -Direct
Acct 930.2 - Misc Gen. Exp. - Trans
Less: PBOP Expense In Acct. 926 Adjustment
A \& G Subtotal
TOTAL O \& M EXPENSE
DEPRECIATION AND AMORTIZATION EXPENSE
Transmission
Plus: Transmission Plant-in-Service Additions (Worksheet B)
General
TOTAL DEPRECIATION AND AMORTIZATION
TAXES OTHER THAN INCOME
Labor Related
Labor Related
Payroll
Plant Related
Property
Property
Gross Receipts/Sales \& Use
Other
TOTAL OTHER TAXES
INCOME TAXES
$\mathrm{T}=1-\left\{[(1-\mathrm{SIT}) *(1-\mathrm{FIT})] /\left(1-\mathrm{SIT} * \mathrm{FIT}^{*} \mathrm{p}\right)\right\}=$
$\mathrm{EIT}=(\mathrm{T} /(1-\mathrm{T}))$ * $(1-(\mathrm{WCLTD} / \mathrm{WACC}))=$
where WCLTD $=(\ln 147)$ and WACC $=(\ln 150)$
and FIT, SIT \& $p$ are as given in Note $O$.
GRCF=1 $/(1-\mathrm{T})=($ from $\ln 109)$
Amortized Investment Tax Credit (enter negative)
Income Tax Calculation
ITC adjustment
TOTAL INCOME TAXES
RETURN ON RATE BASE (Rate Base*WACC)
INTEREST ON IPP CONTRIBUTION FOR CONST. (Note E) (Worksheet E, In 2)
REVENUE REQUIREMENT BEFORE TEXAS GROSS MARGIN TAX (sum Ins 93, 99, 107, 117, 118, 119)
TEXAS GROSS MARGIN TAX (Note P) (Worksheet K)
REVENUE REQUIREMENT INCLUDING GROSS MARGIN TAX

SOUTHWESTERN ELECTRIC POWER COMPANY
$(2)$
Data Sources
(See "General Notes")
(3)

TO Total
321.112.b
(Note I) 321.84-92.b
(Note J) 321.96.b
(Ins 76-77-78-79)
323.197.b (Note K)
323.185.b
323.189.b
323.191.b
323.192.b
323.192.b
(In $81-$ sum $\ln 82$ to $\ln 85$ )
(In 82)
Worksheet J In 32.(E) (Note L)
Worksheet J In 46.(E) (Note L)
Worksheet J In 10 . (E) (Note M)
(sum Ins 86 to 90 less $\ln 91$ )
(ln $80+\ln 92$ )
336.7.f
336.10.f
336.1.f
(sum Ins 95 to 98)
(Note N)
Worksheet L, Col. D
Worksheet L, Col. C
Worksheet L, Col. F
Worksheet L, Col. E
(sum Ins 102 to 106)
(Note O)

| 96,781,200 |
| :---: |
| 15,688,974 |
| 61,728,320 |
| \$0 |
| 19,363,906 |
| 70,385,819 |
| $\begin{aligned} & 2,538,763 \\ & 1,923,339 \end{aligned}$ |
|  |  |
|  |
| 1,117,978 |
| $\begin{array}{r} 64,536,040 \\ 2,538,763 \end{array}$ |
|  |  |
|  |
|  |
|  |
| 80,829,955 |
| 100,193,861 |
| 31,768,930 |
| 682,366 |
| 7,922,859 |
| 12,008,664 |
| 52,382,819 |
| 6,775,111 |
| $\begin{array}{r} 51,940,176 \\ 23,261,131 \\ 6,063,521 \\ \hline \end{array}$ |
|  |  |
|  |  |
|  |
|  |
|  |
| $\begin{gathered} 1.6108 \\ (1,351,985) \end{gathered}$ |
|  |  |
|  |
|  |
| 130,194,483 |
| 323,566,304 |
| 1,622,024 |
| 695,999,430 |

1,976,518
697,975,948
(4)

Allocator

TP
0.94780

TP

| W/S | 0.08010 | 5,169,204 |
| :---: | :---: | :---: |
| GP(h) | 0.17154 | 435,510 |
| TP | 0.94780 |  |
| TP | 0.94780 |  |
| DA | 1.00000 | 109,203 |
| W/S | 0.08010 | $(1,093,012)$ |
|  |  | 6,806,929 |
|  |  | 25,160,083 |
| TP | 0.94780 | 30,110,663 |
| DA | 1.00000 | 682,366 |
| W/S | 0.08010 | 634,605 |
| W/S | 0.08010 | 961,869 |


| W/S | 0.08010 | 542,672 |
| :---: | ---: | ---: |
|  |  |  |
| GP(h) | 0.17154 | $8,910,039$ |
| NA | 0.00000 |  |
| GP(h) | 0.17154 | $1,040,162$ |
|  |  | $10,492,874$ |


| NP(h) | 0.17952 | $\begin{array}{r} 24,786,694 \\ (390,955) \\ \hline \end{array}$ |
| :---: | :---: | :---: |
|  |  | 24,395,738 |
|  |  | 60,587,755 |
| DA | 1.00000 | 1,622,024 |
|  |  | 154,647,977 |

DA
439,174

# AEP - SPP Formula Rate 

 SWEPCO TCOS - Projected Page: 42 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
SOUTHWESTERN ELECTRIC POWER COMPANY

## UPPORTING CALCULATIONS

## TRANSMISSION PLANT INCLUDED IN SPP TARIFF

Total transmission plant
Less transmission plant excluded from SPP Tariff (Note Q)
Less transmission plant included in OATT Ancillary Services (Worksheet A, In 23)
Transmission plant included in SPP Tariff
(In $124-\ln 125-\ln 126$ )

Less transmission plant included in OATT Ancillary Services (Worksheet A, In 23, Col. (C)) (Note R)
(ln $124-\ln 125-\ln 126)$

129 WAGES \& SALARY ALLOCATOR (W/S)
Production
Transmission
Transmission
Regional Market Expenses
Distribution
Other (Excludes A\&G)
Total
Transmission related amount

| $\quad(\ln 127 / \ln 124)$ |
| :--- |
| $\quad$ (Note S) |
| 354.20.b |
| 354.21.b |
| 354.22.b |
| 354.23.b |
| 354.24,25,26.b |
| (sum Ins 130 to 134 ) |


|  | Payroll Billed from |  |  |
| ---: | ---: | ---: | :---: |
| Direct Payroll | AEP Service Corp. | Total |  |
| $41,842,715$ | $13,325,443$ | $55,168,158$ | N |
| $3,507,774$ | $5,751,094$ | $9,258,868$ | T |
| 0 | 0 | - | N |
| $28,508,313$ | $1,585,672$ | $30,093,985$ | N |
| $8,345,335$ | $6,694,217$ | $15,039,552$ | N |
| $82,204,137$ | $27,356,426$ | $109,560,563$ |  |


| TP= | $\begin{array}{r} 1,492,801,726 \\ 41,354,526 \\ 36,566,386 \end{array}$ |
| :---: | :---: |
|  | 1,414,880,814 |
|  | 0.94780 |
| 0.00000 |  |
| 0.94780 | 8,775,576 |
| 0.00000 |  |
| 0.00000 |  |
| 0.00000 | - |
| W/S= | 8,775,576 |
|  | 0.08010 |
|  | \$ |
|  | 118,777,528 |
|  | 2,169,212,700 |
|  | $\begin{gathered} 27,601,852 \\ (9,331,734) \\ \hline \end{gathered}$ |
|  | 2,150,942,582 |
| Cost (Note T) | Weighted |
| 0.0537 | 0.0272 |
| - | 0.0000 |
| 11.2\% | 0.0552 |
| WACC= | 0.0825 |

Long Term Interest (Worksheet M, In. 22, col. (D))
Preferred Stock Dividends (Worksheet M, In. 23, col. (D))


# AEP - SPP Formula Rate SWEPCO TCOS - Projected <br> Page: 43 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
southwestern electric power company

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.
al 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
tility chose to utilize amortization f 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 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 119

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.

This line complies with FERC requirement that Other Post Employment Benefits remain constant from an initial test year. Changes in this base amount can only occur via approval of a 205 filing.

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 109) multiplied by (1/1-T). If the applicable tax rates are zero enter 0 .

Inputs Required:

| FIT $=$ | $35.00 \%$ |  |
| :--- | ---: | :--- |
| SIT $=$ | $4.49 \%$ | (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 Long Term Debt cost rate $=$ long-term interest (In 138) / long term debt (ln 147). Preferred Stock cost rate $=$ preferred dividends (In 139) / preferred outstanding (In 148). Common Stock cost rate (ROE) $=11.2 \%$, the rate accepted by FERC in Docket No. ERO7-XXX. It includes an additional 50 basis points for remaining a member of the SPP RTO.
 it can only be changed via an approved 205 or 206 filing



# AEP - SPP Formula Rate <br> SWEPCO TCOS - Historic <br> Page: 46 of 69 




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 revenue credits. Revenue from Transmission incled 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 166 shows the incremental ARR for of the projected revenue requirement for each project, based on an FCR rate caclulated from inputs on this TCOS. Line 166 shows the incremental ARR for

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 231.
H Consistent with Paragraph 657 of Order 2003-A, the amount on line 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 270.

