## APPALACHIAN POWER COMPANY

| Line No. |  |  |  |  |  | Transmission Amount |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | REVENUE REQUIREMENT (w/o incentives) | (In 138) |  |  |  | \$232,463,494 |  |
|  |  |  | Total | Allocator |  |  |  |
| 2 | REVENUE CREDITS | (Note A) (Worksheet E) | 3,618,736 | DA | 1.00000 | \$ | 3,618,736 |
| 3 | REVENUE REQUIREMENT For All Company Facilities | ( l 11 less $\ln 2)$ |  |  |  | \$ | 228,844,758 |







# AEP East Companies 

General Notes: a) References to data from Worksheets are indicated as: Worksheet X, Line\#.Column.X

A Revenue credits include:

1) Forfeited Discounts.
2) Miscellaneous Service Revenues
3) Rental revenues earned on assets included in the rate base.
4) Revenues for associated business projects provided by employees whose labor and overhead costs are in the transmission cost of service.
5) Other electric revenues.
6) Revenues for grandfathered PTP contracts included in the load divisor

See Worksheet E for details.
B The annual and monthly net plant carrying charges on page 1 are used to compute the revenue requirement for RTEP sponsored upgrades or those projects receiving approved incentive-ROE's.

C Transmission Plant balances in this study are projected as of December 31, 2013. Other ratebase amounts are as of December 31, 2012.
D The total-company balances shown for Accounts 281, 282, 283, 190 only reflect ADIT that relates to utility operations. The balance of Account 255 is reduced by prior flon throughs and is completely excluded if the utility chose to utilize amortization of tax credits against FIT expense. An exception to this is pre-1971 ITC balances, which art required to be taken as an offset to rate base. Account 281 is not allocated. In compliance with FERC Rulemaking RM02-7-000, Asset Retirement Obligation deferrals have been removed from ratebase. Transmission ADIT allocations are shown on WS B. The company will not include the ADIT portion of deferred hedge gains and losses in rate base.

E Cash Working Capital assigned to transmission is one-eighth of $O \& M$ allocated to transmission, as shown on line 88 . It excludes:

1) Load Scheduling \& Dispatch Charges in account 561 that are collected in the OATT Ancilliary Services Revenue, as shown on line 85.
2) AEP transmission equalization transfers, as shown on line 86
3) The impact of state regulatory deferrals and amortizations, as shown on line 87
4) All A\&G Expenses, as shown on line 103.

F Consistent with Paragraph 657 of Order 2003-A, the amount on line 77 is equal to the balance of IPP System Upgrade Credits owed to transmission customers that made contributions toward the construction of System upgrades, and includes accrued interest and unreturned balance of contributions. The annual interest expense is included on line 135 .

G Removes from the cost of service the Load Scheduling and Dispatch expenses booked to accounts 561.1 through 561.8 . Expenses recorded in these accounts, with the exception of $561.4 \& 561.8$ (lines $15 \& 16$ above) are recovered in Schedule 1A, OATT ancillary services rates. See Worksheet F, lines 6 through 15 , for descriptions and the Form 1 Source of these accounts' balances.

H Removes cost of transmission service provided by others to determine the basis of cash working capital on line 88 . To the extent such service is incurred to provide the PJM service at issue, e.g. transmission equalization agreement, such costs are added back on lines 105 and 106 to determine the total O\&M collected in the formula. The amounts on lines 105 and 106 are also excluded in the calculation of the FCR percentage calculated on lines 5 through 11.
The addbacks on lines 105 and 106 of activity recorded in 565 represents inter-company sales or purchases of transmission capacity necessary to meet each AEP company's transmission load relative to their available transmission capacity.
The company records referenced on lines 105 and 106 is the APPALACHIAN POWER COMPANY general ledger.
I Removes the impact of state regulatory deferrals or their amortization from O\&M expense.
J General Plant and Administrative \& General expenses, other than in accounts 924, 928, and 930, will be functionalized based on the Wages \& Salaries "W/S" allocator. The allocation basis for accounts 924,928 and 930 are separately presented in the formula. A change in the allocation method for an account must be approved via a 205 filing with the FERC.

K These deductions on lines 91 through 93 are to remove from the cost of service the expenses recorded by the company for Postemployment Benefits Other than Pensions (PBOP). See Note M below for the recoverable PBOP expense.

L Expenses reported for these A\&G accounts will be included in the cost of service only to the extent they are directly assignable to transmission service. Worksheet F allocates these expense items. Acct 928 Includes Regulatory Commission expenses itemized in FERC Form-1 at page 351, column H. FERC Assessment Fees and Annual Charges shall not be allocated to transmission. Only safety-related and educational advertising costs in Account 930.1 are included in the TCOS. Account 930.2 includes the expenses incurred by the transmission function for Associated Business Development revenues given as a credit to the TCOS on Worksheet E .

M See note K above. Per the settlement in Docket ER08-1329, recoverable PBOP expense is based on an annual total for the operating companies that is ratioed to them based on the total of actual annual PBOP costs, including charges from the AEP Service Corportation. The calculation of the recoverable amount for each company is shown on Worksheet O, and the process for updating the annual total is documented on Attachment F, Allowable PBOP Expense Formula.

N Includes only FICA, unemployment, highway, property and other assessments charged in the current year. Gross receipts, sales \& use and taxes related to income are excluded.
O The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and $p=$ the percentage of federal income tax deductible for state income taxes. See Worksheet G for the development of the Company's composite SIT. A utility that elected to utilize amortization of tax credits against taxable income, rather than book tax credits to Account No. 255 and reduce rate base, must reduce its income tax expense by the amount of the Amortized Investment Tax Credit (Form 1, 266.8.f) (In 130) multiplied by (1/1-T). If the applicable tax rates are zero enter 0 .

| Inputs Required: | FIT $=$ | $35.00 \%$ |  |
| :--- | :--- | ---: | :--- |
|  | SIT $=$ | $6.64 \%$ | (State Income Tax Rate or Composite SIT. Worksheet G)) |
|  | $\mathrm{p}=$ | $0.00 \%$ | (percent of federal income tax deductible for state purposes) |

Removes plant excluded from the OATT because it does not meet the PJM's definition of Transmission Facilities or is otherwise ineligible to be recovered under the OATT

Long Term Debt cost rate $=$ long-term interest (ln 153) / long term debt (In 162). Preferred Stock cost rate $=$ preferred dividends (In 154) / preferred outstanding (In 163). Common Stock cost rate (ROE) $=11.49 \%$, the rate accepted by FERC in Docket No. ER08-1329. It includes an additional 50 basis points for PJM RTO membership. In the Projected \& Historic templates, the interest expense on long-term debt is the sum ot a full year's interest expense at the coupon rate tor each issuance outstanding as of December 31 of the historic year. The projected expense for variable rate debt will be based on the effective rate at December 31 . These conventions ensure that the expense used in the projection will reflect a full year, similar to the actual expense that will appear in the subsequent true-up of the projection, and minimize the impact on the true-up of using a partial year interest expense. The projection will reflect the actual historic-year expense recorded for issuance expenses, discounts and premiums, and gains or losses on reacquired debt. Eligible hedging gains or losses will be limited to five basis points of the projected capital structure. Details and calculations are shown on Worksheet L.
T This note only applies to Indiana Michigan Power Company.
$\mathrm{U} \quad$ This note only applies to the true-up template.

## AEP East Companies

Transmission Cost of Service Formula Rate
Utilizing Historic Cost Data for 2012 with Year-End Rate Base Balances

## APPALACHIAN POWER COMPANY

| Line No. |  |  |  |  |  | Transmission Amount |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 166 | REVENUE REQUIREMENT (w/o incentives) | (In 303) | Total |  |  | \$218,844,211 |  |
|  |  |  |  | Allocator |  |  |  |
| 167 | REVENUE CREDITS | (Note A) (Worksheet E) | 3,618,736 | DA | 1.00000 | \$ | 3,618,736 |
| 168 | REVENUE REQUIREMENT For All Company | (In 166 less In 167) |  |  |  | \$ | 15,225,475 |



AEP East Companies
Transmission Cost of Service Formula Rate
Utilizing Historic Cost Data for 2012 with Year-End Rate Base Balances
APPALACHIAN POWER COMPANY

|  | (1) | (2) | (3) |  |  | (5) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | RATE BASE CALCULATION | Data Sources (See "General Notes") | TO Total | Allocator |  | Total Transmission |
| Line |  |  | NOTE C |  |  |  |
| No. | GROSS PLANT IN SERVICE |  |  |  |  |  |
| 183 | Production | (Worksheet $\mathrm{A} \ln 1 . \mathrm{C}$ ) | 5,620,438,618 | NA | 0.00000 | - |
| 184 | Less: Production ARO (Enter Negative) | (Worksheet $\mathrm{A} \ln 2 . \mathrm{C}$ ) | $(71,986,517)$ | NA | 0.00000 |  |
| 185 | Transmission | (Worksheet A In 3.C \& Ln 307) | 2,040,266,144 | DA |  | 1,989,664,925 |
| 186 | Plus: Transmission Plant-in-Service Additions (Worksheet I) |  | - | TP | 0.97520 | - |
| 187 |  |  | N/A | NA | 0.00000 | N/A |
| 188 | Plus: Additional Trans Plant on Transferred Assets (Worksheet I) |  | N/A | NA | 0.00000 | N/A |
| 189 | Distribution | (Worksheet $\mathrm{A} \ln 5 . \mathrm{C}$ ) | 2,988,920,393 | NA | 0.00000 | - |
| 190 | Less: Distribution ARO (Enter Negative) | (Worksheet $\mathrm{A} \ln 6 . \mathrm{C}$ ) | $(3,069)$ | NA | 0.00000 | 13,825,109 |
| 191 | General Plant | (Worksheet $\mathrm{A} \ln 7 . \mathrm{C}$ ) | 195,239,795 | w/s | 0.07081 | 13,825,109 |
| 192 | Less: General Plant ARO (Enter Negative) | (Worksheet A In 8.C) | $(811,747)$ | W/S | 0.07081 | $(57,481)$ |
| 193 | Intangible Plant | (Worksheet A In 9.C) | 123,626,312 | W/S | 0.07081 | 8,754,093 |
| 194 | TOTAL GROSS PLANT | (sum Ins 183 to 193) | 10,895,689,929 | GP(h)= | 0.184677 | 2,012,186,646 |
|  |  |  |  | GTD= | 0.39562 |  |
| 195 | ACCUMULATED DEPRECIATION AND AMORTIZATION |  |  |  |  |  |
| 196 | Production | (Worksheet A In 12.C) | 2,022,105,333 | NA | 0.00000 | - |
| 197 | Less: Production ARO (Enter Negative) | (Worksheet A In 13.C) | $(30,813,283)$ | NA | 0.00000 | - |
| 198 | Transmission | (Worksheet A In 14.C \& 28.C) | 629,801,174 | TP1= | 0.98245 | 618,746,248 |
| 199 | Less: Transmission ARO (Enter Negative) (Worksheet A In 15.C) Plus: Transmission Plant-in-Service Additions (Worksheet I) |  | - | TP1 $=$ | 0.98245 | - |
| 200 |  |  | N/A | DA | 1.00000 | N/A |
| 201 | Plus: Additional Projected Deprec on Transferred Assets (Worksheet I) |  | N/A | DA | 1.00000 | N/A |
| 202 | Plus: Additional Transmission Depreciation for 2013 (In 276) |  | N/A | TP1 | 0.98245 | N/A |
| 203 | Plus: Additional General \& Intangible Depreciation for 2013 (ln $275+\ln 276$ ) |  | N/A | W/S | 0.07081 | N/A |
| 204 | Plus: Additional Accum Deprec on Transferred Assets (Worksheet I) |  | N/A | DA | 1.00000 | N/A |
| 205 | Distribution | (Worksheet A In 16.C) | 918,499,290 | NA | 0.00000 |  |
| 206 | Less: Distribution ARO (Enter Negative) | (Worksheet A In 17.C) | $(1,517)$ | NA | 0.00000 | - |
| 207 | General Plant | (Worksheet A In 18.C) | 63,986,336 | W/S | 0.07081 | 4,530,931 |
| 208 | Less: General Plant ARO (Enter Negative) | (Worksheet A In 19.C) | $(594,444)$ | W/S | 0.07081 | $(42,093)$ |
| 209 | Intangible Plant | (Worksheet A In 20.C) | 91,986,512 | W/S | 0.07081 | 6,513,649 |
| 210 | TOTAL ACCUMULATED DEPRECIATION | (sum Ins 196 to 209, | 3,694,969,402 |  |  | 629,748,735 |
| 211 | NET PLANT IN SERVICE |  |  |  |  |  |
| 212 | Production | (In $183+\ln 184-\ln 196-\ln 197)$ | 3,557,160,051 |  |  | - |
| 213 | TransmissionPlus: Transmission Plant-in-Service Additions ( $\ln 187-\ln 200)$$(\ln 185+\ln 186-\ln 198-\ln 199)$ |  | 1,410,464,970 |  |  | 1,370,918,678 |
| 214 |  |  | N/A |  |  | N/A |
| 215 | Plus: Additional Trans Plant on Transferred Assets (In 188-In 201) |  | N/A |  |  | N/A |
| 216 | Plus: Additional Transmission Depreciation for 2013 (-In 202) |  | N/A |  |  | N/A |
| 217 | Plus: Additional General \& Intangible Depreciation for 2013 ( $-\ln 203$ ) |  | N/A |  |  | N/A |
| 218 | Plus: Additional Accum Deprec on Transferred Assets (Worksheet I) (-In 204) |  | N/A |  |  | N/A |
| 219 | Distribution | (In $189+\ln 190-\ln 205-\ln 206$ ) | 2,070,419,551 |  |  | - |
| 220 | General Plant | (In $191+\ln 192-\ln 207-\ln 208)$ | 131,036,156 |  |  | 9,278,790 |
| 221 | Intangible Plant | (In $193-\ln 209)$ | 31,639,800 |  |  | 2,240,443 |
| 222 | TOTAL NET PLANT IN SERVICE | (sum Ins 212 to 221) | 7,200,720,527 | $N P(\mathrm{~h})=$ | 0.191986 | 1,382,437,911 |
| 223 | DEFERRED TAX ADJUSTMENTS TO RATE BASEAccount No. 281.1 (enter negative) | (Note D) |  |  |  |  |
| 224 |  | (Worksheet B, In 2 \& In 5.C) | $(197,320,252)$ | NA |  | (28,41, - |
| 225 | Account No. 282.1 (enter negative) | (Worksheet B, $\ln 7$ \& $\ln 10 . C)$ | (1,229,418,143) | DA |  | $(289,461,122)$ |
| 226 | Account No. 283.1 (enter negative) | (Worksheet B, $\ln 12$ \& $\ln 15 . \mathrm{C}$ ) | $(431,851,994)$ | DA |  | $(30,244,723)$ |
| 227 | Account No. 190.1 | (Worksheet B, In 17 \& $\ln 20 . \mathrm{C}$ ) | 399,990,470 | DA |  | 50,244,301 |
| 228 | Account No. 255 (enter negative) | (Worksheet B, In 24 \& $\ln 25 . \mathrm{C}$ ) | $(2,822,664)$ | DA |  | $(641,429)$ |
| 229 | TOTAL ADJUSTMENTS | (sum Ins 224 to 228) | $(1,461,422,583)$ |  |  | (270,102,973) |
| 230 | PLANT HELD FOR FUTURE USE | (Worksheet A In 29.C \& ln 30.C) | 5,319,071 | DA |  | 1,877,675 |
| 231 | REGULATORY ASSETS | (Worksheet A In 36. (C)) | - | DA |  | - |
| 232 | WORKING CAPITAL | (Note E) |  |  |  |  |
| 233 | Cash Working Capital | (1/8* $\ln 253)$ | 3,978,581 |  |  | 3,879,907 |
| 234 | Transmission Materials \& Supplies | (Worksheet C, In 2.(D)) | 1,508,480 | TP | 0.97520 | 1,471,068 |
| 235 | A\&G Materials \& Supplies | (Worksheet C, In 3.(D)) | 825,807 | W/S | 0.07081 | 58,476 |
| 236 | Stores Expense | (Worksheet C, In 4.(D)) | - | GP(h) | 0.18468 | - |
| 237 | Prepayments (Account 165) - Labor Allocated | (Worksheet C, In 6.G) | 203,768,047 | W/S | 0.07081 | 14,429,002 |
| 238 | Prepayments (Account 165) - Gross Plant | (Worksheet C, In 6.F) | 3,057,772 | GP(h) | 0.18468 | 564,701 |
| 239 | Prepayments (Account 165) - Transmission Only | (Worksheet C, In 6.E) | 12,816 | DA | 1.00000 | 12,816 |
| 240 | Prepayments (Account 165) - Unallocable | (Worksheet C, In 6.D) | $(201,506,924)$ | NA | 0.00000 | - |
| 241 | TOTAL WORKING CAPITAL | (sum Ins 233 to 240) | 11,644,579 |  |  | 20,415,970 |
| 242 | IPP CONTRIBUTIONS FOR CONSTRUCTION | (Note F) (Worksheet D, In 7.B) | ( $2,445,715$ ) | DA | 1.00000 | $(2,445,715)$ |
| 243 | RATE BASE (sum Ins 222, 229, 230, 231, 241, 242) |  | 5,753,815,878 |  |  | 1,132,182,868 |

