# BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION 

PENNSYLVANIA POWER COMPANY DOCKET NO. R-2016-2537355

## 2016 GENERAL BASE RATE FILING <br> (Volume I of III)

FILED: April 28, 2016

## PENNSYLVANIA POWER COMPANY

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## Statement No. 2 - Direct Testimony of Richard A. D'Angelo

Exhibit FR Description

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Exhibit RAD-2

Rate Base at Original Cost Normalized to Year-End Conditions at December 31, 2017

Statement of Operating Income, 12 Months Ending December 31, 2017, Normalized and Adjusted to Reflect Revenue Necessary to Achieve Allowable Return

| Exhibit | FR | Description |
| :---: | :---: | :---: |
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| Exhibit | FR | Description |
| :--- | :--- | :--- |
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Cost Baseline For Smart Meter Savings

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2015 Depreciation Study2016 Depreciation StudyExhibit FR Description

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| Exhibit | FR | Description |
| :---: | :---: | :---: |
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PENNSYLVANIA POWER COMPANY EXHIBIT NO. 1

Supplement No. 17 to Tariff Electric - Pa. P.U.C. No. 36

# PENNSYLVANIA POWER COMPANY <br> READING, PENNSYLVANIA 

Electric Service Tariff

Effective in

The Territory as Defined on
Page Nos. 8-9 of this Tariff

Issued: April 28, 2016
Effective: June 27, 2016

By: Steven E. Strah, President<br>Reading, Pennsylvania

## NOTICE

This Supplement No. 17 makes changes to Table of Contents, Description of Territory, General Rules and Regulations, Rate Schedules and Riders.

See Fifteenth Revised Page 2.

## LIST OF MODIFICATIONS

## Table of Contents

Page 5 - Language has been changed (See First Revised Page 5).
Page 6 - Language has been changed (See First Revised Page 6).

## Description of Territory

Changes within Territories (See First Revised Pages 8 and 9).

## General Rules and Regulations

Definition of Terms - Definitions of Applicant, Customer, Primary Voltage and Subtransmission Voltage (See First Revised Pages 11, 13, 14, 18 and 21).

Rule 2 - Deposits language has changed (See First Revised Page 23).
Rule 7 - Wiring, Apparatus and Inspection - Applicant/Customer Obligations language has changed (See First Revised Page 36).

Rule 10 - Meter Reading and Rendering of Bills (9) Power Factor/Kilovar Billing - Language has been changed (See First Revised Page 44).

Rule 11 - Payment of Bills (b) - Rates have been increased (See First Revised Page 46).
Rule 22 - Transfer of Electric Generation Supplier - Language has been changed (See First Revised Page 56).

## Rate Schedules

Rate RS - Rates have been increased (See First Revised Page 57 and Second Revised Page 58).
Rate GS - General Service - Small - Rates have been increased (See Second Revised Pages 61 and 63).

Rate GS - Volunteer Fire Company, and Non-Profit Ambulance Service, Rescue Squad and Senior Center Service Rate - Rates have increased (See First Revised Pages 67 and 68).

Rate GM - General Service - Medium - Rates have been increased (See Second Revised Page 69 and 71. Language has been changed (See Second Revised Pages 69 and 71).

Rate GS-Large - General Service Secondary - Rates have been increased and language has been changed (See First Revised Page 73 and Second Revised Page 74).

## LIST OF MODIFICATIONS

Rate Schedules (Continued)
Rate GP - General Service - Primary - Rates have been increased and language has been changed (See Second Revised Page 76 and First Revised Page 77 and Second Revised 78).

Rate GT - General Service -- Transmission - Rates have been increased (See Second Revised Page 80 and First Revised Page 83) and language has been changed (See Second Revised Page 82).

Rate PLS - Private Outdoor Lighting Service - Rates have been increased (See First Revised Page 84 and 85).

Rate SV - Street Lighting Service High Pressure Sodium Vapor - Rates have been decreased (See First Revised Page 88 and language has been changed (See First Revised Page 90).

Rate SVD - Street Lighting Service: High Pressure Sodium Vapor; Divided Ownership - Rates have been decreased and increased (See First Revised 91 and language has been changed (See First Revised Page 93).

Rate SM - Street Lighting Service Mercury Vapor - Removed Rate Schedule SM-Street Lighting Service (Original Page 94 and 95).

Rate LED - Street Lighting Service - Rates have been increased (See First Revised Page 96).
Rate PNP - Public of Non-Profit Organization Rate - Rates have been increased (See Second Revised Page 99 and First Revised Page 101).

## Riders

Rider H - Price to Compare Default Service Rate Rider - Language has been changed (See Sixth Revised Page 123).

Rider J - Default Service Support Rider - Rates have been increased and language has been changed (See Second Revised Page 135 and First Revised Page 137).

## General Rules and Regulations

Rider I - Hourly Pricing Default Service Rider - Language has been changed (See Second Revised Page 130 and First Revised Pages 132 and 133).

Rider L - Partial Services Rider - Language has been changed (See First Revised Pages 146, 150 and 151).

Issued: April 28, 2016

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Rate GM - Medium-General Service Secondary Rate Demand Metered

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PENNSYLVANIA POWER COMPANY

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High Pressure Sodium Vapor Divided Ownership

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Rate LED - Street Lighting Service LED
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Rider C - Universal Service Cost Rider
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## DESCRIPTION OF TERRITORY

## ALLEGHENY COUNTY

| Boroughs | Bradford Woods | Franklin Park |  |
| :--- | :--- | :--- | :--- |
| Town | McCandless |  |  |
| Townships | Marshall | Pine | Ross |

## BEAVER COUNTY

| Boroughs | Big Beaver <br> Darlington | Homewood <br> Koppel | New Galilee |
| :--- | :--- | :--- | :--- |
| Townships | Chippewa <br>  Darlington | Franklin | Marion |

## BUTLER COUNTY

| Boroughs | Callery | Harmony | Valencia |
| :--- | :--- | :--- | :--- |
|  | Connoquenessing | Mars | Zelienople |
| Townships | Evans City | Seven Fields |  |
|  | Adams | Connoquenessing | Forward |

CRAWFORD COUNTY

| Borough | Conneaut Lake |  |  |
| :--- | :--- | :--- | :--- |
| Townships | East Fallowfield | North Shenango | Summit |
|  | West Fallowfield | South Shenango <br>  <br>  <br>  <br> Sadsbury | West Shenango |


| LAWRENCE COUNTY |  |  |  |
| :--- | :--- | :--- | :--- |
| City |  |  |  |
| Boroughs | New Castle |  |  |
|  | Bessemer | New Beaver | Volant |
|  | Ellwood City | New Wilmington | Wampum |
|  | Ellport | SNPJ |  |
| Townships | Enon Valley | South New Castle |  |
|  | Hickory | Plain Grove | Union |
|  | Little Beaver | Pulaski | Washington |
|  | Mahoning | Scott | Wayne |
|  | Neshannock | Shenango | Wilmington |
|  | North Beaver | Slippery Rock |  |
|  | Perry | Taylor |  |

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DESCRIPTION OF TERRITORY (continued)

## MERCER COUNTY

| Cities | Hermitage | Farrell | Sharon |
| :--- | :--- | :--- | :--- |
| Boroughs | Clark | Jamestown | Sheakleyville |
|  | Fredonia | Mercer | Stoneboro |
|  | Greenville | New Lebanon | West Middlesex |
|  | Grove City | Sandy Lake | Wheatland |
| Townships | Jackson Center | Sharpsville |  |
|  | Cool Spring | Jefferson | Salem |
|  | Deer Creek | Lackawannock | Sandy Creek |
|  | Delaware | Lake | Sandy Lake |
|  | E. Lackawannock | Liberty | Shenango |
|  | Fairview | Mill Creek | Springfield |
|  | Findley | New Vernon | Sugar Grove |
|  | French Creek | Otter Creek | West Salem |
|  | Greene | Perry | Wilmington |
|  | Hempfield | Pine | Wolf Creek |
|  | Jackson | South Pymatuning | Worth |

(C) Change

## GENERAL RULES AND REGULATIONS

Definition of Terms (continued)
Alternative Energy Portfolio Standards ("AEPS") - Standards requiring that a certain amount of electric energy sold from alternative energy sources be included as part of the sources of electric utilities within the Commonwealth of Pennsylvania in accordance with the Alternative Energy Portfolio Standards Act, 73 P.S. §1648.1-1648.8 ("AEPS Act") as may be amended from time to time.

Applicant - Any person, corporation or other entity that (i) desires to receive from the Company electric or any other service provided for in this Tariff, (ii) complies completely with all Company requirements for obtaining electric or any other service provided for in this Tariff, (iii) has filed and is awaiting Company approval of its application for service, and (iv) is not yet actually receiving from the Company any service provided for in this Tariff. For Residential Service, an Applicant is a natural person at least 18 years of age not currently receiving service who applies for Residential Service or any adult occupant whose name appears on the mortgage, deed or lease of the property for which the Residential Service is requested. The term does not include a person who seeks to transfer service within the service territory of the Company or to reinstate service at the same address provided that the final bill for service is not past due.

Basic Electric Supply - For purposes of the Company's Purchase of EGS Receivables Program, energy (including renewable energy) and renewable energy or alternative energy credits (RECs/AECs) procured by an EGS, provided that the RECs/AECs are bundled with the associated delivered energy. For residential Customers, Basic Electric Supply does not include early contract cancellation fees, late fees, or security deposits imposed by an EGS.

Black Start Service - The ability of a Generating Facility to go from a shutdown condition to an operating condition and start delivering power without assistance from the power system (i.e., the Company's electrical system).

Cash Advance - A refundable contribution in cash from an Applicant for those costs associated with a Line Extension, increased for applicable taxes, which is held by the Company in a non-interest bearing account.

## GENERAL RULES AND REGULATIONS

Definition of Terms (continued)
Contributions in Aid of Construction ("CIAC") - A non-refundable contribution in cash from an Applicant for those costs associated with a Line Extension and/or tree trimming, brush clearance and related activities or those costs associated with Temporary Service or the relocation of Company facilities, increased for applicable taxes.

Customer(s) - Any person, partnership, association, corporation, or other entity (i) in whose name a service account is listed, (ii) who occupies or is the ratepayer for any premises, building, structure, etc. or (iii) is primarily responsible for payment of bills. For Residential Service, a Customer is a natural person at least 18 years of age in whose name a Residential Service account is listed and who is primarily responsible for payment of bills rendered for the service or any adult occupant whose name appears on the mortgage, deed, or lease of the property for which the Residential Service is being requested. A natural person remains a Customer after discontinuance or termination until the final bill for service becomes past due.

Customer Choice and Competition Act - The Pennsylvania legislation known as the "Electricity Generation Customer Choice and Competition Act," 66 Pa. C. S. §§ 2801-2813 as implemented by the Default Service Regulations 52 Pa . C. S. $\S \S 52.181-52.189$, and by Act 129 and as may be amended from time to time.

Default Service - Service provided pursuant to a Default Service Program to a Default Service Customer.

Default Service Customer - A Delivery Service Customer not receiving service from an EGS.

Delivery Service - Provision of distribution of electric energy and other services provided by the Company.

Delivery Service Charge - A charge that includes the Monthly Minimum Charge, Distribution Charge, and all charges and surcharges imposed under other applicable tariff provisions.

> (C) Change

## GENERAL RULES AND REGULATIONS

Definition of Terms (continued)
Non-Summer - The calendar months of October through May.
On-Peak Hours - The On-Peak hours shall be from 8:00 a.m. to 9:00 p.m., prevailing times, Monday through Friday excluding holidays. All other hours shall be Off-Peak. The Off-Peak holidays are New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. On-Peak hours are subject to change from time to time by the Company after giving notice of such changes to Customers.

Permanent Residential Customer - A Customer occupying a dwelling or mobile home on a permanent foundation which is the Customer's primary residence occupied year-round for normal living purposes and including: (i) electrical wiring conforming with the National Electrical Code and the Company's service installation policies; (ii) a permanently installed heating system; and (iii) permanently installed plumbing and sewage systems.

PJM - PJM Interconnection, L.L.C. or any successor organization/entity thereto.
Point of Delivery - The location at which the Company service connection terminates and the Customer's wiring and installation begins.

Power Factor - The ratio of the watts to the volt-amperes.
Price to Compare Default Service Charge - The cents per kWh rates representing the Company's costs for providing energy, capacity, including the cost of complying with nonsolar AEPS, market based transmission and ancillary services for Customers who take Default Service.

Primary Voltage - Voltage greater than 600 volts but less than 23,000 volts.
Private Right-of-Way - The right-of-way or easement for electric facilities on, over, under, across and/or through real or other property owned by an individual or entity which is not a governmental, municipal or other public body to provide service.
(C) Change

## GENERAL RULES AND REGULATIONS

Definition of Terms (continued)
Subdivision - A tract of land divided by a Subdivider into five (5) or more adjoining unoccupied lots for the construction of single-family residences, detached or otherwise, or apartment houses, all of which are intended for year-round occupancy, if electric service to such lots necessitates extending the Company's existing Distribution Lines.

Sub-transmission Voltage - 23,000 volts.
Summary Billing - The summation of the charges for a Customer's multiple accounts and provision thereof to the Customer in a single bill.

Summer - The calendar months of June through September.
Tariff - This document, including, but not limited to, the Rules, Regulations and Rate Schedules and Riders contained herein, as filed with and approved by the Commission.

Temporary Electric Service - A Service Line, meter and/or other work supplied by the Company to the Customer for electric service over a defined period, usually less than one (1) year.

Transmission Voltage - Voltage equal to or greater than 69,000 volts.
Universal Service - Policies, protections and services that help residential low-income Customers maintain electric service. The term includes Customer assistance programs, termination of service protections and policies and services that help low-income Customers to reduce or manage energy consumption in a cost-effective manner.

Universal Service Charge - The charge developed and calculated in accordance with Rider C - Universal Service Cost Rider.

Volunteer Fire Company - A service location consisting of a building, sirens, a garage for housing vehicular firefighting equipment, or a facility certified by the Pennsylvania Emergency Management Agency (PEMA) for fire fighter training. The use of electric service at this service location shall be to support the activities of the Volunteer Fire Company. Any fund raising activities at this service location must be used solely to support volunteer fire fighting operations. The Customer of record at this service location must be predominately a Volunteer Fire Company recognized by the local municipality or PEMA as a provider of firefighting services.
(C) Change

## GENERAL RULES AND REGULATIONS

The Company may require an Applicant/Customer to make the payment of any outstanding balance or portion of an outstanding balance if the Applicant/Customer resided at the property for which service is requested during the time the outstanding balance accrued and for the time the Applicant/Customer resided at the property not to exceed four years. The Company may establish that an Applicant/Customer previously resided at a property through the use of mortgage, deed, lease information, a consumer credit reporting service, a Financial Summary that provides the names and income of adult occupants of a household, and a web-based tool such as "Accurint" to research Applicant/Customer information.

## 2. Deposits

Where an Applicant's/Customer's credit is not established or the credit of a Customer with the Company has, in the Company's judgment become impaired, or where the Company deems it necessary, a deposit or other guarantee satisfactory to the Company may be required to be supplied by the Applicant/Customer as security for the payment of future and final bills before the Company shall commence or continue to render any type of electric service to the Applicant/Customer. Deposits required by the Company for Tariff charges shall include unpaid EGS charges that are subject to the Company's POR.

The Company utilizes a generally accepted credit scoring methodology in range of general industry practice that is based on an applicant or customer's utility payment history.

The Company may request deposits from Customers taking service for a period of less than thirty (30) days, in an amount equal to the estimated bill for the cost of total services provided by the Company for such temporary period. Deposits may be required by the Company from all other Customers, in an amount that is in accordance with 52 Pa . Code $\S$ 56.51.

Deposits for Residential Customers shall be returned to them in accordance with the provisions of the Responsible Utility Customer Protection Act ( 66 Pa. C.S. §§ 1401-1418) and the provisions of the Commission's Regulations at 52 Pa . Code Chapter 56, as amended from time to time. Deposits from all other Customers may be held by the Company, in its sole and exclusive judgment, until the Customer discontinues service or the Company determines that the Customer has established a satisfactory payment record. Upon discontinuance of all Company service and payment in full of all charges and financial guarantees, the Company shall refund the deposit or deduct any unpaid amounts from the deposit and refund the difference, if any, to the Customer. The deposit shall no longer accrue interest upon the discontinuance of service.

The interest rate on Residential Customer deposits will be calculated pursuant to The Fiscal Code, as amended annually.

## (C) Change

## GENERAL RULES AND REGULATIONS

Rule 7 - Wiring, Apparatus and Inspection (continued)
When a Customer's facilities or use of equipment having operating characteristics that adversely affects or has the potential to adversely affect, in the Company's sole judgment, the Company's electric system, the Customer shall take corrective action at its sole expense as may be directed by the Company. Unless corrective action is taken, the Company is under no obligation to serve or to continue to serve such Customers.

Each Applicant/Customer shall provide to the Company such service information described in Rule 1 of this Tariff. The Applicant/Customer shall be responsible and liable to the Company for any damages resulting from the Customer's failure to provide such service information.

The Company will require the customer to maintain a Power Factor in the range of $85 \%$ (lagging) to $100 \%$ for secondary, primary and subtransmission service and $97 \%$ (lagging) to $99 \%$ (leading) for transmission service, coincident with the customers maximum monthly peak demand and to provide, at the Customer's expense, any corrective equipment necessary in order to do so. The Company may inspect the Customer's installed equipment and/or place instruments on the premises of the Customer in order to determine compliance with this requirement, as deemed appropriate by the Company. The Company may charge the Customer the Company's installation cost incurred for corrective devices necessary for compliance with this provision. The Company is under no obligation to serve, or to continue to serve, a Customer who does not maintain a Power Factor consistent with the parameters set forth in this provision.

## 8. Metering

## Company Obligations

The Company owns, maintains, installs and operates a variety of meters, and related equipment designed to measure and record Customers' consumption and usage of all services provided under this Tariff. The Company may, in its sole and exclusive discretion, install such meters and related equipment it deems reasonable and appropriate to provide service to Customers under this Tariff. The Company may, in its sole and exclusive discretion, install such special metering equipment as may be requested by a Customer, subject to the Customer paying all of the Company's incremental material, labor, overheads and administrative and general expenses relating to such facilities. Where additional metering services and the associated costs for the additional metering services are contained within this Tariff, those costs shall also be applicable.

## (C) Change

## GENERAL RULES AND REGULATIONS

Rule 10 - Meter Reading and Rendering of Bills (continued)

## (9) Power Factor/kilovar Billing

Billing for Power Factor or kilovars, whichever is applicable, shall be in accordance with the Customer's applicable Rate Schedule or other provisions of this Tariff. The Power Factor used for billing purposes shall be rounded to the next highest whole percent, unless otherwise stated in the Customer's applicable Rate Schedule or other provisions of this Tariff.

## (10) Billing for Vandalism, Theft or Deception

In the event that the Company's meters or other equipment on the Customer's premises have been tampered or interfered with by any means whatsoever, resulting in improper or non-registration of service supplied, the Customer being supplied through such equipment shall pay to the Company the amount the Company estimates is due for service used but not registered on the Company's meter, and the cost of any repairs or replacements, inspections and investigations relating thereto including, but not limited to, all administrative expenses associated with the investigation(s) (e.g., Legal, Accounting/Billing, etc.). Under these circumstances, the Company may at its option terminate its service immediately and/or require the Customer to pay all costs correcting any and all unauthorized conditions at the premises. In the event service has been terminated under these circumstances it shall not be restored to the Customer's premises until: (i) the Customer has a certificate of compliance with the provisions of the National Electric Code and the regulations of the National Fire Protection Association has been issued by the municipal inspection bureau or by any Company-accepted inspection agency, (ii) the Customer has complied with all of the Company's requirements and (iii) the Customer pays the Company a reconnection fee and deposit.

In the event that a Customer knowingly and willfully obtained service for itself or for another by creating or reinforcing a false impression, statement or representation and fails to correct the same, the Company shall immediately correct the account information in question and issue an adjustment for all current or previous amounts. The Customer shall be required to show proof of identity and sign an agreement for payment of all electric service received, plus any and all costs and administrative expenses associated with any investigation(s) (i.e., Legal, Accounts/Billing, etc.) which shall be added to their account. The Customer shall have three (3) business days in which to provide proof of identity. The Company may terminate a Customer's electric service if the Customer fails to provide such proof of identity within the aforementioned time period.

## (C) Change

## GENERAL RULES AND REGULATIONS

## Rule 11 - Payment of Bills (continued)

A Customer's failure to receive a bill shall not be construed or deemed, under any circumstances, to be a waiver of any of the provisions of this Tariff. A Customer's bill shall be overdue when not paid on or before the due date indicated in the bill.

## b. Late Payment Charges

Late payment charges shall be applied to Default Service Charges, EGS charges that are subject to the Company's POR and Delivery Service Charges. The Company will apply late payment charges to EGS charges that are not subject to the Company's POR at the EGS's request when it is performing billing services for the EGS.

A Residential Customer's overdue bill shall be subject to a late payment charge of $1.5 \%$ interest per month on the overdue balance of the bill. A Non-Residential Customer's overdue bill shall be subject to a late payment charge of $2.0 \%$ interest per month on the overdue balance of the bill. Interest charges shall be calculated by the Company on the overdue portions of the bill and shall not be charged against any sum that falls due during a current billing period. At the Company's option, the interest per month associated with the late payment charge for Residential Customers may be reduced or eliminated in order to facilitate payment of bills under dispute.

## c. Allocation of Payments

All payments made by or on behalf of a Customer shall be applied to a Customer's account in accordance with the Commission's payment posting rules and applicable Regulations including the Company's Electric Generation Supplier Coordination Tariff on file with the Commission.

## d. Delinquent Accounts

A Customer's account is delinquent when not paid in full by the due date stated on the bill or otherwise agreed upon by the Customer and the Company. The Company shall pursue collections of outstanding residential delinquent account balances in accordance with applicable law and Commission regulations. Termination of service will occur only for non-payment of undisputed delinquent accounts associated with the Company's regulated charges, which shall include EGS charges subject to the Company's POR.

The Company will have the ability to terminate service to a Customer for the Customer's non-payment of EGS Basic Electric Supply charges incurred after January 1, 2011 in the same manner and to the same extent that the Company could terminate service to such a Customer for non-payment of EDC charges. Residential Customer's termination will be subject to the consumer protections included in Chapter 14 of the Public Utility Code, 66 Pa. C.S. $\S 1401$, et. seq., and Chapters 55 and 56 of the Commission's regulations, 52 Pa . Code $\$ \S 55.1$ and 56.1 et. seq., and/or other applicable regulations as may change from time to time. The POR is only available as long as the Company is able to terminate service to Customers under Chapter 14 of the Public Utility Code 66 Pa. C.S. §1401, et. seq., and Chapters 55 and 56 of the Commission's regulations, 52 Pa . Code $\$ \$ 55.1$ and 56.1 et. seq., and/or other applicable regulations as may change from time to time.
(I) Increase

## GENERAL RULES AND REGULATIONS

## Rule 21 - Service Continuity: Limitation on Liability for Service (continued)

To the extent applicable under the Uniform Commercial Code or on any theory of contract or products liability, the Company disclaims and shall not be liable to any Customer or third party for any claims involving and including, but not limited to, strict products liability, breach of contract, and breach of actual or implied warranties of merchantability or fitness for an intended purpose.

If the Company becomes liable under Section 2806(g) or 2809(c) of the Public Utility Code, 66 Pa. C.S. $\S \$ 2806(\mathrm{~g})$ and 2809(f), for Pennsylvania state taxes not paid by an Electric Generation Supplier (EGS), the non-compliant EGS shall indemnify the Company for the amount of additional state tax liability imposed upon the Company by the Pennsylvania Department of Revenue due to the failure of the EGS to pay or remit to the Commonwealth the tax imposed on its gross receipts under Section 1101 of the Tax Report Code of 1971 or Chapter 28 of Title 66.

## 22. Transfer of Electric Generation Supplier

The Company shall change a Customer's EGS in accordance with 52 Pa. Code Chapter 57, Subchapter M, "Standards for Changing a Customer's Electricity Generation Supplier". Pursuant to the commission's Rulemaking to Amend the Provisions of 52 Pa . Code, Chapter 57 Regulations Regarding Standards for Changing a Customer's Electricity Generation Supplier, at Docket No. L-2014-2409383, changes in a Customer's EGS shall be effective within three (3) business days after the enrollment request is processed, regardless of whether the meter reading is actual or estimated.
(C) Change

## RATE SCHEDULES

## RATE RS

## Availability:

Available for Residential Service using the Company's standard, single phase service, to installations served through one meter for each family unit in a residence or apartment.

When service is used through the same meter for both residential and commercial purposes the General Service rate schedule shall apply.

This rate schedule is not available for commercial, institutional or industrial establishments.

## Service:

Alternating current, 60 hertz, single phase, nominal voltage $120 / 240$ or $120 / 208$ as available.

## Rate:

The net monthly charge per customer shall be:

## Distribution:

$\$ 13.41$ per month (Customer Charge), plus
$4.690 \not \subset$ per kWh for all kWh

## Riders:

Bills rendered under this schedule are subject to the following applicable Rider Charges:

Rider A - Tax Adjustment Surcharge
Rider C -Universal Services Cost
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider G-Smart Meter Technologies Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge
(I) Increase

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## RATE SCHEDULES

Rate RS (continued)

## Default Service Charges:

For Customers receiving Default Service from the Company, Rider H-Price to Compare Default Service Rate Rider, Residential Customer Class rate applies.

## Minimum Charge:

The monthly Minimum Charge shall be $\$ 13.41$ plus distribution energy charges and any (I) charges related to applicable riders.

## Special Monthly Charges Load in Excess of 25 kilowatts:

The Company shall install a suitable demand meter to determine the maximum 15 -minute integrated demand when (i) a Customer's service requires the installation of an individual transformer, (ii) a Customer's total monthly consumption exceeds 10,000 kilowatt-hours for two (2) consecutive months, or (iii) when the Customer's service entrance requirements exceed 600 amperes.

If the demand so determined under this provision exceeds twenty-five (25) kilowatts, a monthly distribution demand charge of Two Dollars (\$2.00) per kW for all kW shall apply to such excess as set forth in this provision, in addition to the General Monthly Charges. In no event shall the demand charge be based upon less than seventy-five percent ( $75 \%$ ) of the highest excess demand during the preceding eleven (11) months.

# RATE SCHEDULES <br> RATE GS <br> GENERAL SERVICE - SMALL 

## Availability:

Available for service through a single metering installation for secondary light and power service for loads up to $1,500 \mathrm{kWh}$.

## Service:

Alternating current, 60 hertz, standard single phase or three phase three-wire or four-wire secondary service, as available.

Single and three phase service will be metered and billed separately or, where feasible, single and three phase service will be furnished through a single meter installation and billed as one account provided the customer arranges his wiring to facilitate the installation of a single meter.

Where service is furnished at three-phase, the customer shall provide and maintain all equipment required for lighting service.

## Rate:

The net monthly charge per Customer shall be:

## Distribution:

$\$ 27.67$ per month (Customer Charge), plus
4.035 cents per kWh for all kWh
(I) Increase

## RATE SCHEDULES

Rate GS (continued)

## Minimum Charge:

The monthly Minimum Charge shall be $\$ 27.67$ plus distribution energy charges and any charges related to applicable riders.

## Terms of Payment:

As per Rule 11, Payment of Bills
(I) Increase

## RATE SCHEDULES

## Rate GS (continued)

service territory that constitutes a separately metered location for electric delivery purposes. The use of the electric service by the Non-Profit Ambulance Service shall be used primarily to support its service. The Company may request and the Customer/Applicant shall provide all documentary and other evidence of its compliance with this provision.

## Rate:

The net monthly charge per Customer shall be:

## Distribution:

$\$ 13.41$ per month (Customer Charge), plus
$4.690 \notin$ per kWh for all kWh

## Riders:

Bills rendered under this schedule are subject to the following applicable Rider Charges:
Rider A - Tax Adjustment Surcharge
Rider C - Universal Service Cost
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider G - Smart Meter Technologies Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge

## Default Service Charges:

For Customers receiving Default Service from the Company, Rider H - Price to Compare Default Service Rate Rider, Residential Customer Class rate applies.
(I) Increase

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## RATE SCHEDULES

Rate GS (continued)

## Minimum Charge:

The monthly Minimum Charge shall be $\$ 13.41$ plus distribution energy charges and any charges related to applicable riders.

## Special Monthly Charges Load in Excess of 25 kilowatts:

The Company shall install a suitable demand meter to determine the maximum 15minute integrated demand when (i) a Customer's service requires the installation of an individual transformer, (ii) a Customer's total monthly consumption exceeds 10,000 kilowatt-hours for two (2) consecutive months, or (iii) when the Customer's service entrance requirements exceed 600 amperes.

If the demand so determined under this provision exceeds twenty-five (25) kilowatts, a monthly distribution demand charge of Two Dollars (\$2.00) per kW for all kW shall apply to such excess as set forth in this Provision, in addition to the General Monthly Charges. In no event shall the demand charge be based upon less than seventy-five percent $(75 \%)$ of the highest excess demand during the preceding eleven (11) months.

## Terms of Payment:

Same as listed previously in this schedule.
(I) Increase

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## RATE SCHEDULES

## RATE GM

GENERAL SERVICE - MEDIUM

## Availability:

Available for secondary light and power service for loads of up to 400 kW . Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of $2,500 \mathrm{KVA}$. Upon a Customer's request, the Company may, at its option, provide transformers having a capacity of greater than 2,500 KVA.

New Customers requiring transformer capacity in excess $2,500 \mathrm{KVA}$ and existing Customers whose load increases such that a transformer change is required (over 2,500 KVA) shall be required to take untransformed service.

## (C)

If an existing Customer's total consumption is less than $1,500 \mathrm{kWh}$ per month for twelve (12) consecutive months, the Customer may no longer be eligible for service under this Rate Schedule GM. Based upon the Company's then estimate of the Customer's usage, the Customer shall be placed on Rate Schedule GS or such other Rate Schedule for which such Customer most qualifies.

If an existing Customer's billing demand exceeds 400 kW for two (2) consecutive months in the most recent twelve-month period, then the Customer may no longer be eligible for service under this Rate Schedule GM and shall be placed on Rate Schedule GS-Large or such other Rate Schedule for which such Customer most qualifies.
All of the following general monthly charges are applicable to Delivery Service

## Rate:

The net monthly charge per customer shall be:

## Distribution:

$\$ 30.44$ per month (Customer Charge), plus
Demand
$\$ 3.85$ per kW for all billing demand as measured in kW
$\$ 0.20$ for each rkVA of Reactive Billing Demand
(C) Change
(I) Increase

## RATE SCHEDULES

Rate GM (continued)

## Primary and Transmission Service Discount:

No service voltage discounts are available on this rate schedule.

## Minimum Charge:

No bill shall be rendered by the Company for less than,
$\$ 30.44$ per month, plus
The demand charge at current rate levels times the Billing Demand, plus any distribution energy charges and any charges stated in or calculated by any applicable rider.

## Determination of Billing Demand:

A Customer's demand shall be measured by indicating or recording instruments. Demands shall be integrated over 15 -minute intervals. The billing demand in the current month shall be the greatest of: (i) the maximum measured demand established in the month during On-Peak Hours, as stated herein, (ii) forty percent $(40 \%)$ of the maximum measured demand established in the month during off-peak hours, as stated herein, (iii) contract demand or (iv) fifty percent (50\%) of the highest billing demand established during the preceding eleven (11) months. The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of Time-of-Use demand meters.

Pending the installation of a demand meter, Customer's Demand shall be a formula demand determined by dividing the kilowatt-hour consumption by 200.

## Reactive Billing Demand:

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Billing Demand by the ratio of the measured lagging reactive kilovoltamperes hours to the measured kWh by the following formula: rkVA = Billing Demand X (measured lagging reactive kilovoltampere hours $\div$ rate measured kWh ). For all other installations, the Reactive Billing Demand shall be the integrated reactive demand occurring coincident with the Billing Demand.
(C) Change
(I) Increase

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## RATE SCHEDULES

## RATE GS-LARGE

GENERAL SERVICE SECONDARY

## Availability:

(C)

This Rate is available to non-Residential Customers using electric service through a single delivery location for lighting, heating and/or power service whose registered demand is equal to or greater than 400 KW in two (2) consecutive months in the most recent twelve-month period, Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Upon a Customer's request, the Company may, at its option, provide transformers having a capacity of greater than $2,500 \mathrm{KVA}$.

New Customers requiring transformer capacity in excess $2,500 \mathrm{KVA}$ and existing Customers whose load increases such that a transformer change is required (over 2,500 KVA) shall be required to take untransformed service.
All of the following general monthly charges are applicable to Delivery Service Customers.

## GENERAL MONTHLY CHARGES

## Distribution Charge:

$\$ 126.53$ per month (Customer Charge), plus
$\$ 4.77$ per kW for all billed kW
$\$ 0.20$ for each rkVA of reactive billing demand

## Riders:

Bills rendered under this schedule are subject to the following applicable Rider Charges:

Rider A - Tax Adjustment Surcharge
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider G - Smart Meter Technologies Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge
(C) Change
(I) Increase

## RATE SCHEDULES

## Rate GS - Large (continued)

## Default Service Charges:

For Customers receiving Default Service from the Company, Rider H-Price to Compare Default Service Rate Rider, Commercial Customer Class rate applies unless the Customer elects to receive Default Service from the Company under Rider I-Hourly Pricing Default Service Rider.