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 .

This line complies with FERC requirement that Other Post Employment Benefits remain constant from an initial test year. Changes in this base amount can only occur via approval of a 205 filing.

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 260) multiplied by (1/1-T). If the applicable tax rates are zero enter 0 .
$\begin{array}{lll}\text { Inputs Required: } & \text { FIT }= & \text { SIT }\end{array}$

| $\mathrm{SIT}=$ | $4.49 \%$ | (State Income Tax Rate or Composite SIT. Worksheet K) |
| :--- | :--- | :--- |
|  | $0.00 \%$ | (percent of federal income tax deductible for state purpose |

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 Long Term Debt cost rate $=$ long-term interest (ln 289) / long term debt (In 298). Preferred Stock cost rate $=$ preferred dividends (In 290) / preferred outstanding (In 299). Common Stock cost rate (ROE) $=11.2 \%$, the rate accepted by FERC in Docket No. ERO7-XXX. It includes an additional 50 basis points for remaining a member of the SPP RTO.
 this date it can only be changed 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
SOUTHWESTERN ELECTRIC POWER COMPANY

| Line No. |  |  |  |  |  | Transmission Amount |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | REVENUE REQUIREMENT (w/o incentives) | ( I 107) |  |  |  | \$142,642,474 |  |
|  |  |  | Total | Allocator |  |  |  |
| 2 | REVENUE CREDITS | (Note A) |  |  |  |  |  |
| 3 | Transmission Credits | (Worksheet H) | 9,106,191 | DA | 1.00000 | \$ | 9,106,191 |
| 4 | Assoc. Business Development | (Worksheet H) | 240,824 | DA | 1.00000 | \$ | 240,824 |
| 5 | Total Revenue Credits |  | 9,347,015 |  |  | \$ | 9,347,015 |
| 6 | REVENUE REQUIREMENT For All Company Facilities | (In 1 less $\ln 2$ ) |  |  |  |  | \$133,295,459 |
| MEMO: The Carrying Charge Calculations on lines 9 to 14 below is used in calculating project revenue requirements billed on SPP Schedule 11. The total non-incentive revenue requirements for these projects shown on line 7 is included in the total on line 6. | The Carrying Charge Calculations on lines 9 to 14 below is used in calculating project revenue requirements billed on SPP Schedule 11. The total non-incentive revenue requirements for these projects shown on line 7 is included in the total on line 6. |  |  |  |  |  |  |
| 7 |  |  | 55,504,307 | DA | 1.00000 | \$ | 55,504,307 |
|  |  |  |  |  |  |  |  |
| 8 | NET PLANT CARRYING CHARGE (w/o incentives) (Note B) |  |  |  |  |  |  |
| 9 | Annual Rate | $(\ln 1 / \ln 39 \times 100)$ |  |  |  |  | 16.68\% |
| 10 | Monthly Rate | ( $\ln 9 / 12)$ |  |  |  |  | 1.39\% |
| 11 | NET PLANT CARRYING CHARGE ON LINE 9 , W/O DEPRECIATION (w/o incentives) (Note B) |  |  |  |  |  |  |
| 12 | Annual Rate | ( ( $\ln 1-\ln 83) / \ln 39 \times 100)$ |  |  |  |  | 13.18\% |
| 13 | NET PLANT CARRYING CHARGE ON LINE 11, W/O INCOME TAXES, RETURN (Note B) |  |  |  |  |  |  |
| 14 | Annual Rate | ( ( $\ln 1-\ln 83-\ln 104-\ln 105) / \ln 39 \times 100)$ |  |  |  |  | 4.55\% |
| 15 | ADDITIONAL REVENUE REQUIREMENT for projects w | centive ROE's (Note C) (Worksheet G) |  |  |  |  |  |


|  | AEP West SPP Member Companies Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2015 with Average Ratebase Balances <br> SOUTHWESTERN ELECTRIC POWER COMPANY |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) |  |  | (5) |
| Line | RATE BASE CALCULATION | Data Sources (See "General Notes") | TO Total |  |  | Total Transmission |
| No. | GROSS PLANT IN SERVICE |  |  |  |  |  |
| 16 | Production | (Worksheet A In 1.E) | 4,115,150,903 | NA | 0.00000 |  |
| 17 | Less: Production ARO (Enter Negative) | (Worksheet A In 2.E) | $(46,100,069)$ | NA | 0.00000 |  |
| 18 | Transmission | (Worksheet A In 3.E \& Ln 114) | 1,344,277,173 | DA |  | 1,266,514,703 |
| 19 | Less: Transmission ARO (Enter Negative) | (Worksheet A In 4.E) |  | TP | 0.94215 |  |
| 20 | Distribution | (Worksheet A In 5.E) | 1,924,462,100 | NA | 0.00000 |  |
| 21 | Less: Distribution ARO (Enter Negative) | (Worksheet A In 6.E) | - | NA | 0.00000 |  |
| 22 | General Plant | (Worksheet A In 7.E) | 321,192,334 | w/s | 0.07962 | 25,573,503 |
| 23 | Less: General Plant ARO (Enter Negative) | (Worksheet A In 8.E) | (698,880) | w/s | 0.07962 | $(55,645)$ |
| 24 | Intangible Plant | (Worksheet A In 9.E) | 49,694,644 | W/S | 0.07962 | 3,956,714 |
| 25 | TOTAL GROSS PLANT | (sum Ins 16 to 24) | 7,707,978,205 | $\begin{array}{r} \text { GP(TU)}= \\ \text { GTD } \end{array}$ | $\begin{gathered} 0.16814 \\ 0.41125 \end{gathered}$ | 1,295,989,275 |
| 26 | ACCUMULATED DEPRECIATION AND AMORTIZATION |  |  |  |  |  |
| 27 | Production | (Worksheet A In 12.E) | 1,411,130,829 | NA | 0.00000 |  |
| 28 | Less: Production ARO (Enter Negative) | ( Worksheet A In 13.E) | $(4,859,346)$ | NA | 0.00000 |  |
| 29 | Transmission | (Worksheet A In 14.E \& 28.E) | 446,488,163 | TP1= | 0.92084 | 411,143,656 |
| 30 | Less: Transmission ARO (Enter Negative) | (Worksheet A In 15.E) | - | TP1= | 0.92084 |  |
| 31 | Distribution | (Worksheet A In 16.E) | 685,582,745 | NA | 0.00000 |  |
| 32 | Less: Distribution ARO (Enter Negative) | (Worksheet A In 17.E) |  | NA | 0.00000 |  |
| 33 | General Plant | (Worksheet A In 18.E) | 186,375,545 | w/s | 0.07962 | 14,839,319 |
| 34 | Less: General Plant ARO (Enter Negative) | (Worksheet A In 19.E) | $(396,452)$ | w/s | 0.07962 | $(31,566)$ |
| 35 | Intangible Plant | (Worksheet A In 20.E) | 33,122,884 | w/s | 0.07962 | 2,637,261 |
| 36 | TOTAL ACCUMULATED DEPRECIATION | (sum Ins 27 to 35) | 2,757,444,368 |  |  | 428,588,671 |
| 37 | NET PLANT IN SERVICE |  |  |  |  |  |
| 38 | Production | (In $16+\ln 17-\ln 27-\ln 28)$ | 2,662,779,351 |  |  |  |
| 39 | Transmission | (ln $18+\ln 19-\ln 29-\ln 30)$ | 897,789,010 |  |  | 855,371,047 |
| 40 | Distribution | (ln $20+\ln 21-\ln 31-\ln 32)$ | 1,238,879,355 |  |  |  |
| 41 | General Plant | ( $\ln 22+\ln 23-\ln 33-\ln 34)$ | 134,514,361 |  |  | 10,710,104 |
| 42 | Intangible Plant | (ln $24-\ln 35$ ) | 16,571,760 |  |  | 1,319,452 |
| 43 | TOTAL NET PLANT IN SERVICE | (sum Ins 38 to 42) | 4,950,533,837 | NP(TU) $=$ | 0.17521 | 867,400,604 |
| 44 | DEFERRED TAX ADJUSTMENTS TO RATE BASE | (Note E) |  |  |  |  |
| 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) | (1,164,556,109) | DA |  | (194,925,344) |
| 47 | Account No. 283.1 (enter negative) | (Worksheet C, In 16.C \& Ln 18.J) | (46,477,938) | DA |  | $(2,749,095)$ |
| 48 | Account No. 190.1 | (Worksheet C, In 25.C \& Ln 27.J) | 125,685,166 | DA |  | 1,473,792 |
| 49 | Account No. 255 (enter negative) | (Worksheet C, In 34.C \& Ln 36.J) |  | DA |  |  |
| 50 | TOTAL ADJUSTMENTS | (sum Ins 45 to 49) | (1,085,348,882) |  |  | (196,200,647) |
| 51 | PLANT HELD FOR FUTURE USE | (Worksheet A ln 29.E \& ln 30.E) | 1,471,023 | DA |  | - |
| 52 | WORKING CAPITAL | (Note F) |  |  |  |  |
| 53 | Cash Working Capital | (1/8* $\ln 68$ ) (Note G) | 2,420,488 |  |  | 2,280,470 |
| 54 | Transmission Materials \& Supplies | (Worksheet D, In 2.(F)) | 379,292 | TP | 0.94215 | 357,351 |
| 55 | A\&G Materials \& Supplies | (Worksheet D, In 3.(F)) | 157,027 | W/S | 0.07962 | 12,503 |
| 56 | Stores Expense | (Worksheet D, In 4.(F)) |  | GP(TU) | 0.16814 |  |
| 57 | Prepayments (Account 165) - Labor Allocated | (Worksheet D, in 7.G) | 109,705,758 | W/S | 0.07962 | 8,734,830 |
| 58 | Prepayments (Account 165) - Gross Plant | (Worksheet D, In 7.F) | 2,205,273 | GP(TU) | 0.16814 | 370,786 |
| 59 | Prepayments (Account 165) - Transmission Only | (Worksheet D, In 7.E) |  | DA | 1.00000 |  |
| 60 61 | Prepayments (Account 165) - Unallocable TOTAL WORKING CAPITAL | (Worksheet D, In 7.D) (sum Ins 53 to 60) | $\frac{(96,088,499)}{18,779,338}$ | NA | 0.00000 |  |
| 61 | TOTAL WORKING CAPITAL | (sum Ins 53 to 60) | 18,779,338 |  |  | 11,755,939 |
| 62 | IPP CONTRIBUTIONS FOR CONSTRUCTION | (Note H) (Worksheet E, In 8.(B)) | $(51,667,071)$ | DA | 1.00000 | $(51,667,071)$ |
| 63 | RATE BASE (sum Ins 43, 50, 51, 61, 62) |  | 3,833,768,245 |  |  | 631,288,826 |