Utilizing Historic Cost Data for 2012 with Year-End Rate Base Balances
APPALACHIAN POWER COMPANY

| (1) | (2) | (3) | (4) |  | (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EXPENSE, TAXES, RETURN \& REVENUE REQUIREMENTS CALCULATION | Data Sources <br> (See "General Notes") | TO Total | Allocator |  | Total Transmission |
| OPERATION \& MAINTENANCE EXPENSE |  |  |  |  |  |
| Production | 321.80.b | 1,892,122,758 |  |  |  |
| Distribution | 322.156.b | 115,706,381 |  |  |  |
| Customer Related Expense | 322 \& 323.164,171,178.b | 53,414,582 |  |  |  |
| Regional Marketing Expenses | 322.131.b | 5,904,349 |  |  |  |
| Transmission | 321.112.b | 64,421,229 |  |  |  |
| TOTAL O\&M EXPENSES | (sum Ins 244 to 248) | 2,131,569,299 |  |  |  |
| Less: Total Account 561 | (Note G) (Worksheet F, In 15.C) | 10,758,518 |  |  |  |
| Less: Account 565 | (Note H) 321.96.b | 35,116,817 |  |  |  |
| Less: Regulatory Deferrals \& Amortizations | (Note I) (Worksheet F, In 4.C) | (13,282,753) |  |  |  |
| Total O\&M Allocable to Transmission | ( Ins 248-250-251-252) | 31,828,647 | TP | 0.97520 | 31,039,256 |
| Administrative and General | $323.197 . \mathrm{b}$ (Note J) | 115,443,349 |  |  |  |
| Less: Acct. 924, Property Insurance | 323.185.b | 2,893,399 |  |  |  |
| Acct. 9260039 PBOP Expense | PBOP Worksheet O Line 9 \& 10, (Note K) | 10,321,493 |  |  |  |
| Acct. 9260057 PBOP Medicare Subsidy | PBOP Worksheet O Line 11, (Note K) | - |  |  |  |
| PBOP Expense Billed From AEPSC | PBOP Worksheet O Line 13, (Note K) | 1,038,300 |  |  |  |
| Acct. 928, Reg. Com. Exp. | 323.189.b | 2,048,123 |  |  |  |
| Acct. 930.1, Gen. Advert. Exp. | 323.191.b | 1,213,171 |  |  |  |
| Acct. 930.2, Misc. Gen. Exp. | 323.192.b | 6,334,522 |  |  |  |
| Balance of A \& G | (In 254 - sum In 255 to In 261) | 91,594,341 | w/s | 0.07081 | 6,485,879 |
| Plus: Acct. 924, Property Insurance | (In 255) | 2,893,399 | GP(h) | 0.18468 | 534,345 |
| Acct. 928 - Transmission Specific | Worksheet F in 19.(E) (Note L) | - | TP | 0.97520 | - |
| Acct 930.1 - Only safety related ads -Direct | Worksheet F In 36.(E) (Note L) | - | TP | 0.97520 | - |
| Acct 930.2 - Misc Gen. Exp. - Trans | Worksheet F In 44.(E) (Note L) | 785,229 | DA | 1.00000 | 785,229 |
| Settlement Approved PBOP Recovery | PBOP Worksheet O, Col. C, Line 1, (Note M) | 13,362,440 | w/s | 0.07081 | 946,207 |
| A \& G Subtotal | (sum Ins 262 to 267) | 108,635,409 |  |  | 8,751,660 |
| O \& M EXPENSE SUBTOTAL | ( $\ln 253+\ln 268)$ | 140,464,056 |  |  | 39,790,916 |
| Plus: TEA Settlement in Account 565 | Company Records (Note H) | - | DA | 1.00000 |  |
| Plus: Transmission Lease Payments To Affiliate | Acct 565 (Company Records) (Note H) | - | DA | 1.00000 | - |
| TOTAL O \& M EXPENSE | $(\ln 269+\ln 270+\ln 271)$ | 140,464,056 |  |  | 39,790,916 |
| DEPRECIATION AND AMORTIZATION EXPENSE |  |  |  |  |  |
| Production | 336.2-6.f | 167,860,265 | NA | 0.00000 | - |
| Distribution | 336.8.f | 101,779,757 | NA | 0.00000 | - |
| Transmission | 336.7.f | 32,626,776 | TP1 | 0.98245 | 32,054,077 |
| Plus: Transmission Plant-in-Service Additions (Worksheet I) |  | N/A |  |  | N/A |
| General | 336.10.f | 3,140,253 | w/s | 0.07081 | 222,364 |
| Intangible | 336.1.f | 16,715,020 | W/S | 0.07081 | 1,183,606 |
| TOTAL DEPRECIATION AND AMORTIZATION | $\begin{aligned} & \text { (Ln 274+275+ } \\ & 276+277+278+279) \end{aligned}$ | 322,122,071 |  |  | 33,460,047 |
| TAXES OTHER THAN INCOME | (Note N) |  |  |  |  |
| Labor Related |  |  |  |  |  |
| Payroll | Worksheet H In 23.(D) | 8,830,131 | w/s | 0.07081 | 625,270 |
| Plant Related |  |  |  |  |  |
| Property | Worksheet $\mathrm{H} \ln 23$. (C) \& $\ln 58$. (C) | 50,923,379 | DA |  | 14,495,326 |
| Gross Receipts/Sales \& Use | Worksheet H In 23.(F) | 33,724,260 | NA | 0.00000 | 1,502,80 |
| Other | Worksheet H In 23.(E) | 8,137,707 | GP(h) | 0.18468 | 1,502,850 |
| TOTAL OTHER TAXES | (sum Ins 283 to 287) | 101,615,477 |  |  | 16,623,445 |
| INCOME TAXES | (Note O) |  |  |  |  |
| $\mathrm{T}=1-\{[(1-\mathrm{SIT}) *(1-\mathrm{FIT})] /(1-\mathrm{SIT}$ * FIT * p $)$ \} |  | 39.32\% |  |  |  |
| EIT=(T/(1-T)) * (1-(WCLTD/WACC)) $=$ where WCLTD=(In 327) and WACC $=(\ln 330)$ and FIT, SIT \& $p$ are as given in Note O . GRCF=1 / (1-T) = (from In 290) |  | $42.12 \%$ 1.6479 |  |  |  |
| Amortized Investment Tax Credit (enter negative) | (FF1 p.114, In 19.c) | $(397,195)$ |  |  |  |
| Income Tax Calculation ITC adjustment | $\begin{aligned} & (\ln 291 * \ln 299) \\ & (\ln 294 * \ln 295) \end{aligned}$ | $\begin{array}{r} 194,321,854 \\ \quad(654,530) \\ \hline \end{array}$ | NP(h) | 0.19199 | $\begin{array}{r} 38,236,864 \\ \quad(125,661) \\ \hline \end{array}$ |
| TOTAL INCOME TAXES | (sum Ins 296 to 297) | 193,667,324 |  |  | 38,111,203 |
| RETURN ON RATE BASE (Rate Base*WACC) | ( $\ln 243$ * $\ln 330)$ | 461,352,545 |  |  | 90,780,703 |
| INTEREST ON IPP CONTRIBUTION FOR CONST. (Note F) (Worksheet D, In 2.(B)) |  | 77,897 | DA | 1.00000 | 77,897 |
| (Gains) / Losses on Sales of Plant Held for Future Use (Worksheet N, In 4, Cols. ((F) \& (H)) |  | - |  |  | - |
| Tax Impact on Net Loss / (Gain) on Sales of Plant Held for Future Use (In 301 * $\ln 291$ ) |  | - |  |  | - |
| TOTAL REVENUE REQUIREMENT |  | 1,219,299,371 |  |  | 218,844,211 |

Transmission Cost of Service Formula Rate
Utilizing Historic Cost Data for 2012 with Year-End Rate Base Balances
APPALACHIAN POWER COMPANY

## SUPPORTING CALCULATIONS



# Formula Rate Historic TCOS Page 10 of 36 <br> AEP East Companies <br> Transmission Cost of Service Formula Rate <br> Utilizing Historic Cost Data for 2012 with Year-End Rate Base Balances <br> APPALACHIAN POWER COMPANY 

General Notes: a) References to data from Worksheets are indicated as: Worksheet X , Line\#.Column. X

A Revenue credits include

1) Forfeited Discounts
2) Miscellaneous Service Revenues.
3) Revenues for associad on assets included in the rate base
4) Other electric revenues.
5) Revenues for grandfathered PTP contracts included in the load divisor

See Worksheet E for details.
B The annual and monthly net plant carrying charges on page 1 are used to compute the revenue requirement for RTEP sponsored upgrades or those projects receiving approved incentive-ROE's.
C Transmission Plant balances in this study are historic as of December 31, 2012
D The total-company balances shown for Accounts 281, 282, 283, 190 only reflect ADIT that relates to utility operations. The balance of Account 255 is reduced by prior flow throughs and is completely excluded if the utility chose to utilize amortization of tax credits against FIT expense. An exception to this is pre-1971 ITC balances, which are equired to be taken as an offset to rate base. Account 281 is not allocated. In compliance with FERC Rulemaking RMO2-7-000, Asset Retirement Obligation deferrals have

The company will not include the ADIT portion of deferred hedge gains and losses in rate base
E Cash Working Capital assigned to transmission is one-eighth of O\&M allocated to transmission, as shown on line 253. It excludes

1) Load Scheduling \& Dispatch Charges in account 561 that are collected in the OATT Ancilliary Services Revenue, as shown on line 250
2) AEP transmission equalization transfers, as shown on line 251
3) The impact of state regulatory deferrals and amortizations, as shown on line 25
4) All A\&G Expenses, as shown on line 268.

F Consistent with Paragraph 657 of Order 2003-A, the amount on line 242 is equal to the balance of IPP System Upgrade Credits owed to transmission customers that made contributions toward the construction of System upgrades, and includes accrued interest and unreturned balance of contributions. The annual inte expense is included on line 300
G Removes from the cost of service the Load Scheduling and Dispatch expenses booked to accounts 561.1 through 561.8. Expenses recorded in these accounts, with the exception o 561.4 \& 561.8 (lines 180 \& 181 above) are recovered in Schedule 1A, OATT ancillary services rates. See Worksheet $F$, lines 6 through 15 , for descriptions and the Form 1 Source of
these accounts' balances.

H Removes cost of transmission service provided by others to determine the basis of cash working capital on line 253. To the extent such service is incurred to provide the PJM service at issue, e.g. transmission equalization agreement, such costs are added back on lines 270 and 271 to determine the total $\mathbf{O} \& \mathrm{M}$ collected in the formula. The amounts on lines 270 and 271 are also excluded in the calculation of the FCR percentage calculated on lines 170 through 176. The addbacks on lines 270 and 271 of activity recorded in 565 represents inter-company sales or purchases of transmission capacity necessary to meet each AEP company's transmission load relative to their available transmission capacity
The company records referenced on lines 270 and 271 is the APPALACHIAN POWER COMPANY general ledger.
1 Removes the impact of state regulatory deferrals or their amortization from O\&M expense.
J General Plant and Administrative \& General expenses, other than in accounts 924, 928, and 930, will be functionalized based on the Wages \& Salaries "W/S" allocator. The allocation basis for accounts 924,928 and 930 are separately presented in the formula. A change in the allocation method for an account must be approved via a 205 filing with the FERC.

K These deductions on lines 256 through 258 are to remove from the cost of service the expenses recorded by the company for Postemployment Benefits Other than Pensions (PBOP) See Note M below for the recoverable PBOP expense.