## Minimum Charge:

No bill shall be rendered by the Company for less than,
$\$ 126.53$ per month, plus
The demand charge at current rate levels for the highest kilowatt demand billed during the current and preceding eleven (11) months, plus distribution energy charges, and any charges stated in or calculated by any applicable rider.

## Determination of Billing Demand:

A Customer's demand shall be measured by indicating or recording instruments. Demands shall be integrated over 15 -minute intervals. The billing demand in the current month shall be the greatest of: (i) the maximum measured demand established in the month during On-Peak Hours, as stated herein, (ii) forty percent ( $40 \%$ ) of the maximum measured demand established in the month during off-peak hours, as stated herein, (iii) contract demand or (iv) fifty percent $(50 \%)$ of the highest billing demand established during the preceding eleven (11) months. The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of Time-of-Use demand meters.

Pending the installation of a demand meter, Customer's Demand shall be a formula demand determined by dividing the kilowatt-hour consumption by 200.

## Reactive Billing Demand:

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Billing Demand by the ratio of the measured lagging reactive kilovoltamperes hours to the measured kWh by the following formula: $\mathrm{rkVA}=$ Billing Demand X (measured lagging reactive kilovoltampere hours $\div$ rate measured kWh ). For all other installations, the Reactive Billing Demand shall be the integrated reactive demand occurring coincident with the Billing Demand.
(C) Change
(I) Increase

# RATE SCHEDULES <br> RATE GP <br> GENERAL SERVICE - PRIMARY 

## Availability:

Available for primary light and power service. The billing load as hereinafter defined shall not be less than 25 kW .

## Service:

Alternating current, 60 hertz, three phase, at nominal primary voltages as available from suitable facilities of adequate capacity adjacent to the premises to be served, and as determined by the Company.

The Customer shall have the responsibility for ownership, operation, and maintenance of all transforming, controlling, regulating, and protective equipment.

## Rate:

The net monthly charge per Customer shall be:

## Distribution:

$\$ 159.89$ per month (Customer Charge), plus
$\$ 6.12$ per kW for all billed kW
$\$ 0.20$ for each rkVA of Reactive Billing Demand
(I) Increase

## RATE SCHEDULES

Rate GP (continued)

## Riders:

Bills rendered under this schedule are subject to the following applicable Rider Charges:
Rider A - Tax Adjustment Surcharge
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider G - Smart Meter Technologies Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge

## Default Service Charges:

For Customers receiving Default Service from the Company, Rider I - Hourly Pricing Service Default Service Rider rate applies.

## Minimum Charge:

No bill shall be rendered by the Company for less than:
$\$ 159.89$ per month, plus demand charges at current rate levels times the Billing Demand, plus any distribution energy charges, and any charges stated in or calculated by any applicable rider.
(I) Increase

## RATE SCHEDULES

Rate GP (continued)

## Riders:

Bills rendered under this schedule are subject to the charges stated in any applicable rider.

## Determination of Billing Demand:

The Customer's demand shall be measured by indicating or recording instruments. Demand shall be integrated over fifteen (15)-minute intervals or as otherwise determined by the Company. The billing demand in the current month shall be the greatest of: (i) twenty-five (25) kW , (ii) the maximum measured demand established in the month during On-Peak Hours, as stated herein, (iii) forty percent ( $40 \%$ ) of the maximum measured demand established in the month during off-peak hours, as stated herein, (iv) contract demand or (v) fifty percent (50\%) of the highest billing demand established during the preceding eleven (11) months. The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of Time-of-Use demand meters.

## Reactive Billing Demand:

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Billing Demand by the ratio of the measured lagging reactive kilovoltamperes hours to the measured kWh by the following formula: rkVA $=$ Billing Demand X (measured lagging reactive kilovoltampere hours $\div$ rate measured kWh ). For all other installations, the Reactive Billing Demand shall be the integrated reactive demand occurring coincident with the Billing Demand.

## Terms of Payment:

As per Rule 11, Payment of Bills
(C) Change

## RATE SCHEDULES

RATE GT<br>GENERAL SERVICE - TRANSMISSION

## Availability:

Available for transmission light and power service furnished through one meter for each installation. The minimum billing demand shall be 200 kW .

## Service:

Alternating current, 60 hertz three phase, at nominal transmission voltages of 23,000 volts or above from suitable facilities of adequate capacity as may be available adjacent to the premises to be served and as determined by the Company.

The Customer shall have the responsibility for ownership, operation, and maintenance of all transforming, controlling, regulating, and protective equipment.

The Company reserves the right to install the metering equipment on either the primary or secondary side of the customer's transformers, and when installed on the secondary side, compensating metering equipment will be used to correct for transformer losses.

## Rate:

The net monthly charge per customer shall be:

## Distribution:

$\$ 376.85$ per month (Customer Charge), plus
$\$ 0.60$ per kw for all billed kW
$\$ 0.20$ for each rkVA of reactive billing demand
(I) Increase

## RATE SCHEDULES

Rate GT (continued)

## Discount:

## A. VOLTAGE DISCOUNT - 115 KV OR GREATER:

If the Company, in its sole discretion, elects to serve a Customer at 115 KV or greater, the demand charge shall be decreased as set forth below:
Credit for:
Distribution

Demand
Dollars/KW
\$0.18
(C)

## Determination of Billing Demand:

The Customer's demand shall be measured by indicating or recording instruments. Demand shall be integrated over fifteen (15)-minute intervals or as otherwise determined by the Company. The billing demand in the current month shall be the greater of: (i) 200 kW , (ii) the maximum measured demand established in the month during On-Peak Hours, as stated herein, (iii) forty percent (40\%) of the maximum measured demand established in the month during off-peak hours, as stated herein, (iv) contract demand (v) fifty percent ( $50 \%$ ) of the highest billing demand established during the preceding eleven (11) months. The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of Time-of-Use demand meters.

For purposes of determining the demand for Net Station Power of a Generating Facility under this Rate Schedule, registered demand during any hour cannot be netted, offset or credited against capacity from that Generating Facility in any other hour or from registered capacity from any other Generating Facility in any other hour.

## Reactive Billing Demand:

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Billing Demand by the ratio of the measured lagging reactive kilovoltamperes hours to the measured kWh by the following formula: rkVA = Billing Demand X (measured lagging reactive kilovoltampere hours $\div$ rate measured kWh ). For all other installations, the Reactive Billing Demand shall be the integrated reactive demand occurring coincident with the Billing Demand.
(C) Change

## RATE SCHEDULES

Rate GT (continued)

## Minimum Charge:

No bill shall be rendered by the Company for less than,
$\$ 376.85$ per month, plus
the demand charges at current rate levels times the Billing Demand, plus any charges stated in or calculated by any applicable Riders.

## Terms of Payment:

As per Rule 11, Payment of Bills

## Station Power Energy Netting:

If applicable PJM rules and procedures for determining Net Station Power are in effect, all Net Station Power shall be determined solely by PJM and provided to the Company for billing purposes under this Rate Schedule. If the Applicant self-supplies Net Station Power, the Applicant shall be responsible for obtaining all related transmission service. If no such applicable PJM rules and procedures for determining Net Station Power are in effect or PJM is unable for any reason to determine Net Station Power, the Company shall determine Net Station Power for any relevant period in its sole discretion.

## Contract:

Electric service hereunder will be furnished in accordance with a written contract which by its terms shall be in full force and effect for a minimum period of one year and shall continue in force thereafter from year to year unless either party shall give to the other not less than 60 days' notice in writing prior to the expiration date of any said yearly periods that the contract shall be terminated at the expiration date of said yearly period. When a contract is terminated in the manner provided herein, the service will be discontinued. Customers who elect not to contract for a minimum one year term, as specified above, will be placed on Rate Schedule GS.

## Rules and Regulations:

The Company's Standard Rules and Regulations shall apply to the installation and use of electric service

## RATE SCHEDULES

## RATE PLS

PRIVATE OUTDOOR LIGHTING SERVICE

## Availability:

Available for all-night outdoor lighting service to any Customer on the lines of the Company where such service can be supplied by the installation of lighting fixtures supplied directly from (1) existing secondary circuits or (2) an extension of existing secondary circuit that requires only one additional span of secondary circuit and does not require any other facilities or expenses (e.g. new pole, pole changeout, or guying).

## Service:

Complete lighting service will be furnished by the Company using vapor lamps installed in standard fixtures. All equipment will be installed and maintained by the Company.

## Rate:

## Overhead and Post-Top (PT) Lighting Service:

The charges listed below for lights not designated as PT are for each light with luminaire and bracket arm, supplied from an existing pole and secondary facilities.

The charges listed below for lights designated as PT are for each lamp with post-top luminaire mounted on a $14^{\prime}-16^{\prime}$ post installed $4^{\prime}$ in the ground, where service is supplied from existing secondary, including 50 feet of circuit installed in a trench provided by the customer.

## Distribution Charge:

| Rating <br> in Watts | Type | Nominal <br> Lumens | Average <br> Monthly <br> kWh | Distribution |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 175 | Mercury Vapor | 7,500 | 70 | $\$ 13.76$ | (I) |
| 175 | Mercury Vapor - PT | 7,500 | 70 | 25.04 | (I) |
| 400 | Mercury Vapor | 22,000 | 156 | 11.83 | (I) |
| 70 | Sodium Vapor | 5,800 | 32 | 17.18 | (I) |
| 100 | Sodium Vapor - PT | 9,500 | 46 | 26.34 | (I) |
| 100 | Sodium Vapor | 9,500 | 46 | 17.28 | (I) |
| 150 | Sodium Vapor | 16,000 | 66 | 16.66 | (I) |
| 250 | Sodium Vapor | 27,500 | 98 | 17.47 | (I) |
| 400 | Sodium Vapor | 50,000 | 156 | 17.31 | (I) |
|  |  |  |  |  |  |
| 250 | Metal Halide | 23,000 | 98 | 21.56 | (I) |
| 400 | Metal Halide | 40,000 | 156 | 18.41 | (I) |
| 1,000 | Metal Halide | 110,000 | 364 | 7.86 | (I) |

(I) Increase

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## RATE SCHEDULES

Rate PLS (continued)
When service cannot be supplied from facilities included above and additional facilities are required, the customer will in addition to the above charges pay the following distribution charge for each pole:

$$
\begin{array}{ll}
\text { For each } 30^{\prime} \text { or } 35^{\prime} \text { pole, per month } & \$ 10.46 \\
\text { For each } 40^{\prime} \text { pole, per month } & \$ 12.18 \tag{I}
\end{array}
$$

## Riders:

Bills rendered under this schedule are subject to the following applicable Rider Charges:

Rider A - Tax Adjustment Surcharge
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge

## Default Service Charges:

The Default Service Charges shall be determined using the applicable Average Monthly kWh usage, from the preceding chart, multiplied by the Rider H - Price to Compare Default Service Rate Rider, Commercial Customer Class rate.
(I) Increase

# RATE SCHEDULES 

RATE SV<br>STREET LIGHTING SERVICE HIGH PRESSURE SODIUM VAPOR

## Availability:

Available to municipalities and other governmental agencies for lighting public streets, highways, bridges, parking lots, parks, and similar public places.

## Service:

Company will furnish, install, operate, and maintain its standard HPS street light units consisting of lamps, luminaires, controls, brackets, and ballasts utilizing the Company's wood, metal or steel poles and overhead and underground distribution facilities that exist along public thoroughfares. Exceptions are as noted under Special Terms and Conditions. Lighting units will operate from sunset until sunrise, each night of the year, approximately 4,070 hours of annual operation.

## Rate:

## Distribution Charge:

| Rating <br> in Watts | Nominal <br> Lumens | Average <br> Monthly <br> kWh | Distribution |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 70 | 5,800 | 32 | $\$ 9.38$ | (D) |
| 100 | 9,500 | 46 | $\$ 9.34$ | (D) |
| 150 | 16,000 | 66 | $\$ 9.48$ | (D) |
| 250 | 27,500 | 98 | $\$ 9.67$ | (D) |
| 400 | 50,000 | 156 | $\$ 9.97$ | (D) |

(D) Decrease

## RATE SCHEDULES

Rate SV (continued)

## Replacements:

If the customer requests the Company to remove the present street light system to install high pressure sodium vapor lights and if the present system is less than twenty years old, the customer shall pay the removal cost plus the remaining value of the system. If the customer terminates his present street lighting service within twelve months of requesting service under this schedule, the above condition of service remains in effect. However, in the case where the lights have been in place longer than ten years, and the customer replaces a portion of the existing mercury vapor system with sodium vapor and further requests that the removed mercury vapor lights replace a portion of the existing incandescent lights, the Company will assume these costs provided that there is remaining value in the mercury vapor lights, i.e., not fully depreciated. If the customer chooses, or is unable, to replace existing incandescent lights with the replaced mercury vapor lights, the customer shall pay the remaining life value of the removed mercury vapor lights including poles and hardware.

If the customer requests the Company to remove the present high pressure sodium vapor street light system to install LED lights and if the present system is less than twenty years old, the customer shall pay the removal cost plus the remaining value of the system.

## Terms of Payment:

The net amount billed is due and payable within a period of thirty days. If the net amount is not paid on or before the date shown on the bill for payment of net amount, the bill shall bear interest at the rate of $2 \%$ per month of the unpaid net balance.

## Contract:

Electric service hereunder will be furnished in accordance with a written contract which by its terms shall be in full force and effect for a period of ten years and shall continue in force thereafter for five-year periods unless either party shall give to the other not less than 60 days' notice in writing prior to the expiration date of any of said five-year period that the contract shall be terminated at the expiration date of said five-year period. When a contract is terminated in the manner provided herein, the service will be discontinued.

## Rules and Regulations:

The Company's Standard Rules and Regulations shall apply to the installation and use of electric service.
(C) Change

RATE SCHEDULES

## RATE SVD

STREET LIGHTING SERVICE; HIGH PRESSURE SODIUM VAPOR; DIVIDED OWNERSHIP

## Availability:

Available to municipalities and other governmental agencies for lighting public streets, highways, bridges, parking lots, parks and similar public places.

## Service:

The Company will furnish energy and maintenance only to those HPS street light units that are listed in the Company's approved material standards. Maintenance shall include lamp replacement, photo-cell replacement, and scheduled cleaning. Lighting units will operate from sunset to sunrise, each night of the year, approximately 4,070 hours of annual operation.

## Rate:

## Distribution Charge:

| Rating <br> in Watts | Nominal <br> Lumens | Average <br> Monthly <br> kWh | Distribution |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 70 | 5,800 | 32 | $\$ 3.96$ | (D) |
| 100 | 9,500 | 46 | $\$ 3.91$ | (D) |
| 150 | 16,000 | 66 | $\$ 5.58$ | (I) |
| 250 | 27,500 | 98 | $\$ 6.10$ | (I) |
| 400 | 50,000 | 156 | $\$ 3.37$ | (D) |

## Riders:

Bills rendered under this schedule are subject to the following applicable Rider Charges:

Rider A - Tax Adjustment Surcharge
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge
(D) Decrease
(I) Increase

## RATE SCHEDULES

Rate SVD (continued)

## Replacements:

If the customer requests the Company to remove the present street light system to install high pressure sodium vapor lights and if the present system is less than twenty years old, the customer shall pay the removal cost plus the remaining value of the system. If the customer terminates his present street lighting service within twelve months of requesting service under this schedule, the above condition of service remains in effect. However, in the case where the lights have been in place longer than ten years, and the customer replaces a portion of the existing mercury vapor system with sodium vapor and further requests that the removed mercury vapor lights replace a portion of the existing incandescent lights, the Company will assume these costs provided that there is remaining value in the mercury vapor lights, i.e., not fully depreciated. If the customer chooses, or is unable, to replace existing incandescent lights with the replaced mercury vapor lights, the customer shall pay the remaining life value of the removed mercury vapor lights including poles and hardware.

If the customer requests the Company to remove the present high pressure sodium vapor street light system to install LED lights and if the present system is less than twenty years old, the customer shall pay the removal cost plus the remaining value of the system.

## Terms of Payment:

The net amount billed is due and payable within a period of thirty days. If the net amount is not paid on or before the date shown on the bill for payment of net amount, the bill shall bear interest at the rate of $2 \%$ per month of the unpaid net balance.

## Contract:

Electric service hereunder will be furnished in accordance with a written contract which by its terms shall be in full force and effect for a period of ten years and shall continue in force thereafter for five-year periods unless either party shall give to the other not less than 60 days' notice in writing prior to the expiration date of any of said five-year period that the contract shall be terminated at the expiration date of said five-year period. When a contract is terminated in the manner provided herein, the service will be discontinued.

## Rules and Regulations:

The Company's Standard Rules and Regulations shall apply to the installation and use of electric service.
(C) Change

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First Revised Page 94
Superseding Original Page 94

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(C) Change

PENNSYLVANIA POWER COMPANY

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(C)
(C) Change

## RATE SCHEDULES <br> RATE LED <br> STREET LIGHTING SERVICE

## Availability:

This Service is applicable to Company owned overhead or underground Light Emitting Diode (LED) street lighting service to municipal, local, state and federal governmental bodies, community associations and to public authorities for lighting of streets, highways, parks and similar places for the safety and convenience of the public.

A minimum installation of 12 LED lights per customer per individual order is required when replacing existing lighting. This restriction does not apply to new installations.

## General Monthly Charges:

## Demand and Energy Charges for Common Lamp Sizes:

Charges Per Month Per Light:

## Cobra Head

| Nominal Watts |  | Monthly kWh |  | Distribution |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| 50 |  | 32 | 8.23 | (I) |
| 90 | 46 | $\$ 9.57$ | (I) |  |
| 130 | 91 |  | $\$ 10.18$ | (I) |
| 260 |  | $\$ 15.75$ | (I) |  |

Colonial
Nominal Watts Monthly kWh Distribution
50
90
Acorn

| Nominal Watts |  | Monthly kWh |  |
| :---: | :---: | :---: | :---: |
|  |  | Distribution |  |
| 50 |  | 18 |  |
| 90 | 32 | $\$ 20.89$ |  |

(C) Change
(I) Increase

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Second Revised Page 99
Superseding First Revised Page 99

## RATE SCHEDULES

## RATE PNP <br> PUBLIC OR NON-PROFIT ORGANIZATION RATE

## Availability:

Certain public or non-profit organizations may receive electric service pursuant to the charges set forth below as part of the Company's Community and Customer Partnership Program (CCPP) rate schedule.

## Definition:

Public or Non-Profit Organization - organization which has the authority to tax and has tax exempt status or an organization recognized by the Internal Revenue Service (IRS) as non-profit. Only qualifying organizations that have temporary connections or occasional use of electric service for periods of less than 30 days and where such service is for an event in the public interest and available to the public qualify for this special provision. The 30-day requirement may be waived for public organizations, but in no event shall occasional use extend beyond 12 continuous months.

## Service:

Alternating current, 60 hertz, standard single phase or three phase three-wire or four-wire secondary service, as available.
Single and three phase service will be metered and billed separately or, when feasible, single and three phase service will be furnished through a single meter installation and billed as one account provided the customer arranges his wiring to facilitate the installation of a single meter.
Where service is furnished at three-phase, the customer shall provide and maintain all equipment required for lighting service.

Rate:
The net monthly charge per customer shall be:

## Distribution:

$\$ 16.47$ per month (Customer Charge), plus
3.645 cents per kWh for all kWh
(I) Increase

## RATE SCHEDULES

RATE PNP (continued)

## Minimum Charge:

The monthly Minimum Charge shall be $\$ 16.47$ plus distribution
energy charges and any related to applicable riders.

## Billing Demand:

A Customer's demand shall be measured by indicating or recording instruments. Demands shall be integrated over 15 -minute intervals. The billing demand in the current month shall be the greatest of: (i) the maximum measured demand established in the month during On-peak hours, as stated herein, (ii) forty percent ( $40 \%$ ) of the maximum measured demand established in the month during Off-peak hours, as stated herein, (iii) contract demand or (iv) fifty percent ( $50 \%$ ) of the highest billing demand established during the preceding eleven (11) months.

## Terms of Payment:

The net amount is due and payable within 15 days after the date of mailing the bill. If the net amount is not received in full on or before the date shown on the bill for payment of net amount, the gross amount, which is $2 \%$ more than the net amount balance, is due and payable. If the normal due date should fall on a Saturday, Sunday, bank holiday or any other day when the offices of the Company which regularly receive payment are not open to the general public, the due date shall be extended to the next business day.

## Rules and Regulations:

The Company's Standard Rules and Regulations shall apply to the installation and use of electric service.

Electric Pa. P. U. C. No. 36 (Supp. 17)
Sixth Revised Page 123
Superseding Fifth Revised Page 123
RIDERS

RIDER H
PRICE TO COMPARE DEFAULT SERVICE RATE RIDER
 Service that Penn Power delivers to Customers under this rider as determined to the nearest one-thousandth of a cent per kWh . The PTC ${ }_{\text {Default }}$ rate shall be billed to Customers receiving Default Service from the Company under this rider. The rates shall be calculated according to the provisions of this rider.

For service rendered March 1, 2016 through May 31, 2016 the PTC $_{\text {Default }}$ rates billed by Customer Class are as follows:

Commercial Customer Class (Rate GS (excluding Special Rate GSDS), Rate GM, (C) Rate GS -Large, Rate PNP, PLS, SV, SVD, SM and LED):
\$0.09479 per kWh.
Residential Customer Class (Rate RS, and Rate GS - Volunteer Fire Company, Non-Profit Ambulance Service, Rescue Squad and Senior Center Service Rate):
$\$ 0.07878$ per kWh
(C) Change

## RIDERS

## RIDER J <br> DEFAULT SERVICE SUPPORT RIDER

A Default Service Support ("DSS") rate shall be applied to DSS Sales delivered by the Company to Delivery Service Customers under this rider as determined to the nearest one-thousandth of a cent per kWh or dollar per kW NSPL, as applicable. The DSS rate shall be billed to Customers receiving Delivery Service from the Company under this rider. The DSS rates shall be calculated according to the provisions of this rider. The DSS Rider shall be non-bypassable.

For service rendered during the DSS Initial Computational Period and thereafter, the DSS Computational Year, the DSS rates billed by Rate Schedule are as follows:

| Rate Schedule | DSS <br> Rates |
| :--- | :--- |
| Rate Schedule RS, \& GS - Volunteer |  |
| Fire Company and Non-Profit |  |
| Ambulance Service, Rescue Squad |  |
| and Senior Center Service Rate | 0.287 cents per kWh (I) |
| Rate Schedule GS | 0.184 cents per kWh (I) |
| Rate Schedule PNP | 0.189 cents per kWh (I) |
| Rate Schedule GM | 0.189 cents per kWh (I) |
| Rate Schedule GS - Large | $\$ 0.557$ per kW NSPL |
| Rate Schedule Primary - GP | $\$ 0.557$ per kW NSPL |
| Rate Schedule Transmission - GT | $\$ 0.557$ per kW NSPL |
| Rate Schedule GS with Special Rule |  |
| GSDS | $\$ 0.557$ per kW NSPL |
| Rate Schedule PLS | 0.189 cents per kWh (I) |
| Rate Schedule SV, SVD, SM, LED | 0.189 cents per kWh (I) |

The Residential Customer Class consists of Rate Schedules RS; and GS Special Provision for Volunteer Fire Companies, Non-Profit Senior Citizen Centers, Non-Profit Rescue Squads, and Non-Profit Ambulance Services.

The Commercial Customer Class consists of Rate Schedules GS (excluding GS Special Rule GSDS), PNP, GM, GS - Large, PLS, SV, SVD, SM, and LED.

The Industrial Customer Class consists of Rate Schedules GP, GT, and GS with Special Rule GSDS.
(C) Change
(I) Increase

## RIDERS

Rider J (continued)
The UE charges by Customer Class to be included in DSS rates are as follows:
Residential Customer Class:

$$
\begin{equation*}
0.155 \text { cents per } \mathrm{kWh} \tag{I}
\end{equation*}
$$

## Commercial Customer Class:

$$
\begin{equation*}
0.008 \text { cents per } \mathrm{kWh} \tag{I}
\end{equation*}
$$

## MTEP and MISO Exit Fees and PJM Integration Charges:

$$
\mathrm{MPI}=\left(\left(\left(\left(\mathrm{MPI}_{\mathrm{Exp} 1}+\mathrm{MPI}_{\mathrm{Exp} 2}\right)-\mathrm{E}\right) \mathrm{X} \text { Adjustment Factor }\right) / \mathrm{S}\right)
$$

Where:
MPI $=\quad$ The charge to be applied to each Delivery Service Customer served under this Tariff for the Midwest Independent System Operator ("MISO") Transmission Expansion Plan ("MTEP") charges and MISO and PJM charges associated with the transition from MISO to PJM approved by FERC.
$\operatorname{MPI}_{\text {Exp } 1}=\quad$ The Company's cost of the MTEP charges assessed on the Company pursuant to the Open Access Transmission Tariff ("OATT") of MISO.
$\operatorname{MPI}_{\text {Exp2 }}=\quad$ The Company's (i) charges assessed under MISO's OATT that are associated with the Company's exit from the MISO control area and (ii) charges assessed under the PJM OATT that are associated with the Company's integration into the PJM control area. All such MISO exit fees and PJM integration fees charges approved by FERC shall not exceed $\$ 3.5$ million, excluding carrying charges. The Company shall recover these charges plus applicable carrying charges over a minimum five year period.
(I) Increase

## RIDER L PARTIAL SERVICES RIDER

## Availability/Applicability:

This Rider applies to general service customers having on-site non-synchronous generation equipment or synchronous equipment that does not qualify for Net Metering Rider capable of supplying a portion of their power requirements for other than emergency purposes. Electricity sold under this Rider may not be resold; nor may it be used to operate the auxiliary loads of the generating facilities while those facilities are generating electricity for sale.

In addition to the charges included in the applicable rate schedule, all of the following general monthly charges are applicable to Delivery Service Customers.

## General Monthly Charges:

Fifty Dollars ( $\$ 50.00$ )/per month, plus the charges listed below, depending upon the voltage at which the Customer is being served and the services (i.e., Backup Demand and/or Maintenance Demand) selected by the Customer:

| Distribution Charge | Backup Demand <br> (Dollars/KW) | Maintenance Demand <br> (Dollars/KW) |  |
| :--- | :--- | :--- | :--- |
|  |  | $\$ 2.86$ | (I) |
| Secondary Voltage | $\$ 3.58$ | $\$ 3.67$ | (I) |
| Primary Voltage | $\$ 4.59$ | $\$ 0.25$ | (I) |
| Transmission Voltage | $\$ 0.32$ |  |  |

(C) Change
(I) Increase
$\square$

## PENNSYLVANIA POWER COMPANY

## READING, PENNSYLVANIA

## Electric Service Tariff

## Effective in

The Territory as Defined on
Page Nos. 8-9 of this Tariff
Issued: April 28, $2016 \quad$ Effective: June 27, 2016

By: Steven E. Strah, President
Reading, Pennsylvania

## NOTICE

This Supplement No. 17 makes changes to Table of Contents, Description of Territory, General Rules and Regulations, Rate Schedules and Riders. See Fifteenth Revised Page 2.

## LIST OF MODIFICATIONS

Table of Contents
Page 5 - Language has been changed (See First Revised Page 5).
Page 6 - Language has been changed (See First Revised Page 6).
Description of Territory
Changes within Territories (See First Revised Pages 8 and 9).
General Rules and Regulations
Definition of Terms - Definitions of Applicant, Customer, Primary Voltage and Subtransmission Voltage (See First Revised Pages 11, 13, 14, 18 and 21).

Rule 2 - Deposits language has changed (See First Revised Page 23).
Rule 7 - Wiring, Apparatus and Inspection - Applicant/Customer Obligations language has changed (See First Revised Page 36).

Rule 10 - Meter Reading and Rendering of Bills (9) Power Factor/Kilovar Billing - Language has been changed (See First Revised Page 44).

Rule 11 - Payment of Bills (b) - Rates have been increased (See First Revised Page 46).
Rule 22 - Transfer of Electric Generation Supplier - Language has been changed (See First Revised Page 56).

Rate Schedules
Rate RS - Rates have been increased (See First Revised Page 57 and Second Revised Page 58).
Rate GS - General Service - Small - Rates have been increased (See Second Revised Pages 61 and 63).

Rate GS - Volunteer Fire Company, and Non-Profit Ambulance Service, Rescue Squad and Senior Center Service Rate - Rates have increased (See First Revised Pages 67 and 68).

Rate GM - General Service - Medium - Rates have been increased (See Second Revised Page 69 and 71. Language has been changed (See Second Revised Pages 69 and 71).

Rate GS-Large - General Service Secondary - Rates have been increased and language has been changed (See First Revised Page 73 and Second Revised Page 74).

Issued: April 28, 2016
Effective: June 27, 2016

| PENNSYLVANIA POWER COMPANY | Electric Pa. P. U. C. No. 36 (Supp. 17) <br>  <br>  <br> First Revised Page 2A | Formatted: Tab stops: $3.56^{\prime \prime}$, Left + Not at $3.81^{\prime \prime}$ |
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## LIST OF MODIFICATIONS

Rate Schedules (Continued)
Rate GP - General Service - Primary - Rates have been increased and language has been changed (See Second Revised Page 76 and First Revised Page 77 and Second Revised 78).

Rate GT - General Service -- Transmission - Rates have been increased (See Second Revised
Page 80 and First Revised Page 83) and language has been changed (See Second Revised Page 82).

Rate PLS - Private Outdoor Lighting Service - Rates have been increased (See First Revised Page 84 and 85 ).

Rate SV - Street Lighting Service High Pressure Sodium Vapor - Rates have been decreased (See First Revised Page 88 and language has been changed (See First Revised Page 90).

Rate SVD - Street Lighting Service: High Pressure Sodium Vapor; Divided Ownership - Rates have been decreased and increased (See First Revised 91 and language has been changed (See First Revised Page 93).

Rate SM - Street Lighting Service Mercury Vapor - Removed Rate Schedule SM-Street Lighting Service (Original Page 94 and 95).

Rate LED - Street Lighting Service - Rates have been increased (See First Revised Page 96).
Rate PNP - Public of Non-Profit Organization Rate - Rates have been increased (See Second Revised Page 99 and First Revised Page 101).

## Riders

Rider H - Price to Compare Default Service Rate Rider - Language has been changed (See Sixth Revised Page 123).

Rider J - Default Service Support Rider - Rates have been increased and language has been changed (See Second Revised Page 135 and First Revised Page 137).

General Rules and Regulations
Rider I - Hourly Pricing Default Service Rider - Language has been changed (See Second Revised Page 130 and First Revised Pages 132 and 133).

Rider L - Partial Services Rider - Language has been changed (See First Revised Pages 146, 150 and 151).

Issued: April 28, 2016
Effective: June 27, 2016

| PENNSYLVANIA POWER COMPANY | Electric Pa. P. U. C. No. 36 (Supp. 17) |
| :--- | :--- |
|  | First Revised Page 5 |

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20 Discontinuance
21 Service Continuity: Limitation on
Liability for Service Interruptions and Variations

22 Transfer of Electric Generation Supplier

RATE SCHEDULES
1
Rate RS - Residential Service Rate
Rate GS -- Small - General Service Secondary Rate Non-Demand Metered

61-65
Rate GS - Volunteer Fire Company, and Non-Profit
Ambulance Service, Rescue Squad and Senior Center Service Rate

Rate GM - Medium-General Service Secondary Rate $\qquad$ 69-72

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DESCRIPTION OF TERRITORY

## ALLEGHENY COUNTY

| Boroughs | Bradford Woods <br> McCandless | Franklin Park |  |
| :--- | :--- | :--- | :--- |
| Town | Mane | Ross |  |
| Townships | Marshall | Pine |  |

BEAVER COUNTY

| Boroughs | Big Beaver <br> Darlington | Homewood <br> Koppel | New Galilee |
| :--- | :--- | :--- | :--- |
| Townships | Chippewa <br> Franklin | North Sewickley (C) |  |
|  | Darlington | Marion | South Beaver |

BUTLER COUNTY

| Boroughs | Callery | Harmony | Valencia |
| :--- | :--- | :--- | :--- |
|  | Connoquenessing | Mars | Zelienople |
| Townships | Evans City | Seven Fields |  |
|  | Adams | Connoquenessing | Corward |

CRAWFORD COUNTY

| Borough <br> Townships | Conneaut Lake <br> East Fallowfield <br> West Fallowfield | North Shenango <br> Sadsbury | South Shenango <br> West Shenango | Summit |
| :--- | :--- | :--- | :--- | :--- |

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DESCRIPTION OF TERRITORY (continued)
MERCER COUNTY

|  |  |
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| Cities | Hermitage | Farrell | Sharon |  |
| :---: | :---: | :---: | :---: | :---: |
| Boroughs | Clark | Jamestown | Sheakleyville |  |
|  | Fredonia | Mercer | Stoneboro |  |
|  | Greenville | New Lebanon | West Middlesex |  |
|  | Grove City | Sandy Lake | Wheatland |  |
|  | Jackson Center | Sharpsville |  |  |
| Townships | Cool Spring | , Jefferson | Salem (C) | Deleted: E. Lackawannock |
|  | Deer Creek | , Lackawannock | Sandy Creek | Deleted: Lake |
|  | Delaware | ${ }^{\text {Lake }}$ | Sandy Lake | Deleted: Liberty |
|  | $\frac{\text { E. Lackawannock }}{\text { Fairview }}$ | $\frac{\text { Liberty }}{\text { Mill Creek }}$ | Shenango Springfield | Deleted: Mill Creck |
|  | Findley | New Vernon | ${ }^{2}$ Sugar Grove | Deleted: Springfield |
|  | French Creek | Otter Creek | -West Salem | Deleted: Sugar Grove |
|  | Greene | Perry | , Wilmington | Deleted: West Salem |
|  | Hempfield | Pine South Pymatuning, | Wolf Creek | Deleted: Wilmington |
|  |  |  |  | Deleted: Pymatuning |
|  |  |  |  | Deleted: Wolf Creck |
|  |  |  |  | Deleted: Jefferson |
|  |  |  |  | Deleted: South Pymatuning |
|  |  |  |  | Deleted: Worth |
|  |  |  |  | Deleted: Lackawannock |


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## GENERAL RULES AND REGULATIONS

## Definition of Terms (continued)

Alternative Energy Portfolio Standards ("AEPS") - Standards requiring that a certain amount of electric energy sold from alternative energy sources be included as part of the sources of electric utilities within the Commonwealth of Pennsylvania in accordance with the Alternative Energy Portfolio Standards Act, 73 P.S. $\S 1648.1$ - 1648.8 ("AEPS Act") as may be amended from time to time.
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Applicant - Any person, corporation or other entity that (i) desires to receive from the Company electric or any other service provided for in this Tariff, (ii) complies completely with all Company requirements for obtaining electric or any other service provided for in this Tariff, (iii) has filed and is awaiting Company approval of its application for service, and (iv) is not yet actually receiving from the Company any service provided for in this Tariff. For Residential Service, an Applicant is a natural person at least 18 years of age not currently receiving service who applies for Residential Service or any adult occupant whose name appears on the mortgage, deed or lease of the property for which the Residential Service is requested. The term does not include a person who seeks to transfer service within the service territory of the Company or to reinstate service at the same address provided that the final bill for service is not past due,

Basic Electric Supply - For purposes of the Company's Purchase of EGS Receivables Program, energy (including renewable energy) and renewable energy or alternative energy credits (RECS/AECs) procured by an EGS, provided that the RECs/AECs are bundled with the associated delivered energy. For residential Customers, Basic Electric Supply does not include early contract cancellation fees, late fees, or security deposits imposed by an EGS.