# AEP - SPP Formula Rate <br> SWEPCO TCOS - True-Up <br> 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
SOUTHWESTERN ELECTRIC POWER COMPANY
(1)

EXPENSE, TAXES, RETURN \& REVENUE REQUIREMENTS CALCULATION
(2)

Data Sources Data Sources
(See "General Notes")
$\underline{\text { TO Total }}$
(3)

OPERATION \& MAINTENANCE EXPENSE Transmission 321.112.b
(Note I) 322.84-92.b
(Note J) 322.96.b

Less: Total Account 561
ess: expenses $100 \%$ assigned to TO billed customers (Worksheet I, In 14)
Total O\&M Allocable to Transmission
Administrative and General
Less: Acct. 924, Property Insurance Acct. 928, Reg. Com. Exp. Acct. 930.1, Gen. Advert. Exp. Acct. 930.2, Misc. Gen. Exp.
Balance of A \& G
Plus: Acct. 924, Property Insurance
Acct. 928 - Transmission Specific
Acct 930.1 - Only safety related ads -Direct
Acct 930.2 - Misc Gen. Exp. - Trans
Less: PBOP Expense In Acct. 926 Adjustment A \& G Subtotal
(Ins 64-65-66-67)
323.197.b (Note K)
323.185.b
322.189.b
322.191.b
( $\ln 69-$ sum $\ln 70$ to $\ln 73$ ) (ln 70)
Worksheet J In 32.(E) (Note L)
Worksheet J In 46.(E) (Note L)
Worksheet J In 49. (E) (Note L)
Worksheet J In 10.C (Note M)
(sum Ins 74 to 78 less In 79)
$(\ln 68+\ln 80)$

## 336.7.f

336.10.f

Transmission
General
Intangible
TOTAL DEPRECIATION AND AMORTIZATION
TAXES OTHER THAN INCOME
Labor Related
Payroll
Plant Related
Property
Property
Gross Receipts/Sales \& Use
Other
OTAL OTHER TAXES
INCOME TAXES
$\mathrm{T}=1-\{[(1-\mathrm{SIT}) *(1-\mathrm{FIT})] /(1-\mathrm{SIT} *$ FIT * p $)\}=$
EIT=(T/(1-T)) * $(1-(W C L T D / W A C C))=$
(sum Ins 83 to 85)
(Note N)
Worksheet L, Col D
Worksheet L, Col. C
Worksheet L, Col. F
Worksheet L, Col. E
(sum Ins 89 to 93 )
$96,781,200$
$15,688,974$
$61,728,320$
$\begin{array}{r}\$ 0 \\ \hline 19,363,906\end{array}$
70,385,819
2,538,763
2,538,763
$1,923,339$
$\mathbf{2 6 9}, 699$
$\begin{array}{r}269,699 \\ 1,117,978 \\ \hline\end{array}$

| $1,117,978$ |
| ---: |
| $64,536,040$ |
| $2,538,763$ |

where WCLTD $=(\ln 134)$ and WACC $=(\ln 137)$
and FIT, SIT \& $p$ are as given in Note O .
$G R C F=1 /(1-T)=($ from $\ln 96)$
(Note O)

| - |
| ---: |
| - |
| 109,203 |
| $(13,645,949)$ |
| $80,829,955$ |
| $100,193,861$ |

31,768,930
$31,768,930$
$7,922,859$
$7,922,859$
$12,008,664$
51,700,453

6,775,111
$6,775,111$
$51,940,176$
$51,940,176$
$23,261,131$
$\begin{array}{r}23,261,131 \\ 6,063,521 \\ \hline 88,039,939\end{array}$

Amortized Investment Tax Credit (enter negative)
(FF1 p.114, In 19.c)
ncome Tax Calculation
ITC adjustment
TOTAL INCOME TAXES
RETURN ON RATE BASE (Rate Base*WACC)
(ln $100 * \ln 101)$
( l 100
$(\ln 63 * \ln 137)$
INTEREST ON IPP CONTRIBUTION FOR CONST. (Note E) (Worksheet E, In 2)
REVENUE REQUIREMENT BEFORE TEXAS GROSS MARGIN TAX (sum Ins 81, 86, 94, 104, 105, 106)

TEXAS GROSS MARGIN TAX (Note P) (Worksheet K)
REVENUE REQUIREMENT INCLUDING GROSS MARGIN TAX
37.92\%

$(1,351,985)$

| $\begin{array}{r} 130,535,061 \\ (2,177,792) \\ \hline \end{array}$ | NP(TU) | 0.17521 | $\begin{array}{r} 21,494,603 \\ (381,579) \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: |
| 128,357,269 |  |  | 21,113,024 |
| 319,974,274 |  |  | 52,688,679 |
| 1,622,024 | DA | 1.00000 | 1,622,024 |
| 689,887,819 |  |  | 142,238,541 |

DA

Transmission Cost of Service Formula Rat
Utilizing Actual Cost Data for 2015 with Average Ratebase Balances
SOUTHWESTERN ELECTRIC POWER COMPANY
SUPPORTING CALCULATIONS


TRANSMISSION PLANT INCLUDED IN SPP TARIFF Total transmission plant
(In 18)
Less tran
Lessinmissis
(In $111-\ln 112-\ln 113)$

Percent of transmission plant in SPP Tariff
(ln 114 / $\ln 111)$

| (Note S) |  | Direct Payroll | Payroll Billed from AEP Service Corp. | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 354.20.b |  | 41,842,715 | 13,325,443 | 55,168,158 | NA |
| 354.21.b |  | 3,507,774 | 5,751,094 | 9,258,868 | TP |
| 354.22.b |  | 0 | 0 | - | NA |
| 354.23.b |  | 28,508,313 | 1,585,672 | 30,093,985 | NA |
|  | 0 | 8,345,335 | 6,694,217 | 15,039,552 | NA |
| (sum Ins 117 to 121) |  | 82,204,137 | 27,356,426 | 109,560,563 |  |

TP=
WAGES \& SALARY ALLOCATOR (W/S)

## Production

| Transmission | 354.21.b |
| :--- | :--- |
| Regional Market Expenses | $354.22 . \mathrm{b}$ |
| Distribution | $354.23 . \mathrm{b}$ |
| Other (Excludes A\&G) |  |
| Total | (sum Ins 117 to 121) |

Total
(sum ins 117 to 121)
Transmission related amount
Long Term Interest (Worksheet N, In. 19, col. (E))

## Long Term Interest

Development of Common Stock:
Proprietary Capital
Less Preferred Stock (In 135)
Less Account 216.1
Common Stock
Preferred Stock Dividends (Worksheet N, In. 47, col. (E))
(Worksheet N, In. 1, col. (E))
(Worksheet $N, \ln .2$, col. (E))
(Worksheet $N, \operatorname{In} .3$ col (E))
(Worksheet $\mathrm{N}, \operatorname{In} .3$, col. (E))
(Worksheet $\mathrm{N}, \operatorname{In} .4$, col. (E))
(In $128-\ln 129-\ln 130-\ln 131$ )