Expenses reported for these $A \& G$ accounts will be included in the cost of service only to the extent they are directly assignable to transmission service. Worksheet F allocate these expense items. Acct 928 Includes Regulatory Commission expenses itemized in FERC Form-1 at page 351, column H. FERC Assessment Fees and Annual Charges shall not be allocated to transmission. Only safety-related and educational advertising costs in Account 930.1 are included in the TCOS. Account 930.2 includes the expenses incurred by the transmission function for Associated Business Development revenues given as a credit to the TCOS on Worksheet E .

M See note K above. Per the settlement in Docket ER08-1329, recoverable PBOP expense is based on an annual total for the operating companies that is ratioed to them based on the total of actual annual PBOP costs, including charges from the AEP Service Corportation. The calculation of the recoverable amount for each company is shown on Worksheet O , and the process for updating the annual total is documented on Attachment F, Allowable PBOP Expense Formula.

N Includes only FICA, unemployment, highway, property and other assessments charged in the current year. Gross receipts, sales \& use and taxes related to income are excluded.
O The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and $p=$
the percentage of federal income tax deductible for state income taxes. See Worksheet G for the development of the Company's composite SIT
A utility that elected to utilize amortization of tax credits against taxable income, rather than book tax credits to Account No. 255 and reduce rate base, must reduce its income tax expense by the amount of the Amortized Investment Tax Credit (Form 1, 266.8.f)
(In 295) multiplied by (1/1-T). If the applicable tax rates are zero enter 0 .
$\begin{array}{ll}\text { Inputs Required: } & \text { FIT }= \\ 35.00 \%\end{array}$
$\begin{array}{lll}\mathrm{p}= & 6.64 \% & \text { (State Income Tax Rate or Composite SIT. Worksheet G)) } \\ \mathrm{p}= & 0.00 \% & \text { (percent of federal income tax deductible for state purposes) }\end{array}$
P Removes plant excluded from the OATT because it does not meet the PJM's definition of Transmission Facilities or is othervise ineligible to be recovered under the OATT.
Q Removes transmission plant (e.g. step-up transformers) included in the development of OATT ancillary service rates and not already removed for reasons indicated in Note $P$
R Includes functional wages \& salaries billed by AEP Service Corporation for support of the operating company.
S Long Term Debt cost rate $=$ long-term interest ( $\ln 318$ )/long term debt (In 327). Preferred Stock cost rate $=$ preferred dividends (In 319)/preferred outstanding (In 328), Common Stock cost rate (ROE) $=11.49 \%$, the rate accepted by FERC in Docket No. ER08-1329. It includes an additional 50 basis points for remaining a member of the PJM RTO

In the Projected \& Historic templates, the interest expense on long-term debt is the sum of a full year's interest expense at the coupon rate for each issuance outstanding as of December 31 of the historic year. The projected expense for variable rate debt will be based on the effective rate at December 31. These conventions ensure that the expense used in the projection will reflect a full year, similar to the actual expense that will appear in the subsequent true-up of the projection, and minimize the impact on the true-up of using a partial year interest expense. The projection will reflect the actual historic-year expense recorded for issuance expenses, discounts and premiums, and gains or losses on reacquired debt. Eligible hedging gains or losses will be limited to five basis points of the projected capital structure. Details and calculations are shown on Worksheet $L$

T This note only applies to Indiana Michigan Power Company.
$\cup \quad$ This note only applies to the true-up template.

## AEP East Companie

Formula Rate APCo True-UP TCOS

Transmission Cost of Service Formula Rate
Utilizing Actual Cost Data for 2012 with Average Ratebase Balances

| Line No. |  |  |  |  |  | TransmissionAmount |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | REVENUE REQUIREMENT (w/o incentives) | (In 138) | Total |  |  | \$218,162,992 |  |
|  |  |  |  | Allocator |  |  |  |
| 2 | REVENUE CREDITS | (Note A) (Worksheet E) | 3,618,736 | DA | 1.00000 | \$ | 3,618,736 |
| 3 | REVENUE REQUIREMENT For All Company Facilities | (ln 1 less $\ln 2)$ |  |  |  | \$ | 214,544,256 |



12 ADDITIONAL REVENUE REQUIREMENT for projects w/ incentive ROE's (Note B) (Worksheet K)

| 14 | Total Load Dispatch \& Scheduling (Account 561) | Line 85 Below |  |
| :--- | :--- | :--- | ---: |
| 15 | Less: Load Dispatch - Scheduling, System Control and Dispatch Services (321.88.b) | 10,758,518 |  |
| 16 | Less: Load Dispatch - Reliability, Planning \& Standards Development Services (321.92.b) | $5,714,454$ |  |
|  |  | (Line 14-Line 15 - Line 16) | $1,211,704$ |
| 17 | Total 561 Internally Developed Costs | $3,832,360$ |  |




AEP East Companies
Transmission Cost of Service Formula Rat
Utilizing Actual Cost Data for 2012 with Average Ratebase Balances

## APPALACHIAN POWER COMPANY

## SUPPORTING CALCULATIONS

| In |
| :---: |
| No. |
| 139 |
| 140 |
| 141 |
| 142 |
|  |
| 143 |
|  |
|  |
| 144 |
| 145 |
| 146 |
| 147 |
| 148 |
| 149 |
| 150 |
|  |
| 151 |
|  |
| 152 |
| 153 |
| 154 |
| 155 |
| 156 |
| 157 |
| 158 |
| 159 |
| 160 |
|  |
| 161 |
| 162 |
| 163 |
| 164 |
| 165 |
| 166 |

TRANSMISSION PLANT INCLUDED IN PJM TARIFF
Total transmission plant
Less transmission plant excluded from PJM Tariff (Note P)
Less transmission plant included in OATT Ancillary Services (Worksheet A, ln 23, Col. (C))) (Note Q)
Transmission plant included in PJM Tariff
(ln $139-\ln 140-\ln 141$ )
WAGES \& SALARY ALLOCATOR (W/S)
Production
Transmission
Regional Market Expenses
Distribution
Other (Excludes A\&G)
Total
Transmission related amount

| (Note R) | Direct Payroll | Payroll Billed from AEP Service Corp. | Total |  |
| :---: | :---: | :---: | :---: | :---: |
| 354.20.b | 57,348,833 | 20,738,274 | 78,087,107 | NA |
| 354.21.b | 4,649,255 | 5,848,397 | 10,497,652 | TP |
| 354.22.b | 0 | 0 | - | NA |
| 354.23.b | 34,664,664 | 4,515,151 | 39,179,815 | NA |
| 354.24,25,26.b | 8,613,542 | 8,194,178 | 16,807,720 | A |
| (sum Ins 145 to 149) | 105,276,294 | 39,296,000 | 144,572,294 |  |

WEIGHTED AVERAGE COST OF CAPITAL (WACC)
Long Term Interest
Preferred Dividends
Development of Common Stock:
Development of Common Stock: (Worksheet M, In. 1, col. (E))
Proprietary Capital
Less: Preferred Stock
Less: Account 216.1
Less: Account 219
$\begin{array}{ll}\text { Less: Account } 219 & \text { (Worksheet M, In. 4, col. (E)) } \\ \text { Common Stock } & \text { (In } 156-\ln 157-\ln 158-\ln 159)\end{array}$
(Worksheet M, In. 2, col. (E))
(Worksheet M, In. 3, col. (E))
(Worksheet M, In. 4, col. (E))
Long Term Debt (Note T) W/S M, $\ln 11, \ln 22$, col. (E)) $\frac{\text { Average \$ }}{3,722,145,904}$
Preferred Stock (In 157)
Commone Stock (In 160)
Total (Sum Ins 162 to 164) 6,759,222,605
3,037,076,702

Capital Structure Equity Limit (Note U)
100.0\%

| $1,991,143,960$ |
| ---: |
| $-\quad 40,910,581$ |
| $1,950,233,379$ |
| TP |

1,991,143,960

TP
0.97945

| 0.00000 | - |
| ---: | ---: |
| 0.979045 | $10,281,964$ |
| 0.00000 | - |
| 0.00000 | - |
| 0.00000 | - |
|  | $10,281,964$ |
| W/S= | $\mathbf{0 . 0 7 1 1 2}$ |


|  | \$ |
| :---: | :---: |
|  | 198,340,666 |
|  | Average |
|  | 2,994,488,906 |
|  | - |
|  | 1,632,577 |
|  | $(44,220,373)$ |
|  | 3,037,076,702 |
| Cost |  |
| (Note S) | Weighted |
| 0.0533 | 0.0293 |
| - | 0.0000 |
| 11.49\% | 0.0516 |
| WACC= | 0.0810 |

# AEP East Companies <br> Transmission Cost of Service Formula Rate Utilizing Actual Cost Data for 2012 with Average Ratebase Balances 

## APPALACHIAN POWER COMPANY

General Notes: a) References to data from Worksheets are indicated as: Worksheet X, Line\#.Column. X

A Revenue credits include

1) Forfeited Discounts.

Service Revenues
3) Rental revenues earned on assets included in the rate base
4) Revenues for associated business projects provided by employees whose labor and overhead costs are in the transmission cost of service
6) Revenues for grandfath
6) Re Worss PTP contracts included in the load divisor

See Worksheet E for details.
B The annual and monthly net plant carrying charges on page 1 are used to compute the revenue requirement for RTEP sponsored upgrades or those projects receiving approved incentive-ROE's.

C Transmission Plant balances in this study reflect the average of the balances at December 31, 2011 and December 31, 2012.
D The total-company balances shown for Accounts 281, 282, 283, 190 only reflect ADIT that relates to utility operations. The balance of Account 255 is reduced by prior flow throughs and is completely excluded if the utility chose to utilize amortization of tax credits against FIT expense. An exception to this is pre-1971 ITC balances, which are required to be taken as an offset to rate base. Account 281 is not allocated. In compliance with FERC Rulemaking RM02-7-000, Asset Retirement Obligation deferrals have been removed from ratebase. Transmission ADIT allocations are shown on WS B.
The company will not include the ADIT portion of deferred hedge gains and losses in rate base.
E Cash Working Capital assigned to transmission is one-eighth of O\&M allocated to transmission, as shown on line 88. It excludes: 1) Load Scheduling \& Dispatch Charges in account 561 that are collected in the OATT Ancilliary Services Revenue, as shown on line 85 .
2) AEP transmission equalization transfers, as shown on line 86
3) The impact of state regulatory deferrals and amortizations, as shown on line 87
4) All A\&G Expenses, as shown on line 103.

F Consistent with Paragraph 657 of Order 2003-A, the amount on line 77 is equal to the balance of IPP System Upgrade Credits owed to transmission customers that made contributions toward the construction of System upgrades, and includes accrued interest and unreturned balance of contributions. The annual interest expense is included on line 135 .

G Removes from the cost of service the Load Scheduling and Dispatch expenses booked to accounts 561.1 through 561.8. Expenses recorded in these accounts, with the exception of 561.4 \& 561.8 (lines 15 \& 16 above) are recovered in Schedule 1A, OATT ancillary services rates. See Worksheet $F$, lines 6 through 15, for descriptions and exception of $561.4 \& 561.8$ (lines $15 \& 16$ above)

H Removes cost of transmission service provided by others to determine the basis of cash working capital on line 88. To the extent such service is incurred to provide the PJM service at issue, e.g. transmission equalization agreement, such costs are added back on lines 105 and 106 to determine the total O\&M collected in the formula. The PJM service at issue, e.g. transmission equalization agreement, such costs are added back on lines 105 amounts on lines 105 and 106 are also excluded in the calculation of the FCR percentage calculated on lines 5 through 11 . The addbacks on lines 105 and 106 of activity recorded in 565 represents inter-company sales or purchases of transmission capacity necessary to meet each AEP company's transmission load relative to their available transmission capacity. The company records referenced on lines 105 and 106 is the APPALACHIAN POWER COMPANY general ledger.

I Removes the impact of state regulatory deferrals or their amortization from O\&M expense.
J General Plant and Administrative \& General expenses, other than in accounts 924,928 , and 930 , will be functionalized based on the Wages \& Salaries "W/S" allocator The allocation basis for accounts 924,928 and 930 are separately presented in the formula. A change in the allocation method for an account must be approved via a 205 filing with the FERC

K These deductions on lines 91 through 93 are to remove from the cost of service the expenses recorded by the company for Postemployment Benefits Other than Pensions (PBOP). See Note M below for the recoverable PBOP expense.
L Expenses reported for these A\&G accounts will be included in the cost of service only to the extent they are directly assignable to transmission service. Worksheet F allocates these expense items. Acct 928 Includes Regulatory Commission expenses itemized in FERC Form-1 at page 351, column H. FERC Assessment Fees and Annual Charges shall not be allocated to transmission. Only safety-related and educational advertising costs in Account 930.1 are included in the TCOS. Account 930.2 includes the expenses incurred by the transmission function for Associated Business Development revenues given as a credit to the TCOS on Worksheet E

M See note K above. Per the settlement in Docket ER08-1329, recoverable PBOP expense is based on an annual total for the operating companies that is ratioed to them based on the total of actual annual PBOP costs, including charges from the AEP Service Corportation. The calculation of the recoverable amount for each company is shown on Worksheet O, and the process for updating the annual total is documented on Attachment F, Allowable PBOP Expense Formula

N Includes only FICA, unemployment, highway, property and other assessments charged in the current year. Gross receipts, sales \& use and taxes related to income are excluded.
O The currently effective income tax rate, where FIT is the Federal income tax rate; SIT is the State income tax rate, and $p=$
the percentage of federal income tax deductible for state income taxes. See Worksheet G for the development of the Company's composite SIT.
A utility that elected to utilize amortization of tax credits against taxable income, rather than book tax credits to Account No. 255 and reduce rate base
must reduce its income tax expense by the amount of the Amortized Investment Tax Credit (Form 1, 266.8.f)
(In 130) multiplied by (1/1-T). If the applicable tax rates are zero enter 0 .
$\begin{array}{lll}\text { Inputs Required: } & \text { FIT }= & 35.00 \% \\ & \text { SIT }= & 6.64 \% \\ & \text { p }= & 0.00 \%\end{array}$ (state Income Tax Rate or Composite SIT. Worksheet G))
P Removes plant excluded from the OATT because it does not meet the PJM's definition of Transmission Facilities or is otherwise ineligible to be recovered under the OATT.
Q Removes transmission plant (e.g. step-up transformers) included in the development of OATT ancillary service rates and not already removed for reasons indicated in Note P.
R Includes functional wages \& salaries billed by AEP Service Corporation for support of the operating company.
S Long Term Debt cost rate = long-term interest (In 153) /average long term debt (In 162). Preferred Stock cost rate = preferred dividends (In 154) / preferred outstanding (In 163). Common Stock cost rate (ROE) $=11.49 \%$, the rate accepted by FERC in Docket No. ER08-1329. It includes an additional 50 basis points for PJM RTO membership Interest expense for the true-up WACC is based on actual expenses for the true-up year. The amount of eligible hedging gains or losses included in total interest expense is limited to five basis points of the true-up capital structure. Details and calculations of the true-up weighted average cost of capital are shown on Worksheet
M. Eligible Hedging Gains and Losses are defined in the Formula Protocols in the tariff, and on Worksheet M.