Black Start Service - The ability of a Generating Facility to go from a shutdown condition to an operating condition and start delivering power without assistance from the power system (i.e., the Company's electrical system).

Cash Advance - A refundable contribution in cash from an Applicant for those costs associated with a Line Extension, increased for applicable taxes, which is held by the Company in a non-interest bearing account.

Deleted: unless specifically stated otherwise in this Tariff, an Applicant shall become a Customer for purposes of this Tariff only after it actually starts receiving the applicable service(s) from the Company under this Tariff.

Electric Pa. P.U.C. No. 36 (Supp. 17)
First Revised, Page 13
Superseding Original Page 13
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## GENERAL RULES AND REGULATIONS

## Definition of Terms (continued)

Contributions in Aid of Construction ("CIAC") - A non-refundable contribution in cash from an Applicant for those costs associated with a Line Extension and/or tree trimming, brush clearance and related activities or those costs associated with Temporary Service or the relocation of Company facilities, increased for applicable taxes.

Customer(s) - Any person, partnership, association, corporation, or other entity (i) in whose name a service account is listed, (ii) who occupies or is the ratepayer for any premises, building, structure, etc. or (iii) is primarily responsible for payment of bills. For
Residential Service, a Customer is a natural person at least 18 years of age in whose name a Residential Service account is listed and who is primarily responsible for payment of bills rendered for the service or any adult occupant whose name appears on the mortgage, deed, or lease of the property for which the Residential Service is being requested, A natural person remains a Customer after discontinuance or termination until the final bill for service becomes past due.

Customer Choice and Competition Act - The Pennsylvania legislation known as the
"Electricity Generation Customer Choice and Competition Act," 66 Pa. C. S. $\S \S 2801-2813$ as implemented by the Default Service Regulations 52 Pa. C. S. $\S \$ 52.181-52.189$, and by Act 129 and as may be amended from time to time.

Default Service - Service provided pursuant to a Default Service Program to a Default Service Customer.

Default Service Customer - A Delivery Service Customer not receiving service from an EGS.

Delivery Service - Provision of distribution of electric energy and other services provided by the Company.
Delivery Service Charge - A charge that includes the Monthly Minimum Charge, Distribution Charge, and all charges and surcharges imposed under other applicable tariff provisions.


## GENERAL RULES AND REGULATIONS

Definition of Terms (continued)
Non-Summer - The calendar months of October through May.
$\overline{\text { On-Peak Hours - The On-Peak hours shall be from 8:00 a.m. to 9:00 p.m., prevailing }}$ times, Monday through Friday excluding holidays. All other hours shall be Off-Peak. The Off-Peak holidays are New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. On-Peak hours are subject to change from time to time by the Company after giving notice of such changes to Customers.

Permanent Residential Customer - A Customer occupying a dwelling or mobile home on a permanent foundation which is the Customer's primary residence occupied year-round for normal living purposes and including: (i) electrical wiring conforming with the National Electrical Code and the Company's service installation policies; (ii) a permanently installed heating system; and (iii) permanently installed plumbing and sewage systems.

PJM - PJM Interconnection, L.L.C. or any successor organization/entity thereto.
Point of Delivery - The location at which the Company service connection terminates and the Customer's wiring and installation begins.

Power Factor - The ratio of the watts to the volt-amperes.
Price to Compare Default Service Charge - The cents per kWh rates representing the Company's costs for providing energy, capacity, including the cost of complying with nonsolar AEPS, market based transmission and ancillary services for Customers who take Default Service.

Primary Voltage - Voltage greater than 600 volts but less than 23,000 volts.
Private Right-of-Way - The right-of-way or easement for electric facilities on, over, under, across and/or through real or other property owned by an individual or entity which is not a governmental, municipal or other public body to provide service.

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Delivery Service Customer - A Customer who takes Delivery Service. 7

Demand - The rate of use of electric energy during a specified time interval, expressed in kilowatts and reactive kilovolt-amperes. 9 |

II
Developer - The person or entity responsible for constructing and providing improvements in a Development, including, but not limited to, streets, sidewalks and utilityready lots. ${ }^{\text {IT }}$
II
Development - A planned project which is developed by a Developer for electric service set out in a recorded plot plan of five (5) or more adjoining unoccupied lots for the construction of single-family residences, detached or otherwise, mobile homes, or one (1) or more five-unit apartment houses, all of which are intended for year-round occupancy, if electric service to such lots necessitates extending the Company's existing Distribution Lines. $\mathbb{\|}$ cxt
Direct Labor Costs - The pay and expenses of Company employecs directly attributable to work performed, excluding construction overheads or payroll taxes, workmen's compensation expenses or similar expenses. ${ }^{\text {|| }}$ II
Direct Material Costs - The purchasc price of materials used, excluding related storcs (i.e. warehousing) expenses. In computing Direct Material Costs, proper allowance shall be made for unused matcrials recovered from temporary structures, and for discounts allowed and realized in the purchase of materials. $\ddagger$

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Discontinuance of Service - The removal of a customer's meter and/or service wires or the de-cnergizing of a meter and cessation of service with the consent of the custom ... [1]
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## GENERAL RULES AND REGULATIONS

## Definition of Terms (continued)

Subdivision - A tract of land divided by a Subdivider into five (5) or more adjoining unoccupied lots for the construction of single-family residences, detached or otherwise, or apartment houses, all of which are intended for year-round occupancy, if electric service to such lots necessitates extending the Company's existing Distribution Lines.

## Sub-transmission Voltage $-23,000$ volts.

Summary Billing - The summation of the charges for a Customer's multiple accounts and provision thereof to the Customer in a single bill.
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Summer - The calendar months of June through September.
Tariff - This document, including, but not limited to, the Rules, Regulations and Rate Schedules and Riders contained herein, as filed with and approved by the Commission.
Temporary Electric Service - A Service Line, meter and/or other work supplied by the Company to the Customer for electric service over a defined period, usually less than one (1) year.

Transmission Voltage - Voltage equal to or greater than 69,000 volts.
Universal Service - Policies, protections and services that help residential low-income Customers maintain electric service. The term includes Customer assistance programs, termination of service protections and policies and services that help low-income Customers to reduce or manage energy consumption in a cost-effective manner.
Universal Service Charge - The charge developed and calculated in accordance with Rider C - Universal Service Cost Rider.
Volunteer Fire Company - A service location consisting of a building, sirens, a garage for housing vehicular firefighting equipment, or a facility certified by the Pennsylvania Emergency Management Agency (PEMA) for fire fighter training. The use of electric service at this service location shall be to support the activities of the Volunteer Fire Company. Any fund raising activities at this service location must be used solely to support volunteer fire fighting operations. The Customer of record at this service location must be predominately a Volunteer Fire Company recognized by the local municipality or PEMA as a provider of firefighting services.

## GENERAL RULES AND REGULATIONS

The Company may require an Applicant/Customer to make the payment of any outstanding balance or portion of an outstanding balance if the Applicant/Customer resided at the property for which service is requested during the time the outstanding balance accrued and for the time the Applicant/Customer resided at the property not to exceed four years. The Company may establish that an Applicant/Customer previously resided at a property through the use of mortgage, deed, lease information, a consumer credit reporting service, a Financial Summary that provides the names and income of adult occupants of a household, and a web-based tool such as "Accurint" to research Applicant/Customer information.

## 2. Deposits

Where an Applicant's/Customer's credit is not established or the credit of a Customer with the Company has, in the Company's judgment become impaired, or where the Company deems it necessary, a deposit or other guarantee satisfactory to the Company may be required to be supplied by the Applicant/Customer as security for the payment of future and final bills before the Company shall commence or continue to render any type of electric service to the Applicant/Customer. Deposits required by the Company for Tariff charges shall include unpaid EGS charges that are subject to the Company's POR.
The Company utilizes a generally accepted credit scoring methodology in range of general industry practice that is based on an applicant or customer's utility payment history.
The Company may request deposits from Customers taking service for a period of less than thirty (30) days, in an amount equal to the estimated bill for the cost of total services provided by the Company for such temporary period. Deposits may be required by the Company from all other Customers, in an amount that is in accordance with 52 Pa. Code § $56.5 \mathrm{t}_{0}$
Deposits for Residential Customers shall be returned to them in accordance with the provisions of the Responsible Utility Customer Protection Act ( 66 Pa. C.S. §§ 1401-1418) and the provisions of the Commission's Regulations at 52 Pa . Code Chapter 56, as amended from time to time. Deposits from all other Customers may be held by the Company, in its
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| Applicant's/Customer's estimated annual bill at the time the |
| Company determines a dcposit is required. |

sole and exclusive judgment, until the Customer discontinues service or the Company determines that the Customer has established a satisfactory payment record. Upon discontinuance of all Company service and payment in full of all charges and financial guarantees, the Company shall refund the deposit or deduct any unpaid amounts from the deposit and refund the difference, if any, to the Customer. The deposit shall no longer accrue interest upon the discontinuance of service.
The interest rate on Residential Customer deposits will be calculated pursuant to The Fiscal Code, as amended annually.

## GENERAL RULES AND REGULATIONS

Rule 7 - Wiring, Apparatus and Inspection (continued)
When a Customer's facilities or use of equipment having operating characteristics that adversely affects or has the potential to adversely affect, in the Company's sole judgment, the Company's electric system, the Customer shall take corrective action at its sole expense as may be directed by the Company. Unless corrective action is taken, the Company is under no obligation to serve or to continue to serve such Customers.
Each Applicant/Customer shall provide to the Company such service information described in Rule 1 of this Tariff. The Applicant/Customer shall be responsible and liable to the Company for any damages resulting from the Customer's failure to provide such service information.

The Company will require the customer to maintain a Power Factor in the range of $85 \%$ (lagging) to $100 \%$ for secondary, primary and subtransmission service and $97 \%$ (lagging) to $99 \%$ (leading) for transmission service, coincident with the customers maximum monthly peak demand and to provide, at the Customer's expense, any corrective equipment necessary in order to do so. The Company may inspect the Customer's installed equipment and/or place instruments on the premises of the Customer in order to determine compliance with this requirement, as deemed appropriate by the Company. The Company may charge the Customer the Company's installation cost incurred for corrective devices necessary for compliance with this provision. The Company is under no obligation to serve, or to continue to serve, a Customer who does not maintain a Power Factor consistent with the parameters set forth in this provision.
8. Metering

## Company Obligations

The Company owns, maintains, installs and operates a variety of meters, and related equipment designed to measure and record Customers' consumption and usage of all services provided under this Tariff. The Company may, in its sole and exclusive discretion, install such meters and related equipment it deems reasonable and appropriate to provide service to Customers under this Tariff. The Company may, in its sole and exclusive discretion, install such special metering equipment as may be requested by a Customer, subject to the Customer paying all of the Company's incremental material, labor, overheads and administrative and general expenses relating to such facilities. Where additional metering services and the associated costs for the additional metering services are contained within this Tariff, those costs shall also be applicable.

## GENERAL RULES AND REGULATIONS

Rule 10 - Meter Reading and Rendering of Bills (continued)
(9) Power Factor/kilovar Billing

Billing for Power Factor or kilovars, whichever is applicable, shall be in accordance with the Customer's applicable Rate Schedule or other provisions of this Tariff. The Power Factor used for billing purposes shall be rounded to the next highest whole percent, unless otherwise stated in the Customer's applicable Rate Schedule or other provisions of this Tariff.

## (10) Billing for Vandalism, Theft or Deception

In the event that the Company's meters or other equipment on the Customer's premises have been tampered or interfered with by any means whatsocver, resulting in improper or non-registration of service supplied, the Customer being supplied through such equipment shall pay to the Company the amount the Company estimates is due for service used but not registered on the Company's meter, and the cost of any repairs or replacements, inspections and investigations relating thereto including, but not limited to, all administrative expenses associated with the investigation(s) (e.g., Legal, Accounting/Billing, etc.). Under these circumstances, the Company may at its option terminate its service immediately and/or require the Customer to pay all costs correcting any and all unauthorized conditions at the premises. In the event service has been terminated under these circumstances it shall not be restored to the Customer's premises until: (i) the Customer has a certificate of compliance with the provisions of the National Electric Code and the regulations of the National Fire Protection Association has been issued by the municipal inspection bureau or by any Company-accepted inspection agency, (ii) the Customer has complied with all of the Company's requirements and (iii) the Customer pays the Company a reconnection fee and deposit.

In the event that a Customer knowingly and willfully obtained service for itself or for another by creating or reinforcing a false impression, statement or representation and fails to correct the same, the Company shall immediately correct the account information in question and issue an adjustment for all current or previous amounts. The Customer shall be required to show proof of identity and sign an agreement for payment of all electric service received, plus any and all costs and administrative expenses associated with any investigation(s) (i.e., Legal, Accounts/Billing, etc.) which shall be added to their account. The Customer shall have three (3) business days in which to provide proof of identity. The Company may terminate a Customer's electric service if the Customer fails to provide such proof of identity within the aforementioned time period.

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## GENERAL RULES AND REGULATIONS

Rule 11 - Payment of Bills (continued)
A Customer's failure to receive a bill shall not be construed or deemed, under any circumstances, to be a waiver of any of the provisions of this Tariff. A Customer's bill Formatted: Right: $-0.38^{\prime \prime}$, Line spacing: Exactly 11 pt shall be overdue when not paid on or before the due date indicated in the bill.

## b. Late Payment Charges

Late payment charges shall be applied to Default Service Charges, EGS charges that are subject to the Company's POR and Delivery Service Charges. The Company will apply late payment charges to EGS charges that are not subject to the Company's POR at the EGS's request when it is performing billing services for the EGS.

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A Residential Customer's overdue bill shall be subject to a late payment charge of $15 \%$ interest per month on the overdue balance of the bill. A Non-Residential Customer's overdue bill shall be subject to a late payment charge of $2.0 \%$ interest per month on the overdue balance of the bill. Interest charges shall be calculated by the Company on the overdue portions of the bill and shall not be charged against any sum that falls due during a current billing period. At the Company's option, the interest per month associated with the late payment charge for Residential Customers may be reduced or eliminated in order to facilitate payment of bills under dispute.
c. Allocation of Payments

All payments made by or on behalf of a Customer shall be applied to a Customer's account in accordance with the Commission's payment posting rules and applicable Regulations including the Company's Electric Generation Supplier Coordination Tariff on file with the Commission.

## d. Delinquent Accounts

A Customer's account is delinquent when not paid in full by the due date stated on the bill or otherwise agreed upon by the Customer and the Company. The Company shall pursue collections of outstanding residential delinquent account balances in accordance with applicable law and Commission regulations. Termination of service will occur only for non-payment of undisputed delinquent accounts associated with the Company's regulated charges, which shall include EGS charges subject to the Company's POR.
The Company will have the ability to terminate service to a Customer for the Customer's non-payment of EGS Basic Electric Supply charges incurred after January 1, 2011 in the same manner and to the same extent that the Company could terminate service to such a Customer for non-payment of EDC charges. Residential Customer's termination will be subject to the consumer protections included in Chapter 14 of the Public Utility Code, 66 Pa. C.S. §1401, et. seq., and Chapters 55 and 56 of the Commission's regulations, 52 Pa . Code $\$ \$ 55.1$ and 56.1 et . seq., and/or other applicable regulations as may change from time to time. The POR is only available as long as the Company is able to terminate service to Customers under Chapter 14 of the Public Utility Code 66 Pa. C.S. § 1401 , et. seq., and Chapters 55 and 56 of the Commission's regulations, 52 Pa . Code $\$ \$ 55.1$ and 56.1 et. seq., and/or other applicable regulations as may change from time to time $e_{c}$

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## GENERAL RULES AND REGULATIONS

Rule 21 - Service Continuity: Limitation on Liability for Service (continued)
To the extent applicable under the Uniform Commercial Code or on any theory of contract or products liability, the Company disclaims and shall not be liable to any Customer or third party for any claims involving and including, but not limited to, strict products liability, breach of contract, and breach of actual or implied warranties of merchantability or fitness for an intended purpose.
If the Company becomes liable under Section 2806(g) or 2809(c) of the Public Utility Code, 66 Pa. C.S. $\S \$ 2806(\mathrm{~g})$ and 2809(f), for Pennsylvania state taxes not paid by an Electric Generation Supplier (EGS), the non-compliant EGS shall indemnify the Company for the amount of additional state tax liability imposed upon the Company by the Pennsylvania Department of Revenue due to the failure of the EGS to pay or remit to the Commonwealth the tax imposed on its gross receipts under Section 1101 of the Tax Report Code of 1971 or Chapter 28 of Title 66.

## 22. Transfer of Electric Generation Supplier

The Company shall change a Customer's EGS in accordance with 52 Pa. Code, Chapter 57. Subchapter M, "Standards for Changing a Customer's Electricity Generation Supplier". Pursuant to the commission's Rulemaking to Amend the Provisions of 52 Pa. Code, Chapter 57 Regulations Regarding Standards for Changing a Customer's Electricity Generation Supplier, at Docket No. L-2014-2409383, changes in a Customer's EGS shall be effective within three (3) business days after the enrollment request is processed, regardless of whether the meter reading is actual or estimated,
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## RATE SCHEDULES

## RATE RS

## Availability:

Available for Residential Service using the Company's standard, single phase service, to installations served through one meter for each family unit in a residence or apartment.

When service is used through the same meter for both residential and commercial purposes the General Service rate schedule shall apply.

This rate schedule is not available for commercial, institutional or industrial establishments.

## Service:

Alternating current, 60 hertz, single phase, nominal voltage $120 / 240$ or $120 / 208$ as available.

## Rate:

The net monthly charge per customer shall be:

## Distribution:

| $\$ 13.41$ per month (Customer Charge), plus | (I) + | Deleted: 10.85 |
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| $4.690 \&$ per kWh for all kWh | (I) | Formatted Table |

## Riders:

Bills rendered under this schedule are subject to the following applicable Rider
Charges:
Rider A - Tax Adjustment Surcharge
Rider C -Universal Services Cost
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider G - Smart Meter Technologies Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge
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## RATE SCHEDULES

## Rate RS (continued)

## Default Service Charges:

For Customers receiving Default Service from the Company, Rider H-Price to Compare Default Service Rate Rider, Residential Customer Class rate applies.

## Minimum Charge:

The monthly Minimum Charge shall be $\$ 13.41$ plus distribution energy charges and any (I) charges related to applicable riders.

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## Special Monthly Charges Load in Excess of 25 kilowatts:

The Company shall install a suitable demand meter to determine the maximum 15 -minute integrated demand when (i) a Customer's service requires the installation of an individual transformer, (ii) a Customer's total monthly consumption exceeds 10,000 kilowatt-hours for two (2) consecutive months, or (iii) when the Customer's service entrance requirements exceed 600 amperes.

If the demand so determined under this provision exceeds twenty-five (25) kilowatts, a monthly distribution demand charge of Two Dollars (\$2.00) per kW for all kW shall apply to such excess as set forth in this provision, in addition to the General Monthly Charges. In no event shall the demand charge be based upon less than seventy-five percent (75\%) of the highest excess demand during the preceding eleven (11) months.

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## RATE SCHEDULES

RATE GS
GENERAL SERVICE - SMALL

## Availability:

Available for service through a single metering installation for secondary light and power service for loads up to $1,500 \mathrm{kWh}$.

## Service:

Alternating current, 60 hertz, standard single phase or three phase three-wire or four-wire secondary service, as available.

Single and three phase service will be metered and billed separately or, where feasible, single and three phase service will be furnished through a single meter installation and billed as one account provided the customer arranges his wiring to facilitate the installation of a single meter.

Where service is furnished at three-phase, the customer shall provide and maintain all equipment required for lighting service.

## Rate:

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The net monthly charge per Customer shall be:

## Distribution:

| $\$ 27.67$ per month (Customer Charge), plus | (I) | Deleted: 19.24 |
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| 4.035 cents per kWh for all kWh | (I) | Formatted Table |


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## RATE SCHEDULES

## Rate GS (continued)

## Minimum Charge:

The monthly Minimum Charge shall be $\$ 27.67$ plus distribution energy charges and (I) any charges related to applicable riders.

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## Terms of Payment:

As per Rule 11, Payment of Bills

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## RATE SCHEDULES

Rate GS (continued)
service territory that constitutes a separately metered location for electric delivery purposes. The use of the electric service by the Non-Profit Ambulance Service shall be used primarily to support its service. The Company may request and the Customer/Applicant shall provide all documentary and other evidence of its compliance with this provision.

## Rate:

The net monthly charge per Customer shall be:

## Distribution:

$\$ 13.41$ per month (Customer Charge), plus
4.690\& per kWh for all kWh

## Riders:

Bills rendered under this schedule are subject to the following applicable Rider Charges:
Rider A - Tax Adjustment Surcharge
Rider C - Universal Service Cost
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider G-Smart Meter Technologies Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge

## Default Service Charges:

For Customers receiving Default Service from the Company, Rider H - Price to Compare Default Service Rate Rider, Residential Customer Class rate applies.

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The monthly Minimum Charge shall be $\$ 13.41$ plus distribution energy charges $\qquad$ (I) Deleted: 10.85 and any charges related to applicable riders.

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## Special Monthly Charges Load in Excess of 25 kilowatts:

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The Company shall install a suitable demand meter to determine the maximum 15minute integrated demand when (i) a Customer's service requires the installation of an individual transformer, (ii) a Customer's total monthly consumption exceeds 10,000 kilowatt-hours for two (2) consecutive months, or (iii) when the Customer's service entrance requirements exceed 600 amperes.

If the demand so determined under this provision exceeds twenty-five (25) kilowatts, a monthly distribution demand charge of Two Dollars (\$2.00) per kW for all kW shall apply to such excess as set forth in this Provision, in addition to the General Monthly Charges. In no event shall the demand charge be based upon less than seventy-five percent ( $75 \%$ ) of the highest excess demand during the preceding eleven (11) months.

## Terms of Payment:

Same as listed previously in this schedule.

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## PENNSYLVANIA POWER COMPANY

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## RATE SCHEDULES

## RATE GM

GENERAL SERVICE - MEDIUM

## Availability:

Available for secondary light and power service for loads of up to 400 kW . Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of $2,500 \mathrm{KVA}$. Upon a Customer's request, the Company may, at its option, provide transformers having a capacity of greater than 2,500 KVA.

New Customers requiring transformer capacity in excess 2,500 KVA and existing Customers whose load increases such that a transformer change is required (over 2,500 KVA) shall be required to take untransformed service.

If an existing Customer's total consumption is less than $1,500 \mathrm{kWh}$ per month for twe twelve (12) consecutive months, the Customer may no longer be eligible for service under this Rate Schedule GSGM-Medium. Based upon the Company's then estimate of the Customer's usage, the Customer shall be placed on Rate Schedule GS or such other Rate Schedule for which such Customer most qualifies.
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If an existing Customer's billing demand exceeds 400 kW for two (2) consecutive months in anythe most recent twelve-month period, then the Customer may no longer be eligible for service under this Rate Schedule GMS Medium, and shall be placed on Rate Schedule GS-Large or such other Rate Schedule for which such Customer most qualifies.
All of the following general monthly charges are applicable to Delivery Service
Rate:
The net monthly charge per customer shall be:

## Distribution:

## $\$ 19.1130 .44$ per month (Customer Charge), plus

(I)

Demand
$\$ 2.623 .85$ per kW for all billing demand as measured in kW
$\$ 0.20$ for each rkVA of Reactive Billing Demand
(C) Change

## RATE SCHEDULES

Rate GM (continued)

## Primary and Transmission Service Discount:

No service voltage discounts are available on this rate schedule.

## Minimum Charge:

No bill shall be rendered by the Company for less than,
$\$ 19.1+30.44$ per month, plus
The demand charge at current rate levels times the Billing Demand, plus any distribution energy charges and any charges stated in or calculated by any applicable rider.

## Determination of Billing LoadDemand:

A Customer's demand shall be measured by indicating or recording instruments. Demands shall be integrated over 15-minute intervals. The billing demand in the current month shall be the greatest of: (i) the maximum measured demand established in the month during On-Peak Hours, as stated herein, (ii) forty percent ( $40 \%$ ) of the maximum measured demand established in the month during off-peak hours, as stated herein, (iii) contract demand or (iv) fifty percent ( $50 \%$ ) of the highest billing demand established during the preceding eleven (11) months. The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of nen-interval-Time-of-Use demand meters.

Pending the installation of a demand meter, Customer's Demand shall be a formula demand determined by dividing the kilowatt-hour consumption by 200.

## Reactive Billing Demand:

For installations metered with reactive energy metering, the reactive billing demand For installations metered with reactive energy metering, the reactive biling deman
in rkVA for the month shall be determined by multiplying the Billing Demand by the ratio of the measured lagging reactive kilovoltamperes hours to the measured kWh by the following formula: $\mathrm{rkVA}=$ Billing Demand X (measured lagging reactive kilovoltampere hours $\div$ rate measured kWh ). For all other installations, the Reactive Billing Demand shall be the integrated reactive demand occurring coincident with the Billing Demand.

(C) Change<br>(I) Increase

| PENNSYLVANIA POWER COMPANY | Electric Pa. P.U.C. No. 36 (Supp. 17) First Revised Page 73 | Formatted: Tab stops: 3.75", Left + Not at 4" |
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## RATE SCHEDULES

RATE GS-LARGE
GENERAL SERVICE SECONDARY

## Availability:

This Rate is available to non-Residential Customers using electric service through a single delivery location for lighting, heating and/or power service whose registered demand is equal to or greater than 400 KW in two (2) consecutive months in the most recent twelve-month period. Secondary voltage shall be supplied to Customers at a single transformer location when load does not require transformer capacity in excess of 2,500 KVA. Upon a Customer's request, the Company may, at its option, provide transformers having a capacity of greater than $2,500 \mathrm{KVA}$.

New Customers requiring transformer capacity in excess $2,500 \mathrm{KVA}$ and existing Customers whose load increases such that a transformer change is required (over 2,500 KVA) shall be required to take untransformed service.

All of the following general monthly charges are applicable to Delivery Service Customers.

## GENERAL MONTHLY CHARGES

## Distribution Charge:

$\$ 126.53$ per month (Customer Charge), plus
$\$ 4.77$ per kW for all billed kW
$\$ 0.20$ for each rkVA of reactive billing demand

## Riders:

Bills rendered under this schedule are subject to the following applicable Rider Charges:

Rider A - Tax Adjustment Surcharge
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider G-Smart Meter Technologies Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge

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## PENNSYLVANIA POWER COMPANY

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## RATE SCHEDULES

Rate GS - Large (continued)

## Default Service Charges:

For Customers receiving Default Service from the Company, Rider H-Price to Compare Default Service Rate Rider, Commercial Customer Class rate applies unless the Customer elects to receive Default Service from the Company under Rider I-Hourly Pricing Default Service Rider.

## Minimum Charge:

No bill shall be rendered by the Company for less than,
$\qquad$
The demand charge at current rate levels for the highest kilowatt demand billed during the current and preceding eleven (11) months, plus distribution energy charges, and any charges stated in or calculated by any applicable rider.

## Determination of Billing Demand:

A Customer's demand shall be measured by indicating or recording instruments. Demands shall be integrated over 15 -minute intervals. The billing demand in the current month shall be the greatest of: (i) the maximum measured demand established in the month during On-Peak Hours, as stated herein, (ii) forty percent ( $40 \%$ ) of the maximum measured demand established in the month during off-peak hours, as stated herein, (iii) contract demand or (iv) fifty percent ( $50 \%$ ) of the highest billing demand established during the preceding eleven (11) months. The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of Time-of-Use demand meters.

Pending the installation of a demand meter, Customer's Demand shall be a formula demand determined by dividing the kilowatt-hour consumption by 200 .

## Reactive Billing Demand:

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Billing Demand by the ratio of the measured lagging reactive kilovoltamperes hours to the measured kWh by the following formula: rkVA $=$ Billing Demand X (measured lagging reactive kilovoltampere hours $\div$ rate measured kWh ). For all other installations, the Reactive Billing Demand shall be the integrated reactive demand occurring coincident with the Billing Demand.
(C) Change
(I) Increase

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## RATE SCHEDULES <br> RATE GP

GENERAL SERVICE - PRIMARY

## Availability:

Available for primary light and power service. The billing load as hereinafter defined shall not be less than 25 kW .

## Service:

Alternating current, 60 hertz, three phase, at nominal primary voltages as available from suitable facilities of adequate capacity adjacent to the premises to be served, and as determined by the Company.

The Customer shall have the responsibility for ownership, operation, and maintenance of all transforming, controlling, regulating, and protective equipment.

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## Rate:

The net monthly charge per Customer shall be:

## Distribution:

\$159.89 per month (Customer Charge), plus
$\$ 6.12$ per kW for all billed kW $\qquad$ (I)

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$\$ 0.20$ for each rkVA of Reactive Billing Demand

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| PENNSYLVANIA POWER COMPANY | Electric Pa. P.U.C. No. 36(Supp. 17) |
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## RATE SCHEDULES

Rate GP (continued)

## Riders:

Bills rendered under this schedule are subject to the following applicable Rider Charges:
Rider A - Tax Adjustment Surcharge
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider G - Smart Meter Technologies Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge

## Default Service Charges:

For Customers receiving Default Service from the Company, Rider I - Hourly Pricing Service
Default Service Rider rate applies.

## Minimum Charge:

No bill shall be rendered by the Company for less than:
\$159.89 per month, plus demand charges at current rate levels times the Billing Demand, (I) plus any distribution energy charges, and any charges stated in or calculated by any applicable rider.

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## RATE SCHEDULES

Rate GP (continued)

## Riders:

Bills rendered under this schedule are subject to the charges stated in any applicable rider.

## Determination of Billing Demand:

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The Customer's demand shall be measured by indicating or recording instruments. Demand shall be integrated over fifteen (15)-minute intervals or as otherwise determined by the
Company. The billing demand in the current month shall be the greatest of: (i) twenty-five (25)
kW , (ii) the maximum measured demand established in the month during On-Peak Hours, as

Deleted: KW stated herein, (iii) forty percent ( $40 \%$ ) of the maximum measured demand established in the month during off-peak hours, as stated herein, (iv) contract demand or (v) fifty percent ( $50 \%$ ) of the highest billing demand established during the preceding eleven (11) months. The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of Time-of-Use demand meters.

## Reactive Billing Demand:

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Billing Demand by the ratio of the measured lagging reactive kilovoltamperes hours to the measured kWh by the following formula: $\mathrm{rkVA}=$ Billing Demand X (measured lagging reactive kilovoltampere hours $\div$ rate measured kWh ). For all other installations, the Reactive Billing Demand shall be the integrated reactive demand occurring coincident with the Billing Demand.

## Terms of Payment:

As per Rule 11, Payment of Bills
(C) Change

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## RATE SCHEDULES

## RATE GT

GENERAL SERVICE - TRANSMISSION
Availability:


Available for transmission light and power service furnished through one meter for each installation. The minimum billing demand shall be 200 kW .

## Service:

Alternating current, 60 hertz three phase, at nominal transmission voltages of 23,000 volts or above from suitable facilities of adequate capacity as may be available adjacent to the premises to be served and as determined by the Company.

The Customer shall have the responsibility for ownership, operation, and maintenance of all transforming, controlling, regulating, and protective equipment.

The Company reserves the right to install the metering equipment on either the primary or secondary side of the customer's transformers, and when installed on the secondary side, compensating metering equipment will be used to correct for transformer losses.