Avg Long Term Debt (Worksheet N, In. 10, col. (E)) Avg Preferred Stock (Worksheet N, In. 46, col. (E)) Avg Preferred Stock (Worksheet N, In.
Avg Common Stock (In 132) (Note U)
Total (sum Ins 134 to 136)

| 2015 Avg Balances |
| ---: |
| $2,135,200,000$ |
| - |
| $2,115,730,718$ |
| $4,250,930,718$ |


| Capital Structure Percentages |  |
| ---: | ---: |
| Actual | Cap Limit |
| $50.23 \%$ | $0.00 \%$ |
| $0.00 \%$ | $0.00 \%$ |
| $49.77 \%$ | $0.00 \%$ |

0.94215

| 0.00000 |  |
| ---: | ---: |
| 0.94215 | - |
| 0.00000 | $8,723,270$ |
| 0.00000 | - |
| 0.00000 | - |
|  |  |
| WIS= | $8,723,270$ |
|  | $\mathbf{0 . 0 7 9 6 2}$ |

Capital Structure Equity Limit (Note U)

# AEP - SPP Formula Rate <br> SWEPCO TCOS - True-Up <br> Page: 53 of 69 

## AEP West SPP Member Companies

Transmission Cost of Service Formula Rate
Utilizing Actual Cost Data for 2015 with Average Ratebase Balances

## SOUTHWESTERN ELECTRIC POWER COMPANY

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, he 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 evenue credits. Revenue from Transmission Customers whose coincident peak loads are included in the DIVISOR of the load-ratio share calculation are no 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 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 106.

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俍 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 .

This line complies with FERC requirement that Other Post Employment Benefits remain constant from an initial test year. Changes in this base amount can only occur via approval of a 205 filing

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 96) multiplied by (1/1-T). If the applicable tax rates are zero enter 0.

| inputs Required: | FIT $=$ |
| :--- | :--- |
| $35.00 \%$ |  |


| SIT $=$ | $4.49 \%$ (State Income Tax Rate or Composite SIT. Worksheet K) |
| :--- | :--- |
| $\mathrm{p}=$ | $0.00 \% \quad$ (percent of federal income tax deductible for state purposes) |

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.

T Long Term Debt cost rate = long-term interest (In 125) / long term debt (In 134). Preferred Stock cost rate = preferred dividends (In 126) / preferred outstanding (In 135) Common Stock cost rate $($ ROE $)=11.2 \%$, the rate accepted by FERC in Docket No. ERO7-XXX. It includes an additional 50 basis points for remaining a member of the SPP RTO
 can only be changed via an approved 205 or 206 filing

|  | (A) |
| :---: | :---: |
| Line |  |
| Number | Rate Base Item \& Supporting Balance |
| NOTE: Functional ARO investment and accumulated depreciation |  |
| Plant Investment Blalances |  |
| 1 | Production Plant In Service |
| 2 | Production Asset Retirement Obligation (ARO) |
| 3 | Transmission Plant In Service |
| 4 | Transmission Asset Retirement Obligation |
| 5 | Distribution Plant In Service |
| 6 | Distribution Asset Retirement Obligation |
| 7 | General Plant In Service |
| 8 | General Asset Retirement Obligation |
| 9 | Intangible Plant In Service |
| 10 | Total Property Investment Balance |
| 11 | Total ARO Balance (included in total on line 10) |


| (B) | (C) <br> Balances @ |
| :---: | :---: |
| Source of Data | $\underline{12 / 31 / 2015}$ |


| (D) |
| :---: |
| Balances |

$\underline{12 / 31 / 2014}$
(E)

Average Balance for 2015

NOTE: Functional ARO investment and accumulated depreciation balances shown below are included in the total functional balances shown here.
FF1, page $205 \mathrm{Col} .(\mathrm{g}) \&$ pg. $204 \mathrm{Col} .(\mathrm{b}), \ln 46$
FF1, page $205 \& 204$, Col.(g)\&(b), Ins $15,24,34,44$
FF1, page $207 \mathrm{Col} .(\mathrm{g}) \&$ pg. $206 \mathrm{Col} .(\mathrm{b}), \ln 58$
FF1, page $207 \mathrm{Col} .(\mathrm{g}) \&$ pg. $206 \mathrm{Col} .(\mathrm{b}), \ln 57$
FF1, page $207 \mathrm{Col} .(\mathrm{g}) \&$ pg. $206 \mathrm{Col} .(\mathrm{b}), \ln 75$
FF1, page $207 \mathrm{Col} .(\mathrm{g}) \&$ pg. $206 \mathrm{Col} .(\mathrm{b}), \ln 74$
FF1, page $207 \mathrm{Col} .(\mathrm{g}) \&$ pg. $206 \mathrm{Col} .(\mathrm{b}), \ln 99$
FF1, page $207 \mathrm{Col} .(\mathrm{g}) \&$ pg. $206 \mathrm{Col} .(\mathrm{b}), \ln 98$
FF1, page $205 \mathrm{Col} .(\mathrm{g}) \&$ pg. $204 \mathrm{Col} .(\mathrm{b}), \ln 5$
(Sum of Lines: $1,3,5,7,9)$
(Sum of Lines: $2,4,6,8)$

| 4,158,567,302 | 4,071,734,504 | 4,115,150,903 |
| :---: | :---: | :---: |
| 61,153,921 | 31,046,217 | 46,100,069 |
| 1,387,776,696 | 1,300,777,651 | 1,344,277,173 |
| - | - | - |
| 1,955,712,964 | 1,893,211,237 | 1,924,462,100 |
| - | - | - |
| 324,056,692 | 318,327,976 | 321,192,334 |
| 713,958 | 683,803 | 698,880 |
| 40,695,821 | 58,693,466 | 49,694,644 |
| 7,866,809,475 | 7,642,744,834 | 7,754,777,154 |
| 61,867,879 | 31,730,020 | 46,798,949 |

## Accumulated Depreciation \& Amortization Balances

| 12 | Production Accumulated Depreciation | FF1, page 219, Ins 20-24, Col. (b) |
| :--- | :--- | :--- |
| 13 | Production ARO Accumulated Depreciation | Company Records |
| 14 | Transmission Accumulated Depreciation | FF1, page 219, In 25, Col. (b) |
| 15 | Transmission ARO Accumulated Depreciation | Company Records |
| 16 | Distribution Accumulated Depreciation | FF1, page 219, In 26, Col. (b) |
| 17 | Distribution ARO Accumulated Depreciation | Company Records |
| 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: 12, 14, 16, 18, 20) |
| 22 | Total ARO Balance (included in total on line 21) | (Sum of Lines: 13, 15, 17, 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) |


| $1,444,419,377$ | $1,377,842,281$ | $1,411,130,829$ |
| ---: | ---: | ---: | ---: |
| $5,424,046$ | $4,294,647$ | $4,859,346$ |
| $461,774,500$ | $431,201,826$ | $446,488,163$ |
| - | - |  |
| $690,329,575$ | $680,835,915$ | $685,582,745$ |
| - | - |  |
| $190,936,107$ | $181,814,982$ | $186,375,545$ |
| 411,556 | 381,347 | 396,452 |
| $23,364,306$ | $42,881,462$ | $33,122,884$ |
| $2,810,823,865$ | $2,714,576,466$ | $2,762,700,166$ |
|  |  |  |
| $5,835,602$ | $4,675,994$ | $5,255,798$ |

Transmission Plant Excluded from SPP Tariff (see TCOS Note Q)

| $23 a$ | Excluded Facilities Investment Amount | Company Records |
| :--- | :--- | :--- |
| $24 a$ | Excluded Facilities Accumulated Depreciation | Company Records |
| $25 a$ | Excluded Facilities Net Balance | (Line 23a - Line 24a) |


| $36,566,386$ | $36,418,186$ | $36,492,286$ |
| ---: | ---: | ---: |
| $17,597,388$ | $15,411,831$ | $16,504,609$ |
| $18,968,998$ | $21,006,356$ | $19,987,677$ |
|  |  |  |
|  |  |  |
| $41,354,526$ | $41,185,842$ | $41,270,184$ |
| $19,932,198$ | $17,747,597$ | $18,839,898$ |
| $21,422,328$ | $23,438,245$ | $22,430,286$ |

Transmission Accumulated Depreciation Net of GSUIExcluded Facilities Accumulated Depreciation

| 26 | Transmission Accumulated Depreciation | (Line 14 Above) | 461,774,500 | 431,201,826 | 446,488,163 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27 | Less: GSU \& Excl Facilities Acc Dep | (Line 24 + Line 24a Above) | 37,529,586 | 33,159,428 | 35,344,507 |
| 28 | Subtotal of Transmission Accumulated Depremer | (Line 26 - Line 27) | 424,244,914 | 398,042,398 | 411,143,656 |