T This note only applies to Indiana Michigan Power Company.
U Per Settlement, equity for APPALACHIAN POWER COMPANY is limited to $100 \%$ of Capital Structure. If the percentage of equity exceeds the cap, the excess is included in weighted percentage of long term debt in the capital structure
During the period ended December 31, 2011 the equity cap is in effect. During this period, a change in the cap percentage must be approved via a 205 filing with the FERC

| AEP East Companies <br> Cost of Service Formula Rate Using 2012 FF1 Balances Worksheet A Supporting Plant Balances APPALACHIAN POWER COMPANY |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (A) | (B) | (C) | (D) | (E) |
| Line |  |  |  |  |  |
| Number | Rate Base Item \& Supporting Balance | Source of Data | Balance @ December $\text { 31, } 2012$ | $\frac{\text { Balance @ December }}{31}$ $\text { 31, } 2011$ | $\frac{\text { Average Balance }}{\text { for } 2012}$ |
| NOTE: Functional ARO investment and accumulated depreciation balances shown below are included in the total functional balances shown he |  |  |  |  |  |
| Plant Investment Balances |  |  |  |  |  |
| 1 | Production Plant In Service | FF1, page 205 Col .(g) \& pg. 204 Col . (b). In 46 | 5,620,438,618 | 5,182,826,934 | 5,401,632,776 |
| 2 | Production Asset Retirement Obligation (ARO | FF1, page 205\&204, Col.(g)\&(b), Ins 15,24,34,44 | 71,986,517 | 67,928,373 | 69,957,445 |
| 3 | Transmission Plant In Servic¢ | FF1, page 207 Col. (g) \& pg. 206 Coll. (b). In 58 | 2,040,266,144 | 1,942,021,775 | 1,991,143,960 |
| 4 | Transmission Asset Retirement Obligation | FF1, page 207 Col.(g) \& pg. 206 Coll. (b). In 57 |  |  |  |
| 5 | Distribution Plant In Service | FF1, page 207 Col.(g) \& pg. 206 Col. (b). In 75 | 2,988,920,393 | 2,841,967,051 | 2,915,443,722 |
| 6 | Distribution Asset Retirement Obligatior | FF1, page 207 Col.(g) \& pg. 206 Col. (b). In 74 | 3,069 | 3,069 | 3,069 |
| 7 | General Plant In Service | FF1, page 207 Col.(g) \& pg. 206 Col. (b). In 99 | 195,239,795 | 188,962,248 | 192,101,022 |
| 8 | General Asset Retirement Obligatior | FF1, page 207 Col .(g) \& pg. 206 Col . (b). In 98 | 811,747 | 811,747 | 811,747 |
| 9 | Intangible Plant In Servic¢ | FF1, page 205 Col .(g) \& pg. 204 Col . (b), In 5 | 123,626,312 | 109,249,193 | 116,437,753 |
| 10 | Total Property Investment Balance | (Sum of Lines: 3, 1, 5, 7, 9) | 10,968,491, 262 | 10,265,027,201 | 10,616,759,232 |
| 11 | Total ARO Balance (included in total on line 10 | (Sum of Lines: 4, 2, 6, 8) | 72,801,333 | 68,743,189 | 70,772,261 |
| Accumulated Depreciation \& Amortization Balance: |  |  |  |  |  |
| 12 | Production Accumulated Depreciatior | FF1, page 219, Ins 20-24, Col. (b) | 2,022,105,333 | 1,878,949,799 | 1,950,527,566 |
| 13 | Production ARO Accumulated Depreciatiol | Company Records - Note 1 | 30,813,283 | 26,034,077 | 28,423,680 |
| 14 | Transmission Accumulated Depreciatior | FF1, page 219, In 25, Col. (b) | 629,801,174 | 607,580,490 | 618,690,832 |
| 15 | Transmission ARO Accumulated Depreciatior | Company Records - Note 1 |  |  |  |
| 16 | Distribution Accumulated Depreciatior | FF1, page 219, In 26, Col. (b) | 918,499,290 | 866,478,073 | 892,488,682 |
| 17 | Distribution ARO Accumulated Depreciatio | Company Records - Note 1 | 1,517 | 1,448 | 1,482 |
| 18 | General Accumulated Depreciatior | FF1, page 219, In 28, Col. (b) | 63,986,336 | 62,827,573 | 63,406,955 |
| 19 | General ARO Accumulated Depreciatior | Company Records - Note 1 | 594,444 | 267,102 | 430,773 |
| 20 | Intangible Accumulated Amortization | FF1, page 200, In 21, Col. (b) | 91,986,512 | 82,263,489 | 87,125,001 |
| 21 | Total Accumulated Depreciation or Amortizatio, | (Sum of Lines: 14, 12, 16, 18, 20) | 3,726,378,645 | 3,498,099,424 | 3,612,239,035 |
| 22 | Total ARO Balance (included in total on line 21 | (Sum of Lines: 15, 13, 17, 19) | 31,409,243 | 26,302,627 | 28,855,935 |
| Generation Step-Up Units |  |  |  |  |  |
| 23 | GSU Investment Amoun | Company Records - Note 1 | 50,601,219 | 31,219,942 | 40,910,581 |
| 24 | GSU Accumulated Depreciation | Company Records - Note 1 | 11,054,926 | 9,772,952 | 10,413,939 |
| 25 | GSU Net Balance | (Line 23 - Line 24) | 39,546,292 | 21,446,990 | 30,496,641 |
| Transmission Accumulated Depreciation Net of GSU Accumulated Depreciatio |  |  |  |  |  |
| 26 | Transmission Accumulated Depreciatior | (Line 14 Above) | 629,801,174 | 607,580,490 | 618,690,832 |
| 27 | Less: GSU Accumulated Depreciation | (Line 24 Above) | 11,054,926 | 9,772,952 | 10,413,939 |
| 28 | Subtotal of Transmission Net of GSL | (Line 26 - Line 27) | 618,746,248 | 597,807,538 | 608,276,893 |
| Plant Held For Future Use |  |  |  |  |  |
| 29 | Plant Held For Future Use | FF1, page 214, In 47, Col. (d) | 5,319,071 | 5,848,769 | 5,583,920 |
| 30 | Transmission Plant Held For Future | Company Records - Note 1 | 1,877,675 | 1,947,017 | 1,912,346 |
| Regulatory Assets and Liabilities Approved for Recovery In Ratebas |  |  |  |  |  |
| Note: Regulatory Assets \& Liabilities can only be included in ratebase pursuant to a 205 filing with the FERC. |  |  |  |  |  |
| 31 32 |  |  |  |  | $:$ |
| 33 |  |  |  |  | - |
| 34 |  |  |  |  | - |
| 35 36 | Total Regulatory Deferrals Included in Ratebase |  |  |  |  |

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

AEP East Companies

## Cost of Service Formula Rate Using 2012 FF1 Balances Worksheet B Supporting ADIT and ITC Balances APPALACHIAN POWER COMPANY

|  | (A) | (B) | (C) | (D) | (E) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line |  |  | Balance @ December | Balance @ December | Average Balance |
| Number | Description | Source | 31, 2012 | 31, 2011 | for 2012 |

## Account 281

Year End Utility Deferrals
Less: ARO Related Deferrals
Less: Other Excluded Deferrals
Transmission Related Deferrals

FF1, p. 272-273, In 8, Col. (k) Company Records - Note 1 Company Records - Note 1 Ln $2-\ln 3-\ln 4$

| $197,320,252$ |
| ---: |
| - |
| $197,320,252$ |

177,921,978 177,921,978

## Account 282

Year End Utility Deferrals
Less: ARO Related Deferrals
Less: Other Excluded Deferrals
Transmission Related Deferrals
FF1, p. 274-275, In 5, Col. (k) Company Records - Note 1 Company Records - Note 1 Ln 7 - $\ln 8-\ln 9$

| $1,229,418,143$ | $1,154,439,973$ |
| ---: | ---: |
| $5,314,689$ | $15,371,558$ |
| $934,642,332$ | $881,306,346$ |
| $289,461,122$ | $257,762,069$ |


| $1,191,929,058$ |
| ---: |
| $10,343,124$ |
| $907,974,339$ |
| $273,611,596$ |

## Account 283

Year End Utility Deferrals Less: ARO Related Deferrals Less: Other Excluded Deferrals
Transmission Related Deferrals
FF1, p. 276-277, In 9, Col. (k)
Company Records - Note 1
Company Records - Note 1
Ln 12 - In 13 - In 14

Account 190
Year End Utility Deferrals
Less: ARO Related Deferrals
Less: Other Excluded Deferrals
Transmission Related Deferrals

| FF1, p. 234, In 8, Col. (c) | $399,990,470$ | $450,019,423$ | $425,004,947$ |
| :---: | ---: | ---: | ---: |
| Company Records - Note 1 | $40,515,848$ | $40,164,641$ | $40,340,245$ |
| Company Records - Note 1 | $309,230,321$ | $360,199,321$ | $334,714,821$ |
| $17-\ln 18-\ln 19$ | $50,244,301$ | $49,655,461$ | $49,949,881$ |

## Account 255

Year End ITC Balances
Less: Balances Not Qualified for Ratebase
ITC Balances Includeable Ratebase
Transmission Related Deferrals
FF1, p. 266-267, In 8, Col. (h)
Company Records - Note 1 Ln 22 - In 23
Company Records - Note 1

| $3,205,027$ |  |  |  |
| ---: | ---: | ---: | ---: |
| 382,363 | $4,445,172$ |  | $3,825,100$ |
|  | 779,558 | 580,961 |  |
|  | $3,822,664,614$ | $3,244,139$ |  |
| 641,429 | 915,869 | 778,649 |  |

NOTE 1 On this worksheet, "Company Records" refers to AEP's tax accounting ledger.
NOTE 2 ADIT balances should exclude balances related to hedging activity.
(F)
(G)
(H)
(I)

Materials \& Supplies

| $\begin{aligned} & \text { Line } \\ & \text { Number } \end{aligned}$ |  | Source | $\frac{\text { Balance @ December }}{31,2012}$ | Balance @ December$\text { 31, } 2011$ | $\frac{\text { Average Balance for }}{\underline{2012}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 1 |  |  |  |  |  |
| 2 | Transmission Materials \& Supplies | FF1, p. 227, In 8, Col. (c) \& (b) | 1,508,480 | 761,022 | 1,134,751 |
| 3 | General Materials \& Supplies | FF1, p. 227, In 11, Col. (c) \& (b) | 825,807 | 701,580 | 763,694 |
| 4 | Stores Expense (Undistributed) | FF1, p. 227, In 16, Col. (c) \& (b) | 0 | 0 |  |


| 5 | Prepayment Balance Summary |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average of YE Balance | Excludable Balances | $\begin{gathered} 100 \% \\ \text { Transmission } \\ \text { Related } \end{gathered}$ | Transmission Plant Related | Transmission Labor Related | Total Included in Ratebase (E) + (F) + (G) |
| 6 | Totals as of December 31, 2012 | 5,331,711 | (201,506,924) | 12,816 | 3,057,772 | 203,768,047 | 206,838,635 |
| 7 | Totals as of December 31, 2011 | 5,222,276 | $(193,295,853)$ | 23,404 | 3,278,832 | 195,215,893 | 198,518,129 |
| 8 | Average Balance | 5,276,994 | (197,401,389) | 18,110 | 3,168,302 | 199,491,970 | 202,678,382 |


| Prepayments Account 165-Balance @ 12/31/2012 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | Acc. No. | Description | $\begin{gathered} 2012 \\ \text { YE Balance } \end{gathered}$ | Excludable Balances | $\begin{gathered} 100 \% \\ \text { Transmission } \\ \text { Related } \end{gathered}$ | Transmission Plant Related | Transmission Labor Related | Total Included in Ratebase (E) $+(\mathrm{F})+(\mathrm{G})$ | Explanation |
| 10 | 1650001 | Prepaid Insurance | 1,844,047 |  |  | 1,844,047 |  | 1,844,047 | Plant Related Insurance Policies |
| 11 | 165000212 | Prepaid Taxes | 1,809,578 | 1,809,578 |  |  |  |  | Prepaid Taxes |
| 12 | 1650003 | Prepaid Rents |  |  |  |  |  |  | Prepaid Distribution Rent Expense |
| 13 | 1650004 | Prepaid Interest | 26,938 | 26,938 |  |  |  |  |  |
| 14 | 1650005 | Prepaid Employee Benefits | 0 | , |  |  |  | - |  |
| 15 | 1650006 | Other Prepayments | 12,816 | - | 12,816 |  |  | 12,816 | PPD Sales |
| 16 | 1650009 | Prepaid Carry Cost-Factored AR | 62,549 | 62,549 |  |  |  |  | AR Factoring - Retail Only |
| 17 | 1650010 | Prepaid Pension Benefits | 203,768,047 |  |  |  | 203,768,047 | 203,768,047 | Prefunded Pension Expense |
| 18 | 1650014 | FAS 158 Qual Contra Asset | (203,768,047) | (203,768,047) |  |  |  |  | SFAS 158 Offset |
| 19 | 1650016 | FAS 112 ASSETS | , | - |  |  |  | - | SFAS 112 Overfunding Asset |
| 20 | 1650021 | Prepaid Insurance - EIS | 1,213,725 | - |  | 1,213,725 |  | 1,213,725 |  |
| 21 | 1650023 | Prepaid Lease | 361,859 | 361,859 |  |  |  |  |  |
| 22 | 165001112 | Prepaid Sales Taxes | 199 | 199 |  |  |  |  |  |
|  |  | Subtotal - Form 1, p 111.57.c | 5,331,711 | (201,506,924) | 12,816 | 3,057,772 | 203,768,047 | 206,838,635 |  |