Rate:
The net monthly charge per customer shall be:

## Distribution:

| \$376.85 per month (Customer Charge), plus | (I) | Formatted Table |
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| \$0.60 per kw for all billed kW | (I) | Deleted: 258.42 |
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$\$ 0.20$ for each rkVA of reactive billing demand
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## PENNSYLVANIA POWER COMPANY

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## RATE SCHEDULES

Rate GT (continued)

## Discount:

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A. VOLTAGE DISCOUNT - 115 KV OR GREATER:

If the Company, in its sole discretion, elects to serve a Customer at 115 KV or greater, the demand charge shall be decreased as set forth below:

Credit for: | Demand |
| :---: |
| Dollars/KW |

Distribution
$\$ 0.18 \quad$ (C)
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## Determination of Billing Demand:

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The Customer's demand shall be measured by indicating or recording instruments. Demand shall be integrated over fifteen (15)-minute intervals or as otherwise determined by the Company. The billing demand in the current month shall be the
greater of: (i) 200 kW , (ii) the maximum measured demand established in the month

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For purposes of determining the demand for Net Station Power of a Generating Facility under this Rate Schedule, registered demand during any hour cannot be netted, offset or credited against capacity from that Generating Facility in any other hour or from registered capacity from any other Generating Facility in any other hour.

## Reactive Billing Demand:

For installations metered with reactive energy metering, the reactive billing demand in rkVA for the month shall be determined by multiplying the Billing Demand by the ratio of the measured lagging reactive kilovoltamperes hours to the measured kWh by the following formula: $\mathrm{rkVA}=$ Billing Demand X (measured lagging reactive kilovoltampere hours $\div$ rate measured kWh ). For all other installations, the Reactive Billing Demand shall be the integrated reactive demand occurring coincident with the Billing Demand.
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| PENNSYLVANIA POWER COMPANY | Electric Pa. P.U.C. No. 36 (Supp. 17) |
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## RATE SCHEDULES

Rate GT (continued)

## Minimum Charge:

No bill shall be rendered by the Company for less than,
\$376.85 per month, plus $\qquad$ (I) Deleted: 258.42
the demand charges at current rate levels times the Billing Demand, plus any charges stated in or calculated by any applicable Riders.

## Terms of Payment:

As per Rule 11, Payment of Bills

## Station Power Energy Netting:

If applicable PJM rules and procedures for determining Net Station Power are in effect, all Net Station Power shall be determined solely by PJM and provided to the Company for billing purposes under this Rate Schedule. If the Applicant self-supplies Net Station Power, the Applicant shall be responsible for obtaining all related transmission service. If no such applicable PJM rules and procedures for determining Net Station Power are in effect or PJM is unable for any reason to determine Net Station Power, the Company shall determine Net Station Power for any relevant period in its sole discretion.

## Contract:

Electric service hereunder will be furnished in accordance with a written contract which by its terms shall be in full force and effect for a minimum period of one year and shall continue in force thereafter from year to year unless either party shall give to the other not less than 60 days' notice in writing prior to the expiration date of any said yearly periods that the contract shall be terminated at the expiration date of said yearly period. When a contract is terminated in the manner provided herein, the service will be discontinued. Customers who elect not to contract for a minimum one year term, as specified above, will be placed on Rate Schedule GS.

## Rules and Regulations:

The Company's Standard Rules and Regulations shall apply to the installation and use of electric service

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## RATE SCHEDULES

## RATE PLS

PRIVATE OUTDOOR LIGHTING SERVICE

## Availability:

Available for all-night outdoor lighting service to any Customer on the lines of the Company where such service can be supplied by the installation of lighting fixtures supplied directly from (1) existing secondary circuits or (2) an extension of existing secondary circuit that requires only one additional span of secondary circuit and does not require any other facilities or expenses (e.g. new pole, pole changeout, or guying).

## Service:

Complete lighting service will be furnished by the Company using vapor lamps installed in standard fixtures. All equipment will be installed and maintained by the Company.

## Rate:

## Overhead and Post-Top (PT) Lighting Service:

The charges listed below for lights not designated as PT are for each light with luminaire and bracket arm, supplied from an existing pole and secondary facilities.

The charges listed below for lights designated as PT are for each lamp with post-top luminaire mounted on a $14^{\prime}-16^{\prime}$ post installed $4^{\prime}$ in the ground, where service is supplied from existing secondary, including 50 feet of circuit installed in a trench provided by the customer.

## Distribution Charge:



Issued: April 28, 2016
Effective: June 27, 2016

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## RATE SCHEDULES

Rate PLS (continued)
When service cannot be supplied from facilities included above and additional facilities are required, the customer will in addition to the above charges pay the following distribution charge for each pole:

For each $30^{\prime}$ or $35^{\prime}$ pole, per month
For each $40^{\prime}$ pole, per month

## Riders:

Bills rendered under this schedule are subject to the following applicable Rider Charges:

Rider A - Tax Adjustment Surcharge
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge

## Default Service Charges:

The Default Service Charges shall be determined using the applicable Average Monthly kWh usage, from the preceding chart, multiplied by the Rider H - Price to Compare Default Service Rate Rider, Commercial Customer Class rate.

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| $\$ 12.18$ | (I) | (I).


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## RATE SCHEDULES

## RATE SV

STREET LIGHTING SERVICE

## HIGH PRESSURE SODIUM VAPOR

## Availability:

Available to municipalities and other governmental agencies for lighting public streets, highways, bridges, parking lots, parks, and similar public places.

## Service:

Company will furnish, install, operate, and maintain its standard HPS street light units consisting of lamps, luminaires, controls, brackets, and ballasts utilizing the Company's wood, metal or steel poles and overhead and underground distribution facilities that exist along public thoroughfares. Exceptions are as noted under Special Terms and Conditions. Lighting units will operate from sunset until sunrise, each night of the year, approximately 4,070 hours of annual operation.

## Rate:

## Distribution Charge:

| , |  | Average |  |  | Formatted Table |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rating in Watts | Nominal Lumens | Monthly kWh | Distribution |  |  |
| 70 | 5,800 | 32 | \$9.38 | (D) | Formatted: Indent: Left: 0.16" |
| 100 | 9,500 | 46 | \$9.34 | (D) | Deleted: 10.67 |
| 150 | 16,000 | 66 | \$9.48 | (D) | Deleted: 10.74 |
| 250 | 27,500 | 98 | \$9.67 | (D) | Deleted: 10.37 |
| 400 | 50,000 | 156 | \$9.97 | (D) | Deleted: 10.85 |
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## RATE SCHEDULES

## Rate SV (continued)

## Replacements:

If the customer requests the Company to remove the present street light system to install high pressure sodium vapor lights and if the present system is less than twenty years old, the customer shall pay the removal cost plus the remaining value of the system. If the customer terminates his present street lighting service within twelve months of requesting service under this schedule, the above condition of service remains in effect. However, in the case where the lights have been in place longer than ten years, and the customer replaces a portion of the existing mercury vapor system with sodium vapor and further requests that the removed mercury vapor lights replace a portion of the existing incandescent lights, the Company will assume these costs provided that there is remaining value in the mercury vapor lights, i.e., not fully depreciated. If the customer chooses, or is unable, to replace existing incandescent lights with the replaced mercury vapor lights, the customer shall pay the remaining life value of the removed mercury vapor lights including poles and hardware.

## If the customer requests the Company to remove the present high pressure sodium

 vapor street light system to install LED lights and if the present system is less than twenty years old, the customer shall pay the removal cost plus the remaining value of the system.
## Terms of Payment:

The net amount billed is due and payable within a period of thirty days. If the net amount is not paid on or before the date shown on the bill for payment of net amount, the bill shall bear interest at the rate of $2 \%$ per month of the unpaid net balance.

## Contract:

Electric service hereunder will be furnished in accordance with a written contract which by its terms shall be in full force and effect for a period of ten years and shall continue in force thereafter for five-year periods unless either party shall give to the other not less than 60 days' notice in writing prior to the expiration date of any of said five-year period that the contract shall be terminated at the expiration date of said five-year period. When a contract is terminated in the manner provided herein, the service will be discontinued.

## Rules and Regulations:

The Company's Standard Rules and Regulations shall apply to the installation and use of electric service.
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## RATE SCHEDULES

RATE SVD
STREET LIGHTING SERVICE; HIGH PRESSURE SODIUM VAPOR; DIVIDED OWNERSHIP

## Availability:

Available to municipalities and other governmental agencies for lighting public streets, highways, bridges, parking lots, parks and similar public places.

## Service:

The Company will furnish energy and maintenance only to those HPS street light units that are listed in the Company's approved material standards. Maintenance shall include lamp replacement, photo-cell replacement, and scheduled cleaning. Lighting units will operate from sunset to sunrise, each night of the year, approximately 4,070 hours of annual operation.

## Rate:

## Distribution Charge:

|  |  |  | Average |  |  | Formatted Table |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rating in Watts | Nominal Lumens | Monthly kWh | Distribution |  |  |
|  | 70 | 5,800 | 32 | \$3.96 | (D) | Formatted: Indent: Left: $0.16^{\text {n }}$ |
|  | 100 | 9,500 | 46 | \$3.91 | (D) | Deleted: 4.50 |
|  | 150 | 16,000 | 66 | \$5.58 | (I) | Deleted: 4.45 |
|  | 250 | 27,500 | 98 | \$6.10 | (I) | Deleted: 3.95 |
|  | 400 | 50,000 | 156 | \$3.37 | (D) | Deleted: 4.32 |
| Riders: |  |  |  |  |  | Deleted: 3.79 |

Bills rendered under this schedule are subject to the following applicable Rider Charges:

Rider A - Tax Adjustment Surcharge
Rider F - Phase II Energy Efficiency and Conservation Charge
Rider J - Default Service Support Charge
Rider N - Solar Photovoltaic Requirements Charge

$$
\frac{\text { (D) Decrease }}{\text { (I) Increase }}
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## RATE SCHEDULES

Rate SVD (continued)

## Replacements:

If the customer requests the Company to remove the present street light system to install high pressure sodium vapor lights and if the present system is less than twenty years old, the customer shall pay the removal cost plus the remaining value of the system. If the eustemer requests the Company to remove the present high-pressure sedium vaper-street light system to install LED lights and if the present-system is less-than twenty years old, the custemer shall pay the removal eost plus the remaining value of the system.-If the customer terminates his present street lighting service within twelve months of requesting service under this schedule, the above condition of service remains in effect. However, in the case where the lights have been in place longer than ten years, and the customer replaces a portion of the existing mercury vapor system with sodium vapor and further requests that the removed mercury vapor lights replace a portion of the existing incandescent lights, the Company will assume these costs provided that there is remaining value in the mercury vapor lights, i.e., not fully depreciated. If the customer chooses, or is unable, to replace existing incandescent lights with the replaced mercury vapor lights, the customer shall pay the remaining life value of the removed mercury vapor lights including poles and hardware.

If the customer requests the Company to remove the present high pressure sodium vapor street light system to install LED lights and if the present system is less than twenty years old, the customer shall pay the removal cost plus the remaining value of the system.

## Terms of Payment:

The net amount billed is due and payable within a period of thirty days. If the net amount is not paid on or before the date shown on the bill for payment of net amount, the bill shall bear interest at the rate of $2 \%$ per month of the unpaid net balance.

## Contract:

Electric service hereunder will be furnished in accordance with a written contract which by its terms shall be in full force and effect for a period of ten years and shall continue in force thereafter for five-year periods unless either party shall give to the other not less than 60 days' notice in writing prior to the expiration date of any of said five-year period that the contract shall be terminated at the expiration date of said five-year period. When a contract is terminated in the manner provided herein, the service will be discontinued.

## Rules and Regulations:

The Company's Standard Rules and Regulations shall apply to the installation and use of electric service.
(C) Change

RATE SCHEDULES This page is intentionally left blank.
RATESM
STREET LIGHTING SERVIGE
MERGURY VAPOR
Availability:
This provision is-grandfathered to existing Custemers eurrently utilizing this provision at existing tocations and-will be clesed to all other Custemers effective June 1, 2008.

Available-to governmental units for lighting publie streets, reads, and-ways.

## Service:

Company furnishes, operates, and maintains the street lighting system, exeept as neted under Speeial Terms and Conditions. Service shall extend from-one-half hour after sunset until one-half hour before sunrise, each night of the year, approximating 4,070 hours of annual operation.

| Rating隼 | Rate: |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Average |  |  |
|  | Type | Neminal Eumens | Menthly <br> kWh | Pistribution |
| Watts |  |  |  |  |
| 175 | Overhead Weod Pole | 7,500 | 70 | \$13.94 |
| 400 | Overhead-WeodPele | 22,000 | 156 | \$14.90 |

## Riders:

Bills rendered under this schedule are-subject to the following applieable Rider Charges:
Rider A Tax Adjustment Sureharge
Rider F Phase II Energy Efficieney and Conservation Charge
Rider J Default Serviee Suppert Charge
Rider N Solar Photoveltaic Requirements Charge

Rate SM (eontinued)

## Default Service Charges:

The-Default Service-Charges shall be-determined using the applieable Average Menthly kWh usage, from the preceding chart, multiplied by the Rider H-Price to-Compare Default Service Rate-Rider, Commercial Custemer Class rate.

## Extensions:

Extensions of street lighting faeilities will be made by the Company only where, in the opinion of the Company, the annual revenue justifies the cost of stuch extensions.

## Terms of Payments:

The net ameunt billed is due and payable within a period of thirty days. If the net amount is net paid on er before the date shown on the bill for payment of net amount, the bill shall bear interest at the rate of $2 \%$ per menth of the umpaid net balance.

## Contract:

Electric service hereunder will be furnished in accerdance with a written centract which by its terms shall be in full foree and effect for a period of five years and shall continue in feree thereafter frem year to year unless either party shall give to the other net less than- 60 -days' notice in-writing prier to the-expiration date of any of said yearly periods that the contraet shall be terminated at the expiration date of said yearly-peried. When- $\alpha$-contract is terminated in the manner provided herein, the service will be diseentinued.

## Rules-and Regulations:

The-Company's Standard Rules and Regulations-shall apply to the installation and use of electrie service.

## RATE SCHEDULES

RATE LED
STREET LIGHTING SERVICE

## Availability:

This Service is applicable to Company owned overhead or underground Light Emitting Diode (LED) street lighting service to municipal, local, state and federal governmental bodies, community associations and to public authorities for lighting of streets, highways, parks and similar places for the safety and convenience of the public.

A minimum installation of 12 LED lights per customer per individual order is required when replacing existing lighting. This restriction does not apply to new installations.

## General Monthly Charges:

## Demand and Energy Charges for Common Lamp Sizes:

Charges Per Month Per Light:

## Cobra Head

| Nominal Watts | Monthly kWh | Distribution |  |
| :---: | :---: | :---: | :---: |
| 50 | 18 | \$5.25 8.23 | (I) |
| 90 | 32 | \$6.59 9.57 | -(I) |
| 130 | 46 | \$7.01 | -(1) |
| 260 | 91 | \$10.8415.75 | -(I) |

Colonial

| Nominal Watts | Monthly kWh | Distribution |  |
| :---: | :---: | :---: | :---: |
| 50 | 18 | \$8.4012.20 | (I) |
| 90 | 32 | \$9.2313.41 | -(I) |
| Acorn |  |  |  |
| Nominal Watts | Monthly kWh | Distribution |  |
| 50 | 18 | \$13.9519.69 | (I) |
| 90 | 32 | \$14.75 20.82 | -(I) |

(C) Change
(I) Increase

## PENNSYLVANIA POWER COMPANY

Electric Pa. P.U.C. No. 36 (Supp. 179)
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## RATE SCHEDULES

## RATE PNP

PUBLIC OR NON-PROFIT ORGANIZATION RATE

## Availability:

Certain public or non-profit organizations may receive electric service pursuant to the charges set forth below as part of the Company's Community and Customer Partnership Program (CCPP) rate schedule.

## Definition:

Public or Non-Profit Organization - organization which has the authority to tax and has tax exempt status or an organization recognized by the Internal Revenue Service (IRS) as non-profit. Only qualifying organizations that have temporary connections or occasional use of electric service for periods of less than 30 days and where such service is for an event in the public interest and available to the public qualify for this special provision. The 30 -day requirement may be waived for public organizations, but in no event shall occasional use extend beyond 12 continuous months.

## Service:

Alternating current, 60 hertz, standard single phase or three phase three-wire or four-wire secondary service, as available.
Single and three phase service will be metered and billed separately or, when feasible, single and three phase service will be furnished through a single meter installation and billed as one account provided the customer arranges his wiring to facilitate the installation of a single meter.
Where service is furnished at three-phase, the customer shall provide and maintain all equipment required for lighting service.

## Rate:

The net monthly charge per customer shall be:

## Distribution:

(C)
$\$ 13.3316 .47$ per month (Customer Charge), plus (I) 2.8943 .645 cents per kWh for all kWh

## RATE SCHEDULES

RATE PNP (continued)

## Minimum Charge:

$\$ 13.3316 .47$ per menth. The monthly Minimum Charge shall be $\$ 13.4116 .47$ plus distribution (I)
energy charges and any related to applicable riders.

## Billing Demand:

A Customer's demand shall be measured by indicating or recording instruments. Demands shall be integrated over 15 -minute intervals. The billing demand in the current month shall be the greatest of: (i) the maximum measured demand established in the month during On-peak hours, as stated herein, (ii) forty percent ( $40 \%$ ) of the maximum measured demand established in the month during Off-peak hours, as stated herein, (iii) contract demand or (iv) fifty percent $(50 \%)$ of the highest billing demand established during the preceding eleven (11) months.

## Terms of Payment:

The net amount is due and payable within 15 days after the date of mailing the bill. If the net amount is not received in full on or before the date shown on the bill for payment of net amount, the gross amount, which is $2 \%$ more than the net amount balance, is due and payable. If the normal due date should fall on a Saturday, Sunday, bank holiday or any other day when the offices of the Company which regularly receive payment are not open to the general public, the due date shall be extended to the next business day.

## Rules and Regulations:

The Company's Standard Rules and Regulations shall apply to the installation and use of electric service.

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Fifth-Sixth Revised Page 123
Superseding Fourth-Fifth Revised Page 123 RIDERS

RIDER H
PRICE TO COMPARE DEFAULT SERVICE RATE RIDER
A Price to Compare Default Service Rate ("PTCDefault") shall be applied to each kWh of Default Service that Penn Power delivers to Customers under this rider as determined to the nearest one-thousandth of a cent per kWh . The PTC Default rate shall be billed to Customers receiving Default Service from the Company under this rider. The rates shall be calculated according to the provisions of this rider.

For service rendered March 1, 2016 through May 31, 2016 the PTC $C_{\text {Default }}$ rates billed by Customer Class are as follows:

Commercial Customer Class (Rate GS (excluding Special Rate GSDS), Rate GM,
Rate GS -Large, Rate PNP, PLS, SV, SVD, SM and LED):
$\$ 0.09479$ per kWh.
Residential Customer Class (Rate RS, and Rate GS - Volunteer Fire Company, Non-Profit
Ambulance Service, Rescue Squad and Senior Center Service Rate):
$\$ 0.07878$ per kWh
(C) Change
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RIDER J
DEFAULT SERVICE SUPPORT RIDER
A Default Service Support ("DSS") rate shall be applied to DSS Sales delivered by the Company to Delivery Service Customers under this rider as determined to the nearest one-thousandth of a cent per kWh or dollar per kW NSPL, as applicable. The DSS rate shall be billed to Customers receiving Delivery Service from the Company under this rider. The DSS rates shall be calculated according to the provisions of this rider. The DSS Rider shall be non-bypassable.

For service rendered during the DSS Initial Computational Period and thereafter, the DSS Computational Year, the DSS rates billed by Rate Schedule are as follows:

| Rate Schedule | DSS <br> Rates |
| :--- | :--- |
| Rate Schedule RS, \& GS - Volunteer <br> Fire Company and Non-Profit |  |
| Ambulance Service, Rescue Squad |  |
| and Senior Center Service Rate |  |
| Rate Schedule GS | $0.186 \underline{287}$ cents per kWh (PI) |
| Rate Schedule PNP | $0.178 \underline{184}$ cents per kWh (I) |
| Rate Schedule GM | $0.183 \underline{189}$ cents per kWh (I) |
| Rate Schedule GS - Large | $0.183 \underline{189}$ cents per kWh (I) |
| Rate Schedule Primary - GP | $\$ 0.557$ per kW NSPL (I) |
| Rate Schedule Transmission - GT | $\$ 0.557$ per kW NSPL (I) |
| Rate Schedule GS with Special Rule | $\$ 0.557$ per kW NSPL (I) |
| GSDS | $\$ 0.557$ per kW NSPL (I) |
| Rate Schedule PLS | $0.183 \underline{189}$ cents per kWh (I) |
| Rate Schedule SV, SVD, SM, LED | $0.183 \underline{189}$ cents per kWh (I) |

The Residential Customer Class consists of Rate Schedules RS; and GS Special Provision for Volunteer Fire Companies, Non-Profit Senior Citizen Centers, Non-Profit Rescue Squads, and Non-Profit Ambulance Services.

The Commercial Customer Class consists of Rate Schedules GS (excluding GS Special Rule GSDS), PNP, GM, GS - Large. PLS, SV, SVD, SM, and LED.

The Industrial Customer Class consists of Rate Schedules GS Large, GP, GT, and GS with Special Rule GSDS.
(D) Deerease(C) Change
(I) Increase

## RIDERS

Rider J (continued)
The UE charges by Customer Class to be included in DSS rates are as follows:
Residential Customer Class: 0.060155 cents per kWh

Commercial Customer Class:
$0.002 \underline{008}$ cents per kWh

## MTEP and MISO Exit Fees and PJM Integration Charges:

$\mathrm{MPI}=\left(\left(\left(\left(\mathrm{MPI}_{\mathrm{Exp} 1}+\mathrm{MPI}_{\mathrm{Exp} 2}\right)-\mathrm{E}\right) \mathrm{X}\right.\right.$ Adjustment Factor $\left.) / \mathrm{S}\right)$
Where:
MPI $=\quad$ The charge to be applied to each Delivery Service Customer served under this Tariff for the Midwest Independent System Operator ("MISO") Transmission Expansion Plan ("MTEP") charges and MISO and PJM charges associated with the transition from MISO to PJM approved by FERC.
$\mathrm{MPI}_{\text {Expl }}=\quad$ The Company's cost of the MTEP charges assessed on the Company pursuant to the Open Access Transmission Tariff ("OATT") of MISO.
$\mathrm{MPI}_{\text {Exp2 }}=$ The Company's (i) charges assessed under MISO's OATT that are associated with the Company's exit from the MISO control area and (ii) charges assessed under the PJM OATT that are associated with the Company's integration into the PJM control area. All such MISO exit fees and PJM integration fees charges approved by FERC shall not exceed $\$ 3.5$ million, excluding carrying charges. The Company shall recover these charges plus applicable carrying charges over a minimum five year period.

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First Second Revised Page 146
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## RIDER L

PARTIAL SERVICES RIDER

## Availability/Applicability:

This Rider applies to general service customers having on-site non-synchronous generation equipment or synchronous equipment that does not qualify for Net Metering Rider capable of supplying a portion of their power requirements for other than emergency purposes. Electricity sold under this Rider may not be resold; nor may it be used to operate the auxiliary loads of the generating facilities while those facilities are generating electricity for sale.

In addition to the charges included in the applicable rate schedule, all of the following general monthly charges are applicable to Delivery Service Customers. All of the following general menthly charges are applicable to Delivery Service Gustomers.

## General Monthly Charges:

Fifty Dollars $(\$ 50.00) /$ per month, plus the charges listed below, depending upon the voltage at which the Customer is being served and the services (i.e., Backup Demand and/or Maintenance Demand) selected by the Customer:

| Distribution Charge | Backup Demand <br> (Dollars/KW) | Maintenance Demand <br> (Dollars/KW) |
| :---: | :--- | :---: |
| Secondary Voltage <br> $(\mathrm{D})(\mathrm{I})$ | $\$ 2.603 .58$ | $-\$ 2.01 \underline{2.86}$ |
| Primary Voltage <br> $(\mathrm{D})(\mathrm{I})$ | $\$ 1.954 .59$ | $-\$ 1.56 \underline{2} .67$ |
| Transmission Voltage <br> $(\mathrm{D})(\mathrm{I})$ | $\$ 0.20 \underline{0.32}$ | $-\$ 0.16 \underline{0.25}$ |

PENNSYLVANIA POWER COMPANY Electric Pa. P.U.C. No. 36 (Supp. 917)<br>First Second Revised Page 146<br>Superseding First Revised Original Page 146<br>(DC) DecreaseChange<br>(I) Increase

## GENERAL RULES AND REGULATIONS

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Definition of Terms (continued)
Delivery Service Customer - A Customer who takes Delivery Service.
Demand - The rate of use of electric energy during a specified time interval, expressed in kilowatts and reactive kilovolt-amperes.

Developer - The person or entity responsible for constructing and providing improvements in a Development, including, but not limited to, streets, sidewalks and utility-ready lots.

Development - A planned project which is developed by a Developer for electric service set out in a recorded plot plan of five (5) or more adjoining unoccupied lots for the construction of single-family residences, detached or otherwise, mobile homes, or one (1) or more five-unit apartment houses, all of which are intended for year-round occupancy, if electric service to such lots necessitates extending the Company's existing Distribution Lines.

Direct Labor Costs - The pay and expenses of Company employees directly attributable to work performed, excluding construction overheads or payroll taxes, workmen's compensation expenses or similar expenses.
Direct Material Costs - The purchase price of materials used, excluding related stores (i.e. warehousing) expenses. In computing Direct Material Costs, proper allowance shall be made for unused materials recovered from temporary structures, and for discounts allowed and realized in the purchase of materials.

Discontinuance of Service - The removal of a customer's meter and/or service wires or the de-energizing of a meter and cessation of service with the consent of the customer.
Distribution Charge - A charge designed to recover the costs the Company incurs in using its distribution system or local wires to deliver electricity to a Customer.
Distribution Line - An electric supply line and related equipment of 34,500 volt delta configured or lower voltage from which energy is delivered to one (1) or more Service Lines.
(C) Change

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## GENERAL RULES AND REGULATIONS

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## BEFORE THE

 PENNSYLVANIA PUBLIC UTILITY COMMISSION
## PENNSYLVANIA POWER COMPANY DOCKET NO. R-2016-2537355

Direct Testimony<br>of

Charles V. Fullem

## List of Topics Addressed

Overview of Distribution Base Rate Filing
Settlement Commitments from Docket No. R-2014-2428744
Reasons for the Requested Increase
Organization of the Filing and Introduction of Witnesses
Importance of Adequate Rate Relief to the Company

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II. SETTLEMENT COMMITMENTS ..... 4
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IV. ORGANIZATION OF THE FILING, OTHER WITNESSES AND THE IMPORTANCE OF THIS CASE TO THE COMPANY AND ITS CUSTOMERS ..... 13

APPENDIX A

# DIRECT TESTIMONY <br> OF <br> CHARLES V. FULLEM 

## I. INTRODUCTION

Q. Please state your name and business address.
A. My name is Charles V. Fullem, and my business address is 2800 Pottsville Pike, Reading, Pennsylvania 19605.

## Q. By whom are you employed and in what capacity?

A. I am employed by FirstEnergy Service Company, which is a direct subsidiary of FirstEnergy Corp. ("FirstEnergy"). I am the Director, Rates and Regulatory Affairs Pennsylvania. The Pennsylvania Rate Department of FirstEnergy Service Company provides regulatory support for each of FirstEnergy's wholly-owned Pennsylvania operating companies ("Companies", including Pennsylvania Power Company ("Penn Power" or "Company")).

I am responsible to the Vice President of Rates and Regulatory Affairs for the development, coordination, preparation and presentation of the Companies' rate-related matters before the Pennsylvania Public Utility Commission ("Commission") and the New York State Public Service Commission, including their default service programs. My responsibilities encompass the preparation of various statements and reports addressing, among other things, distribution revenue requirement, energy costs, non-utility generation costs, quarterly earnings, and other financial matters. I am also responsible for administering the Companies' tariffs, including developing retail electric rates, rules and regulations and ensuring their uniform application and interpretation.

## Q. What is your educational and professional background?

A. I received a Bachelor of Science degree in Mineral Economics from the Pennsylvania State University in November 1981. I have over thirty years of experience with FirstEnergy and its predecessor companies. My work experience is more fully described in my professional biography, which is attached as Appendix A to this testimony.

## Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of Penn Power.

## Q. Please describe the purpose of your testimony.

A. The purpose of my testimony is to provide an overview of and the principal factors driving the distribution base rate increase request that the Company is proposing for approval by the Commission. I will also explain why approval of the proposed distribution rate increase is necessary to provide a fair return to shareholders and to establish the groundwork for enhanced reliability and customer service.

In addition to this Introduction, my testimony is comprised of three substantive sections: Section II reports on the Company's progress in meeting the settlement commitments made in Penn Power's last base rate proceeding at Docket No. R-2014-2428744. In Section III, I provide an overview of the current filing and discuss the primary reasons the Company is requesting an increase in its distribution rates. Lastly, in Section IV, I describe the organization of the Company's rate filing, introduce the other witnesses submitting direct testimony on behalf of Penn Power and explain the importance of this case to the Company and its customers.

## Q. Are you sponsoring any exhibits?

A. Yes, I am sponsoring Penn Power Exhibits CVF-1 through CVF-6, which consist of the following: ${ }^{1}$

Penn Power Exhibit CVF-1 provides a summary of and specific reasons for the proposed rate increase. This exhibit also identifies and quantifies the major components of the Company's revenue request.

Penn Power Exhibit CVF-2 identifies the other witnesses submitting direct testimony on behalf of the Company, their corresponding statement numbers and their areas of responsibility.

Penn Power Exhibit CVF-3 is a table showing, at present and proposed rates, the Company's revenues, operating expenses, operating income and rate base, as adjusted for ratemaking purposes, and the resulting overall rates of return for the fully projected future test year, the twelve months ending December 31, 2017 ("FPFTY"). The table also provides references to exhibits sponsored by other witnesses that set forth this information in more detail.

Penn Power Exhibit CVF-4 provides a corporate history, including the dates of the Company's original incorporation and subsequent mergers and acquisitions.

[^3]Penn Power Exhibit CVF-5 provides a comparison of residential customer bills at the Company's existing and proposed base rates to residential customer bills, at the same usage levels, of Duquesne Light Company ("Duquesne"), PECO Energy Company ("PECO") and PPL Electric Utilities Corporation ("PPL"), as well as the other FirstEnergyowned Pennsylvania electric distribution companies ("EDCs").

Penn Power Exhibit CVF-6 is a copy of the Meter Reading section of the Company's web-site.

## II. SETTLEMENT COMMITMENTS

Q. In the Joint Petition for Settlement of Rate Investigation ("Settlement Agreement") which the Commission approved in Penn Power's last base rate proceeding at Docket No. R-2014-2428744, the Company, at pages 11-14, made various commitments in the areas of customer service, meter reading and smart meter operations. Is Penn Power in compliance with those provisions?
A. Yes, it is.
Q. Is the Company prepared to meet its commitment to achieve and maintain an annual call answer rate of at least $80 \%$ of calls answered within thirty seconds beginning with the twelve-month period ended December 31, 2016 ?
A. Yes. In fact, the Company satisfied the $80 \%$ target in 2014, in 2015 and again during the twelve months ended March 31, 2016.
Q. The Company also agreed to reduce the number of residential disputes that did not receive a response within thirty days to no more than sixty beginning with the twelve-month period ending December 31, 2016. Is Penn Power on track to comply with that standard?
A. Yes. The Company has made great strides in this area. For example, in 2014, Penn Power had 100 residential disputes that did not receive a response within thirty days. The Company reduced that figure to two in 2015 and, as of March 31, 2016, Penn Power had no outstanding residential customer disputes that had not received a response within thirty days.
Q. The Company also agreed to take the necessary action to: (i) consistently meet the twelve-month performance standards established by the Commission for SAIFI ${ }^{2}$, SAIIDI ${ }^{3}$ and CAIIDI ${ }^{4}$ by the end of the first reporting quarter of 2016 (i.e., March 31, 2016); (ii) consistently meet the three-year performance standards established by the Commission for SAIFI, SAIIDI, and CAIIDI by the end of calendar year 2017; and (iii) strive towards the achievement of reliability performance at or better than the performance benchmarks established by the Commission. How is the Company performing with respect to these reliability commitments?
A. The Company has made tremendous progress and has met, or is in the process of meeting, all of its reliability obligations as shown in Table 1 below:

[^4]
## Table 1

Penn Power Reliability Performance as of March 31, 2016

| Metric | Benchmark | 12-Month <br> Standard | 12-Month <br> Actual | 3-Year <br> Standard | 3-Year <br> Actual |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SAIFI | 1.12 | 1.34 | 1.16 | 1.23 | 1.14 |
| CAIDI | 101 | 121 | 102.3 | 111 | 103 |
| SAIDI | 113 | 162 | 118.4 | 136 | 117 |

As indicated above, the Company has bettered the 12-month and 3-Year Standards for all three metrics and is very close to satisfying the Commission's performance benchmarks.
Q. As part of the Settlement Agreement, the Company also agreed to ensure that its policies and procedures were designed such that customer meters are read at least every other month and to document the specific reasons when it is unable to do so. Has the Company complied with this commitment?
A. Yes. The Company continues to focus on its meter reading operations to ensure that its performance is consistent with all regulatory requirements. In furtherance of the commitment it made in its last base rate case, the Company created a new report that summarizes its meter-reading performance and identifies the causes for any missed reads. The Company provided such a report, covering the period from June 1, 2015 through December 31, 2015, to the statutory advocates on April 8, 2016.
Q. Penn Power further agreed to revise its website and customer education materials to explicitly inform its customers, in plain language, of the Company's policy to issue bills based on actual meter readings no less frequently than every other month and to explain the procedures for customers to submit self-readings if they elect to do so. Has Penn Power complied with this settlement provision?
A. Yes. The Company modified its website on July 1, 2015 to provide the information requested by the settling parties. Exhibit CVF- 6 provides a copy of the relevant Meter Reading page, shown on the website, of Penn Power's current tariff.
Q. The Settlement Agreement also required that Penm Power provide the statutory advocates with certain information regarding the operation of its modified estimated billing algorithm, including its performance over the first full year of its use. Is the Company on track to supply the necessary information?
A. Yes. Company representatives met with the statutory advocates on September 10, 2015 in Harrisburg to review its modified estimated billing algorithm and to answer any questions regarding its operation. Due to final upgrades taking place through the end of 2015, it was agreed that the Company will use the twelve-month period-ending December 31, 2016 to study the accuracy and performance of the new algorithm and will provide a report to the statutory advocates in March of 2017.
Q. Turning to a different area, did the Company add certain reporting metrics to its Annual Progress Report under its Smart Meter Technology Deployment Plan approved by the Commission at Docket No. M-2013-2341994 ("Smart Meter Plan"), as it agreed to do in its Settlement Agreement?
A. Yes. Beginning with the August 1, 2015 Annual Progress Report submitted pursuant to its Smart Meter Plan, the Company provided information concerning the following metrics:

Home area network ("HAN") devices. Number of utility AMI meters with consumer devices registered to operate with the HAN chip.