## Plant Held For Future Use

29
Plant Held For Future Use
Transmission Plant Held For Future

FF1, page 214, In 47, Col. (d)
Company Records

## I. Calculation of Composite Depreciation Rate

| 1 | Transmission Plant @ Beginning of Historic Period (2015) (P.206, In 58,(b)): | $1,300,777,651$ |
| :--- | :--- | ---: |
| 2 | Transmission Plant @ End of Historic Period (2015) (P.207, In 58,(g)): | $1,387,776,696$ |
|  |  | $2,688,554,347$ |
| 4 | Average Balance of Transmission Investment | $1,344,277,173$ |
| 5 | Annual Depreciation Expense, Historic TCOS, In 246 | $31,768,930$ |
| 6 | Composite Depreciation Rate | $2.36 \%$ |
| 7 | Round to 2\% to Reflect a Composite Life of 50 Years | $2.00 \%$ |

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

| 8 | Month in Service | Capitalized Balance |  | Composite Annual Depreciation Rate | Annual Depreciation |  | Monthly Depreciation |  | No. Months Depreciation | First Year Depreciation Expense |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | January | \$ | 1,122,414 | 2.00\% | \$ | 22,448 | \$ | 1,871 | 11 | \$ | 20,581 |
| 10 | February | \$ | 1,024,466 | 2.00\% | \$ | 20,489 | \$ | 1,707 | 10 | \$ | 17,070 |
| 11 | March | \$ | 16,046,352 | 2.00\% | \$ | 320,927 | \$ | 26,744 | 9 | \$ | 240,696 |
| 12 | April | \$ | 3,374,656 | 2.00\% | \$ | 67,493 | \$ | 5,624 | 8 | \$ | 44,992 |
| 13 | May | \$ | 5,530,074 | 2.00\% | \$ | 110,601 | \$ | 9,217 | 7 | \$ | 64,519 |
| 14 | June | \$ | 2,807,955 | 2.00\% | \$ | 56,159 | \$ | 4,680 | 6 | \$ | 28,080 |
| 15 | July | \$ | 1,021,860 | 2.00\% | \$ | 20,437 | \$ | 1,703 | 5 | \$ | 8,515 |
| 16 | August | \$ | 37,031,916 | 2.00\% | \$ | 740,638 | \$ | 61,720 | 4 | \$ | 246,880 |
| 17 | September | \$ | 958,882 | 2.00\% | \$ | 19,178 | \$ | 1,598 | 3 | \$ | 4,794 |
| 18 | October | \$ | 1,405,538 | 2.00\% | \$ | 28,111 | \$ | 2,343 | 2 | \$ | 4,686 |
| 19 | November | \$ | 932,002 | 2.00\% | \$ | 18,640 | \$ | 1,553 | 1 | \$ | 1,553 |
| 20 | December | \$ | 33,768,919 | 2.00\% | \$ | 675,378 | \$ | 56,282 | 0 | \$ | - |
| 21 | Investment | \$ | 105,025,030 |  |  |  |  | Dep | ciation Expense | \$ | 682,366 |

## III. Plant Transferred

22
23
$24(\operatorname{Ln} 7 * \operatorname{Ln} 22)$

| $\$$ | - | $<==$ This input area is for original cost plant |
| :--- | :--- | :--- |
| $\$$ | - | $<==$ 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. <br> $\$$ |
| $==$ This input area is for additional Depreciation Expense |  |  |

## AEP West SPP Member Companies

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2016 Cost of Service Formula Rate

## Worksheet C - ADIT Balances used in Projection \& True-Up

SOUTHWESTERN ELECTRIC POWER COMPANY

|  | (A) | (B) | (C) | (E) | (F) | (G) | (H) | (1) | (J) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 100\% | PTD | Transmission \& |  | Total Included |
| Line |  |  |  |  | Transmission | Plant | Distribution | Labor | in Ratebase |
| No. | Acc. No. | Description | YE Balance | Exclusions* | Related | Related | Plant Related | Related | (E) $+(\mathrm{F})+(\mathrm{G})+(\mathrm{H})$ |

Account 282 - Form-1 page 274-275, Ln 2 Col. (k)

| 282.12015 Year 282 Balance to Use in Projection |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $(1,185,711,001)$ | $(15,823,711)$ | - | $(1,169,899,454)$ | - | 12,164 |  |
| 282.1 | Transmission Allocator from Historic TCOS [GP or W/S] |  | 0.0000\% | 100.0000\% | 17.1544\% | 41.5068\% | 7.9764\% |  |
| 282.1 | Allocated Total |  | 0 | 0 | $(200,689,546)$ | 0 | 970 | (200,688,576) |
| 282 Balance to Use in True-Up |  |  |  |  |  |  |  |  |
| 282.1 | 2015 Year End Tax Deferrals - Ws C-1 | (1,185,711,001) | $(15,823,711)$ | - | (1,169,899,454) | - | 12,164 |  |
| 282.1 | 2014 Year End Tax Deferrals - Ws C-2 | (1,143,401,217) | 7,638,717 | - | (1,146,724,254) | - | $(4,315,680)$ |  |
|  | Subtotal | (2,329,112,218) | $(8,184,994)$ | - | (2,316,623,708) |  | $(4,303,516)$ |  |
|  | Average Balance | $(1,164,556,109)$ | $(4,092,497)$ | 0 | (1,158,311,854) | 0 | $(2,151,758)$ |  |
|  | Transmission Allocator from True-Up TCOS [GP or W/S] |  | 0.0000\% | 100.0000\% | 16.8136\% | 41.1252\% | 7.9621\% |  |
|  | Allocated Total |  | 0 | 0 | (194,754,020) | 0 | $(171,324)$ | (194,925,344) |
| Account 283 - Form-1 page 276-277, Ln 9, Col (k) |  |  |  |  |  |  |  |  |
| 283 Balance to Use in Projection |  |  |  |  |  |  |  |  |
| 283.1 | 2015 Year End Tax Deferrals - Ws C-1 | $(46,919,466)$ | $(13,793,756)$ | - | (1,979,641) | - | $(31,146,069)$ |  |
| 283.1 | Transmission Allocator from Historic TCOS [GP or W/S] |  | 0.0000\% | 100.0000\% | 17.1544\% | 41.5068\% | 7.9764\% |  |
| 283.1 | Allocated Total |  | 0 | 0 | $(339,596)$ | 0 | $(2,484,339)$ | $(2,823,935)$ |
| 283 Balance to Use in True-Up |  |  |  |  |  |  |  |  |
| 283.1 | 2015 Year End Tax Deferrals - Ws C-1 | $(46,919,466)$ | $(13,793,756)$ | - | (1,979,641) | - | $(31,146,069)$ |  |
| 283.1 | 2014 Year End Tax Deferrals - Ws C-2 | $(46,036,411)$ | $(13,854,967)$ | - | $(1,391,524)$ | - | $(30,789,920)$ |  |
|  | Subtotal | $(92,955,877)$ | (27,648,722) | - | $(3,371,166)$ | - | (61,935,989) |  |
|  | Average Balance | $(46,477,938)$ | $(13,824,361)$ | 0 | $(1,685,583)$ | 0 | $(30,967,994)$ |  |
|  | Transmission Allocator from True-Up TCOS [GP or W/S] |  | 0.0000\% | 100.0000\% | 16.8136\% | 41.1252\% | 7.9621\% |  |
|  | Allocated Total |  | 0 | 0 | $(283,407)$ | 0 | $(2,465,688)$ | (2,749,095) |