| Prepayments Account 165-Balance @ 12/31/2011 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | Acc. No. | Description | $\begin{gathered} 2011 \\ \text { YE Balance } \end{gathered}$ | Excludable Balances | $\begin{gathered} 100 \% \\ \text { Transmission } \\ \text { Related } \end{gathered}$ | Transmission Plant Related | Transmission Labor Related | Total Included in Ratebase (E) + (F) + (G) | Explanation |
| 23 | 1650001 | Prepaid Insurance | 1,935,794 |  |  | 1,935,794 |  | 1,935,794 | Plant Related Insurance Policies |
| 24 | 165000211 | Prepaid Taxes | 1,637,001 | 1,637,001 |  | 0 |  | - | Prepaid Taxes |
| 25 | 1650003 | Prepaid Rents | 0 | 0 |  |  |  | - | Prepaid Distribution Rent Expense |
| 26 | 1650004 | Prepaid Interest | 27,220 | 27,220 |  |  |  |  |  |
| 27 | 1650005 | Prepaid Employee Benefits | 0 |  |  |  |  |  |  |
| 28 | 1650006 | Other Prepayments | 23,404 |  | 23,404 | 0 |  | 23,404 | PPD Sales |
| 29 | 1650009 | Prepaid Carry Cost-Factored AR | 49,321 | 49,321 |  |  |  | - | AR Factoring - Retail Only |
| 30 | 1650010 | Prepaid Pension Benefits | 195,215,893 |  |  |  | 195,215,893 | 195,215,893 | Prefunded Pension Expense |
| 31 | 1650014 | FAS 158 Qual Contra Asset | $(195,215,893)$ | $(195,215,893)$ |  |  |  | - | SFAS 158 Offset |
| 32 | 1650016 | FAS 112 ASSETS | 0 | - |  |  |  | $\cdots$ | SFAS 112 Overfunding Asset |
| 33 | 1650021 | Prepaid Insurance - EIS | 1,343,038 |  |  | 1,343,038 |  | 1,343,038 |  |
| 34 | 1650023 | Prepaid Lease | 206,498 | 206,498 |  |  |  |  |  |
|  |  | Subtotal - Form 1, p 111.57.d | 5,222,276 | (193,295,853) | 23,404 | 3,278,832 | 195,215,893 | 198,518,129 |  |

AEP East Companies

# Cost of Service Formula Rate Using 2012 FF1 Balances <br> Worksheet D Supporting IPP Credits APPALACHIAN POWER COMPANY 

| Line | (A) | (B) |
| :---: | :---: | :---: |
| Number | Description | 2012 |
| 1 | Net Funds from IPP Customers 12/31/2011 (2012 FORM 1, P269, line 20.b) | (2,367,818.00) |
| 2 | Interest Accrual (Company Records - Note 1) | $(77,897.00)$ |
| 3 | Revenue Credits to Generators (Company Records - Note 1) | - |
| 4 | Other Adjustments |  |
| 5 | Accounting Adjustment (Company Records - Note 1) | - |
| 6 |  | - |
| 7 | Net Funds from IPP Customers 12/31/2012 (2012 FORM 1, P269, line 23.f) | (2,445,715.00) |
| 8 | Average Balance for Year as Indicated in Column ((ln $1+\ln 7) / 2$ ) | (2,406,766.50) |

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

## AEP East Companies

Cost of Service Formula Rate Using 2012 FF1 Balances Worksheet E Supporting Revenue Credits APPALACHIAN POWER COMPANY

| Line |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Number | Description | Company | Transmission | Transmission |
| 1 | Account 450, Forfeited Discounts (FF1 p.300.16.(b); Company Records - Note 1) | 5,024,400 | 5,024,400 | - |
| 2 | Account 451,Miscellaneous Service Revenues (FF1 p.300.17.(b); Company Records - Note 1) | 1,833,084 | 1,470,159 | 362,925 |
| 3 | Account 454, Rent from Electric Property (FF1 p.300.19.(b); Company Records - Note 1) | 21,091,928 | 19,091,646 | 2,000,282 |
| 4 | Account 4560015, Associated Business Development- (Company Records - Note 1) | 7,744,030 | 6,488,501 | 1,255,529 |
| 5 | Account 456-Other Electric Revenues - (Company Records - Note 1) | 59,627,918 | 59,627,918 | - |
| 6 | Subtotal - Other Operating Revenues (Company Total equals (FF1 p. 300.26.(b)] | 95,321,360 | 91,702,624 | 3,618,736 |
| 7 | Accounts 4470004 \& 5, Revenues from Grandfathered Transmission Contracts (Company Records - Note 1) | - | - | - |
| 8 | Total Other Operating Revenues To Reduce Revenue Requirement | 95,321,360 | 91,702,624 | 3,618,736 |

[^0]| Requlatory O\&M Deferrals \& Amortizations |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 5700005 | Maint Station-Reliability-Df | 15,744 |  |  |
| 2 | 5660007 | Virginia T-RAC UnderRecovery | $(13,438,947)$ |  |  |
| 3 | 566000 | Amortization Severance | 140,450 |  |  |
| 4 |  |  |  |  |  |
| 5 |  | Total | \$(13,282,753) |  |  |
| Detail of Account 561 Per FERC Form 1 |  |  |  |  |  |
| 6 | FF1 p 321.84.b | 561-Load Dispathing | 0 |  |  |
| 7 | FF1p 321.85.b | 561.1 - Load Dispatch - Reliability | 23,193 |  |  |
| 8 | FF1p 321.86.b | 561.2- Load Dispatch - Monitor \& Operate Trans System | 3,210,973 |  |  |
| 9 | FF1 p 321.87.b | 561.3 - Load Dispatch - Trans Service \& Scheduling | (314) |  |  |
| 10 | FF1 p 321.88.b | 561.4 - Scheduling, System Control \& Dispatch | 5,714,454 |  |  |
| 11 | FF1 p 321.89.b | 561.5 - Reliability, Planning and Standards Development | 598,508 |  |  |
| 12 | FF1 p 321.90.b | 561.6 - Transmission Service Studies | 0 |  |  |
| 13 | FF1p 321.91.b | 561.7-Generation Interconnection Studies | 0 |  |  |
| 14 | FF1 1 321.92.b | 561.8-Reliability, Planning and Standards Development Services | 1,211,704 |  |  |
| 15 |  | Total of Account 561 | 10,758,518 |  |  |
| Account 928 |  |  |  |  |  |
| 16 | 9280000 | Regulatory Commission Exp | 2,443 | 2,443 |  |
| 17 | 9280001 | Regulatory Commission Exp-Adm | 1,473,176 | 1,473,176 |  |
| 18 | 9280002 | Regulatory Commission Exp-Case | 572,503 | 572,503 | - |
| 19 |  | Total | 2,048,123 | 2,048,123 | - |
| Account 930.1 |  |  |  |  |  |
| 20 | 9301000 | General Advertising Expenses | 67,832 | 67,832 |  |
| 21 | 9301001 | Newspaper Advertising Space | 244,076 | 244,076 |  |
| 22 | 9301002 | Radio Station Advertising Time | 4,902 | 4,902 |  |
| 23 | 9301003 | TV Station Advertising Time | 565,322 | 565,322 |  |
| 24 | 9301004 | Newspaper Advertising Prod Exp | 1,752 | 1,752 |  |
| 25 | 9301005 | Radio \&TV Advertising Prod Exp | 36,525 | 36,525 | - |
| 26 | 9301006 | Spec Corporate Comm Info Proj | 2 | 2 | - |
| 27 | 9301007 | Special Adv Space \& Prod Exp | 345 | 345 |  |
| 28 | 9301008 | Direct Mail and Handouts |  |  |  |
| 29 | 9301009 | Fairs, Shows, and Exhibits | 269 | 269 |  |
| 30 | 9301010 | Publicity | 21,223 | 21,223 | - |
| 31 | 9301011 | Dedications, Tours, \& Openings | 5 | 5 |  |
| 32 | 9301012 | Public Opinion Surveys | 13,839 | 13,839 |  |
| 33 | 9301013 | Movies Slide Films \& Speeches |  |  |  |
| 34 | 9301014 | Video Communications | 77 | 77 | - |
| 35 | 9301015 | Other Corporate Comm Exp | 257,000 | 257,000 | - |
| 36 |  | Total | 1,213,171 | 1,213,171 | - |
| Account 930.2 |  |  |  |  |  |
| 37 | 9302000 | Misc General Expenses | 822,994 | 822,994 |  |
| 38 | 9302003 | Corporate \& Fiscal Expenses | 132,749 | 132,749 |  |
| 39 | 9302004 | Research, Develop\&Demonstr Exp | 13,524 | 13,524 |  |
| 40 | 9302006 | Assoc Bus Dev - Materials Sold | 1,970,687 | 1,970,687 |  |
| 41 | 9302007 | Assoc Business Development Exp | 3,393,929 | 2,608,700 | 785,229 |
| 43 | 9302458 | Non Affiliated Expense | 638 | 638 |  |
| 44 |  | Total | 6,334,522 | 5,549,293 | 785,229 |

Cost of Service Formula Rate Using 2012 FF1 Balances
Worksheet G Supporting - Development of Composite State Income Tax Rate APPALACHIAN POWER COMPANY

| Tennessee Income Tax Rate | 6.50\% |  |
| :---: | :---: | :---: |
| Apportionment Factor - Note 2 | 1.98\% |  |
| Effective State Tax Rate |  | 0.13\% |
| West Virginia Net Income Tax Rate | 7.75\% |  |
| Apportionment Factor - Note 2 | 52.71\% |  |
| Effective State Tax Rate |  | 4.08\% |
| Virginia Income Tax Rate | 6.00\% |  |
| Apportionment Factor - Note 2 | 37.41\% |  |
| Effective State Tax Rate |  | 2.24\% |
| Michigan Business Income Tax Rate | 6.00\% |  |
| Apportionment Factor - Note 2 | 0.11\% |  |
| Effective State Tax Rate |  | 0.01\% |
| Ohio Franchise Tax Rate | 0.00\% |  |
| Phase-out Factor Note 1 | 0.00\% |  |
| Apportionment Factor - Note 2 | 0.00\% |  |
| Effective State Tax Rate |  | 0.00\% |
| Illinios Corporate Income Tax Rate | 9.50\% |  |
| Apportionment Factor - Note 2 | 1.94\% |  |
| Effective State Tax Rate |  | 0.18\% |
| Total Effective State Income Tax Rate |  | 6.64\% | taxable portion of income is $0 \%$ in 2009. The phase-out factors can be found in the Ohio Revised Code at 5733.01(G)2(a)(v). This tax has been replaced with a Commercial Activites Tax that is included in Schedule H and $\mathrm{H}-1$.

Note 2 Apportionment Factors are determined as part of the Company's annual tax return for that jurisdiction.
AEP East Companies
Cost of Service Formula Rate Using 2012 FF1 Balances
Worksheet H Supporting Taxes Other than Income
APPALACHIAN POWER COMPANY Pager 23 of 36
orksheet H Supporting Taxes Other than Income
APPALACHIAN POWER COMPANY