AMI meter installs. Number of smart meters installed and registered.

Customer complaints. Number of formal and informal PUC complaints related to AMI meter deployment, broken down by type of complaint and resolution. AMI meter deployment includes installation, functioning or accuracy of the AMI meter, and HAN device registration.

Reduction in greenhouse gas emissions. Reduced emissions attributable to reduced truck rolls due to automatic meter readings and increased efficiencies. This reporting will commence once the realization of this benefit has been determined and reflected in the smart meter baseline savings as of April 30, 2016.

Voltage and VAR controls. Number and percentage of distribution lines using sensing from an AMI meter as part of the Company's voltage regulation scheme.

## Q. Did the Company also host an informational meeting with respect to the Company's smart meter and smart grid deployment efforts as committed to in the Settlement Agreement?

A. Yes. The meeting was held on July 20, 2015 at the FirstEnergy General Offices in Akron. Representatives of the Environmental Defense Fund attended in person and representatives of the Office of Consumer Advocate participated via teleconference.

## III. OVERVIEW OF RATE REQUEST AND REASONS FOR PROPOSED INCREASE

Q. Please describe the increases and changes in rates for distribution service that the Company is proposing.
A. The Company is proposing a general rate increase to its distribution rates and is also requesting increases in rates charged under its Default Service Support ("DSS")Rider and Hourly Pricing Default Service ("HPS") Rider in order to fully collect the uncollectible expense associated with the provision of default service, as well as the Purchase of Receivables Program offered to electric generation suppliers. Finally, the Company is proposing to roll smart meter and Distribution System Improvement Charge ("DSIC") investment costs into base rates.

## Q. Please identify the principal changes to existing and pending rate riders that affect distribution base rate revenue in this case.

A. The Company currently has a Smart Meter Technologies Charge ("SMT-C") Rider through which it recovers the costs of implementing its Smart Meter Plan. The Company will continue to include its 2017 smart meter costs in base rates and will maintain its SMT-C Rider rate at zero. The SMT-C Rider will remain in the Company's tariff and will be utilized to recover the costs of its Smart Meter Plan in excess of the level of such costs included in base rates, net of applicable savings.

Likewise, the Company has sought the Commission's approval to implement a DSIC Rider for service rendered beginning July 1, 2016 at Docket No. P-2015-2508931. The Company proposes to roll the projected DSIC Rider charges and costs into base distribution rates, and to reset the DSIC Rider to zero as of the effective date of the base
rates determined in this case. The DSIC Rider will remain at zero until Penn Power has added plant through its Commission-approved Long Term Infrastructure Improvement Plan ("LTIIP") in excess of the claimed amount included in its estimated December 31, 2017 rate base in the present case.

## Q. What effect will the proposed increases and changes in distribution rates and riders

 have on the Company's pro forma revenues at current rates?A. The effect of the proposed increases and changes in distribution rates and riders on the Company's pro forma revenues at current rates for the FPFTY is summarized in Penn Power Exhibit CVF-3 and highlighted in Table 2 below:

Table 2

| Requested Revenue Change |  |
| :--- | :---: |
| Penn Power | $(\$$ Thousands $)$ |
| Distribution Base Rate | $\$ 40,357$ |
| DSS \& HPS Riders | $\$ 1,676$ |
| Total Request | $\$ 42,033$ |
| Percentage Increase in Total Revenue | $9.57 \%$ |
| Smart Meter Roll In | $\$ 0$ |
| DSIC Roll In | $\$ 4,634$ |
| Net Increase in Revenue | $\$ 37,399$ |
| Percentage Increase in Total Revenue | $8.43 \%$ |
| Smart Meter - 2017 Rider revenue in the absence of the <br> rate case |  |
| DSIC Roll in - 2017 Rider revenue in the absence of <br> the rate case |  |

The percentage increases shown are based on total Company revenue, assuming all customers are taking default service from the Company.
Q. What overall rate of return and return on common equity does the Company propose be used for purposes of calculating its revenue requirement in this case?
A. Penn Power's proposed distribution rates are designed to recover the Company's costs to furnish safe and reliable distribution service and to provide it an opportunity to earn a fair return on its investment in distribution assets. More specifically, as summarized in Penn Power Exhibit CVF-3 and explained in more detail in the direct testimony of Pauline M. Ahern (Penn Power St. No. 8), the requested increase proposed by the Company would provide it an opportunity to earn an overall rate of return of $8.70 \%$ and a $11.50 \%$ return on common equity.
Q. How will the proposed rate increase impact the total bill of a typical residential customer using $1,000 \mathrm{kWh}$ per month and how will the resulting bill compare to the current average residential bills of other Pennsylvania EDCs?
A. Table 3 below shows: (1) a current monthly bill for a residential default service customer using $1,000 \mathrm{kWh}$; (2) the requested increase in that bill; and (3) the new bill under proposed base rates.

Table 3

|  | Current Monthly <br> Bill | Increase | Total Bill <br> After Increase |
| :--- | :---: | :---: | :---: |
| Penn <br> Power | $\$ 130.06$ | $\$ 18.45$ | $\$ 148.51$ |
| *Based upon current default service rates as of the date of this filing. |  |  |  |

Under the corresponding rates in effect as of May 1, 2016, customers of the other three non-affiliated major Pennsylvania EDCs (i.e., Duquesne, PECO and PPL) would pay a monthly bill of between $\$ 136.37$ and $\$ 156.21$. Penn Power Exhibit CVF-5 graphically depicts the billing comparison I just described.

## Q. What are the principal factors driving the Company's need for rate relief?

A. The principal factors driving the Company's need to increase its distribution base rates are as follows:

1. Growth in the Company's distribution rate base. One of the factors driving Penn Power's need for rate relief is the $20 \%$ growth in the Company's rate base attributable to its ongoing investment in distribution plant (including smart meter and DSIC-eligible investment). As shown in Table 4 below, the Company's estimated rate base at December 31, 2017, as summarized in Penn Power Exhibit CVF - 3 and developed in Mr. D'Angelo's Penn Power Exhibit RAD-1, is expected to be $\$ 68.5$ million greater than the level reflected in current rates:

Table 4

|  | \$ (thousands) |
| :--- | :--- |
| Rate Base Docket No. R-2014-2428744 | $\$ 345,013$ |
| Rate Base RAD-1 pg. 1 line 19 | $\$ 413,519$ |
| Increase | $\$ 68,506$ |
| Percentage Change | $20 \%$ |

2. Reduction in sales. Penn Power's projected 2017 revenue at current rates is five million dollars less than the revenue requirement agreed to in the Settlement Agreement approved by the Commission at Docket No. R-2014-2428744. Sales to the residential class as a whole are expected to decrease by $1.46 \%$ annually, driven by a decline in the average usage per customer of approximately $1.70 \%$ annually over the next four years, offset only slightly by increases in the number of residential customers. The decline in the average residential usage in the

Company's service area is primarily due to implementation of Pennsylvania's state-mandated energy efficiency programs under Act 129 , as well as federally mandated energy efficiency lighting standards.
3. Deferred taxes. Penn Power's deferred tax expense for the FPFTY is higher than the amount reflected in its last base rate proceeding.
4. Depreciation expense associated with increased investment in plant in service. The Company has included with this filing a new service life study reflecting adoption of the Equal Life Group Method. The updated accrual rates, along with the new distribution plant, result in corresponding increases in depreciation expense.
5. Increase in operations and maintenance ("O\&M") expense. Implementation of the Company's LTIIP, will drive higher O\&M expenses as work included in the LTIIP has an on-going O\&M component in addition to the capital component. In addition, the Company has budgeted increases in expenses associated with vegetation management, facility repairs and substation maintenance as part of its on-going efforts to enhance reliability. Finally, the Company continues to experience increased uncollectible accounts expense.
IV. ORGANIZATION OF THE FILING, OTHER WITNESSES AND THE IMPORTANCE OF THIS CASE TO THE COMPANY AND ITS CUSTOMERS
Q. Please identify the other witnesses presenting direct testimony on behalf of the Company and the principal subjects they address.
A. The Company is submitting the direct testimony of nine witnesses including myself. The other witnesses submitting direct testimony and the principal subjects they address are identified in Penn Power Exhibit CVF-2 and can be summarized as follows:
\(\left.\left.$$
\begin{array}{lll}\text { Richard A. D'Angelo } & \text { Statement No. } 2 & \begin{array}{l}\text { Development of the Company's } \\
\text { revenue requirement, including } \\
\text { sponsoring and explaining the } \\
\text { Company's principal accounting } \\
\text { exhibits. }\end{array} \\
\text { Kevin M. Siedt } & \text { Statement No. } 3 & \begin{array}{l}\text { Development of normalized sales } \\
\text { and revenues; development of the } \\
\text { Company's proposed rate design; } \\
\text { proposed changes to tariff rules and } \\
\text { regulations, rate schedules and } \\
\text { riders. }\end{array} \\
\text { Thomas J. Dolezal } & \text { Statement No. } 4 & \begin{array}{l}\text { Development of the Company's cost } \\
\text { of service studies; separation studies; } \\
\text { and cost of service at existing rates. }\end{array} \\
\text { Jeffrey L. Adams } & \text { Statement No. } 5 & \begin{array}{l}\text { Development of the Company's } \\
\text { claim for cash working capital. }\end{array} \\
\text { Laura W. Gifford } & \text { Statement No. } 6 & \begin{array}{l}\text { Updating uncollectible accounts } \\
\text { expense to be recovered in Penn }\end{array} \\
\text { Power's DSS and HPS Riders. }\end{array}
$$\right\} \begin{array}{l}Updating the baselines for the <br>

measurement of smart meter savings.\end{array}\right\}\)| Annual and accrued depreciation |
| :--- |
| rates and service lives. |

Q. Please explain the importance of the proposed rate increase to the Company.
A. In order to continue enhancing reliability and customer service, the Company must continue to make very substantial investments in new and replacement distribution plant,
including the investments set forth in its Commission-approved LTIIP. Moreover, it must do so during a period of declining sales and ever-increasing O\&M expenses. Due to these factors, Penn Power's projected overall rate of return for the FPFTY, at present rates, is only $3.32 \%$. More importantly, its indicated return on common equity during that same period is anticipated to be but $-0.26 \%$, which is obviously grossly inadequate by any reasonable standard. Returns at these levels will simply not support the level of investment required to ensure that customers continue to receive safe and reliable electric service. Accordingly, it is critically important that the Company be granted the rate relief it is requesting in this case.
Q. In view of the foregoing, do you have a recommendation regarding the rate of return on common equity that should be approved for the Company?
A. Yes, I do. I strongly encourage the Commission to adopt the $11.5 \%$ equity return developed by Ms. Ahern.
Q. Does this conclude your direct testimony?
A. Yes, it concludes my direct testimony at this time. However, I would like to reserve the right to supplement my direct testimony should it become necessary to do so.

## Biography <br> Charles V. Fullem <br> Director - Rates \& Regulatory Affairs/Pennsylvania

Charles V. Fullem is Director- Rates \& Regulatory Affairs/Pennsylvania, a position he was appointed to on January 22, 2006. In that capacity, he is responsible for developing the default service plans of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company, as well as all retail tariff filings and financial reports to the Pennsylvania Public Utility Commission ("PaPUC") and the New York State Public Service Commission. He has over 30 years of experience in the energy industry, with a background in rates and regulation, marketing, unregulated retail pricing and regulated tariffs, contract development and negotiations of both wholesale and retail electric service contracts.

From December 2000 through January 2006, he served in various positions, including Director of Energy Consulting Operations for The E Group, the energy consulting subsidiary of FirstEnergy Corporation ("FirstEnergy"). As Director, he managed technical staff teams and was responsible for delivering all aspects of The E Group's client services for an over one billion dollar client energy spend, including energy management, bill and rate analysis, development of energy procurement strategies, preparation of requests for proposal, evaluation of bids, contract development and implementation, open market analysis, and negotiations with suppliers and utilities and utility bill payment.

From November 1999 through December 2000, Mr. Fullem was Director, Pricing and Regulatory Affairs, in FirstEnergy's rate department, where he was responsible for tariff administration and pricing programs serving over 2.2 million customers in Ohio and Pennsylvania. In this capacity, Mr. Fullem developed and implemented the unbundled tariffs designed to implement Customer Choice in Ohio, coordinated the development of FirstEnergy's Supplier Tariff and Net Metering Rider, and participated in the Operational Support Plan (OSP) workgroups. The OSP workgroups were collaborative working groups charged with establishing the various rules and policies of retail choice in Ohio.

From December 1994 through November 1999, Mr. Fullem served in various roles in FirstEnergy's marketing department, including Director, Planning and Strategy, and Director of Centerior Energy's Competitive Analysis Department, where he developed and implemented successful marketing programs targeted to commercial and industrial customers and mass market customers in both competitive generation markets and traditional areas of competition between fully integrated electric utility providers.

From 1982 through December 1994, Mr. Fullem served in various roles in rates and regulation at Centerior Energy and Cleveland Electric Illuminating Company, including the roles of Director, Planning \& Strategy, and Director of Rates \& Contracts. In these roles, Mr. Fullem managed and performed cost of service studies, load research, customer requirements analyses, designed rates and tariffs, participated in the development of revenue requirements, and performed financial analyses.

Mr. Fullem holds his Bachelor of Science degree in Mineral Economics from the Pennsylvania State University. Mr. Fullem is a Certified Energy Procurement Professional by the Association of Energy Engineers. He has provided expert testimony before the Public Utilities Commission of Ohio ("PUCO"), the PaPUC, The New York State Public Service Commission and the Federal Energy Regulatory Commission ("FERC").

Mr. Fullem has prepared and presented testimony in the following rate-related cases:

## PUCO Cases:

## Docket Nos. Case Name

85-521-EL-COI (In the Matter of the Investigation into the Perry Nuclear Power Station)
88-170-EL-AIR (In the Matter of the Application of the Cleveland Electric Illuminating Company for Authority to Amend and to Increase Certain of its Filed Schedules Fixing Rates and Charges for Electric Service)

| 88-171-El-AIR | (In the Matter of the Application of the Toledo Edison Company for <br> Authority to Amend and to Increase Certain of its Filed Schedules <br> Fixing Rates and Charges for Electric Service) |
| :--- | :--- |
| 91-1528-EL-CSS | (In the Matter of the Complaint of Toledo Premium Yogurt, Inc., dba <br> Freshens Yogurt, Complainant, v. Toledo Edison Company, <br> Respondent) |
| $91-2308-E L-C S S$ | (Board of Education, Cleveland City Schools v. Cleveland Electric <br> Illuminating Company) |
| $92-504-E L-C S S$ | (Board of Education, Cleveland City Schools v. Cleveland Electric <br> Illuminating Company) |
| $95-02-E L-A B N$ | (In the Matter of the Application of the City of Clyde Requesting |
| Removal of Certain Electric Distribution Facilities of the Toledo Edison |  |
| Company from Within Clyde's Corporate Limits) |  |


| PaPUC Cases: |  |
| :---: | :---: |
| Docket No. | Case Name |
| R-850267 | (Pennsylvania Public Utility Commission, et al. v. Pennsylvania Power Company) |
| R-860378 | (Pennsylvania Public Utility Commission, et al. v. Duquesne Light Company) |
| 87-1160 | (Duquesne Light Company and Pennsylvania Power Company, Appellants v. David M. Barasch, etc., et al.) |
| P-00072305 | (Petition of Pennsylvania Power Company for Approval of Interim Default Service Supply Plan) |
| P-2008-2066692 | (Voluntary Prepayment Plan) |
| P-2009-2093053 | (Metropolitan Edison Company Default Service Programs) |
| P-2009-2093054 | (Pennsylvania Electric Company Default Service Programs) |
| I-2009-2099881 | (Compliance of Commonwealth of Pennsylvania with Section 410(a) of the American Recovery and Reinvestment Act 2009) |
| M-2009-2092222 | (Petition of Metropolitan Edison Company, Pennsylvania Electric Company, and Pennsylvania Power Company for approval of its Energy Efficiency and Conservation Plans) |
| M-2009-2112952 | (Petition of Metropolitan Edison Company, Pennsylvania Electric Company, and Pennsylvania Power Company for approval of its Energy Efficiency and Conservation Plans) |
| M-2009-2112956 | (Petition of Metropolitan Edison Company, Pennsylvania Electric Company, \& Pennsylvania Power Company for approval of its Energy Efficiency and Conservation Plans) |
| A-2010-2176520 | (Joint Application of West Penn Power Company, Trans-Allegheny Interstate Line Company \& FirstEnergy Corp.) |
| A-2010-2176732 | (Joint Application of West Penn Power Company, Trans-Allegheny Interstate Line Company \& FirstEnergy Corp.) |


| P-2011-2273650 | (Metropolitan Edison Company Default Service Programs) |
| :---: | :---: |
| P-2011-2273668 | (Pennsylvania Electric Company Default Service Programs) |
| P-2011-2273669 | (Pennsylvania Power Company Default Service Programs) |
| P-2011-2273670 | (West Penn Power Company Default Service Programs) |
| M-2012-2334387 | Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company for Approval of its Act 129 Phase II EE\&C Plans |
| M-2012-2334392 | Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company for Approval of its Act 129 Phase II EE\&C Plans |
| M-2012-2334395 | Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company for Approval of its Act 129 Phase II EE\&C Plans |
| M-2012-2334398 | Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company for Approval of its Act 129 Phase II EE\&C Plans |
| R-2014-2428745 | Metropolitan Edison Company - General Base Rate Filing |
| R-2014-2428743 | Pennsylvania Electric Company - General Base Rate Filing |
| R-2014-2428744 | Pennsylvania Power Company - General Base Rate Filing |
| R-2014-2428742 | West Penn Power Company - General Base Rate Filing |
| A-2015-2488903 | Joint Application of Mid-Atlantic Interstate Transmission, LLC ("MAIT"); Metropolitan Edison Company and Pennsylvania Electric Company |
| A-2015-2488904 | Joint Application of Mid-Atlantic Interstate Transmission, LLC ("MAIT"); Metropolitan Edison Company and Pennsylvania Electric Company |
| A-2015-2488905 | Joint Application of Mid-Atlantic Interstate Transmission, LLC ("MAIT"); Metropolitan Edison Company and Pennsylvania Electric Company |

Met-Ed Statement No. 1
Witness: C. V. Fullem Appendix A Page 5 of 5

G-2015-2488906 Joint Application of Mid-Atlantic Interstate Transmission, LLC ("MAIT"); Metropolitan Edison Company and Pennsylvania Electric Company

G-2015-2488907 Joint Application of Mid-Atlantic Interstate Transmission, LLC ("MAIT"); Metropolitan Edison Company and Pennsylvania Electric Company

P-2015-2511333 Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company for Approval of their Default Service Programs

P-2015-2511351 Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company for Approval of their Default Service Programs

P-2015-2511355 Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company for Approval of their Default Service Programs

P-2015-2511356 Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company for Approval of their Default Service Programs

NY PSC Cases:

## Docket No.

Case 11-E-0594 (Pennsylvania Electric Company Waverly District - moving POLR rates to market supply)

FERC Cases:

## Docket No.

ER93-471-000

## Case Name

(COS - FERC Rate Case: Cleveland Electric Illuminating Company v. Cleveland Public Power)

Witness: C. V. Fullem
Page 1 of 6

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT I-A-1:

"Provide a summary discussion of the rate change request, including specific reasons for each increase or decrease. Also provide a breakdown which identifies the revenue requirement value of the major items generating the requested rate change."

## RESPONSE:

## Pennsylvania Power Company Statement of Reasons for Rate Changes

## Introduction

Pennsylvania Power Company ("Penn Power" or the "Company") has filed a tariff supplement and accompanying supporting data setting forth a proposed distribution base rate increase and other proposed tariff revisions ("Rate Plan") for approval by the Pennsylvania Public Utility Commission ("Commission").

The Rate Plan proposes rates that would produce an increase in Penn Power's annual distribution revenue of $\$ 42.0$ million based on a fully projected future test year ending December 31, 2017 and reflecting the Company's proposed overall rate of return of $8.70 \%$ and a rate of return on the common equity portion of its capital structure of $11.5 \%$. The changes in average total bills under the proposed rates vary by class of customers and range from approximately $1.03 \%$ to $32.8 \%$ for customers that receive default service from the Company. The monthly bill of a residential default service customer using 1,000 kilowatt-hours (" kWh ") per month would increase from $\$ 130.06$ to \$148.51.

## Principal Reasons For The Proposed Increase In Rates

Five principal factors are driving the Company's need to increase its distribution rates:

1. Growth in the Company's distribution rate base. One of the factors driving Penn Power's need for rate relief is the $20 \%$ growth in the Company's rate base attributable to its ongoing investment in distribution plant (including smart meter and DSIC-eligible investment). As shown in the table below, the Company's estimated rate base at December 31, 2017, as developed in Mr. D'Angelo's Penn Power Exhibit RAD-1, is expected to be approximately $\$ 68.5$ million greater than the level reflected in current rates:

| Penn Power | (thousands) |
| :--- | :---: |
| Rate Base Docket No. R-2014-2428744 | $\$ 345,013$ |
| Rate Base RAD-1 pg. 1 line 19 | $\$ 413,519$ |
| Increase | $\$ 68,506$ |
| Percentage Change | $20 \%$ |

2. Reduction in sales. Penn Power's projected 2017 revenue at current rates is five million dollars less than the revenue requirement in the Settlement Agreement approved by the Commission at Docket No. R-2014-2428744. Sales to the residential class as a whole are expected to decrease by $1.46 \%$ annually, driven by a decline in the average usage per customer of approximately $1.70 \%$ annually over the next four years, offset
slightly by increases in the number of residential customers. The decline in the average residential usage in the Company's service area is primarily due to implementation of Pennsylvania's state-mandated energy efficiency programs (Act 129), as well as federally mandated energy efficiency lighting standards.
3. Deferred Taxes. Penn Power's deferred tax expense for the FPFTY is higher than the amount reflected in its last base rate proceeding.
4. Depreciation expense associated with increased investment in plant in service. The Company has included with this filing a new service life study reflecting adoption of the Equal Life Group Method. The updated accrual rates, along with the new distribution plant, result in corresponding increases in depreciation expense.
5. Increase in operations and maintenance ("O\&M") expense. Implementation of the Company's Commission-approved Long Term Infrastructure Improvement Plan ("LTIIP") will drive higher O\&M expenses as work included in the LTIIP has an on-going O\&M component in addition to the capital component. In addition, the Company has budgeted increases in vegetation management, facility repairs and substation maintenance, as part of its on-going efforts to enhance reliability. Finally, the Company continues to experience increased uncollectible accounts expense.

Notwithstanding its success in containing O\&M expenses and due in large part to its substantial investment in utility plant, Penn Power's overall rate of return, at present rates, is projected to be only $3.32 \%$ for the fully projected future test year. More importantly, the indicated return on common equity under present rates is anticipated to be only ( $0.26 \%$ ), which is inadequate by any reasonable standard.

## Principal Components of the Rate Plan

The Company's Rate Plan consists of the following principal components:

1. The Company is proposing a general rate increase to its distribution rates and is also requesting increases in its Default Service Support Rider and Hourly Pricing Default Service Rider in order to fully collect the uncollectible expense associated with the provision of default service, as well as the Purchase of Receivable Program offered to Electric Generation Suppliers. In addition, the Company is proposing to include smart meter and DSIC (Distribution System Improvement Charge) investment costs in base rates.
2. The Company currently has a Smart Meter Technologies Charge ("SMT-C") Rider through which it recovers the costs of implementing its Smart Meter Plan. The Company will continue include its 2017 smart meter costs in base rates and will maintain its SMT-C Rider rate at zero. The SMT-C Rider will remain in the Company's tariff and will be utilized to recover the costs of its Smart Meter Plan in excess of the level of such costs included in base rates, net of applicable savings.
3. Likewise, the Company has sought the Commission's approval to implement a Distribution System Improvement Charge ("DSIC Rider") for service rendered beginning July 1, 2016 at Docket No. P-2015-2508931. The Company proposes to roll the projected DSIC Rider charges and costs into base distribution rates, and to reset the DSIC Rider to zero as of the effective date of the base rates determined in this case. The DSIC Rider will remain at zero until Penn Power has added plant through its LTIIP in excess of the claimed amount included in its estimated December 31, 2017 rate base in the present case.

## Customer Impact/Bill Comparisons

As previously noted, if Penn Power's proposed rates were fully implemented, a residential customer of the Company using $1,000 \mathrm{kWh}$ of electricity per month and receiving default service would pay a total monthly bill of $\$ 148.51$. That amount is competitive with the monthly bills of default service customers using $1,000 \mathrm{kWh}$ per month served by the three other major EDCs in Pennsylvania not affiliated with Penn Power, ${ }^{1}$ which range from $\$ 136.37$ to $\$ 156.21$ under those companies' existing rates.

## Conclusion

The Rate Plan reflects the Company's need for adequate and timely rate relief to support the substantial amounts of additional investment it will be required to make to maintain and enhance reliability, replace aging infrastructure, and fully implement its Smart Meter Plan while continuing to furnish its customers the safe, reliable and high-

[^5]quality electric service they have come to expect. Accordingly, it is critically important for both the Company and its customers that the Rate Plan be approved.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT I-A-2:

"Identify the proposed witnesses for all statements and schedules of revenues, expenses, taxes, property, valuation, and the like."

## RESPONSE:

|  | Statement |  |
| :---: | :---: | :---: |
| Witness | Designation | Area of Testimony |
| C. Fullem | Statement 1 | Overview of Distribution Base Rate Case Filing |
| R. D'Angelo | Statement 2 | Revenue Requirements |
| K. Siedt | Statement 3 | Sales \& Revenue Normalization, Rate Design, and Proposed Changes in Tariff |
| T. Dolezal | Statement 4 | Cost of Service |
| J. Adams | Statement 5 | Cash Working Capital |
| L. Gifford | Statement 6 | Unbundled Uncollectible Expense, Smart Meters Cost Savings Baseline, and Smart Meter Revenue Requirements |
| J. Spanos | Statement 7 | Annual and Accrued Depreciation Service Lives |
| P. Ahern | Statement 8 | Cost of Common Equity |
| J. Dipre | Statement 9 | Weighted Average Cost of Capital, Capital Structure, and Cost of Long-Term Debt |

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT I-A-3:

"Provide a single page summary table showing, at present and at proposed rates, together with references to the filing information, the following as claimed for the fully adjusted test year:

Revenues
Operating Expenses
Operating Income
Rate Base
Rate of Return (produced)"

## RESPONSE:

| Total Distribution <br> At $\frac{\text { Present Rates* }}{}$ <br> (\$ millions) | Total Distribution <br> At Proposed Rates* |
| :--- | :--- |
| (\$ millions) |  |


| Revenues | $\$ 94$ | $\$ 135$ |
| :--- | :---: | :---: |
| Operating Expenses | $\$ 80$ | $\$ 99$ |
| Operating Income | $\$ 14$ | $\$ 36$ |
| Rate Base | $\$ 414$ | $\$ 414$ |
| Rate of Return (produced) | $3.32 \%$ | $8.7 \%$ |

*There is an increase in the total revenue requirements because of changes in the Default Service Support Rider of $\$ 1,676$.

# Penn Power Exhibit CVF-4 

Witness: C. V. Fullem
Page 1 of 2

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT I-B-1:

"Provide a corporate history including the dates of original incorporation, subsequent mergers and acquisitions. Indicate all counties, cities and other governmental subdivisions to which service is provided, including service areas outside this Commonwealth, and the total number of customers or billed units in the areas served."

## RESPONSE:

Pennsylvania Power Company ("Penn Power" or "Company") had its origin in Shenango Valley Electric Light Company, incorporated in the Commonwealth of Pennsylvania on December 26, 1890. On September 20, 1917 Sharpsville Electric Light Company was merged into the Shenango Valley Electric Light Company. The name of the Company was changed to Pennsylvania Power Company on April 14, 1926.

The present Penn Power was formed by consolidation and merger of Pennsylvania Power Company, Harmony Electric Company and Peoples Power Company, as approved by Order of the Public Service Commission of the Commonwealth of Pennsylvania on May 26, 1930. Penn Power now consists of various companies acquired through purchase or consolidation and merger, either directly or indirectly through predecessor companies, its most recent acquisition taking place in 1962.

In 1930, following its organization in 1929, The Commonwealth of Southern Corporation acquired by consolidation of predecessor companies a number of common stocks, including all of the common stock of Pennsylvania Power Company. On September 29, 1944 the common stock of Pennsylvania Power Company was transferred by The Commonwealth and Southern Corporation to Ohio Edison Company ("Ohio Edison"), which at that time was also a subsidiary of The Commonwealth and Southern Corporation. On October 1, 1949, the common stock of Ohio Edison Company was distributed in liquidation by The Commonwealth and Southern Corporation to its common stockholders. Thus, Penn Power is a subsidiary of Ohio Edison Company, a registered holding company under the Public Utility Holding Company Act of 1935 .

In addition to the acquisition and merger of several companies into Ohio Edison in 1950, Ohio Edison (and Penn Power as its subsidiary) joined its now-sister companies, The Illuminating Company and The Toledo Edison Company, in 1997 to form the new FirstEnergy Corp. that exists today.

Witness: C. V. Fullem Page 2 of 2
The Company's principal business is the distribution and sale of electricity in western Pennsylvania. Penn Power is affiliated with three other Pennsylvania electric distribution utilities (Metropolitan Edison Company, Pennsylvania Electric Company and West Penn Power Company), as well as five additional sister distribution utilities in New Jersey, Ohio, Maryland and West Virginia apart from Ohio Edison Company. Other affiliates include FirstEnergy Service Company (a service company) and various regulated transmission and unregulated competitive energy companies.

The Company provides retail service to approximately 163,000 customers in all or portions of six counties in the northern and central parts of Pennsylvania. The municipalities which the Company serves are listed in the Company's filed Electric Service Tariff, Electric Pa. P.U.C. No. 36.

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Penn Power Exhibit CVF-5

# FirstEnergy Web Changes Based on PA PUC Requirements for Meter Reading 

## Order:

"The Company shall revise its website and customer education materials within ninety days of the Final Order in this proceeding to explicitly inform its customers, in plain language, of the Company's standard policy to issue bills based on actual meter readings every other month. The Company's website shall also explain, in plain language, that customers may provide actual readings in months when the Company would provide an estimated bill and the procedure for self-readings."