## Account 190 - Form-1 page 234, Ln 8, Col. (c)

| 190.1 | 2015 Year End Tax Deferrals - Ws C-1 | 127,491,877 | 112,643,004 | - | 1,810,410 | - | 13,038,464 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 190.1 | Transmission Allocator from Historic TCOS [GP or W/S] |  | 0.0000\% | 100.0000\% | 17.1544\% | 41.5068\% | 7.9764\% |  |
| 190.1 | Allocated Total |  | 0 | 0 | 310,565 | 0 | 1,040,001 | 1,350,567 |
| 190 Balance to Use in True-Up |  |  |  |  |  |  |  |  |
| 190.1 | 2015 Year End Tax Deferrals - Ws C-1 | 127,491,877 | 112,643,004 | - | 1,810,410 | - | 13,038,464 |  |
| 190.1 | 2014 Year End Tax Deferrals - Ws C-2 | 123,878,454 | 107,838,439 | - | 3,704,951 | - | 12,335,064 |  |
|  | Subtotal | 251,370,331 | 220,481,443 | - | 5,515,360 | - | 25,373,528 |  |
|  | Average Balance | 125,685,166 | 110,240,722 | 0 | 2,757,680 | 0 | 12,686,764 |  |
|  | Transmission Allocator from True-Up TCOS [GP or W/S] |  | 0.0000\% | 100.0000\% | 16.8136\% | 41.1252\% | 7.9621\% |  |
|  | Allocated Total |  | 0 | 0 | 463,666 | 0 | 1,010,127 | 1,473,792 |
|  | Account 255-Form-1 page 266-267 | Pre 1971 ITC Includeable in Rate Base |  |  |  |  |  |  |
|  | 255 Balance to Use in Projection |  |  |  |  |  |  |  |
| 255 | Acc Defrd ITC - Federal - 12/31/2015 (FF1 p. 267, Ln 2.h) | - |  |  | - |  |  |  |
| 255 | Transmission Allocator from Historic TCOS [GP or WIS] |  |  |  | 17.1544\% |  |  |  |
| 255 | Allocated Total |  | N/A | N/A | 0 | N/A | N/A | 0 |
| 255 Balance to Use in True-Up |  |  |  |  |  |  |  |  |
| 255 | Acc Defrd ITC - Federal - 12/31/2015 (FF1 p. 267, Ln 2.h) | - |  |  | - |  |  |  |
| 255 | Acc Defrd ITC - Federal - 12/31/2014 (FF1 p. 266, Ln 2.b) |  |  |  |  |  |  |  |
|  | Subtotal | - | 0 |  |  |  |  |  |
|  | Average Balance | 0 |  |  |  |  |  |  |
|  | Transmission Allocator from True-Up TCOS [GP or W/S] |  | N/A N/A $\frac{16.8136 \%}{0}$ |  |  |  |  |  |
|  | Allocated Total |  |  |  |  | N/A | N/A | 0 |

[^2]
## Worksheet C-1 - ADIT \& ITC Details



2831
TOTAL ELECTRIC ACCOUNT SUBTOTAL
(absolute value Total Company Amount Ties to FF1 p. 277 (k) -- Acct 283 Electric)

| ${ }_{19010001}$ |
| :---: |
| 1901001 |
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| 1901001 |
| 1901002 |


| 011 C | 011C-MJE TAX CREDIT CIF - def tax Asset- MJe |
| :---: | :---: |
| 011C-DFIT | 011C-DFIT TAX CREDIT CIF - DEF TAX ASSET |
| 433 A | 433A PUCT FUEL O/U RECOVERY-RETAIL |
| 433в | 433B INTEREST-FUEL OVER/UNDER RECOVERY |
| 433 C | 433C AR - FUEL OVER/UNDER RECOVERY |
| 433 D | 433D LA - FUEL OVER/UNDER RECOVERY |
| 460 A | 460A UNBILLED REVENUE |
| 520 A | 520A PROVS POSS REV REFDS-A/L |
| 576F | 576 F MARK \& SPREAD-DEFL-190-AL |
| 602A | 602A PROV WORKER'S COMP |
| 605 E | 605E SUPPLEMENTAL EXECUTIVE RETIREMENT PLAN |
| 605 F | 605 F ACCRD SUP EXEC RETIR PLAN COSTS-SFAS 158 |
| 6051 | 6051 ACCRD BK SUP. SAVINGS PLAN EXP |
| 605 J | 605 J EMPLOYER SAVINGS PLAN MATCH |
| 605 K | 605K ACCRUED BK BENEFIT COSTS |
| 6050 | 6050 ACCRUED PSI PLAN EXP |
| 610A | 610A BK PROV UNCOLL ACCTS - ST |
| 6100 | 6104 PROV-TRADING CREDIT RISK - All |
| 610 V | 610 V PROV-FAS 157 - AlL |
| 611 E | 611E ACCRUED MINE RECLAMATION |
| 611 G | 611G DEFD COMPENSATION-BOOK EXPENSE |
| $612 Y$ | 612 Y ACCRD COMPANYWIDE INCENTV PLAN |
| 613 C | 613 C ACCRD ENVIRONMENTAL LIAB-CURRENT |
| 613 E | 613E ACCRUED BOOK VACATION PAY |
| 613K | 613 K (ICDP)-INCENTIVE COMP DEFERRAL PLAN |
| $613 Y$ | $613 Y$ ACCRUED BK SEVERANCE BENEFITS |
| 615A | 615A ACCRUED INTEREST EXP -STATE |
| 615B | 615B ACCRUED INTEREST-LONG-TERM - FIN 48 |
| 615B | 615B-MJE ACCRD INTRST-TAX RES-LT-FIN 48-MJE |
| 615 C | 615C ACCRUED INTEREST-SHORT-TERM - FIN 48 |
| 615 C | 615C-MJE ACCRD INTRST-TAX RES-S/T-FIN 48-MJE |
| 615 E | 615 E ACCRUED STATE INCOME TAX EXP |
| 6150 | 6150 BK DFL RAIL TRANS REV/EXP |
| 639A | 639A DEFD BK GAIN-NON-AFF SALE-EMA |
| 6411 | 6411 ADVANCE RENTAL INC (CUR MO) |
| $641 \times$ | 641X DEFERRED INCOME - DOLET HILLS MINING BUYOUT |
| 651 F | 651F DISALLOWED COSTS - TURK PLANT |
| 651H | 651 H DISALLOWED COSTS - TURK PLANT AUX BOILER |
| 652 G | 652 G REG LIAB-UNREAL MTM GAIN-DEFL |
| 664 G | 664 G REG LIAB-MIRROR AFUDC-LA |
| 701A | 701A AMORT - GOODWILL PER BOOKS |
| 702A | 702A GOODWILL PER TAX |
| 710 H | 710H AMORT ELEC PLT ACQ ADJS |
| 906F | 906F ACCRD OPEB COSTS - SFAS 158 |
| 906P | 906P ACCRD BOOK ARO EXPENSE - SFAS 143 |
| 911Q-DSIT | 911Q-DSIT DSIT ENTRY - NORMALIZED |
| 911 S | 911S ACCRUED SALES \& USE TAX RESERVE |
| 911 S | 911S ACCRUED SALES \& USE TAX RESERVE - MJe |
| 911 V | 911V-MJE ACCRD SIT TX RES-LNG-TERM-FIN 48-MJE |
| 911 V | 911 V ACCRD SIT TX RESERVE-LNG-TERM-FIN 48 |
| 911 W | 911W ACCRD SIT TX RESERVE-SHRT-TERM-FIN 48 |
| $940 \times$ | 940X IRS CAPITALIZATION ADJUSTMENT |
| 960E | 960E AMT CREDIT - DEFERRED |


| $\begin{gathered} 898,797 \\ (321,320) \end{gathered}$ | E |
| :---: | :---: |
| $(1,015,819)$ | E |
| (122) | E |
| 0 | E |
| $(361,115)$ | E |
| 5,522,320 | E |
| 1,044,466 | PTD |
| (54,376) | E |
| 205,725 | Labor |
| 352,211 | Labor |
| 248,642 | E |
| 337,495 | Labor |
| 0 | Labor |
| 42,740 | Labor |
| 2,196,323 | Labor |
| 321,192 | PTD |
| 20,708 | E |
| 14,182,821 | E |
| 593,275 | Labor |
| 5,593,510 | Labor |
| 9,515 | PTD |
| 3,666,752 | Labor |
| 50,432 | Labor |
| 0 | Labor |
| 0 | PTD |
| $(498,536)$ | E |
| 961,045 | E |
| $(141,586)$ | E |
| 141,586 | E |
| $(621,404)$ | E |
| (0) | E |
| $(69,006)$ | E |
| 431,394 | PTD |
| 143,064 | E |
| 19,473,368 | E |
| 751,515 | E |
| $(1,507,631)$ | E |
| 13,085,883 | E |
| 2,119,648 | E |
| $(741,878)$ | E |
| 208,396 | PTD |
| 421,150 | E |
| 26,377,579 | , |
| (1,046,870) | PTD |
| $(762,650)$ | E |
| 762,650 | E |
| 1,233,829 | E |
| 2,019,194 | E |
| 842,317 | PTD |
| 124,850 | E |

898,797
$(321,320$
$(1,015,819)$
$(122)$





# AEP West SPP Member Companies <br> 2016 Cost of Service Formula Rate <br> Worksheet E-IPP Credits <br> SOUTHWESTERN ELECTRIC POWER COMPANY 

| Line | (A) | (B) |
| :---: | :---: | :---: |
| Number | Description | $\underline{2015}$ |
| 1 | Net Funds from IPP Customers @ 12/31/2014 (2015 FORM 1, P269, (B)) | 56,994,522 |
| 2 | Interest Accrual (company records) | 1,622,024 |
| 3 | Revenue Credits to Generators (company records) | $(12,276,926)$ |
| 4 |  |  |
|  | Other Adjustments (company records) |  |
| 5 | Accounting Adjustment |  |
| 6 |  |  |
| 7 | Net Funds from IPP Customers 12/31/2015 (2015 FORM 1, P269, (F)) | 46,339,620 |
| 8 | Average Balance for $2015((\ln 1+\ln 7) / 2)$ | 51,667,071 |

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 ELECTRIC POWER 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, II 149)
Project ROE Incentive Adder (Enter as whole number) $\quad 11.20 \%{ }_{0}$