| Line No. | Account | Total Company | Property | Labor | Other | Non-Allocable |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NOTE 1 |  |  |  |  |
| 1 | Revenue Taxes |  |  |  |  |  |
| 2 | Gross Receipts Tax | 13,315,273 |  |  |  | 13,315,273 |
| 3 | Real Estate and Personal Property Taxes |  |  |  |  |  |
| 4 | Real and Personal Property - West Virginia | 34,549,317 | 34,549,317 |  |  |  |
| 5 | Real and Personal Property - Virginia | 15,173,148 | 15,173,148 |  |  |  |
| 6 | Real and Personal Property - Tennessee | 734,598 | 734,598 |  |  |  |
| 7 | Real and Personal Property - Other Jurisdictions | 466,316 | 466,316 |  |  |  |
| 8 | Payroll Taxes |  |  |  |  |  |
| 9 | Federal Insurance Contribution (FICA ) | 8,566,234 |  | 8,566,234 |  |  |
| 10 | Federal Unemployment Tax | 27,378 |  | 27,378 |  |  |
| 11 | State Unemployment Insurance | 236,519 |  | 236,519 |  |  |
| 12 | Production Taxes |  |  |  |  |  |
| 13 | State Severance Taxes | - |  |  |  | - |
| 14 | Miscellaneous Taxes |  |  |  |  |  |
| 15 | State Business \& Occupation Tax | 20,401,461 |  |  |  | 20,401,461 |
| 16 | State Public Service Commission Fees | 4,616,176 |  |  | 4,616,176 |  |
| 17 | State Franchise Taxes | 3,519,086 |  |  | 3,519,086 |  |
| 18 | State Lic/Registration Fee | 1,899 |  |  | 1,899 |  |
| 19 | Misc. State and Local Tax | 546 |  |  | 546 |  |
| 20 | Sales \& Use | 540 |  |  |  | 540 |
| 21 | Federal Excise Tax | 6,986 |  |  |  | 6,986 |
| 22 | Michigan Single Business Tax | - |  |  |  | - |
| 23 | Total Taxes by Allocable Basis | 101,615,477 | 50,923,379 | 8,830,131 | 8,137,707 | 33,724,260 |
|  | (Total Company Amount Ties to FFI p.114, Ln 14,(c)) |  |  |  |  |  |
|  | NOTE 1: The detail of each total company number and its source in | he FERC Form 1 | shown on WS H-1. |  |  |  |
|  |  | unctional Proper | Tax Allocation |  |  |  |
|  |  | Production | Transmsission | Distribution | General | Total |
| 24 | Functionalized Net Plant (Hist. TCOS, Lns 212 thru 222) VIRGINIA JURISDICTION | 3,557,160,051 | 1,410,464,970 | 2,070,419,551 | 131,036,156 | 7,169,080,727 |
| 25 | Percentage of Plant in VIRGINIA JURISDICTION | 14.60\% | 44.97\% | 55.78\% | 51.49\% |  |
| 26 | Net Plant in VIRGINIA JURISDICTION (Ln 24 * Ln 25) | 519,520,961 | 634,267,997 | 1,154,977,049 | 67,468,340 | 2,376,234,348 |
| 27 | Less: Net Value of Exempted Generation Plant | 126,497,409 |  |  |  |  |
| 28 | Taxable Property Basis (Ln $26-\operatorname{Ln} 27)$ | 393,023,552 | 634,267,997 | 1,154,977,049 | 67,468,340 | 2,249,736,939 |
| 29 | Relative Valuation Factor | 100\% | 100\% | 100\% | 100\% |  |
| 30 | Weighted Net Plant (Ln 28 * Ln 29) | 393,023,552 | 634,267,997 | 1,154,977,049 | 67,468,340 |  |
| 31 | General Plant Allocator (Ln 30 / (Total - General Plant)) | 18.01\% | 29.06\% | 52.93\% | -100.00\% |  |
| 32 | Functionalized General Plant (Ln 31 * General Plant) | 12,150,955 | 19,609,414 | 35,707,971 | $(67,468,340)$ | - |
| 33 | Weighted VIRGINIA JURISDICTION Plant (Ln $30+32$ ) | 405,174,507 | 653,877,412 | 1,190,685,020 | 0 | 2,249,736,939 |
| 34 | Functional Percentage (Ln 33/Total Ln 33) | 18.01\% | 29.06\% | 52.93\% |  |  |
| 35 | Functionalized Expense in VIRGINIA JURISDICTION | 2,732,663 | 4,410,017 | 8,030,468 |  | 15,173,148 |
|  | WEST VA JURISDICTION |  |  |  |  |  |
| 36 | Percentage of Plant in WEST VA JURISDICTION | 85.40\% | 51.89\% | 44.21\% | 48.34\% |  |
| 37 | Net Plant in WEST VA JURISDICTION (Ln 24 * Ln 36) | 3,037,639,090 | 731,940,783 | 915,410,634 | 63,338,743 | 4,748,329,251 |
| 38 | Less: Net Value of Exempted Generation Plant | 1,954,604,153 |  |  |  |  |
| 39 | Taxable Property Basis (Ln $37-\operatorname{Ln} 38$ ) | 1,083,034,937 | 731,940,783 | 915,410,634 | 63,338,743 | 2,793,725,098 |
| 40 | Relative Valuation Factor | 100\% | 100\% | 100\% | 100\% |  |
| 41 | Weighted Net Plant (Ln 39 * Ln 40) | 1,083,034,937 | 731,940,783 | 915,410,634 | 63,338,743 |  |
| 42 | General Plant Allocator (Ln 41 / (Total - General Plant)) | 39.67\% | 26.81\% | 33.53\% | -100.00\% |  |
| 43 | Functionalized General Plant (Ln 42 * General Plant) | 25,123,943 | 16,979,359 | 21,235,441 | $(63,338,743)$ | - |
| 44 | Weighted WEST VA JURISDICTION Plant (Ln $41+43$ ) | 1,108,158,880 | 748,920,142 | 936,646,075 | 0 | 2,793,725,098 |
| 45 | Functional Percentage (Ln 44/Total Ln 44) | 39.67\% | 26.81\% | 33.53\% |  |  |
| 46 | Functionalized Expense in WEST VA JURISDICTION | 13,704,331 | 9,261,713 | 11,583,274 |  | 34,549,317 |
|  | TENNESSEE JURISDICTION |  |  |  |  |  |
| 47 | Net Plant in TENNESSEE JURISDICTION (Ln $24-\operatorname{Ln} 26-\operatorname{Ln} 37)$ | - | 44,256,189 | 31,867 | 229,072 | 44,517,128 |
| 48 | Less: Net Value Exempted Generation Plant |  |  |  |  |  |
| 49 | Taxable Property Basis | - | 44,256,189 | 31,867 | 229,072 | 44,517,128 |
| 50 | Relative Valuation Factor | 100\% | 100\% | 100\% | 100\% |  |
| 51 | Weighted Net Plant (Ln 49 * Ln 50) | - | 44,256,189 | 31,867 | 229,072 |  |
| 52 | General Plant Allocator (Ln 51 / (Total - General Plant) | 0.00\% | 99.93\% | 0.07\% | -100.00\% |  |
| 53 | Functionalized General Plant (Ln 53 * General Plant) | - | 228,907 | 165 | $(229,072)$ |  |
| 54 | Weighted TENNESSEE JURISDICTION Plant (Ln $51+53$ ) | - | 44,485,096 | 32,032 | 0 | 44,517,128 |
| 55 | Functional Percentage (Ln 54/Total Ln 54) | 0.00\% | 99.93\% | 0.07\% |  |  |
| 56 | Functionalized Expense in TENNESSEE JURISDICTION | - | 734,069 | 529 |  | 734,598 |
| 57 | Total Other Jurisdictions: (Line 7 * Net Plant Allocator) |  | 89,526 |  |  | 466,316 |
| 58 | Total Func. Property Taxes (Sum Lns 35, 46 56, 57) | 16,436,994 | 14,495,326 | 19,614,270 |  | 50,923,379 |


| AEP East Companies |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Worksheet H-1 Form 1 Source Reference of Company Amounts on WS H APPALACHIAN POWER COMPANY |  |  |  |  |
|  |  |  |  |  |
| (A) |  | (B) | (c) | (D) |
| LineNo. |  | Total Company | FERC FORM 1 Tie-Back | FERC FORM 1 Reference |
| 1 | Revenue Taxes | 13,315,273 |  |  |
|  | Gross Receipts Tax |  |  |  |
|  |  |  | 12,477,550 | P. 263.1 In 4 (i) |
|  |  |  | 145,133 | P. 263.1 ln 33 (i) |
|  |  |  | 692,590 | P. 263.1 In 34 (i) |
| 3 | Real Estate and Personal Property Taxes |  |  |  |
| 4 | Real and Personal Property - West Virginia | 34,549,317 |  |  |
|  |  |  | 16,414,766 | P. $263 \ln 34$ (i) |
|  |  |  | 18,184,510 | P. $263 \ln 35$ (i) |
|  |  |  | $(82,556)$ | P. $263 \ln 38$ (i) |
|  |  |  | $(28,406)$ | P. $263 \ln 39$ (i) |
|  |  |  | 61,003 | P. $263 \ln 40$ (i) |
| 5 | Real and Personal Property - Virginia | 15,173,148 | 23 | P. $263.2 \ln 22$ (i) |
|  |  |  | 191 | P. $263.2 \ln 23$ (i) |
|  |  |  | $(29,546)$ | P. $263.2 \ln 24$ (i) |
|  |  |  | 14,980,441 | P. $263.2 \ln 25$ (i) |
|  |  |  | $(2,240)$ | P. $263.2 \ln 29$ (i) |
|  |  |  | $(100,722)$ | P. 263.2 In 30 (i) |
|  |  |  | 325,001 | P. $263.2 \ln 31$ (i) |
| 6 | Real and Personal Property - Tennessee | 734,598 |  |  |
|  |  |  | $(64,602)$ | P. $263.3 \ln 10$ (i) |
|  |  |  | 799,200 | P. $263.3 \ln 11$ (i) |
| 7 | Real and Personal Property - Other Jurisdictions | 466,316 |  |  |
|  |  |  | 704 | P. 263.1 ln 36 (i) |
|  |  |  | 465,612 | P. 263.1 ln 37 (i) |
| 8 | Payroll Taxes |  |  |  |
| 9 | Federal Insurance Contribution (FICA) | 8,566,234 |  |  |
|  |  |  | 8,566,234 | P. $263 \ln 6$ (i) |
| 10 | Federal Unemployment Tax | 27,378 |  |  |
|  |  |  | 27,378 | P. $263 \ln 9$ (i) |
| 11 | State Unemployment Insurance | 236,519 |  |  |
|  |  |  | 111,767 | P. 263.1 ln 17 (i) |
|  |  |  | 14,244 | P. 263.1 In 40 (i) |
|  |  |  | 110,391 | P. $263.2 \ln 38$ (i) |
|  |  |  | 117 | P. $263.3 \ln 22$ (i) |
| 12 | Production Taxes |  |  |  |
| 13 | State Severance Taxes | - |  |  |
| 14 | Miscellaneous Taxes |  | - |  |
| 15 | State Business \& Occupation Tax | 20,401,461 |  |  |
|  |  |  | 390,088 | P. $263 \ln 21$ (i) |
|  |  |  | 19,769,873 | P. $263 \ln 22$ (i) |
|  |  |  | 241,500 | P. $263 \ln 23$ (i) |
| 16 | State Public Service Commission Fees | 4,616,176 |  |  |
|  |  |  | 1,599,615 | P. $263 \ln 26$ (i) |
|  |  |  | 3,016,561 | P. $263 \ln 27$ (i) |
| 17 | State Franchise Taxes | 3,519,086 |  |  |
|  |  |  | $(266,239)$ | P. 263.1 ln 20 (i) |
|  |  |  | 282,774 | P. 263.1 In 21 (i) |
|  |  |  | $(322,867)$ | P. 263.1 ln 23 (i) |
|  |  |  | $(25,537)$ | P. 263.1 In 25 (i) |
|  |  |  | 89,833 | P. 263.1 In 26 (i) |
|  |  |  | 6,672,000 | P. 263.2 In 11 (i) |
|  |  |  | $(2,897,155)$ | P. 263.2 In 10 (i) |
|  |  |  | $(41,712)$ | P. 263.3 In 5 (i) |
|  |  |  | 14,876 | P. $263.3 \ln 6$ (i) |
|  |  |  | 13,113 | P. $263.3 \ln 7$ (i) |
| 18 | State Lic/Registration Fee | 1,899 |  |  |
|  |  |  | 25 | P. 263.1 In 10 (i) |
|  |  |  | 1,700 | P. 263.2 In 13 (i) |
|  |  |  | 22 | P. 263.3 In 14 (i) |
|  |  |  | 52 | P. 263.4 In 25 (i) |
|  |  |  | 100 | P. 263.3 In 26 (i) |
| 19 | Misc. State and Local Tax | 546 |  |  |
|  |  |  | 546 | P. $263.1 \ln 8$ (i) |
| 20 | Sales \& Use | 540 |  |  |
|  |  |  | 688 | P. 263 ln 30 (i) |
|  |  |  | 1,172 | P. $263 \ln 31$ (i) |
|  |  |  | (583) | P. 263.1 In 32 (i) |
|  |  |  | 24 | P. 263.2 In 16 (i) |
|  |  |  | (761) | P. $263.2 \ln 17$ (i) |
| 2 | Federal Excise Tax | 6,986 |  |  |
|  |  |  | 6,986 | P. $263 \ln 14$ (i) |
| 22 | Michigan Single Business Tax | - |  |  |
|  |  |  | - |  |
| 23 | Total Taxes by Allocable Basis <br> (Total Company Amount Ties to FFI p.114, Ln 14,(c)) | 101,615,477 | 101,615,477 |  |
|  |  |  |  |  |

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

## AEP East Companies

## Cost of Service Formula Rate Using 2012 FF1 Balances Worksheet I Supporting Transmission Plant in Service Additions APPALACHIAN POWER COMPANY

## I. Calculation of Composite Depreciation Rate

| Transmission Plant @ Beginning of Historic Period (2012) (P.206, In 58,(b)): | 1,942,021,775 |
| :---: | :---: |
| Transmission Plant @ End of Historic Period (2012) (P.207, In 58,(g)): | 2,040,266,144 |
|  | 3,982,287,919 |
| Average Balance of Transmission Investment | 1,991,143,960 |
| Annual Depreciation Expense, Historic TCOS, In 276 | 32,626,776 |
| Composite Depreciation Rate | 1.64\% |

## 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 | \$ | 71,997,178 | 1.64\% | \$ | 1,180,754 | \$ | 98,396 | 11 | \$ | 1,082,356 |
| 10 | February | \$ | 5,649,481 | 1.64\% | \$ | 92,651 | \$ | 7,721 | 10 | \$ | 77,210 |
| 11 | March | \$ | 4,359,926 | 1.64\% | \$ | 71,503 | \$ | 5,959 | 9 | \$ | 53,631 |
| 12 | April | \$ | 3,540,020 | 1.64\% | \$ | 58,056 | \$ | 4,838 | 8 | \$ | 38,704 |
| 13 | May | \$ | 2,897,989 | 1.64\% | \$ | 47,527 | \$ | 3,961 | 7 | \$ | 27,727 |
| 14 | June | \$ | 5,135,780 | 1.64\% | \$ | 84,227 | \$ | 7,019 | 6 | \$ | 42,114 |
| 15 | July | \$ | 29,357,907 | 1.64\% | \$ | 481,470 | \$ | 40,122 | 5 | \$ | 200,610 |
| 16 | August | \$ | 4,600,335 | 1.64\% | \$ | 75,445 | \$ | 6,287 | 4 | \$ | 25,148 |
| 17 | September | \$ | 2,149,084 | 1.64\% | \$ | 35,245 | \$ | 2,937 | 3 | \$ | 8,811 |
| 18 | October | \$ | 1,559,798 | 1.64\% | \$ | 25,581 | \$ | 2,132 | 2 | \$ | 4,264 |
| 19 | November | \$ | 1,547,549 | 1.64\% | \$ | 25,380 | \$ | 2,115 | 1 | \$ | 2,115 |
| 20 | December | \$ | 8,029,318 | 1.64\% | \$ | 131,681 | \$ | 10,973 | 0 | \$ | - |
| 21 | Investment | \$ | 140,824,365 |  |  |  |  | Depr | eciation Expense | \$ | 1,562,690 |

## III. Plant Transferred

| 22 | $\$$ | - | $<==$ This input area is for original cost plant |
| :--- | :--- | :--- | :--- |
| 23 | $\$$ | - | $<=$ This input area is for accumulated depreciation that may be associated with capital |
| $24(\operatorname{Ln} 7 * \operatorname{Ln} 22)$ |  | expenditures. It would have an impact if a company had assets transferred from a subsidiary. |  |
|  | $\$$ | $-==$ This input area is for additional Depreciation Expense |  |

## IV. List of Major Projects Expected to be In-Service in 2013

|  |  | Estimated Cost | Month in |
| :---: | :---: | :---: | :---: |
|  |  | (000's) | Service |
| 25 Major Zonal Projects |  |  |  |
| 26 VIRGINIA SYS REHAB |  | \$5,558 | Aug-13 |
| 27 Line Rehab/Replace |  | \$5,621 | Dec-13 |
|  | Subtotal | \$11,179 |  |


| 28 PJM Socialized/Beneficiary Allocated Regional Projects |  |  |
| :--- | :--- | :--- |
| 29 | Subtotal | $\$ 0$ |
| 30 | $\$ 0$ |  |

AEP East Companies
Cost of Service Formula Rate Using 2012 FF1 Balances
Worksheet J Supporting Calculation of PROJECTED PJM RTEP Project Revenue Requirement Billed to Benefiting Zones
APPALACHIAN POWER COMPANY

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

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


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

|  |  | UE REQU <br> iire |  | Incentive Amounts |
| :---: | :---: | :---: | :---: | :---: |
| PRojected year | 2013 | 1,956,928 | 1,956,928 | \$ . |


$1,237,984,496$
8.1089
99, 264,090
c. Determine Income Taxes using Return with hypothetical basis point ROE increase for Identified Projects.