Before July 1, 2015

## 1. Meter Reading (Help)

www.firstenergycorp.com/content/customer/my account/Submit Meter Reading.html


## 2. Submit Meter Reading (My Account)

www.firstenergycorp.com/content/customer/my account/Submit Meter Reading.html

## WestPennPower

Search Site Eearch


|  | M Account Sumat Weter Readra |
| :---: | :---: |
| My Account | Submilithater Peading |
| Pay My Bill |  |
| View ( ${ }^{\text {dy }}$ Bill |  |
| View Payment History View Usage History | You may choose to zubmit your neter reading onhe if it is scheduled to be estimated. A three-day window will be listed on your bill buing this time We wh we your actual suppled reading to calculate your bul only if is entereu within the dates provided If you enter a reading cotside of this vindow we whit prorate your bill using the suppled reading. |
| View Accounts |  |
| Wanage My Account | Account Summary |
| Payment Billing | Account 1000838349234,123 Address |
| Options | Name John Smith |
| Submir Meter Readhag | 123 Street |
| itemized Account Statement | Address Greensburg, PA 15601 |
| $V \mathrm{Vew}$ Bill inserts |  |
| Analyze Usage | Meter Reading |
|  | Severe weather condions or access problems can prevent us from reading your electic moter. If his happens, we issue an estimated bill that is based on your usage history. Your account will be autonatically adjusted when we obtain an attual reading. |
|  | If you have received an estimated bill, yow may use the form below to submil your own metor reading and you may receive an adusted bill in order to provide a feading for your next bill. you must wat to days from the date of your last billing if we do not obtain a reafing oursenves, we will use your reading to caiculate the next bill. |
|  | Please note, ${ }^{\text {d }}$ your bill is catcutated using a reading you suply, it may appear as an "estmated reading" on your statement. |
|  | Additional Intomation: |
|  | * How to Read Your Meter |

# After July 1, 2015 

## 1. Meter Reading (Help)

www.firstenergycorp.com/content/customer/my account/Submit Meter Reading.html

|  | 6\% Wive |
| :---: | :---: |
|  | Help p Billin! |
| Help | Wherer min |
| Managing My Account |  |
| Billing \& Payments | Our meter: depending 1 |
| Billing \& Payment Options | shows wher |
| About Your Bill |  |
| Heter Reading | -040whod |
| Lecating Weter info | Ohio Edision |
| Reacing Load heter |  |
| Feacding theter | The muminati |
| View Weter Reading Schedules | Toiedo Edisic |
| Fates and Tariffs | Met-Ed |
| Creoit Policy | Penelec |
| Bill inserts |  |
| Bill Explanation of Terms | Penn Power |
| Assistance 8 Service Pregrams | West Penn F |
| Making Service | Jersety Cend |
| Requests |  |
| Outages |  |
| Safety | Potomac Ed: |
| Saving Energy | Potomac edt |
| Communication Tools | On the mor |
| Pemnsylvania Smart | based ond |
| Meters | between yo |
| Contact Center | time your at |
| Useful Brochures \& Forms | After the fe compares $\}$ |
|  | usage, the |
|  | associates another rea |

We provide electricity to millions of customers and strive to deliver accurate bills every month. However, if you feel you've received a bill that is not accurate, you can read your meter and compare that reading with the one on your bilt.

To submit your reading, you must enter it within a three-day window, which is listed under the "Messages" section on your bill, the month before a scheduled estimation. We will use your actual supplied reading to calculate your bill only if it is entered within this window. If you enter a reading outside of this window, we will prorate your bill using the reading you prowided.
Unplanned Estimated Meter Readings
At times, severe weather conditions or other unforeseen circumstances might prevent us from reading your meter. On the months your meter is not read, your bill is estimated. You can submit a meter reading ontine or by calling our Contact Center if you prefer not to receive an estimated bill.

## 2. Submit Meter Reading (My Account) www.firstenergycorp.com/content/customer/my account/Submit Meter Reading.html

## WestPennPower

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My Account
Pay Ny Bill
View My Bill
View Payment History
View Usage History
View Accounts
Manage My Account
Payment \& Biling
Optons
Submit Meter Readin

My Account Submit Meter Reading

Itemized Account
Statement
View Bill Inserts
Analyze Usage

Submit Meter Reading
When Should You Submit Your Meter Reading?
West Penn Power issues bills based of actual meter readings every other month (bimonthly). On the months your meter is not read, your bill is estimated. You can submit a meter reading online or by calling our Contact Center if you prefer not to receive an estimated bill.

To submil your reading, you must enter it within a three-day window, which is listed on your bill the month before a scheduled estimation. We will use your actual supplied reading to calculate your bill only if it is entered within this window. If you enter a reading outside of this window, we will prorate your bill using the reading you provided.

Account Summary
Account 100093346235,4113 CYPRESS ST •
Name RICHARD A FRY

Address 4113 CYPRESS ST
BUTLER PA 16001
Unplanned Estimated Meter Readings
Severe weather conditions or access problems can prevent us from reading your electric meter. If this happens, we issue an estimated bill that is based on your usage history. Your account will be automatically adjusted when we abtain an actual reading.

## Additional Imormation:

- How to Read Your Meter
* Meter Reading Work Schedule
- About Your Bill


# PENNSYLVANIA POWER COMPANY 

Docket No. R-2016-2537355

Direct Testimony<br>of

Richard A. D'Angelo

## List of Topics Addressed

Accounting and Financial Data
Budgets
Ratemaking Adjustments to Budgeted Test Year Data
Regulatory Treatment of Storm Damage Costs
Reporting Required Under Settlement Provisions
Other Filing Requirements

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# DIRECT TESTIMONY <br> OF <br> RICHARD A. D'ANGELO 

## I. INTRODUCTION AND PURPOSE

Q. Please state your name and business address.
A. My name is Richard A. D'Angelo. My business address is 2800 Pottsville Pike Reading, Pennsylvania 19605.
Q. By whom are you employed and in what capacity?
A. I am employed by FirstEnergy Service Company as Manager - Rates and Regulatory Affairs - Pennsylvania.
Q. Please describe your responsibilities as Manager - Rates and Regulatory Affairs - Pennsylvania.
A. Generally, the Rates and Regulatory Affairs Department provides regulatory support for Pennsylvania Power Company ("Penn Power" or "Company") and its affiliated Pennsylvania operating companies (collectively referred to as the "Companies"). I am responsible to the Director of Rates \& Regulatory Affairs Pennsylvania for the development, coordination, preparation and presentation of the Companies' accounting and financial data in all their rate-related matters before the Pennsylvania Public Utility Commission ("PUC" or "Commission") and the Federal Energy Regulatory Commission ("FERC"), as well as the preparation of statements and reports addressing, among other things, energy costs, non-utility generation costs, quarterly earnings, and other financial matters.

Also, I am responsible for the administration of the Companies' retail and wholesale tariffs, the development of retail electric rates, and the promulgation of Company policies and practices ensuring uniform tariff administration and interpretation.

## Q. What is your educational and professional background?

A. I obtained a Master's Degree in Business Administration from Pace University in 1976. I am also a graduate of Brooklyn College where I received a Bachelor of Science degree with a major in Economics. I have over thirty-nine years of experience with FirstEnergy Service Company and GPU Energy. My work experience is more fully described in Appendix A to this testimony.

## Q. Have you previously testified in regulatory proceedings?

A. Yes. As set forth in Appendix A, I have previously testified before the Commission, as well as the New Jersey Board of Public Utilities, the New York State Public Service Commission and, at the federal level, before FERC.
Q. On whose behalf are you testifying in this proceeding?
A. I am testifying in this proceeding on behalf of Penn Power.

## Q. Please describe the purpose of your direct testimony.

A. The general purpose of my testimony is to describe and support: (i) various accounting, rate case, and other financial data that are being submitted in response to the filing requirements for an electric utility base rate case proceeding; (ii) the budgeted level of capital and operation and maintenance ("O\&M") expenses; (iii)
ratemaking adjustments to the budgeted test year rate base and operating income statement; (iv) the updated amount of smart meter costs included in base rates; (v) the continuing regulatory treatment of ongoing storm damage costs through the storm reserve established in accordance with the terms and conditions of the Joint Petition for Partial Settlement of Rate Investigation ("2015 Settlement") agreement at Docket No. R-2014-2428744; and (vi) financial reports reflecting actual expenses and rate base additions for the twelve months ended April 30, 2016 as required by Paragraph 6 of the Terms and Condition section of the 2015 Settlement.

## Q. Have you prepared exhibits to accompany your testimony?

A. Yes. Penn Power Exhibits RAD-1 through RAD-67 were prepared by me or under my supervision. My testimony will focus primarily on Penn Power Exhibit RAD-1, which sets forth the Company's proposed rate base at December 31, 2017, i.e., the end of the fully projected future test year ("FPFTY") being utilized in this proceeding, and Penn Power Exhibit RAD-2, which provides a detailed income statement and support for certain normalization and annualization adjustments to the budgeted FPFTY data. The remaining exhibits, for the most part, comprise responses to those Commission base rate filing requirements for which I am responsible.
Q. Please identify those witnesses whose testimony relates to and supports your testimony and exhibits.
A. Kevin M. Siedt (Penn Power Statement No. 3) supports the pro forma levels of energy sales, normalized revenues and late payment charges ("LPCs") utilized to determine the need for rate relief. Mr. Siedt also details the proposed rate design and various rider modifications.

Thomas J. Dolezal (Penn Power Statement No. 4) explains the cost of service study he performed.

Jeffrey L. Adams (Penn Power Statement No. 5) supports the Company's cash working capital requirements.

Laura W. Gifford (Penn Power Statement No. 6) describes and supports the normalization of uncollectible accounts expense. She discusses the availability to the Company of its Smart Meter Technologies Charge Rider when the smart meter capital and O\&M expense revenue requirements included in base rates are exceeded or when billable savings are achieved.

John J. Spanos (Penn Power Statement No. 7) supports the depreciation accrual rates used to develop depreciation expenses for the FPFTY. In particular, he discusses the depreciation studies performed and the procedures utilized for calculating annual depreciation accrual rates using the Equal Life Group ("ELG") method.

Pauline M. Ahern (Penn Power Statement No. 8) develops and supports the Company's requested return on common equity of $11.50 \%$.

Joseph Dipre (Penn Power Statement No. 9) presents the Company's proposed capital structure ratios and weighted average cost of long-term debt.

## II. ACCOUNTING AND FINANCIAL DATA

Q. Does the Company adhere to a system of accounts prescribed by the Commission?
A. Yes. The Company's accounting records are maintained in accordance with the Commission's regulations at 52 Pa . Code $\S 57.41$ et seq. and in conformity with the Uniform System of Accounts prescribed by the FERC and adopted by the Commission.

## Q. Are the accounting records of Penn Power audited?

A. Yes. Penn Power's financial records are audited at least annually by an independent certified public accounting firm. In addition, the FERC conducts periodic compliance audits to confirm that the Company is keeping its accounts in conformity with the Uniform System of Accounts. Apart from conducting its own audits, the staff of the PUC reviews the findings of FERC's audits. Other independent agencies also have the authority to audit the Company's records on a recurring basis, including the Internal Revenue Service and the Securities and Exchange Commission. In addition, the PUC audit staff and the Pennsylvania Department of Revenue staff perform annual audits of the Company's cost recovery rider mechanisms and sales and use tax filings.
Q. Have original cost determinations been made of Penn Power's utility plant?
A. Yes. For Penn Power, an original cost determination was approved by the Commission in the mid-1940's. A subsequent original cost determination was made as part of the Commission's April 6, 1984 Order in Penn Power's base rate proceeding at Docket No. R-832409 (58 PaPUC 305, 60 PUR 4th 593). In that case, the Commission, at the recommendation of the Office of Trial Staff, directed Penn Power to develop its revenue requirement on the basis of its book reserve for depreciation and to convert to the average remaining life method of depreciation and, in so doing, established depreciated original cost plant values to be utilized henceforth.

Since the dates noted above, Penn Power has maintained its continuing property records in accordance with the approved plans.

## III. BUDGETS

Q. Mr. D'Angelo, are you familiar with the process by which Penn Power budgets future capital expenditures, revenues and operating expenses?
A. Yes, I am. In general, the budgeting process involves: (1) the establishment of documented and well-supported goals, objectives and guidelines; (2) intensive reviews and refinements by all levels of management and functional staffs; and (3) careful scrutiny and ultimate approval by appropriate senior management.

## Q. How were the Company's budgets utilized to develop the claimed revenue requirements in this proceeding?

A. They provided the starting point for determining the claimed rate base at December 31, 2017 and operating income for the twelve months ending that date.

Specifically, I consolidated budgeted monthly data for the months of January through December from the forecast to develop the "Per Budget" amounts set forth in Column 1 of each of Penn Power Exhibits RAD-1 and RAD-2.

## Q. Did you update any of the budgeted data for purposes of this rate filing?

A. Yes. Since the completion of the capital budget, certain revisions were made to the forecasted capital structure and those changes have been reflected by Mr. Dipre in his testimony and exhibits.

## Q. What opinion, if any, do you have as to the budgeted levels of capital and expense?

A. In my opinion, the budgeted levels of capital and expense are reasonable estimates of what Penn Power can expect to experience during the FPFTY prior to recognition of the appropriate ratemaking adjustments reflected in Penn Power Exhibits RAD-1 and RAD-2.

## IV. RATEMAKING ADJUSTMENTS TO BUDGETED TEST YEAR DATA

## A. Rate Base At December 31, 2017

Q. Please generally describe Penn Power Exhibit RAD-1.
A. This exhibit sets forth Penn Power's proposed overall distribution rate base and smart meter rate base at December 31, 2017. Column 1 on page 1 of Penn Power Exhibit RAD-1 provides budgeted amounts; column 2 adjusts various components; and column 3 reflects the adjusted rate base. The remaining
columns on page 1 break the adjusted rate base into separate distribution and smart meter rate base elements.

The adjustments to the budgeted rate base data, along with a detailed explanation of each adjustment, are contained on pages 2 through 11 of Penn Power Exhibit RAD-1 and are referenced on page 1 by adjustment number. The adjustments are designed to:

- Remove asset retirement costs ("ARCs");
- Reflect adjusted depreciation reserves applicable to rate base;
- Reflect inclusion of light emitting diode ("LED") street lights in accordance with the Company's latest work plan;
- Eliminate American Transmission Systems, Inc. ("ATSI") plant and depreciation reserves in accordance with the settlement approved at Docket No. A-110450F0016 ("ATSI Settlement") and eliminate transmission easements and land;
- Eliminate plant held for future use;
- Reflect in base rates the smart meter investment and related depreciation reserves;
- Reflect cash working capital requirements;
- Reflect material and supplies ("M\&S") inventories;
- Reflect in rate base the additional unrecovered legacy meter investment which was transferred from a plant in service account to a regulatory asset account;
- Reflect the storm reserve balance established in the 2015 Settlement as an addition to rate base; and
- Adjust accumulated deferred income taxes - liberalized depreciation.


## Q. Please describe Adjustment No. 1 - Electric Plant in Service.

A. This adjustment eliminates from plant in service accounts: (1) ARCs; (2) transmission easements and land; and (3) ATSI plant in accordance with the ATSI Settlement. The adjustment also reflects the inclusion of LED street lights in accordance with the Company's latest work plan.

## Q. What are ARCs?

A. ARCs apply to all legal obligations associated with the retirement of long-lived assets that result from construction under Financial Account Standards Board Statement No. 143 ("FAS-143"). FAS-143 requires that the fair value of a liability for an asset's retirement obligation ("ARO") be recognized in the period in which it is incurred. The associated ARCs are capitalized as part of the carrying amount of the long-lived assets. ARCs increase the carrying amount of a long-lived asset when a liability for an ARO is recognized and is depreciated over the life of the asset. ARCs and related depreciation reserve are excluded from rate base, while the associated depreciation expense is excluded from the income statement. This treatment is in accordance with 18 CFR Chapter $1 \S 35.18$, Asset Retirement Obligations.

## Q. What is Penn Power's position on plant held for future use?

A. Historically, Penn Power claimed in rate base those investments in plant held for future use that were expected to be utilized within ten years of the test period. The ten-year window reflected the Commission's prior policy of allowing such investments where definitive plans for utilizing the investment within the ten-year period existed. Under current Commission policy, investments in plant held for
future use are excluded from rate base, but allowed to accrue carrying charges provided they satisfy the ten-year test. Adjustment No. 2 is designed to comply with that policy.

## Q. Please describe Adjustment No. 3 - Depreciation Reserve - Electric Plant in Service.

A. This adjustment removes from the budgeted depreciation reserve those portions attributable to the plant eliminated in Adjustment No. 1.
Q. What is the purpose of Adjustment No. 4 - Cash Working Capital?
A. This adjustment includes the cash working capital requirements described by Mr . Adams in Penn Power Statement No. 5 and computed by him in Penn Power Exhibit JLA-1.

## Q. Please describe Adjustment No. 5-M\&S Inventories.

A. This adjustment includes the Company's allocated portion of the materials and supplies inventory maintained by the FirstEnergy Service Company at December 31, 2015. The historic test year ("HTY") year-end balance was used because the Company does not budget M\&S inventories. Penn Power Exhibit RAD-13 provides a monthly breakdown of M\&S inventories for the thirteen months ended December 31, 2015.

## Q. Please describe Adjustment No. 6 - Legacy Meters.

A. In its March 6, 2014 Order at Docket Nos. M-2013-2341990, et al., approving the Companies' Smart Meter Deployment Plans, the Commission directed that the
cost of removing legacy meters (i.e., meters to be replaced by the installation of smart meters) be charged to the regulatory asset account containing the legacy meters and recovered, along with the unrecovered investment in those meters, over the remaining lives of those meters. This adjustment adds back to rate base the unamortized regulatory asset account, net of accrued depreciation and amortization, plus the estimated cost of removal. The 2015 Settlement established the recovery period for legacy meters at five years.

## Q. What is the purpose of Adjustment No. 7 - Deferred Storm Damage Expenses?

A. The 2015 Settlement provided for a storm reserve account to be established and maintained on the Company's balance sheet. The storm reserve account balance has been included in rate base. Details of year-by-year storm costs for the FPFTY, the future test year ("FTY"), the HTY and four previous calendar years appear in Penn Power Exhibit RAD-63.

## Q. Please describe Adjustment No. 8-Accumulated Deferred Income Taxes Liberalized Depreciation.

A. Adjustment No. 8 adjusts the budgeted deferred tax balances for liberalized depreciation, excluding the impact of Statement of Financial Accounting Standards No. 109 deferrals, to eliminate: (1) other excludable items (capital leases); (2) deferred income taxes associated with ground leases; and (3) remaining state income tax deferrals, including the benefit of those income taxes.
Q. After taking into account the foregoing adjustments, what is Penn Power's claimed distribution rate base?
A. Penn Power's claimed distribution rate base equals $\$ 413,519,000$, of which $\$ 35,280,000$ represents the Company's smart meter investment.
Q. What is contained on page 11 of Penn Power Exhibit RAD-1?
A. This page sets forth Penn Power's claimed overall rate of return, including its proposed capital structure ratio, weighted average cost of long-term debt, and requested return on common equity. Those findings, which are presented and supported by Mr. Dipre and Ms. Ahern, are summarized below:

| Penn Power | Capital Structure <br> Ratio | Cost Rate | Weighted Cost <br> Rate |
| :--- | :---: | :---: | :---: |
| Long-Term Debt | $49.9 \%$ |  | $5.88 \%$ |
| -- | $2.94 \%$ |  |  |
| Preferred Stock | $\underline{50.1 \%}$ | $\underline{-1.5 \%}$ | $\underline{5.76 \%}$ |
| Common Equity | $100.0 \%$ |  | $8.70 \%$ |

## B. Statement Of Operating Income For The Twelve Months Ending December 31, 2017

## Q. What is contained in Penn Power Exhibit RAD-2?

A. Penn Power Exhibit RAD-2 contains the budgeted and pro forma statements of net utility operating income for the FPFTY ending December 31, 2017. The first three pages summarize the budgeted and adjusted results of operations at present and proposed rates; the next three pages break down the revenue requirement by component part (e.g., distribution, smart meter and total distribution); and the remaining pages, starting at page 7 , document the specific adjustments made to normalize and annualize the budgeted data.

The adjustments are designed to:

- Annualize the number of customers, usage and sales at FPFTY yearend levels and roll in Distribution System Improvement Charge ("DSIC") revenues;
- Roll into base rates revenues associated with the State Tax Adjustment Surcharge ("STAS");
- Eliminate DSIC rider revenues;
- Eliminate non-jurisdictional "Other Operating Revenues," as applicable, and normalize LPC revenues;
- Annualize payroll and employee benefit costs to reflect anticipated employee levels and benefits;
- Calculate net negative salvage based on a five-year average of net salvage, consistent with Commission practice;
- Normalize pension expense to reflect a ten-year average of cash contributions consistent with the approach approved by the Commission in prior proceedings;
- Normalize other post-employment benefits ("OPEBs") to reflect the actual ongoing level of service costs charged to expense consistent with the approach used in the past with Commission approval;
- Normalize depreciation accruals to reflect utility plant in service as of the end of the FPFTY using ELG depreciation rates;
- Normalize rate case expenses to reflect a two-year cost recovery period;
- Normalize O\&M expenses associated with serving new customers;
- Normalize customer accounts expenses for interest on customer deposits;
- Normalize safety-related O\&M expenses;
- Amortize the investments in "legacy" meters made after the Company's last base rate case that are being replaced by smart meters over the remaining thirty-nine month amortization period; and
- Adjust taxes other than income.
Q. Is Penn Power seeking to recover any acquisition premium or other transaction costs associated with the FirstEnergy/GPU or FirstEnergy/Allegheny mergers as part of the revenue requirement in this case?
A. No. There is no provision in the budget for, nor has any adjustment been made to include, an amortization of the acquisition premiums or other transaction costs associated with either of those mergers.


## Q. Please describe Adjustment No. 1 - Base Operating Revenues.

A. This is an adjustment to base operating revenues to: (1) annualize changes in the number of customers; (2) roll in STAS revenues; (3) roll in DSIC revenues; (4) normalize the sales and revenue effects of energy efficiency measures implemented or to be implemented under the Company's Energy Efficiency and Conservation Phase III Plan ${ }^{1}$ and to reflect the impact of behind-the-meter generation; (5) normalize other revenue; and (6) eliminate unbilled revenue. Parts (1) through (5) of this adjustment are discussed in detail by Mr. Siedt in Penn Power Statement No. 3. I address item (6). By way of background, unbilled revenue has been included in the budget projection to reflect revenues for service rendered but not billed as of the end of each accounting period. Items that produce unbilled revenue include such things as increases in rates and increases in the number of customers. In developing pro forma revenues for ratemaking purposes, separate adjustments are being made to annualize and normalize the revenue effect of such factors. Therefore, to eliminate any duplication of revenue

[^6]for ratemaking purposes, unbilled revenue must be eliminated, which is done in Adjustment No. 1.

## Q. Please describe Adjustment No. 2 - STAS Revenues.

A. This adjustment eliminates budgeted test year revenues projected to be billed under the STAS Rider. Because all state taxes are included in distribution base rate revenue requirement, no revenues will be billed under the STAS Rider. As the Company did not forecast any charge under its STAS Rider, the adjustment is zero.

## Q. Please describe Adjustment No. 3 - DSIC Revenues.

A. This adjustment eliminates revenues projected to be billed under the Company's DSIC Rider as currently proposed and pending before the Commission. ${ }^{2}$ Because all of the FPFTY capital additions contemplated to be associated with the DSIC Rider are included in the Company's distribution base rate revenue requirement, no costs related to those additions will be billed under the DSIC Rider if the proposed rates are approved as filed.
Q. Please describe Adjustment No. 4 - Other Operating Revenues.
A. This adjustment: (1) normalizes LPC revenues; and (2) eliminates projected ground lease revenues associated with ATSI.

## Q. What is the purpose of Adjustment No. 5-Distribution Expense?

[^7]A. This adjustment: (1) normalizes Penn Power's and FirstEnergy Service Company's payroll expense to reflect year-end wage and employee levels; (2) includes the amortization of gains or losses on reacquired debt; and (3) normalizes additional $O \& M$ expenses for contractor safety requests.

Supporting Schedule No. 1 develops the payroll expense to reflect FPFTY yearend wage and employee levels for both the Company and FirstEnergy Service Company employees. The O\&M payroll expense for the Company and FirstEnergy Service Company is then allocated to individual Price To Compare, Transmission, Distribution, Customer Accounts, Customer Service and Administrative and General components. These amounts are utilized in subsequent adjustments.

## Q. Please describe Adjustment No. 6-Customer Accounts Expense.

A. Customer Accounts expense is adjusted to reflect FPFTY year-end wage and employee levels for the Company and FirstEnergy Service Company personnel (developed in Adjustment No. 5, Supporting Schedule No. 1), increased costs associated with added new customers, and interest on customer deposits.

Supporting Schedule No. 1 develops the Other O\&M expenses associated with serving new customers reflected in Adjustment No. 1. The Commission has previously approved an adjustment to customer accounts expense in recognition of this increased cost. This cost is estimated by determining the ratio of nonpayroll customer account expense to distribution revenues from customers and
applying this ratio to the additional revenue received from the additional customers.

Supporting Schedule No. 2 captures the cost of interest Penn Power is required to pay on residential and non-residential customer deposits given that the customer deposits are deducted from rate base.

## Q. What is the purpose of Adjustment No. 7-Customer Service and Information Expense?

A. Customer Service and Information Expense is adjusted to reflect FPFTY year-end wage and employee levels for the Company and FirstEnergy Service Company that were developed in Adjustment No. 5, Supporting Schedule No. 1.
Q. Please describe Adjustment No. 8 - Administrative and General Expense.
A. Administrative and General Expense is adjusted to reflect: (1) FPFTY year-end wage and employee levels for the Company and FirstEnergy Service Company that were developed in Adjustment No. 5, Supporting Schedule No. 1; (2) OPEBs at the service cost level; (3) pension expense at the ten-year average cash contribution level; (4) employee benefit expense at FPFTY year-end personal and wage levels; and (5) inclusion of rate case expenses incurred in the current proceeding normalized over a two-year period.

Supporting Schedule No. 1 adjusts the budgeted level of OPEB expenses to the service cost level. The budgeted OPEB expense consists of the current service cost, adjustments to prior years' service costs, and the financing component. The
service cost represents the actuarial present value of benefit liabilities accrued under the plan benefit formula for services rendered during the test year. Inclusion of the service cost in rates provides for recovery of the current cost of benefits earned by plan participants. Any excess or shortfall related to the expected return on plan assets is excluded because its inclusion would artificially reduce or increase total costs and result in the recovery of more or less than the normal ongoing cost of service. The adjustment to restate OPEB expense at the current service cost level was originally adopted by the Commission at Docket Nos. R-00061366 and R-00061367 and included in the 2015 Settlement.

Supporting Schedule No. 2 normalizes the budgeted level of pension expense to appropriately reflect a ten-year historical average level of actual cash contributions to the pension plan under the methodology that was originally adopted by the Commission at Docket Nos. R-00061366 and R-00061367 and included in the 2015 Settlement.

Supporting Schedule No. 3 uses the O\&M payroll expense developed in Adjustment No. 5, Supporting Schedule No. 1 to normalize the employee benefits costs charged to Administrative and General expense.

## Q. Please describe Adjustment No. 9 - Depreciation Expense.

A. Budgeted Depreciation Expense is adjusted: (1) to reflect the application of ELG depreciation rates to claimed plant in service; and (2) to restate the cost of removal/salvage expense on a five-year average basis removing the component associated with legacy meters consistent with Commission practice. The
application of ELG depreciation rates is discussed in detail by Mr. Spanos in Penn Power Statement No. 7.

## Q. Please describe Adjustment No. 10 - Amortization Expense.

A. Amortization expenses included in the budget were adjusted to: (1) eliminate smart meter amortization; and (2) include amortization for additional unrecovered legacy meters over the remaining thirty-nine month amortization period.

Supporting Schedule No. 1 develops the appropriate annual amortization allowances for the additional legacy meters. In its March 6, 2014 Order at Docket No. M-2013-2341993, the Commission authorized the Company to create a regulatory asset for its existing meters currently in place to be replaced by smart meters referring to all such meters as legacy meters.

## Q. Please describe Adjustment No. 11 - Taxes Other Than Income Taxes.

A. Taxes Other Than Income Taxes included in the budget were adjusted to: (1) reflect Pennsylvania gross receipts tax ("GRT") at $5.9 \%$ for normalized sales revenues; and (2) adjust payroll tax expense based on annualized payroll and employee levels.

Supporting Schedule No. 1 shows the calculation of Federal Insurance Contributions Act tax associated with the annualized O\&M payroll expense developed in Adjustment No. 5, Supporting Schedule No. 1.

## Q. Please describe briefly the computation of federal and state income taxes as reflected in Adjustment No. 12.

A. This schedule begins with the computation of the Company's $\$ 23,506,000$ net operating income before income taxes from data shown on page 1 of Penn Power Exhibit RAD-2 (line 6 less line 15 of column 3 on page 1). The revenues and expenses used to calculate the federal and state income taxes in Adjustment No. 12 are divided into columns corresponding to the components shown on pages 1-3 of this exhibit (Distribution, Smart Meter, Price To Compare, Universal Service, Energy Efficiency, Default Service Support, and Solar) to derive net operating income before income taxes. From that amount, interest was deducted. Interest was calculated by multiplying the adjusted rate base by the weighted average cost of long-term debt. The resulting figure is net income before income taxes and is shown on line 10.

Three adjustments (lines 11, 13 and 15) were made to increase taxable income. The first reflects the five-year amortization of net salvage. The second increases net income by adding back the amortization amount for legacy meters, while the third increases net income by adding back the cash pension contribution included in pro forma O\&M expenses. This is because neither of these items represent a current deduction for tax purposes.

The remaining two adjustments (lines 12 and 14) are deductions from taxable income. The first adjusts depreciation to reflect accelerated depreciation, where permitted, on eligible property as of December 31, 2017. The second reflects cost of removal $\$ 2,914,000$ that may be claimed as a current deduction for tax purposes. The net amount of these adjustments is included in the net income before federal and state income taxes to determine the income subject to state
income tax. State taxable income is adjusted for limitations on federal bonus tax depreciation that is allowed for state income tax purposes. Detailed calculations of the limitations of federal bonus tax depreciation allowed for state income tax purposes are provided in Penn Power Exhibit RAD-65. The adjustment to taxable income is reflected on lines 18 through 20. The state and federal income tax calculations then follow. The state and federal income taxes are computed at the statutory rates of $9.99 \%$ and $35 \%$, respectively.

Supporting Schedule No. 1 allocates tax depreciation into cost of removal, smart meter and distribution.

## Q. Please describe Adjustment No. 13 - Provision for Deferred Income Taxes.

A. This adjustment eliminates from the budgeted Provision for Deferred Income Taxes all deferred taxes except the federal deferred taxes associated with liberalized depreciation. Additionally, federal deferred taxes for liberalized depreciation are adjusted to reflect plant in service as of the end of the FPFTY. Detailed calculations of the federal deferrals are provided in Penn Power Exhibit RAD-41.

The computation for post-1969 through 1980 "expansion" property is based on the difference between accelerated depreciation (calculated using the Sum of the Years Digits method and taxable lives based on the Asset Depreciation Range) and straight-line depreciation using "guideline" lives. The computation for 1981 and subsequent property begins by determining the difference between tax depreciation using the Accelerated Cost Recovery System and the Modified

Accelerated Cost Recovery System and straight-line depreciation (using book rates and tax basis).

The federal tax rate of $35 \%$ was applied to the amounts calculated in the manner described above and compared to the tax to be booked during the test year to determine the adjustment to deferred taxes.

The state deferred taxes associated with liberalized depreciation pertain only to FERC jurisdictional property and have been eliminated. The deferred taxes associated with other miscellaneous items have been eliminated because the associated income has not been included in the calculation of taxable income used to compute federal and state taxes included in the Company's revenue requirement.

## Q. What is Penn Power's claimed additional distribution revenue requirement?

A. Reflecting all of the adjustments to the budget data discussed above, Pemn Power's net utility operating income for the FPFTY at present rates is \$13,742,000 (page 1 , column 6 , line 24 ). This amount, compared to the $\$ 35,965,000$ shown on page 3 , column 25 , line 24 , shows that $\$ 22,222,000$ in additional return is required for Penn Power to achieve an overall return of $8.70 \%$ on its distribution rate base. This translates into an additional base rate revenue requirement, or revenue deficiency under existing rates, of $\$ 40,357,000$, as shown on page 2 , column 15 , line 6.

## Q. What is contained in Penn Power Exhibits RAD-3, RAD-4, RAD-5 and RAD$6 ?$

A. Penn Power Exhibits RAD-3 and RAD-5 set forth the Company's rate base at December 31, 2016 and 2015, respectively. Penn Power Exhibits RAD-4 and RAD-6 set forth the Company's operating income statements with normalizing adjustments for the FTY (twelve months ending December 31, 2016) and the HTY (twelve months ended December 31, 2015), respectively.

While the specific numbers differ, these two sets of exhibits are identical in format and concept to Penn Power Exhibits RAD-1 and RAD-2 and the description of the filing format in my testimony applies equally to them.

## V. REGULATORY TREATMENT OF STORM DAMAGE COSTS THROUGH A STORM RESERVE

## Q. How has the Commission historically treated storm damage costs for ratemaking purposes?

A. As in the case of other operating expenses, utilities have been allowed to include a normal, ongoing level of storm damage costs in their base rate revenue requirement. In addition, utilities have been permitted to request authorization to defer, for accounting purposes, extraordinary storm damage costs, with the understanding that rate recovery of the deferred costs would be addressed in a future base rate proceeding. The recovery of ongoing storm damage costs through the storm reserve was established in the Terms and Conditions, paragraph 5 of the 2015 Settlement. In accordance with the Commission's policy and prior rulings regarding the ratemaking treatment of extraordinary storm damage, the Company has included in its FPFTY revenue requirement a normalized level of storm damage costs (see Penn Power Exhibits RAD-1 and RAD-2).

## Q. Is Penn Power proposing any changes to the recovery of storm damage expense in this filing?

A. No. Penn Power is proposing to continue recovering storm damage costs, excluding expenses related to damage from extraordinary storm events, through the storm reserve mechanism established in the 2015 Settlement at the same level established in that base rate proceeding. The storm reserve has only been in place since May 2015 but appears to be working as the Settlement parties envisioned. Therefore, the budget reflects a booking to the amortization account of the difference between the storm reserve revenues, less GRT, and the base line storm O\&M expenses reflected in Penn Power Exhibit RAD-63 for the FPFTY.
Q. What is the normalized, ongoing amount of storm damage $O \& M$ expense budgeted for the twelve months ending December 31, 2017 ?
A. Penn Power Exhibit RAD-63 sets forth budgeted storm damage expense for the twelve months ending each of December 31, 2017 and December 31, 2016, and actual storm damage expense for the twelve months ended December 31, 2015, along with data for an additional four calendar years. The level of budgeted storm damage O\&M expense normally recovered through base rates is $\$ 936,000$ at Penn Power. However, Penn Power's income statement (Penn Power Exhibit RAD-2) includes the normalized level of storm damage expenses excluding extraordinary storms in the amount contained in the 2015 Settlement. This additional amount of storm damage costs, along with other amortization amounts, appears on the amortization line of Penn Power Exhibit RAD-2. Therefore, the Company is
proposing to continue the same revenue requirement level established in that proceeding, or \$1 million.