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

Rate Base (Projected Tcos, $\ln 75$ )
R (from A. above)
Return (Rate Base $\times$ R)

## $\begin{array}{r}734,624,004 \\ 0.0825 \\ \hline\end{array}$

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

| Return (from B. above) | .587,755 |
| :---: | :---: |
| Tax Rate (Projected TCOS, In 109) | 37.92\% |
| EIT=(T/(1-T) * $(1-(\mathrm{WCLTD} / \mathrm{WACC}))=$ | 40.91\% |
| Income Tax Calculation (Return x EIT) | 24,78,694 |
| ITC Adjustment (Projected TCOS, In 116) | (390,955) |
| Income Taxes | 4,395,73 |

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 (Projection | 155,087,151 |
| :---: | :---: |
| Eturn (Projected TCOS, In 118) | 60,587,755 |
| me Taxes (Projected TCOS, In 117) | 24,395,738 |
| Gross Margin Taxes (Projected TCOS, in 122) | ,174 |
| and |  |

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

```
Return (from I.B. above)
Net Revenue Requirement, with 0 Basis Point ROE increase
Gross Margin Tax with 0 Basis Point ROE Increase (II.. below)
R Revenue Requirmenttw/ GIoss Margin Taxes
L Less: Depreciation (Projected TCOS, In 95)
```

| 69,664,484 60,587,755 |
| :---: |
| ${ }^{24,395,738}$ |
| 154,647,977 |
| $\begin{array}{r}155,087,151 \\ \hline 1897\end{array}$ |
| 30,110,663 |
| 976, |

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

Apportionment Factort to Texas (Wor
Apportioned Texas Revenues
Taxable eercentage of Revenu
Apporioned fexas Revenues
Taxable Percentage of Revenue ( $70 \%$ )
Taxable, Apportioned Margin
Texas Gross Margin Tax Rate
Texas Gross Margin Tax Rate
Tross-up Required for Kxpense
Tor Gos Margin

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 NeCR with 0 Basis Point increase in ROE
Net Rev. Req, w/o Basis Point ROE increase, less Dep


$\qquad$ | $960,766,546$ |
| :--- |
| $154,647,977$ |

.
$124,976,488$
13.019
$13.01 \%$
10.0
III. Calculation of Composite Depreciation Rate

Transmission Plant @ Beginning of Period (P. 2006, In 58 )
Transmission Plant @ End of Period (P.207, in 58 )
Transmission Plant Average Balance for 2015
Annual Depreciaiton Exxense (Historic TCos, Annual Depreciation Expense (Historic TCOS, In 246)
Composite Depreciation Rate
Depreciable Lite for composite Depreciation Rate



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

AEP West SPP Member Companies
2016 Cost of Servicice 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 ELECTRIC POWER COMPANY
I. Calculate Return and Income Taxes with $\mathbf{0}$ basis point ROE increase for Projects Qualified for
A. Determine ' R ' with hypothetical 0 basis point increase in ROE for Identified Projects

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

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

$\begin{array}{r}52,688,679 \\ 37.929 \\ \hline \text {.920 }\end{array}$
Income Tax Calct
ITC Adiustment
Income Taxes

ncome Txes ( ${ }^{(381,59}$
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 (TTue-Up TCOS, In 110)
Reurn (True-up TCOS, In 105)
Income Taxes (True-UP TCos, in 10



B. Determine Net Revenue Requirement with hypothetical 0 basis point increase in ROE.
 Gross Margin Tax with Basis Point ROE Increase (IIC. below)
Revenuege Re Less: Depreciaion (TTue-UPT TCOS, In 83)
C. Determine Gross Margin Tax with hypothetica
$\square$

Apportioned Texas Revenues
taxale Percentage of Reverue ( $70 \%$ )

Texas Gross Margin Tax Rate


Determine FCR with hypothetical 0 basis point ROE increas

Esis Point increase in RO
$\begin{array}{r}854,571.047 \\ \hline 142.642 .474 \\ \hline 16.680\end{array}$
Net Rev. Req, w/ O Basis Point RoE increase, less Dep
FCR witho Basis Point ROE increase, less Depereciation

Incremental FCR with 0 Basis Point ROE increase, less Depreciaio
$112,711,283$
$13.18 \%^{2}$

1 | $13.12 \% \%$ |
| :--- |
| $\frac{13.18 \%}{0.00 \%}$ |

III. Calculation of Composite Depreciation Rate

Transmission Plant @ Beginning of Period (P. 200, In (I) 58)
Transmission Plant @ End of Period (P.207, in 58 ) Transmission Plant Average Balance for 2015
Annual pepreciation Expense (True-up TCOS, in 83$)$ Compositereciaition exerecition Ra



Note: Review formulas in summary to ensure the proper year's reverue requirement is being

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

| Total <br> Company | $c$ <br> Non- <br> Transmission | Transmission |
| ---: | ---: | ---: |$|$| $4,782,909$ | $4,782,909$ |
| ---: | ---: |
|  |  |
| $2,410,556$ | $2,410,556$ |

(Revenue related to transmission facilities for pole attachments, rentals, etc. Provide data sources and explanations in Section VIII, Notes below )
IV. Account 4560015, Revenues from Associated Business Development

1 Account 4560015, Revenues from Associated Business Development 803,087
V. Total Other Operating Revenues To Reduce Revenue Requirement

| 196,730 |
| ---: |
| 240,824 |
| $71,522,009$ |
| - |
| - |
| 76,752 |
| - |
| $33,710,266$ |
| - |
| 521,472 |
| $1,267,721$ |
| $26,839,608$ |
| - |
| - |

Net Transmission Credits

| $\$ 9,106,191$ |
| ---: |
| $\$ 9,347,015$ |

## VIII.Data Sources:

# Cost of Service Formula Rate Using 2015 FF1 Balances Worksheet I - Supporting Transmission Expense Adjustments SOUTHWESTERN ELECTRIC POWER COMPANY 

| Other Expenses | $\$ 0$ |
| :--- | :--- |
| Direct Assignment Charge | $\$ 0$ |
| Sponsored Upgrades Charge | $\$ 0$ |
| Firm and Non-Firm Point-To-Point Charges | $\$ 0$ |
| Base Plan Charges | $\$ 0$ |
| Schedule 9 Charges | $\$ 0$ |
| SPP Schedule 12 - FERC Assessment | $\$ 0$ |
| SPP Schedule 1-A | $\$ 0$ |
| SPP Annual Assessment | $\$ 0$ |
| Ancillary Services Expenses | $\$ 0$ |
| Other | $\$ 0$ |
| Other | $\$ 0$ |
| Other | $\$ 0$ |
|  | $\$ 0$ |

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.

## 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
SOUTHWESTERN ELECTRIC POWER COMPANY


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

## SOUTHWESTERN ELECTRIC POWER COMPANY

I. DEVELOPMENT OF COMPOSITE STATE INCOME TAX RATES FOR 2015

| State Income Tax Rate - Louisiana |  | 8.00\% | 2.9064\% |
| :---: | :---: | :---: | :---: |
| Apportionment Factor <br> Effective Louisiana State Income Tax Rate |  | 36.33\% |  |
|  |  |  |  |
| State Income Tax Rate - Arkansas |  | 6.50\% | 1.5740\% |
| Apportionment FactorEffective Arkansas State Income Tax Rate |  |  |  |
|  |  |  |  |
| State Income Tax Rate - Oklahoma | Note 1 | 5.66\% | 0.0111\% |
| Apportionment FactorEffective Oklahoma State Income Tax Rate |  |  |  |
|  |  |  |  |
| State Income Tax Rate - Texas |  | 0.00\% |  | 0.0000\% |
| Apportionment Factor Effective Texas State Income Tax Rate |  | 0.00\% |  |  |
|  |  |  |  |  |
| State Income Tax Rate - Nebraska |  | 0.00\% | 0.0000\% |  |
| Apportionment Factor <br> Effective Nebraska State Income Tax Rate |  | 0.00\% |  |  |
|  |  |  |  |  |
| Total Effective State Income Tax Rate |  |  | 4.4915\% |  |