II. Calculate Net Plant Carrying Charge Rate (Fixed Charge Rate or FCR) with hypothetical basis point ROE increase.
A. Determine Annual Revenue Requirement less return and Income Taxes.

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

III. Calculation of Composite Depreciation Rate

Subiotal
Averae Transmission Plant Balance tor 2012
Annual Depreciation Rate (Projected TCOS, In 111 )



## APCo Worksheet J - ATRR PROJECTED Calculation for PJM Projects Charged to Benefiting Zone

## IV Determine the Revenue Requirement and Additional Revenue Requirement for facilities receiving incentive

A. Base Plan Facilities

Facilities receiving incentives accepted by FERC in Docket No.
Project Description: RTEP ID: bo318 (Amos 7651138 kV Transtormer)

| Current Projected $Y$ | 1,915,150 |
| :---: | :---: |
| Current Projected Year ARR wI Incentive | 1,915,150 |


*" This is the total amount that needs to be reported to PJM for billing to all regions.

should be inceremented by the amount of the incentive evevenue calculuted tor that year on this project.


## APCo Worksheet J - ATRR PROJECTED Calculation for PJM Projects Charged to Benefiting Zone:

Iv. Determine the Revenue Requirement, and Additional Revenue Requirement for facilities receiving incentives.
A. Base Plan Facilities

Facilities receiving incentives accepted by FERC in Docket No.
(e.9. ER05-925-000)

Current Projected Year ARR
Current Proiected Y Year ARR w
Carentrijectecy vear arR $w$ Incentiv
Current Proiected Year Incentive ARR

| 41,778 |
| :--- |
| 41,78 |



CUMULATVE HISTORY OF PROJECTED ANNUAL REVENUE REQUREMENT INPUT PROJECTED ARR (WITH \& WITHOUT INCENTVES FROM EACH PRIOR YEAR TEMP LATE BELOW TO MAINTAIN HISTORY OF PROUECTED ARRS OVER THE

-" This is the total amount that needs to be reported to PJM tor billing to all regions.
 should be incemenened by the amount of the incentive ervenue calculated fort that year on this project.

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

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


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.

| (from B. above) | 90,660,890 |
| :---: | :---: |
| Effective Tax Rate (True-Up TCOS, In 126) | 41.31\% |
| Income Tax Calculation (Return $\times$ CIT) | 37,451,121 |
| ITC Adjustment | $(127,206)$ |

Calculate Net Plant Carrying Charge Rate (Fixed Charge Rate or FCR) with hypothetical 0
basis point ROE increase.
A. Determine Annual Revenue Requirement less return and Income Taxes.
Annual Reverue Requirement (True-Up TCOS, In 1)
T.E.A. \& Lease Payments (Tue-Up TCOS, Lns 105 \& 106)
.

Income Taxes (True-Up, it Tros, in 1 I33)
Annual Revenue Requirement, Less TEA

Anuuar everue Require
netical 0 basis pont increase in ROE

Acome Taxes (trom I.C. above)
Dnaur Reverue Requirement, with 0 Basis Point ROE increase
Deneciation (True-Up TCOS
Depreciation (True-Up TTOS, II 1111)
Anual Rev. Req wo Basis Point ROE

C. Determine FCR with hypothetical 0 basis point ROE increase.
Net Transmission Plant (True-Up Tcos, In 48 )
Annual Revenue Requirement, with 0 Basis Poi Ancua Revenue Requirement, with 0 Bas
FCR with 0 Basis
Point increase in in ROE ROE increase $1,341,956,486$
$218,162,992$
$16.26 \%$
Annual Rev. Req, w/ O Basis Point RoE increase, less Dep.
CCR with 0 Basis Point RoE increase, less Depreciation

$186,085,397$
$13.87 \%$
increase, less Depreciation
Calculation of Composite Depreciation Rate
Transmission Plant @ Beginning of Historic Period 0 (P.206, In $58,($ (b) :
Transmission Plant © End of Historic Period 0 (P.207, in 58 , (g):
Average Transmission Plant Balance tor
Annual Depreciation Rate (TTue-UP TCOS, In 111)

Depreciable Lite for Composite
Round to nearest whole eear
IV. Determine the Revenue Requirement, and Additional Revenue Requirement for facilities receiving incentives.
A. Base Plan Facilities

Facilities receiving incentives accepted by FERC in Docket No.
Project Description: RTEP ID: bo318 (Amos 765138 kV Transformer)

| 2012 | Rev Require | W Incentives |
| :---: | :---: | :---: | Incentive Amounts


|  | $13,798,879$ 2008 6 61 No | urrent Year 2012 <br> CR w/o incentives, less depreciation 2 <br> CR w/incentives approved for these facilities, less dep. 2 <br> nnual Depreciation Expens 226 |  |  |  |  |  | TRUE UP OF PROJECT REVENUE REQUIREMENT FOR PRIOR YEAR: <br> CUMULATIVE HISTORY OF TRUED-UP ANNUAL REVENUE REQUIREMENTS: <br> INPUT TRUE-UP ARR (WITH \& WITHOUT INCENTIVES) FROM EACH PRIOR YEAR TEMPLATE BELOW TO MAINTAIN HISTORY OF TRUED-UP ARRS OVER THE LIFE OF THE PROJECT. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investment Year | Beginning Balance | Depreciation Expense | $\begin{aligned} & \text { Ending } \\ & \text { Balance } \end{aligned}$ | Average Balance | RTEP Rev. Req't wlo Incentives | RTEP Rev. Req't. with Incentives ** | Incentive Rev. Requirement \#\# |  | RTEP Rev Req't True-up wlo Incentives | RTEP Projected Rev. Req't.From with Incentives * with Incentive | ${ }^{\text {RTEP Rev Reqt }}$ <br> True-up with Incentives | True-up of Incentive with Incentives ** |
| ${ }^{2008}$ | ${ }^{13,798,879}$ | ${ }^{113,106}$ | ${ }^{13,685,773}$ | 退13,742,266 | ${ }_{\text {2,018,716 }}$ | $\xrightarrow{2,018,716}$ | ${ }^{\text {s }}$ |  | 9388 | ${ }^{\text {8 }}$ | ${ }_{5}$ | ${ }_{\text {s }}$ |
| 2009 | 13,685,773 | ${ }^{226,211}$ | 13,459,562 |  | 2,108,295 | 2,107,295 | \$ | $1,124,469$ $2.077,403$ | 983,826 49,524 | $1,124,469$ $2,077,403$ | $\$$ 983,826 <br> $\$$ 49.524 | \$ |
| 2011 | ${ }_{\text {13,233,351 }}^{13,45962}$ | ${ }_{226,211}^{226,21}$ | ${ }_{\text {13, }}^{13,007,140}$ | ${ }_{\text {ckin }}^{13,120,246}$ | ${ }_{2,045,559}^{2,07029}$ | ${ }_{2,045,559}$ | \$ | 2,050,107 | ${ }_{(4,548)}$ | 2,050,107 | ${ }_{(4,548)}^{49,24}$ | \$ |
| 2012 | 13,07, ,40 | 226,211 | 12,780,929 | 12,894,034 | 2,014,191 | 2,014,191 | \$ | 1,906,118 | 108,073 | 1,906,118 | 108,073 | \$ |
| ${ }^{2013}$ | 12,780,929 | ${ }^{226,211}$ | 12,54,718 | (12,667, 23 | -1,982,823 | 1,982,823 | \$ |  | \$ - |  | \$ - | \$ - |
| 2014 2015 | $12,54,478$ <br> $12,328,507$ | ${ }_{226,211}^{226,211}$ | $12,328,57$ <br> $12,102,296$ |  | 1,951,455 <br> $1,920,087$ | 1,951,455 | \$ |  | \$ |  | \$ - | \$ |
| 2016 | 12,102,296 | 226,211 | 11,876,084 | 11,989,190 | 1,888,719 | 1,888,719 | \$ |  | \$ - |  | \$ - | \$ - |
| 2017 2018 |  | 2266,211 <br> 226,211 | $11,64,9,873$ <br> $11,423,662$ | $11,762,299$ <br> $11,536,768$ <br> 1. | 1,857,351 $1,855,983$ 1,1 |  | \$ |  | \$ |  | \$ | \$ |
| 2019 | ${ }^{11,424,662}$ | ${ }^{2266,211}$ | 11,197,451 | ${ }^{11,310,5575}$ | ${ }_{\text {1,794,615 }}$ | 1,794,615 | \$ |  | \$ - |  | \$ - | \$ - |
| ${ }_{2021}^{2020}$ | $11,197,451$ <br> $10,971,240$ | ${ }_{\text {cher }}^{2226,211}$ | $10,971,240$ $10,745.029$ | $11,084,45$ <br> $10,858,134$ <br> 1 | $1,763,247$ $1,731,879$ | $1,763,247$ $1,731,879$ | \$ |  | \$ |  | \$ | ${ }_{8}^{\text {s }}$ |
| 2022 | 10,775,029 | ${ }^{226,211}$ | 10,518,818 | 10,631,923 | 1,700,511 | 1,700,511 | \$ - |  | \$ - |  | \$ - | s |
| ${ }_{2024}^{2023}$ | $10,518,818$ $10,292,606$ | ${ }_{\text {cke }}^{2266,211}$ | $10,292,066$ $10,066,395$ | $10,40,7712$ <br> $10,179.501$ | $1,669,142$ <br> $1,637,74$ <br> 1, | $1,669,142$ <br> $1,637,74$ <br> 1 | \$ |  | \$ |  | \$ | \$ |
| ${ }_{2025}$ | 10,066,395 | ${ }^{226,211}$ | ${ }^{9,840,184}$ | 9,953,290 | 1,606,4066 | 1,606,406 | \$ - |  | \$ - |  | \$ - | s |
| ${ }_{2027}^{2026}$ | 9,840,184 | $\underset{\substack{\text { 226,211 } \\ 226211}}{2,21}$ |  | $9,727,079$ $9,50,868$ | $1,575,038$ <br> $1,543,670$ | $1,575,038$ <br> $1,543,670$ | \$ |  | \$ |  | \$ | ${ }_{\text {s }}$ |
| 2028 | 9,387,762 | ${ }^{226,211}$ | 9,161,551 | $9,274,566$ | 1,512,302 | 1,512,302 | \$ - |  | \$ |  | \$ - | \$ |
| 2029 | - $9,161,551$ | ${ }_{\text {220, }}^{226,211}$ | $8,935,340$ <br> 8709129 | 9,048,445 | $1,480,934$ 1,499566 1,069 | $1,488,934$ 1.499 .566 1 | \$ |  | \$ : |  | \$ | \$ |
| ${ }_{2031}^{2031}$ | - | ${ }_{226,211}^{226,21}$ |  | - |  | 1,418,198 | \$ |  | \$ |  | \$ - | \$ |
| ${ }^{2032}$ | 8,482,917 | ${ }^{2266,211}$ | 8, 8,25,7066 | 8,369,812 | $1,386,830$ <br> 1,355462 | $1,386,830$ <br> 1,3554 | \$ |  | \$ : |  | \$ | \$ : |
| ${ }_{2034}^{2033}$ | $8,255,706$ <br> 8,095 | ${ }_{226,211}^{226,211}$ | $8,030,495$ <br> $7,804,284$ <br> 18 | ${ }_{\substack{\text { c, } \\ 7,917,390}}^{8,14301}$ | $1,355,462$ <br> $1,34,094$ | $1,355,462$ <br> $1,34,094$ | \$ |  | \$ : |  | \$ | \$ |
| 2035 2036 | 7,804,284 | 226,211 | $7,778,073$ <br> 7,3183 | 7,691,178 | $1,292,726$ <br> $\substack{126,258 \\ \hline}$ | 1,292,726 | \$ |  | \$ - |  | \$ - | \$ - |
| 2037 | 7,351,862 | 226,211 | 7,125,651 | 7,238,756 | 1,229,989 | 1,229,989 | \$ - |  | \$ - |  | \$ - | \$ |
| 2038 2039 | $7,125,651$ <br> 6,899440 <br> , 640 | ${ }_{226,211}^{226,211}$ | $6,899,440$ <br> $6,673,288$ | 7,012,545 | $1,198,621$ 1,167253 1 1,1854 | $1,198,621$ 1,167253 1 1 | \$ |  | \$ |  | \$ - | \$ - |
| 2040 | 6,673,228 | ${ }_{226,211}$ | 6,447,017 | $6,560,123$ | ${ }_{1,135,885}^{1,1,26}$ | ${ }_{1,1,15,885}^{1,862}$ | + |  | \$ - |  | \$ | \$ |
| ${ }_{2042}^{2041}$ | 6,447,017 $6,220,806$ | ${ }_{\text {226, }}^{2211}$ | 6,220,806 <br> $5,944,595$ | ¢,$6,333,912$ <br> 6,107701 | $1,104,517$ <br> $1,073,149$ | $1,104,517$ <br> $1,073,149$ <br> 1 | \$ |  | \$ : |  | \$ | ${ }_{\text {\$ }}^{\$}$ |
| 2043 | 5,994,595 | 226,211 | 5,768,384 | 5,881,489 | 1,041,781 | 1,041,781 | \$ - |  | \$ - |  | \$ - | \$ |
| ${ }_{2045}^{2044}$ | $5,768,384$ <br> $5,542,173$ | ${ }_{\text {220, }}^{226,211}$ |  | ¢, 5,655,278 | 1,010,413 | 1,010,413 | ${ }_{\text {s }}$ |  | \$ |  | \$ : | ${ }_{\text {\$ }}^{\text {\$ }}$ |
| 2046 | 5,315,962 | 226,211 | 5,089,750 | ${ }_{5,202,856}^{5}$ | 9477,677 | 9947,677 | \$ |  | \$ - |  | \$ - | ${ }_{\$}^{\$}$ |
| ${ }_{2048}^{2047}$ | $5,089,750$ <br>  <br> 489359 | 226,211 | 4,663,539 | 4,976,645 | ${ }^{916,309}$ | ${ }^{916,309}$ | \$ |  | \$ |  | \$ | \$ |
| 2048 2049 2050 | $4,863,539$ <br> $4,67,328$ | ${ }_{226,211}^{226,211}$ | $4,4,411,117$ 4 | 4,524,223 | ${ }_{8}^{885,943}$ | 884,941 <br> 853,573 <br> 85 | \$ |  | \$ |  | \$ | ${ }_{\text {\$ }}^{\text {\$ }}$ |
| 2050 2051 | $4,411,177$ | 226,211 | 4,184,906 | 4,298,011 | ${ }^{822,205}$ | 822,205 | \$ |  | \$ - |  | \$ - | ${ }_{\text {\$ }}^{\text {\$ }}$ |
| ${ }_{2052}^{2051}$ | $4,184,906$ <br> $3,956,695$ | ${ }_{226,211}^{226,211}$ | $3,955,695$ <br> $3,732,484$ |  | ${ }_{759,468}^{790,868}$ | 759,8,468 | ${ }_{\text {\$ }}^{\$}$ |  | \$ |  | \$ | \$ |
| 2053 2054 | $3,732,484$ <br> $3,506,273$ | ${ }_{226,211}^{226,211}$ | $3,500,273$ <br> $3,280,061$ |  | 728,100 696,732 | 7288.100 696,732 | \$ |  | \$ |  | \$ | \$ : |
| 2055 | 3,280,061 | 226,211 | 3,053,850 | 3,166,956 | 665,364 | 665,364 | \$ - |  | \$ - |  | \$ - | \$ |
| ${ }_{2056}^{2056}$ | $3,053,850$ 2,877,639 | ${ }_{226,211}^{226,211}$ | $2,827,639$ <br> $\substack{\text { 2,601.428 }}$ <br> 18 | $2,940,745$ <br> 2714534 | 633,966 602628 |  | \$ |  | \$ |  | \$ | \$ |
| 2058 | 2,601,428 | 226,211 | 2,375,217 | ${ }^{2}, 4888,322$ | 571,260 | 571,260 | \$ . |  | \$ - |  | \$ - | \$ |
| 2059 2060 | $2,375,217$ <br> $2,149,066$ <br> 1, | ${ }_{226,211}^{226,211}$ | $2,149,006$ $1.922,795$ 1,09 | $2,266,111$ <br> $2,035,900$ <br> 1 | 539,892 508,524 |  | \$ |  | \$ : |  | \$ | \$ - |
| 2061 | 1,922,795 | ${ }_{226,211}^{226,21}$ | ${ }^{1,696,583}$ | 1,899,689 | 477,156 | 477,156 | \$ |  | \$ |  | \$ | \$ |
| ${ }_{2063}^{2062}$ | $1,696,583$ <br> $1,470,372$ <br> 1, | ${ }_{226,211}^{226,211}$ | $1,4770,372$ $1,244,161$ 1,1 | $1,583,478$ $1,357,267$ 1 | 445,788 414,420 | 445,788 414,420 | ${ }_{\text {\$ }}^{\text {\$ }}$ |  | \$ |  | \$ | \$ |
| 2064 | 1,244,161 | 226,211 | 1,017,950 | 1,131,056 | 383,051 | 383,051 | \$ - |  | \$ - |  | \$ | \$ |
| 2065 2066 | $1,017,950$ <br> 791,739 | 226,211 226,211 | 791,739 <br> 565,528 | 904,845 678,633 | 351,683 <br> 320,315 | ${ }_{320,315}^{351,683}$ | ${ }_{\text {\$ }}^{\$}$ |  | \$ |  | \$ | ${ }_{\text {\$ }}^{\text {\$ }}$ |
| 2067 | 565,528 | 226,211 | 339,317 | 452,422 | 288,947 | 288,947 | \$ |  | \$ . |  | \$ . | \$ |