## VI. REPORTING REQUIRED UNDER PROVISIONS OF THE 2015 SETTLEMENT AT DOCKET NO. R-2014-2428744

## Q. Was Penn Power required to provide any financial reports as part of its next base rate proceeding?

A. Yes. The 2015 Settlement requires the Company, in its next base rate proceeding, to file a comparison of its actual expenses and rate base additions for the twelve months ended April 30, 2016 to its projections originally filed at Docket No. R-2014-2428744. The Joint Petitioners recognized that the 2015 Settlement represented a black box settlement and consequently reflected compromises by all parties on the various issues raised during the proceeding. Except for specific terms and conditions addressed within the 2015 Settlement document itself, there were no findings made by the Commission for income statement or rate base purposes.

## Q. What is contained in Penn Power Exhibit RAD-66?

A. Penn Power Exhibit RAD-66 contains a comparison of actual expenses for the twelve months ended April 30, 2016 compared to the projections originally filed at Docket No. R-2014-2428744. The format utilized is the same as developed for Penn Power Exhibit RAD-55, which reflects a comparison of revenues and expenses in an income statement format by FERC account number. At the time of this filing, actual information was only available through February 29, 2016. Therefore, Penn Power Exhibit RAD-66 contains ten months of actual
information and two months of forecasted data. Once March and April 2016 actual accounting data become available, Penn Power Exhibit RAD-66 will be updated to incorporate actual expenses for the twelve months ended April 30, 2016.

## Q. What is contained in Penn Power Exhibit RAD-67?

A. Penn Power Exhibit RAD-67 contains a comparison of rate base additions for the twelve months ended April 30, 2016 compared to the projections originally filed at Docket No. R-2014-2428744. The format utilized is the same as developed for Penn Power Exhibit RAD-46, which reflects a comparison of plant in service additions by FERC account number. As in the case of Penn Power Exhibit RAD66, Penn Power Exhibit RAD-67 contains ten months of actual information and two months of forecasted data. Once March and April 2016 actual accounting data become available, Penn Power Exhibit RAD-67 will similarly be updated to incorporate actual rate base additions for the twelve months ended April 30, 2016.

## VII. OTHER FILING REQUIREMENTS

## Q. Would you briefly describe Penn Power Exhibits RAD-7 through RAD-62?

A. Yes. 52 Pa. Code $\S 53.53$ sets forth the information that must be with a proposed general rate increase filing. Penn Power Exhibits RAD-7 through RAD-60 contain responses to various data requests assigned to me. Each exhibit cites the specific filing requirement to which it is responding and is followed by the Company's response.

Penn Power Exhibit RAD-61 lists the types of advertising included in expenses for the test year and the immediately preceding year, in accordance with Section 1316(c) of the Public Utility Code, 66 Pa.C.S. § 1316(c). Penn Power Exhibit RAD-62 responds to the PUC Statement of Policy at 52 Pa . Code $\S 69.36$, entitled "Performance criteria regarding energy supply alternatives." This Statement of Policy identifies six areas for review in rate proceedings pertaining to an electric utility's efforts to encourage the development of cost effective energy supply alternatives. Penn Power Exhibit RAD-62 addresses five of the six identified areas. Mr. Siedt addresses the remaining area in Penn Power Statement No. 3.

## VIII. CONCLUSION

## Q. Please summarize your direct testimony and recommendations.

A. Inclusive of the roll-in of smart meter costs, Penn Power has supported an increase in base distribution rate revenue requirements of $\$ 40,357,000$, of which $\$(91,000)$ is associated with smart meter costs. The total revenue requirement associated with the Smart Meter Deployment Plan reflected in proposed rates is $\$ 12,392,000$.

Finally, and as previously discussed, Penn Power is proposing to continue its storm damage reserve mechanism established in the 2015 Settlement at the same revenue requirement level established in that proceeding, or $\$ 1$ million.
Q. Mr. D'Angelo, does this complete your direct testimony?
A. Yes, it does.

DB1/87380996.3

Penn Power Statement No. 2
Witness: R. A. D'Angelo
Appendix A
Page 1 of 3

Resume: Education and Experience of Richard A. D'Angelo

## Education:

1972 Bachelor of Science Degree in Economics - Brooklyn College
1976 Master of Business Administration Degree in Finance - Pace University

## Experience:

| 9/72-11/76 | Accountant and Supervisor - Bankers Trust Company <br> $11 / 76-2 / 81$ |
| :--- | :--- |
| Employed as Accountant within Regulatory Accounting Area - |  |
| $2 / 81-2 / 82$ | Metropolitan Edison Company ("Met-Ed") <br> Senior Accountant within Regulatory Accounting Area with special <br> emphasis on rate-related matters (Met-Ed) |
| $2 / 82-2 / 83$ | Supervisor - Rates and Financing (Met-Ed) <br> $2 / 83-3 / 95$ |
| Manager - Rate Revenue Requirements within the Rate Department <br> (Met-Ed) |  |
| $3 / 95-8 / 96$ | Manager - Regulatory Liaison within the Regulatory Affairs and <br> Pricing Department (Met-Ed/Penelec) |
| $11 / 06-11 / 01$ | Manager - Rate Activity within the Rate Department (GPU Energy) <br> Manager - Rates \& Regulatory Affairs- Pennsylvania (FirstEnergy |
|  | Mervice Company) |

Prepared and presented testimony in the following rate-related cases:
Pa. P.U.C. Cases: Docket Nos. R-2014-2428745
R-2014-2428743
R-2014-2427744
R-2014-2428742
P-2011-2273650
P-2011-2273668
P-2011-2273669
P-2011-2273670
A-2010-2176520
A-2010-2176732
P-2010-2157862
P-2009-2093053
P-2009-2093054
P-00072305
P-00072259

Penn Power Statement No. 2
Witness: R. A. D'Angelo
Appendix A
Page 2 of 3

# Penn Power Statement No. 2 

Witness: R. A. D'Angelo
Appendix A Page 3 of 3

> M-FACE 8506
> M-FACE 8404
> M-FACE 8203
> M-FACE 8104
> M-870171 C001

NJ B.P.U Case: Docket No. EO03121014
Docket No. ER12111052

NY P.S.C. Case: Case No. 11-E-0594

FERC Cases: Docket Nos. ER-90-388-000 and ER-90-522-000
ER-87-34-001
ER-83-173

Assisted in development and preparation in the following rate cases:
Pa. P.U.C. Cases: Docket Nos. R-811601
R-80051196
R.I.D. 626

FERC Case: Docket No. ER-79-58
Case 11-E-0594


$$
\begin{aligned}
& \begin{array}{c}
\text { PENNSYLVANIA POWER COMPANY } \\
\text { Rate Base At Original Cost } \\
\text { Normalized To Year-End Conditions at December 31, } 2017 \\
\text { ( } \$ 000 \text { ) }
\end{array}
\end{aligned}
$$

> Total Rate Base
> $\begin{array}{lll}20 & \text { Pro forma return at present rates (PA Distribution) } & \$ \\ 21 & \\ 22 & \text { Pro forma return at proposed rates (PA Distribution) } & \$\end{array}$

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 1
(\$000)

Adjustment of Electric Plant in Service

To adjust the budgeted gross plant in service to (1) eliminate the Asset Retirement Cost ("ARC"); (2) to include LED Street Lights. (3) eliminate Transmission easements and land. (4) eliminate American Transmission Systems, inc. ("ATSI") plant in accordance with the settlement agreement at Docket A-110450F0016. An asset retirement cost ("ARC") increases the carrying amount of a long-lived asset when a liability for an asset retirement obligation ("ARO") is recognized. The ARC is depreciated over the life of the asset. The ARC and related reserve are excluded from Rate Base, while the associated depreciation expense is excluded from the Income Statement. This treatment is in accordance with 18 CFR Chapter $1 \S 35.18$ Asset retirement obligations.

Budgeted Plant in Service at 12/31/2017 (Exhibit RAD-46, Altach. B, p. 2)

Normalizing adjustment:
Eliminate ARC (Exhibit RAD-46, Attach. B, p. 2)

Increase LED Street Lighting (Exhibit RAD-46, Attach. B, p. 2)

Eliminate Transmission easements and land (Exhibit RAD-46, Attach. B, p. 1)

Eliminate ATSI Plant from 1999 Agreement (Exhibit RAD-46, Attach. B, p. 2)
(775)

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 2 (\$000)

Adjustment of Plant Held for Future Use

To adjust Plant Held for Future Use. As an alternative to rate base treatment, the Company is requesting the allowance of deferred carrying charges on any current or future investments in Plant Held for Future Use with definitive plans of utilization within a ten-year period. This is consistent with long-standing Commission policy.

Line

No.

Per budget Plant Held for Future Use at 12/31/2017
Normalizing adjustment:

Eliminate Plant Held for Future Use

Amount
(1)
$\$$
$(1,764)$
$\qquad$

## PENNSYLVANIA POWER COMPANY

## Normalization Adjustment No. 3

 (\$000)
## Adjustment of Depreciation Reserves - Plant In Service

To adjust the budgeted gross plant in service to (1) eliminate the Asset Retirement Cost ("ARC"); and (2) eliminate American Transmission Systems, Inc. ("ATSI") plant in accordance with the settlement agreement at Docket A-110450F0016. An asset retirement cost ("ARC") increases the carrying amount of a long-lived asset when a liability for an asset retirement obligation ("ARO") is recognized. The ARC is depreciated over the life of the asset. The ARC and related reserve are excluded from Rate Base, while the associated depreciation expense is excluded from the Income Statement. This treatment is in accordance with 18 CFR Chapter 1 § 35.18 Asset retirement obligations.

| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | Description | Adjustments | Depreciation Reserves Plant in Service |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  | (1) | (2) |  |
| 1 | Plant in Service depreciation reserves at 12/31/2017 (Exhibit RAD-46, Attach. B, p. 3) |  | \$ | 200,554 |
|  | Normalizing adjustments: |  |  |  |
| 2 | Eliminate ARC (Exhibit RAD-46, Attach. B, p. 3) | (26) |  |  |
| 3 | Eliminate ATSI reserve per 1999 Agreement (Exhibit RAD-46, Attach. B, p. 3) | $(667)$ |  |  |
| 4 | Normalization Adjustment (Lines $2+3$ ) |  |  | (693) |
| 5 | Plant in Service depreciation reserves at 12/31/2017, as adjusted |  | \$ | 199,862 |

# PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 4 (\$000) 

## Adjustment of Cash Working Capital

To recognize cash working capital at year-end level. This adjustment is supported by Penn Power Witness Mr. J.L. Adams in Statement No. 5.

Line
No.

Normalizing adjustment:

Cash working capital normalized to year-end

Cash working capital per budget

4 Normalization Adjustment

Cash Working Capital
(1) (2)
\$
$\qquad$ -

$\$$
28,906

# PENNSYLVANIA POWER COMPANY 

Normalization Adjustment No. 5 (\$000)

## Adjustment of Material and Supplies Inventories

To recognize the Company's distribution portion of FE Service material and services ("M\&S") inventory levels projected at 12/31/2017


# PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 6 (\$000) 

## Adjustment for Legacy Meters

To include legacy meters in a regulatory asset as ordered in the Final Order on the Smart Meter Deployment Plan at Docket No. M-2013-2341993.

| Line No. | Description | Legacy Meters |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  | (2) |
| 1 | Net legacy meters in regulatory asset at 12/31/2017 | \$ |  |  |
| 2 | Legacy meter normalized to year-end (Exhibit RAD-64) | 5,508 |  |  |
| 3 | Normalization Adjustment |  |  | 5,508 |
| 4 | Net legacy meters in regulatory asset at 12/31/2017, as adjusted |  | \$ | 5,508 |

# Penn Power Exhibit RAD-1 <br> Witness: R. A. D'Angelo <br> Page 8 

PENNSYLVANIA POWER COMPANY
Normalization Adjustment No. 7 (\$000)

## Adjustment for Deferred Storm Damage Epenses

Line

Description

Unamortized storm damage deferral expense per budget at 12/31/2017

Storm Reserve Balance

Normalization Adjustment

Storm damage deferral expense at 12/31/2017, as adjusted

Storms
(1) (2)
\$ - \$

1,425
\$ 1,425


Normalization Adjustment No. 9 (\$000)

Adjustment of Operating Reserves

Not Applicable

PENNSYLVANIA POWER COMPANY
Rate of Return at December 31, 2017

| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ |  | Exhibit JD-24 Capital Amounts |  | Capital Ratios | $\begin{aligned} & \text { Cost } \\ & \text { Rate } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Weighted } \\ \text { Cost Rate } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (2) | (3) |  |
| 1 | Total long-term debt |  | 151,981 | 49.9\% | 5.88\% | 2.94\% |
| 2 | Total preferred stock |  | - | 0.00\% | 0.00\% | 0.00\% |
| 3 | Total common equity |  | 152,390 | 50.1\% | 11.50\% | 5.76\% |
| 4 | Total capitalization | \$ | 304,371 | 100.00\% |  | 8.70\% |



Penn Power Exhibit RAD-2
Witness: R. A. D'Angelo Page 2




## PENNSYLVANIA POWER COMPANY

Summary of Revenue Requirements Distribution
$\$ 000$

| Line No. |  |  | Revenue |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Description | Budget as Adjusted | Adjustment Required | Allowable Revenue |
| 㖪 |  | (1) | (2) | (3) |

Operating revenues
Retail sales
STAS revenue
DSIC revenue
Sales for resale
Other operating revenue
Total operating revenue
Operating expenses


.

| PTC | \$ | - | \$ | - | \$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Distribution |  | 16,772 |  | - |  | 16,772 |
| Customer accounts |  | 4,762 |  | - |  | 4,762 |
| Customer service \& info |  | 5,009 |  | - |  | 5,009 |
| Admin \& gen expense |  | 6,801 |  | - |  | 6,801 |
| Depreciation - accrual |  | 20,257 |  | - |  | 20,257 |
| Amortization |  | 1,700 |  | - |  | 1,700 |
| Taxes other than income |  | 5,486 |  | 2,379 |  | 7,865 |
| Operating expense before tax | \$ | 60,787 | \$ | 2,379 | \$ | 63,166 |
| Operating income before tax | \$ | 20,920 | \$ | 38,068 | \$ | 58,988 |
| Income taxes |  |  |  |  |  |  |
| Federal income tax - current | \$ | 2,903 | \$ | 11,993 | \$ | 14,896 |
| State income tax - current |  | 2,243 |  | 3,803 |  | 6,046 |
| Deferred income tax - federal |  | 5,150 |  | - |  | 5,150 |
| Deferred income tax - state |  | - |  | - |  | - |
| Investment tax credit |  | - |  | - |  | - |
| Total tax expense | \$ | 10,296 | \$ | 15,796 | \$ | 26,092 |
| Total operating expenses | \$ | 71,083 | \$ | 18,175 | \$ | 89,258 |
| Operating income | \$ | 10,624 | \$ | 22,273 | \$ | 32,897 |
| Rate Base | \$ | 378,239 |  |  | \$ | 378,239 |
| Rate of Return overall |  | 2.81\% |  |  |  | 8.70\% |
| Return on Equity |  | -0.26\% |  |  |  | 11.50\% |

## PENNSYLVANIA POWER COMPANY <br> Summary of Revenue Requirements <br> Smart Meter <br> $\$ 000$

| Line No. | Description | Budget as Adjusted |  | Revenue Adjustment Required |  | Allowable Revenue |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  | (2) |  | (3) |  |
| Operating revenues |  |  |  |  |  |  |  |
| 1 | Retail sales | \$ | 12,483 | \$ | (91) | \$ | 12,392 |
| 2 | STAS revenue |  | - |  | - |  |  |
| 3 | DSIC revenue |  | - |  | - |  | - |
| 4 | Sales for resale |  | - |  | - |  | - |
| 5 | Other operating revenue |  | - |  | - |  | - |
| 6 | Total operating revenue | \$ | 12,483 | \$ | (91) | \$ | 12,392 |
| Operating expenses |  |  |  |  |  |  |  |
| 7 | PTC | \$ | - | \$ | - | \$ | - |
| 8 | Distribution |  | - |  | - |  | - |
| 9 | Customer accounts |  | - |  | - |  | - |
| 10 | Customer service \& info |  | - |  | - |  | - |
| 11 | Admin \& gen expense |  | 3,462 |  | - |  | 3,462 |
| 12 | Depreciation - accrual |  | 4,130 |  | - |  | 4,130 |
| 13 | Amortization |  | - |  | - |  | - |
| 14 | Taxes other than income |  | 736 |  | (5) |  | 731 |
| 15 | Operating expense before tax | \$ | 8,328 | \$ | (5) | \$ | 8,323 |
| 16 | Operating income before tax |  | 4,155 |  | (86) |  | 4,069 |
| Income taxes |  |  |  |  |  |  |  |
| 17 | Federal income tax - current | \$ | (124) | \$ | (27) | \$ | (151) |
| 18 | State income tax - current |  | (39) |  | (9) |  | (48) |
| 19 | Deferred income tax - federal |  | 1,201 |  | - |  | 1,201 |
| 20 | Deferred income tax - state |  | - |  | - |  | - |
| 21 | Investment tax credit |  | $\square$ |  | - |  | - |
| 22 | Total tax expense | \$ | 1,037 | \$ | (36) | \$ | 1,001 |
| 23 | Total operating expenses | \$ | 9,365 | \$ | (41) | \$ | 9,324 |
| 24 | Operating income | \$ | 3,118 | \$ | (50) | \$ | 3,068 |
| 25 | Rate Base | \$ | 35,280 |  |  | \$ | 35,280 |
| 26 | Rate of Return overall |  | 8.84\% |  |  |  | 8.70\% |
| 27 | Return on Equity |  | 11.78\% |  |  |  | 11.50\% |

## PENNSYLVANIA POWER COMPANY Summary of Revenue Requirements Total Distribution $\$ 000$

Line No.
1
1
2
3
4
5
6

## Description

## Operating revenues

## Retail sales <br> STAS revenue

DSIC revenue
Sales for resale
Other operating revenue
Total operating revenue
Operating expenses

## PTC

Distribution
Customer accounts
Customer service \& info
Admin \& gen expense
Depreciation - accrual
Amortization
Taxes other than income
Operating expense before tax
Operating income before tax
Income taxes
Federal income tax - current
State income tax - current
Deferred income tax - federal
Deferred income tax - state
Investment tax credit
Total tax expense
Total operating expenses
Operating income
Rate Base

Rate of Return overall

Return on Equity

| Budget as <br> Adjusted | Revenue <br> Adjustment <br> Required | Allowable <br> Revenue |
| :---: | :---: | :---: |
| $(1)$ | $(2)$ | $(3)$ |


| \$ | 90,994 | $\$$ | 40,238 | $\$$ |
| ---: | ---: | ---: | ---: | ---: |
| - | - | 131,232 |  |  |
| - | - | - |  |  |
| - | - |  |  |  |
| 3,196 | 119 | 3,315 |  |  |
|  |  | 40,357 | 134,547 |  |


| \$ | - | \$ | - | \$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 16,772 |  | - |  | 16,772 |
|  | 4,762 |  | - |  | 4,762 |
|  | 5,009 |  | - |  | 5,009 |
|  | 10,264 |  | - |  | 10,264 |
|  | 24,387 |  | - |  | 24,387 |
|  | 1,700 |  | - |  | 1,700 |
|  | 6,222 |  | 2,374 |  | 8,596 |
| \$ | 69,115 | \$ | 2,374 | \$ | 71,489 |
| \$ | 25,075 | \$ | 37,983 | \$ | 63,057 |
| \$ | 2,778 | \$ | 11,966 | \$ | 14,744 |
|  | 2,203 |  | 3,794 |  | 5,998 |
|  | 6,351 |  | - |  | 6,351 |
|  | - |  | - |  | - |
|  | - |  | - |  | - |
| \$ | 11,332 | \$ | 15,760 | \$ | 27,093 |
| \$ | 80,448 | \$ | 18,134 | \$ | 98,582 |
| \$ | 13,742 | \$ | 22,222 | \$ | 35,965 |
| \$ | 413,519 |  |  | \$ | 413,519 |
|  | 3.32\% |  |  |  | 8.70\% |
|  | -0.26\% |  |  |  | 11.50\% |

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 1 $\$ 000$

## Adjustment of Base Operating Revenues

To adjust base operating revenues (1) for changes in number of customers, (2) to roll in State Tax Adjustment Surcharge ("STAS") revenues into base rates, (3) to roll in Distribution System Improvement Charge ("DSIC") revenue into base rates, (4) for Energy Efficiency and Behind the Meter generation, (5) for other revenue, and (6) to eliminate unbilled revenues. Adjustments (1) through (5) are supported by Mr. K. M. Siedt. The adjustment for unbilled revenues is supported by Mr. R. A. D'Angelo.

Line

No. Description

Base revenues per budget for the 12 months ending 12/31/17
Normalizing adjustments:
2 Customers - increase to yr end level
Specific adjustments
Roll-in of STAS
\$
Roll-in of DSIC
Adjust for Energy Efficiency and Behind the Meter Generation
$6 \quad$ Adjust for Other Revenues
7 Eliminate unbilled revenues

8 Total (Lines 3+4+5+6+7)
\$ (449)

9 Normalizing adjustment (Lines $2+8$ )

Base revenues per budget for the
1012 months ending $12 / 31 / 17$, as adjusted
Amount
(1)
(2)
\$ 270,643
\$ 134

1,446
$(1,398)$
(545)49

# Penn Power Exhibit RAD-2 Witness: R. A. D'Angelo Page 8 

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 2 $\$ 000$

## Adjustment of State Tax Adjustment Surcharge Revenues

To remove state tax adjustment surcharge ("STAS") revenues. Normalized STAS revenues are being rolled into base rates.

## Description

Amount

12 months ending $12 / 31 / 17$

2
Eliminate per budget STAS

3 STAS revenue per budget for the 12 months ending 12/31/17, as adjusted
(1)
$\$$
$\qquad$
$\$$

# PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 3 $\$ 000$ 

## Adjustment of Distribution Improvement System Charge Revenues

To remove distribution system improvement charge ("DSIC") revenues. Normalized DSIC revenues are being rolled into base rates in Normalization Adjustment No. 1.

Description

DSIC revenue per budget for the 12 months ending 12/31/17
2 Eliminate per budget DSIC

3 DSIC revenue per budget for the 12 months ending 12/31/17, as adjusted

## Amount

(1)
$\$ 4,643$
$(4,643)$
$\$$
\$

# PENNSYLVANIA POWER COMPANY 

Normalization Adjustment No. 4 $\$ 000$

## Adjustment of Other Operating Revenues

To adjust other operating revenue (1) to remove American Transmission System Incorporated (ATSI) ground lease revenues; and (2) to adjust late payment charges. The adjustment to late payment charge is supported by Mr. K. M. Siedt.

Line No.
Description
1 Other Operating revenue per budget for the 12 months ending 12/31/17

2 New Payment charge charges (Exhibit KMS-2)
3 Less Late Payment charge per budget
4 Adjustment to LPC

5 Eliminate ATSI ground lease

6 Total normalizing adjustment (Lines $4+5$ )
7 Other Operating revenue per budget for the 12 months ending 12/31/17, as adjusted

Amount


## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 5 $\$ 000$

## Adjustment of Distribution Expense

To adjust distribution payroll expense (1) to reflect year end wage and employee levels, (2) to adjust service company payroll expenses to reflect year end and wage and employee levels, and (3) to include the amortization of gains or losses on reacquired debt.

## Description

1 Distribution expense per budget for the
12 months ending 12/31/17
2 Distribution payroll expense adjustment to reflect year end employee levels, and ongoing wage and salary rate (Supporting Schedule No. 1, Line 16, Col 2).

3 Service Company Distribution payroll expense adjustment allocated to Penn Power to reflect year end employee levels and ongoing wage and salary rate (Supporting Schedule 1, Line 28, Col. 2)

4 Amortization of (gain) or loss on reacquired debt

5 Increase distribution expenses for contractor safety request
Total normalizing adjustment (Lines $2+3+4+5$ )
7 Distribution expense per budget for the 12 months ending $12 / 31 / 17$, as adjusted (Lines $1+6$ )

Amount
$\$$
(1) (2)
\$ 20,561

157

19

366

48

# Penn Power Exhibit RAD-2 <br> Witness: R. A. D'Angelo <br> Page 12 

PENNSYLVANIA POWER COMPANY
Supporting Schedule No. 1 to Normalizing Adjustment No. 5
(\$000)

## Adjustment to Payroll Expense to Reflect Year End Employee Levels and Wage Rates

To determine the additional payroll expense associated with (1) year end bargaining and non-bargaining wage rates and employee levels, and (2) Service Company year end wage rates and employee levels; and to allocate the additional payroll expense to individual components. Mr. T. J. Dolezal supports the labor allocation factors.
$\qquad$
(1) (2)

Line No.

1

## Non-Bargaining

2 Straight time per budget for January 1, 2017 through February 28, 2017
3 Straight time 3\% increase effective 3/1/2017 (Line $2 \times 3 \%$ )
Straight time per budget for the 12 months ending 12/31/2017, as adjusted
5 Straight time 3\% increase effective 3/1/2017 (Line $4 \times 3 \%$ )

Bargaining

O\&M payroll adjustment (Line $10 \times 13$ )

Allocation of payroll adjustment:
Price to Compare
Transmission
Distribution

## Customer accounts

Customer service
Administrative and general
Total

## Service Company

Straight time per budget for January 1, 2017 through February 28, 2017
Straight time 3\% increase effective 3/1/2016 (Line $21 \times 3 \%$ )

Straight time per budget for the 12 months ending 12/31/2017, as adjusted
Straight time 3\% increase effective 3/1/2017 (Line $23 \times 3 \%$ )
Total service company payroll adjustments (Lines $22+24$ )

Allocation of Service Company payroll adjustment (Exhibii RAD-25)

## Price to Compar <br> Transmission

Distribution

## Customer accounts

Administrative and general
Total
Straight time per budget for the 12 months ending 12/31/2017, as adjusted
Straight time $2.5 \%$ increase effective 3/1/2017 (Line $8 \times 2.5 \%$ )

Total company payroll adjustments
\$ 5,384
\$ 693
21
\$ 4,394
132
+
\$ 11,038
276
$\qquad$

18,714
45.69\%
\$ 257

| $0.00 \%$ | $\$$ |
| ---: | ---: |
| $0.00 \%$ | - |
| $61.18 \%$ | 157 |
| $18.53 \%$ | 48 |
| $14.74 \%$ | 38 |
| $5.54 \%$ | 14 |
| $100 \%$ | $\$$ |

[^8]18
\$ 4,004
120
$\$ \quad 139$

| $0.00 \%$ | $\$$ | - |
| ---: | ---: | ---: |
| $0.00 \%$ | - |  |
| $13.95 \%$ | 19 |  |
| $25.08 \%$ | 35 |  |
| $60.97 \%$ | 85 |  |
| $100 \%$ | $\$$ | 139 |

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 6 $\$ 000$

## Adjustment of Customer Accounts Expense

To adjust customer account expense (1) to reflect year end wage rates and employee levels, (2) to reflect Service Company year end wage rates and employee levels, (3) to include increased O\&M costs associated with serving new customers, and (4) to include interest on customer deposits.

| Line No. | Description | Amount |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | (2) |
| 1 | Customer Account expense per budget for the 12 months ending 12/31/17 |  |  | \$ | 6,923 |
| 2 | Customer Account payroll expense adjustment to reflect year end employee levels and ongoing wage \& salary rates <br> (Normalizing Adjustment No. 5, Supporting Schedule No. 1, Line 17, Column 2) | \$ | 48 |  |  |
| 3 | Service Company customer account payroll expense adjustment allocated to Penn Power to reflect year end employee levels and ongoing wage and salary rates, <br> (Normalizing Adjustment No. 5, Supporting Schedule 1, Line 29, Col. 2) |  | 35 |  |  |
| 4 | Increased O\&M costs associated with increased number of customers in normalized revenue levels <br> (Supporting Schedule 1, Line 10) |  | 2 |  |  |
| 5 | Interest on customer deposits, (Supporting Schedule 2, Line 3) |  | 231 |  |  |
| 6 | Total normalizing adjustment (Lines $2+3+4+5$ ) |  |  |  | 315 |
| 7 | Customer Account expense per budget for the 12 months ending 12/31/17, as adjusted |  |  | \$ | 7,239 |

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 1 to Normalizing Adjustment No. 6
(\$000)

## Adjustment of Other O\&M Costs Associated with Serving New Customers

To determine the cost associated with serving the additional customers reflected in Normalization Adjustment No. 1. The ratio of non-payroll customer account expense to total revenue is applied to the additional revenue from increased customers to estimate this cost. The Commission previously recognized and approved this adjustment. The adjustment to base operating revenue for changes in number of customers is supported by Mr. K. M. Siedt.

Line No.
Amount
(1)

## Customer Account Expense Excluding Labor and Uncollectible

1 Customer Account expense per budget for the 12 months ending 12/31/17
2 Less: Uncollectible expense
3 Less: Labor expense
4 Customer Account expense excluding labor and uncollectible expense

## Total Distribution Revenue

5 Distribution revenues per budget
$6 \quad$ Late payment charges per budget
7 Total
8 Ratio of customer account expense to total revenue (Line 4 / Line 7)
9 Revenue from added customers
Revenue from added customers (Normalization Adjustment No. 1, Line 2)
10 Additional expense from added customers (Lines $8 \times 9$ )
\$
134
\$
2

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 2 to Normalizing Adjustment No. 6 (\$000)

## Adjustment to Allow for Interest Expense on Customer Deposits

To determine the interest paid on customer deposits. Since customer deposits are funds supplied to the Company by customers, they are included in rate base as a deduction. The Commission previously recognized this adjustment to include the corresponding interest paid to customers on these deposits as a expense.

Line No.
Description

Customer deposits included in rate base (Exhibit RAD-1, Page 1, Column 1, Line 14)

Interest rate on deposits
Interest expense on customer deposits

| Non |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Residential <br> (1) | Residential <br> (2) |  | $\frac{\text { Total }}{(3)}$ |  |
| \$ 2,790 | \$ | 2,450 | \$ | 5,239 |
| 3\% |  | 6\% |  |  |
| \$ 84 | \$ | 147 | \$ | 231 |

# Penn Power Exhibit RAD-2 <br> Witness: R. A. D'Angelo Page 16 

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 7
$\$ 000$

## Adjustment of Customer Service and Information Expense

To adjust customer service and information expense to reflect year end wage and employee levels.

## Line No.

Description

1 Customer Service expense per budget for the
\$ 12,313 12 months ending 12/31/17

2 Customer Service payroll expense adjustment to reflect year end employee levels and ongoing wage \& salary rates
(Normalization Adjustment No. 5, Supporting Schedule No. 1, Line 18, Column 2)
$\$$
38

3 Total normalizing adjustment
4 Customer Service expense per budget for the 12 months ending $12 / 31 / 17$, as adjusted
$\$ \quad 12,351$

PENNSYLVANIA POWER COMPANY<br>Normalization Adjustment No. 8<br>$\$ 000$

## Adjustment of Administrative and General Expense

To adjust administrative and general expenses (1) to reflect year end wage rates and employee levels, (2) to reflect Service Company year end wage rates and employee levels, (3) to reflect OPEB expense at service cost level, (4) to reflect pension expense at the ten year cash level, (5) to reflect employee benefits expense at year end wage rates and employee levels, and (6) to include amortization of rate case expenses.