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

Line \# REVENUE REQUIREMENT BEFORE TEXAS GROSS MARGIN TAX (In 118 of Template)
1 Apportionment Factor to Texas (In12)
2 Apportioned Texas Revenues
3 Taxable Percentage of Revenue (70\%)
4 Taxable, Apportioned Margin
5 Texas Gross Margin Tax Rate (1\%)
6 Texas Gross Margin Tax Expense
7 Gross-up Required for Texas Gross Margin Expense
$\quad((\ln 6 * \ln 3$ * $\ln 1) /(1-\ln 5) * \ln 5)$
8 Total Additional Gross Margin Tax Revenue Requirement

| Projected |  | Historic |  | Actual |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total Company $695,999,430$ | $\begin{aligned} & \text { Trans. Only } \\ & 154,647,977 \end{aligned}$ | Total Company 689,199,241 | Trans. Only 145,168,521 | Total Company $689,887,819$ | $\begin{aligned} & \text { Trans. Only } \\ & 142,238,541 \end{aligned}$ |
| 40.45\% | 40.45\% | 40.45\% | 40.45\% | 40.45\% | 40.45\% |
| \$281,554,485 | \$62,560,154 | \$278,803,587 | \$58,725,405 | \$279,082,140 | \$57,540,132 |
| 70\% | 70\% | 70\% | 70\% | 70\% | 70\% |
| 197,088,140 | 43,792,108 | 195,162,511 | 41,107,783 | 195,357,498 | 40,278,093 |
| 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| 1,970,881 | 437,921 | 1,951,625 | 411,078 | 1,953,575 | 402,781 |
| 5,637 | 1,253 | 5,582 | 1,176 | 5,588 | 1,152 |
| 1,976,518 | 439,174 | 1,957,207 | 412,254 | 1,959,163 | 403,933 |

9 WHOLESALE LOAD ALLOCATOR (For Use in Gross Margin Tax Allocator)
10 Texas Jurisdictional Load
11 Total Load
12 Allocation Percentage

AEP West SPP Member Companies
Cost of Service Formula Rate Using 2015 FF1 Balances
Worksheet L - Taxes Other than Income
SOUTHWESTERN ELECTRIC POWER COMPANY
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 | Revenue Taxes |  |  |  |  |  |
| 2 | TX Gross Receipts/OH CAT Tax | 5,832,635 |  |  |  | 5,832,635 |
| 3 | Real Estate and Personal Property Taxes |  |  |  |  |  |
| 4 | Oklahoma Ad Valorum | 389,742 | 389,742 |  |  |  |
| 5 | Arkansas Ad Valorum | 12,052,172 | 12,052,172 |  |  |  |
| 6 | Louisiana Ad Valorum | 20,637,337 | 20,637,337 |  |  |  |
| 7 | Texas Ad Valorum | 18,860,925 | 18,860,925 |  |  |  |
| 8 | Payroll Taxes |  |  |  |  |  |
| 9 | Federal Insurance Contribution (FICA ) | 6,670,814 |  | 6,670,814 |  |  |
| 10 | Federal Unemployment Tax | 48,268 |  | 48,268 |  |  |
| 11 | State Unemployment Insurance | 56,029 |  | 56,029 |  |  |
| 12 | Production Taxes |  |  |  |  |  |
| 13 |  | - |  |  |  | - |
| 14 |  | - |  |  |  | - |
| 15 | Miscellaneous Taxes |  |  |  |  |  |
| 16 | Federal Excise Tax | 8,140 |  |  |  | 8,140 |
| 17 | LA State Franchise | - |  |  | - |  |
| 18 | DE State Franchise | 72,150 |  |  | 72,150 |  |
| 19 | AR State Franchise | 122,393 |  |  | 122,393 |  |
| 20 | Ok State Franchise Tax | 20,100 |  |  | 20,100 |  |
| 21 | Ok State License |  |  |  | - |  |
| 22 | AR State License |  |  |  | - |  |
| 23 | NE State License |  |  |  | - |  |
| 24 | DE State License |  |  |  | - |  |
| 25 | State Franchise | 3,937,241 |  |  | 3,937,241 |  |
| 26 | AR Local Franchise |  |  |  | - |  |
| 27 | TX Local Franchise | 9,331,988 |  |  |  | 9,331,988 |
| 28 | TX State Franchise |  |  |  |  | - |
| 29 | LA Local Franchise | 8,058,095 |  |  |  | 8,058,095 |
| 30 | AR Sales \& Use Tax |  |  |  | - |  |
| 31 | LA Sales \& Use Tax | (651) |  |  |  | (651) |
| 32 | NE Sales \& Use Tax |  |  |  |  | - |
| 33 | Ok Sales \& Use Tax |  |  |  |  | - |
| 34 | TX Sales \& Use Tax | 30,924 |  |  |  | 30,924 |
| 35 | TX PUC | 863,033 |  |  | 863,033 |  |
| 36 | LA Insp \& Cntrl Fees | 484,929 |  |  | 484,929 |  |
| 37 | State Licence Registration | 239 |  |  | 239 |  |
| 38 | LA PUC |  |  |  | - |  |
| 39 | AR PUC | 563,436 |  |  | 563,436 |  |
| 40 | DE Misc State and Local |  |  |  | - |  |
| 41 | Total Taxes by Allocable Basis | 88,039,939 | 51,940,176 | 6,775,111 | 6,063,521 | 23,261,131 |
|  | (Total Company Amount Ties to FFI p.114, Ln 14,(c)) | 88,039,939 |  |  |  |  |

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## Cost of Service Formula Rate Using 2015 FF1 Balances <br> Worksheet M - Cost of Debt Based on Outstanding Balances as of 12/31/2015 SOUTHWESTERN ELECTRIC POWER COMPANY

| (A) | (B) | (C) | (D) | (E) |
| :---: | :---: | :---: | :---: | :---: |
| Issuance | Principle Amount FF1.p. 257.x (h) | Interest Rate | Annual Expense | Notes |
| Long Term Debt (FF1.p. 256-257.h) |  |  |  |  |
| 1 |  |  |  |  |
| 2 TX Local Bank Facility FERC Auth ES 14-24-000 3 | 100,000,000 |  | $1,807,385$ | p257.1 L17h) |
| 4 Pollution Control Bonds |  |  |  |  |
| 5 PCRB - Parish of DeSoto, LA - Series 2010 | 53,500,000 | 1.60\% | 853,622 | p257 L11(h) |
| 6 PCRB - Sabine River - Series 2006-4.95\% | 81,700,000 | 4.95\% | 4,044,150 | p257 L19(h) |
| 7 PCRB - Parish of DeSoto, LA - Series 2010 |  | 3.25\% | 4,830 | p257 L8(h) |
| 8 Senior Unsecured Notes |  |  |  |  |
| 9 Senior Unsecured Notes - Series C |  | 5.375\% | 1,552,778 | p257 L13(h) |
| 10 Senior Unsecured Notes - Series D |  | 4.90\% | 3,675,000 | p257 L16(h) |
| 11 Senior Unsecured Notes - Series E | 250,000,000 | 5.55\% | 13,875,000 | p257 L22(h) |
| 12 Senior Unsecured Notes - Series F | 300,000,000 | 5.875\% | 17,625,000 | p257 L27(h) |
| 13 Senior Unsecured Notes - Series G | 400,000,000 | 6.45\% | 25,800,000 | p257 L30(h) |
| 14 Senior Unsecured Notes - Series H | 350,000,000 | 6.20\% | 21,700,000 | p257.1 L5(h) |
| 15 Senior Unsecured Notes - Series I | 275,000,000 | 3.55\% | 9,762,500 | p257.1 L8(h) |
| 16 Senior Unsecured Notes - Series J | 400,000,000 | 3.90\% | 11,916,667 | p257.1 L13(h) |
| Issuance Discount, Premium, \& Expenses: |  |  |  |  |
| 17 Financial Hedges \& Auction Fees | FF1.p256 \& 257.i Lines Described as Hersin | Hedges or Fees | 3,073,312 | $\begin{aligned} & \text { p257.1,Ln11 } \\ & \text { p257,Ln25 } \end{aligned}$ |
| 18 Amort of Debt Discount and Expenses | FF1.p. 117.63.c (or WS-N Ln 15) |  | 2,144,123 |  |
| 19 Less: Amor of Debt Premiums | FF1.p. 117.65.c (or WS-N Ln 17) |  | - |  |
| Reacquired Debt: |  |  |  |  |
| 20 Amortization of Loss | FF1.p. 117.64.c (or WS-N Ln 16) |  | 954,273 |  |
| 21 Less: Amortization of Gain | FF1.p. 117.66.c (or WS-N Ln 18) |  | 11,112 |  |
| 22 Total Interest on Long Term Debt | 2,210,200,000 | 5.37\% | 118,777,528 |  |
| Preferred Stock (FF1.p. 250-251) | Preferred Balance Outstanding |  |  |  |
|  |  |  | - |  |
|  |  |  | - |  |
| 23 Dividends on Preferred Stock | - | 0.00\% | - |  |

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



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



## Development of Cost of Preferred Stock

## Preferred Stock




[^0]:    TRANSMISSION PLANT INCLUDED IN SPP TARIFF
    Total transmission plant (In 18)
    Less transmission plant excluded from SPP Tariff (Worksheet A, In 23a Col. (E)) (Note Q)
    Less transmission plant included in OATT Ancillary Services (Worksheet A, In 23, Col. (E)) (Note R)
    Transmission plant included in SPP Tariff (In $111-\ln 112-\ln 113)$
    ( $\ln 114$ / $\ln 111$ )

[^1]:    * Exclusions: Non-utility, fuel supply, off-system sales and other items as specified related to costs not included in rates.

[^2]:    * Exclusions: Non-utility, fuel supply, off-system sales and other items as specified related to costs not included in rates.