Facilities receiving incentives accepted by FERC in Docket No


** This is the total amount that needs to be reported to PJM for biling to all regions.
\#\# This is the calculation of additional incentive revenue on projects deemed by the $E$ ERC to be e eigible for an incentive reurn. This
additional incentive requirement is applicable tor the litie of this specific project. Each year the evenenue requirement calculated tor PJM
should be incremented by the amount of the incentive revenue calculated for that year on this project.

AEP East Companies
Cost of Service Formula Rate Using 2012 FF1 Balances
Worksheet L Supporting Projected Cost of Debt

## APPALACHIAN POWER COMPANY

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



# Worksheet M Supporting Calculation of Capital Structure and Weighted Average Cost of 

 Capital Based on Average of Balances At 12/31/2011 \& 12/31/2012| (A) (B) | (C) | (D) | (E) |
| :---: | :---: | :---: | :---: |
|  | Balances @ | Balances @ |  |
| Line | 12/31/2012 | 12/31/2011 | Average |
| Development of Average Balance of Common Equity |  |  |  |
| 1 Proprietary Capital (112.16.c\&d) | 3,052,563,357 | 2,936,414,454 | 2,994,488,906 |
| 2 Less Preferred Stock (Ln 54 Below) | 0 | 0 | - |
| 3 Less Account 216.1 (112.12.c\&d) | 1,654,344 | 1,610,810 | 1,632,577 |
| 4 Less Account 219.1 (112.15.c\&d) | $(29,897,592)$ | $(58,543,154)$ | $(44,220,373)$ |
| 5 Average Balance of Common Equity | 3,080,806,605 | 2,993,346,798 | 3,037,076,702 |

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

| 6 Bonds (112.18.c\&d) | - | - |  |
| :---: | :---: | :---: | :---: |
| 7 Less: Reacquired Bonds (112.19.c\&d) | - | - |  |
| 8 LT Advances from Assoc. Companies (112.20.c\&d) |  |  |  |
| 9 Senior Unsecured Notes (112.21.c\&d) | 3,709,883,415 | 3,734,408,392 | 3,722,145,904 |
| 10 Less: Fair Value Hedges (See Note on Ln 12 below) | - | , - |  |
| 11 Total Average Debt | 3,709,883,415 | 3,734,408,392 | 3,722,145,904 |
| 12 NOTE: The balance of fair value hedges on outstanding long term debt are to be excluded from the balance of long term debt included in the formula's capital structure. (Column H of the FF1) |  |  |  |
| 13 Annual Interest Expense for 2012 |  |  |  |
| 14 Interest on Long Term Debt (256-257.33.i) |  |  | 193,138,993 |
| 15 Less: Total Hedge Gain/Expense Accumulated from p 256-257, col. (i) of FERC Form 1 |  |  |  |
| 16 Plus: Allowed Hedge Recovery From Ln 38 below. |  |  | 1,619,222 |
| 17 Amort of Debt Discount \& Expense (117.63.c) |  |  | 3,859,577 |
| 18 Amort of Loss on Reacquired Debt (117.64.c) |  |  | 1,342,096 |
| 19 Less: Amort of Premium on Debt (117.65.c) |  |  | - |
| 20 Less: Amort of Gain on Reacquired Debt (117.66.c) |  |  | - |
| 21 Total Interest Expense (Ln 14 + Ln 17 + Ln 18 - Ln $19-\mathbf{L n} 20)$ |  |  | 198,340,666 |
| 22 Average Cost of Debt for 2012 (Ln 21/Ln 11) |  |  | 5.33\% |

## CALCULATION OF RECOVERABLE HEDGE GAINS/LOSSES

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

|  |  |  |  |  | Amortization Period |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HEDGE AMOUNTS BY ISSUANCE (FROM p. 256-257 (i) of the FERC Form 1) | Total Hedge <br> (Gain)/Loss for 2012 | Less Excludable Amounts (See NOTE on Line 23) | Net Includable Hedge Amount | Remaining Unamortized Balance | Beginning | Ending |
| 24 Senior Unsecured Notes - Series I | 764,169 |  | 764,169 | 1,209,935 | Jan-05 | Feb-15 |
| 25 Senior Unsecured Notes - Series K | 1,336,324 |  | 1,336,324 | 3,229,451 | Jun-05 | Jun-17 |
| 26 Senior Unsecured Notes - Series O | 60,287 |  | 60,287 | (0) | Aug-07 | Aug-12 |
| 27 Senior Unsecured Notes - Series L | $(238,880)$ |  | $(238,880)$ | $(656,918)$ | Sep-05 | Oct-35 |
| 28 Senior Unsecured Notes - Series H | 37,068 |  | 37,068 | 753,816 | May-03 | May-33 |
| 29 Senior Unsecured Notes - Series N | $(194,198)$ |  | $(194,198)$ | $(4,515,114)$ | Apr-06 | Apr-36 |
| 30 Senior Unsecured Notes - Series Q | 159,672 |  | 159,672 | 4,025,043 | Mar-08 | Apr-38 |
| 31 Senior Unsecured Notes - Series S | 826,212 |  | 826,212 | 1,981,131 | May-10 | May-15 |
| 32 Senior Unsecured Notes - Series T | $(1,131,432)$ | - | $(1,131,432)$ | $(9,302,888)$ | Mar-11 | Mar-21 |

## 33 Total Hedge Amortization

## 1,619,222

34 Hedge Gain or Loss Prior to Application of Recovery Limit (Sum of Lines 24 to )
35 Total Average Capital Structure Balance for 2012 (True-UP TCOS, Ln 165)
9,222,605
36 Financial Hedge Recovery Limit - Five Basis Points of Total Capital
38 Recoverable Hedge Amortization (Lesser of Ln 34 or Ln 37)

## Development of Cost of Preferred Stock



## Cost of Service Formula Rate Using 2012 FF1 Balances

## Worksheet $\mathbf{N}$ - Gains (Losses) on Sales of Plant Held For Future Use APPALACHIAN POWER COMPANY

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


## (C) Function <br> (T) or (G)

 T= Basis Proceeds (Gain) / Loss G = General(G)

Functional Allocator
(H)

| $(\mathrm{H})$ | (I) |
| :---: | :---: |
| Functionalized | FERC |
| Proceeds | Account | Proceeds (Gain) / Loss

0.000\%
0.000\%

# AEP East Companies 

Cost of Service Formula Rate Using 2012 FF1 Balances
Worksheet O-Calculation of Postemployment Benefits Other than Pensions Expenses Allocable to Transmission Service


[^2]AEP EAST COMPANIES
Worksheet - P CALCULATION OF
TOTAL WEIGHTED AVERAGE DEPRECIATION RATES
FOR TRANSMISSION PLANT PROPERTY ACCOUNT

## EFFECTIVE AS OF 2/1/2012

OR MULTIPLE JURISDICTION COMPANIE
APPALACHIAN POWER COMPANY

|  | VIRGINIA |  |  |
| :---: | :---: | :---: | :---: |
|  | (1) |  | WTDAVG. |
| PLANT | VASCC | AlLOCATION | DEPREC. |
| ACCT. | RATES | FACTOR (5) | RATE |


| WEST VIRGINIA |  |  |
| :---: | :---: | :---: |
| PSCOF WV |  | WTD AVG. |
| APPOVED | ALLOCATION | DEPREC. |
| RATES | FACTOR (5) | RATE |


| FERC WHOLESALE |  |  |
| :---: | :---: | :---: |
| (3) |  | WTD AVG. |
| FERC | ALLOCATION | DEPREC. |
| RATES | FACTOR (5) | RATE |


| FERC KINGSPORT |  |  |
| :---: | :---: | :---: |
| (4) |  | WTDAVG. |
| FERC | AlLOCATION | DEPREC. |
| RATES | FACTOR (5) | RATE |


| TRANSMISSION PLANT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Land Rights - Va. | 350.1 | 0.66\% | 1.000000 | 0.66\% |  |  |  |  |  |  |  |  |  | 0.66\% |
| Structures \& Improvements | 352.0 | 1.55\% | 0.455791 | 0.71\% | 1.55\% | 0.444609 | 0.69\% | 2.19\% | 0.039062 | 0.09\% | 2.19\% | 0.060538 | 0.13\% | 1.62\% |
| Station Equipment | 353.0 | 1.95\% | 0.455791 | 0.89\% | 1.95\% | 0.444609 | 0.87\% | 2.19\% | 0.039062 | 0.09\% | 2.19\% | 0.060538 | 0.13\% | 1.98\% |
| Towers \& Fixtures | 354.0 | 1.14\% | 0.455791 | 0.52\% | 1.14\% | 0.444609 | 0.51\% | 2.19\% | 0.039062 | 0.09\% | 2.19\% | 0.060538 | 0.13\% | 1.25\% |
| Poles \& Fixtures | 355.0 | 2.77\% | 0.455791 | 1.26\% | 2.77\% | 0.444609 | 1.23\% | 2.19\% | 0.039062 | 0.09\% | 2.19\% | 0.060538 | 0.13\% | 2.71\% |
| Overhead Conductor | 356.0 | 1.01\% | 0.455791 | 0.46\% | 1.01\% | 0.444609 | 0.45\% | 2.19\% | 0.039062 | 0.09\% | 2.19\% | 0.060538 | 0.13\% | 1.13\% |
| Underground Conduit | 357.0 | 1.23\% | 0.455791 | 0.56\% | 1.24\% | 0.444609 | 0.55\% | 2.19\% | 0.039062 | 0.09\% | 2.19\% | 0.060538 | 0.13\% | 1.33\% |
| Underground Conductors | 358.0 | 3.18\% | 0.455791 | 1.45\% | 3.18\% | 0.444609 | 1.41\% | 2.19\% | 0.039062 | 0.09\% | 2.19\% | 0.060538 | 0.13\% | 3.08\% |

(1) As approved in VA Case No. PUE 2006-00065 on May 15, 2007. Depreciation rates were made effective on January $1,2006$.

Approved by PSC of WV Order dated July 26, 2006 in Case No. 05-1278-E-PC-PW-42T effective July 1, 2006
(3) Approved by FERC March 2, 1990 in Docket ER90-132
(4) Approved by FERC March 2, 1990 in Docket ER90-133
(5) 2009 Allocation factors based on APCo's 12 monthly Coincident Peaks for twelve months ended September 30, 2008 as provided by AEPSC Regulated Pricing. The demand allocation factors are updated annually as of January 1, based on the 12 monthly CP's as of the previous September 30th.

## GENERAL NOTES:

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


[^0]:    Note 1 The total company data on this worksheet comes from the indicated FF1 source, or APPALACHIAN POWER COMPANY's general ledger. The functional amounts identified as transmission revenue also come from the general ledger.

[^1]:    (Total Company Amount Ties to FFI p.114, Ln 14,(c)

[^2]:    * Sourced from Actuarial Report