Amount
(1) (2)


6 Service Company Administrative \& general payroll expense adjustment
allocated to Penn Power to reflect year end employee levels and
ongoing wage \& salary rates,

(Normalization Adjustment No. 5, Supporting Schedule No. 1, Line 30, Column 2)

7 Adjust OPEB expense to service cost level,
(Supporting Schedule No. 1, Line 12, Col. 1) ..... 892
8 Adjust pension expense to ten year cash level, (Supporting Schedule No. 2, Line 19, Col. 3) ..... 1,783
9 Adjust employee benefit costs (Supporting Schedule No. 3, Line 8, Column 3) ..... 122

10 Rate case expenses to be incurred during current rate proceeding (Exhibit RAD-23)
11 Recovery period - 2 years
12 Annual amount (Line 7 /Line 8)

13 Total normalizing adjustment (Lines 5+6+7+8+9+12)

14 Administrative and general expense per budget for the 12 months ending $12 / 31 / 17$, as adjusted

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 1 to Normalizing Adjustment No. 8
$\$ 000$

## Adjustment for OPEB Expense

To adjust OPEB expense to the test year service cost. The service cost represents the actuarial present value of benefit liabilities accrued under the plan benefit formula for services rendered during the test year. Inclusion of the service cost in rates provides for recovery of the current cost of benefits earned by plan participants. Any excess or shortfall related to the expected return on plan assets are not included because their inclusion would artificially reduce or increase total costs and result in the recovery of more or less than the actual normal cost of service. The adjustment for OPEB expense to the current service cost amount was adopted by the Commission at Docket Numbers R-00061366 and R-00061367 and included at Docket Nos. R-2014-2428745; R-2014-2428743; R-20142428744 and R-2014-2428742.

| Line No. | Description |
| :---: | :---: |
| 1 | O\&M - Capital allocation ratios |
| 2 | Company OPEB expense included in budget (Exhibit RAD 27) |
| 3 | FirstEnergy Service Corp. OPEB expense |
| 4 | Allocation ratio |
| 5 | Allocated FirstEnergy Service Corp. OPEB expense included in budget (Lines $3 \times 4$ ) |
| 6 | Total OPEB expense included in budget (Lines $2+5$ ) |
| 7 | Service cost for company OPEB expense |
| 8 | Service cost for FirstEnergy Service Corp. OPEB expense |
| 9 | Allocation ratio |
| 10 | Allocated FirstEnergy Service Corp. service cost (Lines $8 \times 9$ ) |
| 11 | Total OPEB service cost (Line $7+10$ ) |
| 12 | Adjustment to set OPEB expense at ongoing service cost level (Lines 11-6) |


|  | O\&M |  | Capital |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) |  | (2) | (3) |  |
|  | 45.69\% |  | 54.31\% | 100.00\% |  |
| \$ | (712) | \$ | (846) | \$ $(1,558)$ |  |
| \$ | $(11,003)$ |  | $(13,079)$ | \$ $(24,082)$ |  |
|  | 1.56\% |  | 1.56\% | 1.56\% |  |
| \$ | (172) | \$ | (204) | \$ | (376) |
| \$ | (884) | \$ | $(1,050)$ | \$ (1,934) |  |
| \$ | 4 | \$ | 5 | \$ | 9 |
| \$ | 256 | \$ | 304 | \$ | $\begin{array}{rr} \$ \quad 560 \\ & 1.56 \% \end{array}$ |
|  | 1.56\% |  | 1.56\% |  |  |
| \$ | 4 | \$ | 5 | \$ | 9 |


| $\$$ | 8 | 10 | $\$ \quad 18$ |
| :--- | :--- | :--- | :--- | :--- |

$\$ \quad 892 \quad \$ \quad 1,060 \quad \$ \quad 1,952$

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 2 to Normalizing Adjustment No. 8 $\$ 000$

## Adjustment for Pension Expense

To adjust pension expense to a ten year average level of actual cash contributions under the methodology that was adopted by the Commission at Docket Numbers R-00061366 and R-0061367, and included at Docket Nos. R-2014-2428745; R-2014 2428743; R-2014-2428744 and R-2014-2428742.

| Line No. | Description | Amount |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { (1) } \\ & \text { Total } \end{aligned}$ |  | $\begin{gathered} \text { (2) } \\ \text { O\&M } \% \end{gathered}$ | (3) |  |
|  |  |  |  |  | O8M |
| 1 | Company Cash Contributions |  |  |  |  |  |  |
| 2 | 2009 Cash Pension Contribution |  | 21,359 | 33.35\% |  | 7,123 |
| 3 | 2011 Cash Pension Contribution |  | 12,000 | 41.69\% |  | 5,003 |
| 4 | 2016 Cash Pension Contribution |  | 14,856 | 38.05\% |  | 5,653 |
| 5 | Total Company Cash Pension Contributions | \$ | 48,215 |  | \$ | 17,779 |
|  | FirstEnergy Service Company Cash Contributions |  |  |  |  |  |
| 6 | 2016 Pension Contribution |  | 24,760 |  |  |  |
| 7 | Company Allocation Factor |  | 1.56\% |  |  |  |
| 8 | 2016 Service Company Pension Contribution allocated to the Company | \$ | 386 | 38.05\% |  | 147 |
| 9 | 2017 Pension Contribution |  | 221,360 |  |  |  |
| 10 | Company Allocation Factor |  | 1.56\% |  |  |  |
| 11 | 2017 Service Company Pension Contribution allocated to the Company | \$ | 3,453 | 45.69\% |  | 1,578 |
| 12 | Total FirstEnergy Service Company Cash Pension Contributions allocated to the Company | \$ | 3,839 |  | \$ | 1,725 |
| 13 | Total Pension cash contributions (Lines $5+12$ ) | \$ | 52,054 |  | \$ | 19,503 |
| 14 | Number of years |  | 10 |  |  | 10 |
| 15 | Pension expense cash contribution, averaged over 10 years | \$ | 5,205 |  | \$ | 1,950 |
| 16 | O\&M Pension Expense included in budget |  |  |  |  | 167 |
| 17 | Adjustment to Pension Expense (Lines 15-16) |  |  |  | \$ | 1,783 |

## PENNSYLVANIA POWER COMPANY

## Supporting Schedule No. 3 to Normalizing Adjustment No. 8

## $\$ 000$

## Adjustment to Employee Benefit Expense to Reflect Year End Employee Levels and Ongoing Wage Rates

To determine the normalized costs associated with providing additional employee benefits related to the increased O\&M payroll expense reflected in Normalization Adjustment No. 5, Supporting Schedule No. 1.

## Employee benefits applicable to operating expenses:

| Line No. | Description | Effective <br> Rate (a) | Payroll Adjustment |  |  | Benefit Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  |  |  |  |  |
| 1 | Workers compensation | 0.722\% | \$ | 257 | (b) | \$ | 2 |
| 2 | Pension costs | 26.563\% | \$ | 257 | (b) |  | 68 |
| 3 | OPEB costs | 0.051\% | \$ | 257 | (b) |  | - |
| 4 | Life insurance | 0.160\% | \$ | 257 | (b) |  | - |
| 5 | Medical insurance | 9.878\% | \$ | 257 | (b) |  | 25 |
| 6 | Savings plan | 3.030\% | \$ | 257 | (b) |  | 8 |
| 7 | Other (Exhibit RAD-27) | 7.394\% | \$ | 257 | (b) |  | 19 |
| 8 | Total increase due to payroll adjustment |  |  |  |  | \$ | 122 |

(a) Summary of effective employee benefit rates based on total payroll for the 12 months ending 12/31/17

|  | Total Amount |  | Total Payroll |  |  | $\begin{gathered} \text { Effective } \\ \text { Rate } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Workers compensation (Exhibit RAD 27) | \$ | 131 | \$ | 18,151 | (a) | 0.722\% |
| Pension costs - normalized basis |  | 4,822 | \$ | 18,151 | (a) | 26.563\% |
| OPEB costs - service cost |  | 9 | \$ | 18,151 | (a) | 0.051\% |
| Life insurance (Exhibit RAD 27) |  | 29 | \$ | 18,151 | (a) | 0.160\% |
| Medical insurance (Exhibit RAD 27) |  | 1,793 | \$ | 18,151 | (a) | 9.878\% |
| Savings plan (Exhibit RAD 27) |  | 550 | \$ | 18,151 | (a) | 3.030\% |
| Other (Exhibit RAD 27) |  | 1,342 | \$ | 18,151 | (a) | 7.394\% |

(b) Adjustment No. 5, Supporting Schedule No. 1, Line 7.

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 9 \$000

## Adjustment of Depreciation Expense

To adjust depreciation expense (1) C (ELG) rates on adjusted rate base, (2) to adjust cost of removal / salvage expense to a five year average per Commission practice, and (3) eliminate legacy meter cost of removal from the five year average. Mr. J. J. Spanos supports the ELG depreciation rates.


# Penn Power Exhibit RAD-2 <br> Witness: R. A. D'Angelo <br> Page 22 

# PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 10 $\$ 000$ 

## Adjustment of Amortization Expense

To adjust amortization expense to (1) exclude smart meter amortization in the budget; and (2) include the amortization of additional legacy meters.

Line No.

1 Amortization expense per budget for the 12 months ending 12/31/2017
2 Adjustment for amortization of legacy meters (Adj. 10 Sched 1, Line 2)
3 Eliminate smart meter amortization per budget

4 Total normalizing adjustment
5 Amortization expense per budget for the 12 months ending $12 / 31 / 17$, as adjusted

Amount
(1)
(2)

## PENNSYLVANIA POWER COMPANY

## Supporting Schedule No. 1 to Normalizing Adjustment No. 10

 \$000
## Adjustment for Amortization Expense of Legacy Meters

To determine additional legacy meters to fully recover all legacy meter costs over 39 months of the original amortization period.

Amount
(1)

Total Legacy Meters and Cost of Removal to be recovered (Exhibit RAD-64)

Less Legacy Meters and Cost of Removal in Base Rates

Unrecovered Legacy Meters
\$ 9,287

10,797
$\qquad$ $(1,510)$
$\$ \quad(465)$

# Penn Power Exhibit RAD-2 <br> Witness: R. A. D'Angelo 

Page 24

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 11 <br> $\$ 000$

Adjustment of Taxes Other Than Income

To adjust gross receipts tax expense to (1) reflect normalized sales revenues, to (2) adjust payroll tax expenses for normalized payroll and employee expenses.

Line No.

## Description

1 Taxes Other Than Income per budget for the 12 months ending 12/31/17
Gross Receipts Tax
2 Normalized sales revenues (Exhibit RAD-2, page 1, Col. 3) \$ 270,329
3 Gross receipts tax @ 5.9\%
4 Gross receipts tax included in budget (Exhibit RAD-32, page 1)
15,949
16,236

5 Adjustment for gross receipts tax at normalized revenue level (Lines 3-4)

6 Adjustment for payroll taxes on normalized payroll
(Supporting Schedule No. 1, Line 8)

7 Total normalizing adjustment (Lines $5+6$ )
8 Taxes other than income per budget for the 12 months ending 12/31/17, as adjusted

Amount
(1) (3) (3)
$\$ \quad(287)$
$\qquad$
7 (280)

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 1 to Normalizing Adjustment No. 11 $\$ 000$

Adjustment to Taxes Other Than Income to reflect changes in payroll taxes.

To determine the additional payroll tax expense associated with the increased O\&M payroll expense reflected in Normalization Adjustment No. 5, Supporting Schedule No. 1.

Line No.
Description
Amount
(1)
\$ 18,151 (Normalization Adjustment No. 5, Schedule 1, Line 1, Col 3)

Total payroll tax included in budget, (Exhibit RAD-32)

Effective payroll tax rate (Line $2 /$ Line 1 )

Total payroll as adjusted (Normalization Adjustment No. 5 Schedule 1, Line 5)

Payroll tax on normalized payroll (Lines $3 \times 4$ )

8 Adjustment for payroll tax (Lines $6 \times 7$ )
$\$ \quad 510$
\$ 15
45.69\%

495

$$
\underline{\underline{2.73} \%}
$$

$\$ \quad 18,714$
$\$$



## PENNSYLVANIA POWER COMPANY <br> Supporting Schedule No. 1 to Normalization Adjustment No. 12 $\$ 000$

Adjustment of Tax Depreciation
To adjust tax depreciation to eliminate the cost of removal component.

Line No.
Description
Total
Exhibit RAD-33
(1)

| 1 | Tax depreciation expense per budget | $\$$ | 30,648 |
| :--- | :--- | ---: | ---: |
| 2 | Cost of removal salvage in tax depreciation | 2,914 |  |
| 3 | Net Tax depreciation (Line 1 - Line 2) | 27,734 |  |
| 4 | Smart Meter tax depreciation |  | 7,643 |
| 5 | Distribution tax depreciation (Line 3 - Line 4) | $\$$ | 20,090 |

# PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 13 <br> $\$ 000$ 

## Adjustment of Provision for Deferred Income Taxes

This adjustment to the Provision for Deferred Income Taxes reflects (1) the adjustment of Federal deferrals to reflect year-end plant and (2) miscellaneous federal deferred taxes not associated with liberalized depreciation. All state deferred taxes associated with liberalized depreciation have been eliminated.

| Line No. | Description | Provision for Deferred Taxes - Net |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Federal |  | State |  |
|  |  |  | 1) |  |  |
| 1 | Deferred taxes per budget, 12 months ending 12/31/2017 | \$ | 6,469 | \$ | 1,144 |
| 2 | Deferred taxes - liberalized depreciation, (Exhibit RAD-41, page 17) |  | 6,351 |  |  |
| 3 | Less Deferred taxes - Smart meters |  | 1,201 |  | - |
| 4 | Distribution deferred taxes |  | 5,150 |  |  |
| 5 | Adjustment to deferred tax expense ( Lines 2-1) | \$ | (118) | \$ | $(1,144)$ |
| 6 | Deferred tax expense per budget for the |  |  |  |  |
|  | 12 months ending 12/31/17, as adjusted | \$ | 6,351 | \$ | - |

# Penn Power Exhibit RAD-2 

Witness: R. A. D'Angelo
Page 29
PENNSYLVANIA POWER COMPANY
Normalization Adjustment No. 14 $\$ 000$

Adjustment of Investment Tax Credit

Not Applicable



#### Abstract

\section*{PENNSYLVANIA POWER COMPANY Normalization Adjustment No. 1 (\$000)}


Penn Power Exhibit RAD-3
Witness: R. A. D'Angelo
Page 2

## Adjustment of Electric Plant in Service

To adjust the budgeted gross plant in service to (1) eliminate the Asset Retirement Cost ("ARC"); (2) to include LED Street Lights. (3) eliminate Transmission easements and land (4) eliminate American Transmission Systems, Inc. ("ATSI") plant in accordance with the settlement agreement at Docket A-110450F0016. An asset retirement cost ("ARC") increases the carrying amount of a long-lived asset when a liability for an asset retirement obligation ("ARO") is recognized. The ARC is depreciated over the life of the asset. The ARC and related reserve are excluded from Rate Base, while the associated depreciation expense is excluded from the income Statement. This treatment is in accordance with 18 CFR Chapter $1 \S 35.18$ Asset retirement obligations.

Line No.

Eliminate ATSI Plant from 1999 Agreement (Exhibit RAD-47, Attach. B, p. 2) (775)

## PENNSYLVANIA POWER COMPANY

## Normalization Adjustment No. 2

 (\$000)
## Adjustment of Plant Held for Future Use

To adjust Plant Held for Future Use. As an alternative to rate base treatment, the Company is requesting the allowance of deferred carrying charges on any current or future investments in Plant Held for Future Use with definitive plans of utilization within a ten-year period. This is consistent with long-standing Commission policy.
Line No.

Normalizing adjustment:

Eliminate Plant Held for Future Use
$(1,764)$
$\qquad$

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 3
(\$000)

Adjustment of Depreciation Reserves - Plant in Service

To adjust the budgeted gross plant in service to (1) eliminate the Asset Retirement Cost ("ARC"); and (2) eliminate American Transmission Systems, Inc. ("ATSI") plant in accordance with the settlement agreement at Docket A-110450F0016. An asset retirement cost ("ARC") increases the carrying amount of a long-lived asset when a liability for an asset retirement obligation ("ARO") is recognized. The ARC is depreciated over the life of the asset. The ARC and related reserve are excluded from Rate Base, while the associated depreciation expense is excluded from the Income Statement. This treatment is in accordance with 18 CFR Chapter 1 § 35.18 Asset retirement obligations.


# PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 4 (\$000) 

## Adjustment of Cash Working Capital

To recognize cash working capital at year-end level. This adjustment is supported by Penn Power Witness Mr. J.L. Adams in Statement No. 5.

## Line

$\qquad$ Description
$\frac{\text { Cash Working Capital }}{(1)}$

1

Cash working capital normalized to year-end
\$
28,906

3
Cash working capital per budget $\qquad$

4 Normalization Adjustment
28,906

5 Cash working capital at $12 / 31 / 2016$, as adjusted
$\$$
28,906

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 5 (\$000)

## Adjustment of Material and Supplies Inventories

To recognize the Company's distribution portion of FE Service material and services ("M\&S") inventory levels projected at 12/31/2016.

| Line No. | Description | M\&S Inventories |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (1) |  | (2) |
| 1 | M\&S Inventory per budget at 12/31/2016 |  |  | \$ | - |
|  | Normalizing adjustment: |  |  |  |  |
| 2 | Distribution component of projected FE Service M\&S Inventory allocated to the company at 12/31/2016 (Exhibit RAD-13) | \$ | 3,245 |  |  |
| 3 | M \& S Inventory per budget at 12/31/2016 |  | - |  |  |
| 4 | Normalization Adjustment |  |  |  | 3,245 |
| 5 | M\&S inventory at $12 / 31 / 2016$, as adjusted |  |  | \$ | 3,245 |

# PENNSYLVANIA POWER COMPANY 

Normalization Adjustment No. 6 (\$000)

## Adjustment for Legacy Meters

To include legacy meters in a regulatory asset as ordered in the Final Order on the Smart Meter Deployment Plan at Docket No. M-2013-2341993.

| Line <br> No. | Description | Legacy Meters |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  | (2) |
| 1 | Net legacy meters in regulatory asset at 12/31/2016 | \$ |  |  |
| 2 | Legacy meter normalized to year-end | 7,847 |  |  |
| 3 | Normalization Adjustment |  |  | 7,847 |
| 4 | Net legacy meters in regulatory asset at 12/31/2016, as adjusted |  | \$ | 7,847 |

Penn Power Exhibit RAD-3 Witness: R. A. D'Angelo Page 8

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 7 (\$000)

## Adjustment for Deferred Storm Damage Epenses

Description

Unamortized storm damage deferral expense per budget at 12/31/2016

Storm Reserve Balance

Normalization Adjustment

Storm damage deferral expense at $12 / 31 / 2016$, as adjusted

Storms
(1) (2)
\$

- \$

1,430

1,430
$\$ \quad 1,430$

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 8

 (\$000)
## Adiustment of Accumulated Deferred fncome Taxes - Liberalized Depreciation

This adjustment adjusts the budgeted deferred tax balances for liberalized depreciation (excluding the impact of SFAS No. 109 defertals) to (1) eliminate remaining state deferred taxes - liberalized depreciation balances including the federal benefit of those taxes; and (2) Eliminate Other excludable items.

| Line No. | Description. |  | Adjustments | Accum Reserve for Deferred Taxes - Liberalized Depreciation |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (1) |  |  |
| 1 | Deferred taxes per budget - liberalized depreciation at 12/31/2016 |  |  | \$ | 148,470 |
|  | Normalizing adjustments: |  |  |  |  |
| 2 | Eliminate remaining state deferred taxes - liberalized depreciation including the federal benefit of those taxes | \$ | $(18,391)$ |  |  |
| 3 | Eliminate Other Excludable Items (Leases) |  | $(13,266)$ |  |  |
| 4 | Normalization Adjustment |  |  |  | (31,657) |
| 5 | Deferred taxes - liberalized depreciation at 12/31/2016, as adjusted |  |  | \$ | 116,813 |

## Adjustment of Operating Reserves

Not Applicable

## PENNSYLVANIA POWER COMPANY

## Rate of Return at December 31, 2016

| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ |  | Exhibit JD-24 Capital |  | Capital Ratios | Cost <br> Rate | $\begin{gathered} \begin{array}{c} \text { Weighted } \\ \text { Cost Rate } \end{array} \\ \hline(3)=(2) \times(3) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (2) | (3) |  |
| 1 | Total long-term debt |  | 151,981 | 49.9\% | 5.88\% | 2.94\% |
| 2 | Total preferred stock |  | - | 0.00\% | 0.00\% | 0.00\% |
| 3 | Total common equity |  | 152,390 | 50.1\% | 11.50\% | 5.76\% |
| 4 | Total capitalization | \$ | 304,371 | 100.00\% |  | 8.70\% |

ANヲdWOO צヨMOd VINヲイTLSNNEd
PENNSYLVANIA POWER COMPANY
Statement of Operating Income， 12 Months Ending December 31，2016，Normalized and Adjusted
to Reflect Revenue Necessary to Achieve Allowable Return


| Line No． | Description |
| :---: | :---: |
|  | Operating revenues |
| 1 | Retail sales |
| 2 | STAS revenue |
| 3 | DSIC revenue |
| 4 | Sales for resale |
| 5 | Other operating revenue |
| 6 | Total operating revenue |
|  | Operating．expenses |
| 7 | Price To Compare |
| 8 | Distribution |
| 9 | Customer accounts |
| 10 | Customer service \＆info |
| 11 | Admin \＆gen expense |
| 12 | Depreciation－accrual |
| 13 | Amortization and Accretion |
| 14 | Taxes other than income |
| 15 | Operating expense before tax |
| 16 | Operating income before income tax |
|  | Income taxes |
| 17 | Federal income tax－current |
| 18 | State income tax－current |
| 19 | Deferred income tax－federal |
| 20 | Deferred income tax－state |
| 21 | Investment tax credit |
| 22 | Total tax expense |
| 22 | Total operating expenses |
| 23 | Operating income |

Penn Power Exhibit RAD-4 Witness: R. A. D'Angelo
Page 2




## PENNSYLVANIA POWER COMPANY Summary of Revenue Requirements <br> Distribution <br> \$000

Line No. Description $\quad$\begin{tabular}{c}
Budget as <br>
Adjusted

$\frac{$

Revenue <br>
Adjustment <br>
Required

}{$(1)$}$\frac{$

Allowable <br>
Revenue
\end{tabular}}{$\substack{(3)}$}

Operating revenues
Retail sales
STAS revenue
DSIC revenue
Sales for resale
Other operating revenue
Total operating revenue

Operating expenses
PTC
Distribution
Customer accounts
Customer service \& info
Admin \& gen expense
Depreciation - accrual
Amortization
Taxes other than income
Operating expense before tax

Operating income before tax
Income taxes
Federal income tax - current
State income tax - current
Deferred income tax-federal
Deferred income tax - state
Investment tax credit
Total tax expense
Total operating expenses
Operating income
Rate Base
Rate of Return overall
Return on Equity

Return on Equity


| \$ | - | \$ | - | \$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15,412 |  | - |  | 15,412 |
|  | 5,797 |  | - |  | 5,797 |
|  | 4,254 |  | - |  | 4,254 |
|  | 6,888 |  | - |  | 6,888 |
|  | 18,665 |  | - |  | 18,665 |
|  | 1,700 |  | - |  | 1,700 |
|  | 5,446 |  | 1,647 |  | 7,093 |
| \$ | 58,162 | \$ | 1,647 | \$ | 59,809 |
| \$ | 23,960 | \$ | 26,269 | \$ | 50,228 |


| \$ | 3,548 | \$ | 8,276 | \$ | 11,824 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2,859 |  | 2,624 |  | 5,483 |
|  | 1,334 |  | - |  | 1,334 |
|  | - |  | - |  | - |
| \$ | 7,742 | \$ | 10,900 | \$ | 18,641 |
| \$ | 65,904 | \$ | 12,547 | \$ | 78,451 |
| \$ | 16,218 | \$ | 15,369 | \$ | 31,587 |
| \$ | 363,227 |  |  | \$ | 363,227 |
|  | 4.47\% |  |  |  | 8.70\% |
|  | 3.05\% |  |  |  | 11.50\% |

## PENNSYLVANIA POWER COMPANY <br> Summary of Revenue Requirements <br> Smart Meter $\$ 000$

Line No.

## Description

Operating revenues

## Retail sales

STAS revenue
DSIC revenue
Sales for resale Other operating revenue
Total operating revenue
Operating expenses
PTC
Distribution
Customer accounts
Customer service \& info
Admin \& gen expense
Depreciation - accrual
Amortization
Taxes other than income Operating expense before tax

Operating income before tax
Income taxes
Federal income tax - current
State income tax - current
Deferred income tax - federal
Deferred income tax - state
Investment tax credit
Total tax expense
Total operating expenses
Operating income
Rate Base
Rate of Return overall
Return on Equity

| Budget as <br> Adjusted | Revenue <br> Adjustment <br> Required |
| :---: | :---: |
|  |  | | (1) |
| :---: | | Allowable |
| :---: |
| Revenue |


| \$ | 12,483 | \$ | $(2,483)$ | \$ | 10,000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - |  | - |  |  |
|  | - |  | - |  |  |
|  | - |  | - |  |  |
|  | - |  | - |  |  |
| \$ | 12,483 | \$ | $(2,483)$ | \$ | 10,000 |


| $\$$ | - | $\$$ | - | - |
| :--- | ---: | :--- | ---: | ---: |
|  | - | - | - |  |
|  | - | - | - |  |
|  | 3,462 | - | 3,462 |  |
|  | 3,636 | - | 3,636 |  |
|  | 736 | - | - |  |
|  | 7,834 | $\$$ | $(147)$ | $\$ 89$ |
|  |  |  | 7,687 |  |
|  | 4,649 |  | $(2,337)$ | 2,312 |


| \$ | (939) | \$ | (736) | \$ | (1,675) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (298) |  | (233) |  | (531) |
|  | 2,581 |  | - |  | 2,581 |
|  | - |  | - |  |  |
| \$ | 1,344 | \$ | (970) | \$ | 374 |
| \$ | 9,178 | \$ | $(1,116)$ | \$ | 8,062 |
| \$ | 3,305 | \$ | $(1,367)$ | \$ | 1,938 |
| \$ | 22,287 |  |  | \$ | 22,287 |
|  | 14.83\% |  |  |  | 8.70\% |
|  | 23.75\% |  |  |  | 11.50\% |

## PENNSYLVANIA POWER COMPANY Summary of Revenue Requirements Total Distribution <br> $\$ 000$

Line No.
Description

## Operating revenues

Retail sales
STAS revenue
DSIC revenue

DSIC revenue
Sales for resale
Other operating revenue
Total operating revenue
Operating expenses
PTC
Distribution
Customer accounts
Customer service \& info
Admin \& gen expense
Depreciation - accrual
Amortization
Taxes other than income
Operating expense before tax
Operating income before tax
Income taxes
Federal income tax - current
State income tax - current
Deferred income tax - federal
Deferred income tax - state
Investment tax credit
Total tax expense
Total operating expenses
Operating income
Rate Base
Rate of Return overall

Return on Equity

| Budget as <br> Adjusted | Revenue <br> Adjustment <br> Required | Allowable <br> Revenue |
| :---: | :---: | :---: |
|  | $(2)$ | $(3)$ |


| $\$ 91,177$ | $\$$ | 25,432 | $\$$ | 116,610 |
| ---: | ---: | ---: | ---: | ---: |
| - | - | - |  |  |
| - | - |  |  |  |
| - | - | - |  |  |
| 3,428 | - | 3,428 |  |  |
|  | 25,605 | 25,432 | 120,037 |  |


| $\$$ | - | $\$$ | - | $\$$ | - |
| :--- | ---: | :--- | ---: | :--- | ---: |
|  | 15,412 |  | - | 15,412 |  |
|  | 5,797 | - | 5,797 |  |  |
|  | 4,254 | - | 4,254 |  |  |
|  | 10,350 | - | 10,350 |  |  |
|  | 22,300 | - | 22,300 |  |  |
|  | 1,700 |  | - | 1,700 |  |
|  | 6,182 |  | 1,501 |  | 7,682 |
|  | 65,996 | $\$$ | 1,501 | $\$$ | 67,497 |
|  |  |  |  |  |  |
| $\$$ | 28,609 | $\$$ | 23,932 | $\$$ | 52,541 |


| \$ | 2,609 | \$ | 7,539 | \$ | 10,149 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2,561 |  | 2,391 |  | 4,952 |
|  | 3,915 |  | - |  | 3,915 |
|  | - |  | - |  | - |
|  | - |  | - |  | - |
| \$ | 9,085 | \$ | 9,930 | \$ | 19,016 |
| \$ | 75,081 | \$ | 11,431 | \$ | 86,512 |
| \$ | 19,524 | \$ | 14,002 | \$ | 33,525 |
| \$ | 385,514 |  |  | \$ | 385,514 |

8.70\%
$11.50 \%$

PENNSYLVANIA POWER COMPANY
Normalization Adjustment No. 1
\$000

## Adjustment of Base Operating Revenues

To adjust base operating revenues (1) for changes in number of customers, (2) to roll in State Tax Adjustment Surcharge ("STAS") revenues into base rates, (3) to roll in Distribution System Improvement Charge ("DSIC") revenue into base rates, (4) for Energy Efficiency and Behind the Meter generation, (5) for other revenue, and (6) to eliminate unbilled revenues.
Adjustments (1) through (5) are supported by Mr. K. M. Siedt. The adjustment for unbilled revenues is supported by Mr. R. A. D'Angelo.

Line

| No. | Description | Amount |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  | (2) |  |
| 1 | Base revenues per budget for the 12 months ending 12/31/16 |  |  | \$ | 278,201 |
|  | Normalizing adjustments: |  |  |  |  |
| 2 | Customers - increase to yr end level | \$ | 160 |  |  |
|  | Specific adjustments |  |  |  |  |
| 3 | Roll-in of STAS | \$ | - |  |  |
| 4 | Roll-in of DSIC |  | 1,446 |  |  |
| 5 | Adjust for Energy Efficiency and Behind the Meter Generation |  | $(2,082)$ |  |  |
| 6 | Adjust for Other Revenues |  | (545) |  |  |
| 7 | Eliminate unbilled revenues |  | 72 |  |  |
| 8 | Total (Lines 3+4+5+6+7) | \$ | $(1,109)$ |  |  |
| 9 | Normalizing adjustment (Lines $2+8$ ) |  |  |  | (949) |
|  | Base revenues per budget for the |  |  |  |  |
| 10 | 12 months ending 12/31/16, as adjusted |  |  | \$ | 277,252 |

# Penn Power Exhibit RAD-4 Witness: R. A. D'Angelo <br> Page 8 

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 2 $\$ 000$

## Adjustment of State Tax Adjustment Surcharge Revenues

To remove state tax adjustment surcharge ("STAS") revenues. Normalized STAS revenues are being rolled into base rates.

Line No.
0
1

Eliminate per budget STAS
STAS revenue per budget for the12 months ending $12 / 31 / 16$, as adjusted

Amount
(1)
\$
-
$\$$ $\qquad$

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 3 \$000

## Adjustment of Distribution Improvement System Charge Revenues

To remove distribution system improvement charge ("DSIC") revenues. Normalized DSIC revenues are being rolled into base rates in Normalization Adjustment No. 1.

## Amount

(1)

DSIC revenue per budget for the 12 months ending 12/31/16
Eliminate per budget DSIC
\$ 1,446
$(1,446)$

DSIC revenue per budget for the 12 months ending 12/31/16, as adjusted
$\$$

# PENNSYLVANIA POWER COMPANY 

Normalization Adjustment No. 4
\$000

## Adjustment of Other Operating Revenues

To adjust other operating revenue (1) to remove American Transmission System Incorporated (ATSI) ground lease revenues; and (2) to adjust late payment charges. The adjustment to late payment charge is supported by Mr. K. M. Siedt.

Amount

1 Other Operating revenue per budget for the 12 months ending $12 / 31 / 16$
2 Eliminate ATSI ground lease

3 Normalizing adjustment
4 Other Operating revenue per budget for the 12 months ending $12 / 31 / 16$, as adjusted
$\$ \quad 3,608$

# PENNSYLVANIA POWER COMPANY 

Normalization Adjustment No. 5
$\$ 000$

Adjustment of Distribution Expense

To adjust distribution payroll expense (1) to reflect year end wage and employee levels, (2) to adjust service company payroll expenses to reflect year end and wage and employee levels, and (3) to include the amortization of gains or losses on reacquired debt.

Line No.
Description

1 Distribution expense per budget for the 12 months ending 12/31/16
2 Distribution payroll expense adjustment to reflect year end employee levels, and ongoing wage and salary rate (Supporting Schedule No. 1, Line 16, Col 2).

3 Service Company Distribution payroll expense adjustment allocated to Penn Power to reflect year end employee levels and ongoing wage and salary rate (Supporting Schedule 1, Line 28, Col. 2)

4 Amortization of (gain) or loss on reacquired debt

5 Increase distribution expenses for contractor safety request

6 Total normalizing adjustment (Lines $2+3+4+5$ )

7 Distribution expense per budget for the 12 months ending $12 / 31 / 16$, as adjusted (Lines $1+6$ )

Amount
(1) (2)

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 1 to Normalizing Adjustment No. 5
(\$000)

## Adjustment to Payroll Expense to Reflect Year End Employee Levels and Wage Rates

To determine the additional payroll expense associated with (1) year end bargaining and non-bargaining wage rates and employee levels, and (2) Service Company year end wage rates and employee levels; and to allocate the additional payroll expense to individual components. Mr. T. J. Dolezal supports the labor allocation factors.

| Line No. | Description | Amount |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  |  |  |
| 1 | Total company payroll (Exhibit RAD 27) |  |  |  | 805 |
|  | Non-Bargaining |  |  |  |  |
| 2 | Straight time per budget for January 1, 2016 through February 28, 2016 | \$ | 678 |  |  |
| 3 | Straight time 3\% increase effective 3/1/2016 (Line $2 \times 3 \%$ ) |  | 20 |  |  |
| 4 | Straight time per budget for the 12 months ending 12/31/2016, as adjusted | \$ | 4,290 |  |  |
| 5 | Straight time 3\% increase effective 3/1/2016 (Line $4 \times 3 \%$ ) |  | 129 |  |  |
|  | Bargaining |  |  |  |  |
| 6 | Straight time per budget for January 1, 2016 through June 30, 2016 | \$ | 5,406 |  |  |
| 7 | Straight time $2.5 \%$ increase effective 3/1/2016 (Line $6 \times 2.5 \%$ ) |  | 135 |  |  |
| 8 | Straight time per budget for the 12 months ending $12 / 31 / 2016$, as adjusted | \$ | 10,840 |  |  |
| 9 | Straight time 2.5\% increase effective 3/1/2016 (Line $8 \times 2.5 \%$ ) |  | 271 |  |  |
| 10 | Total company payroll adjustments |  |  |  | 555 |
| 11 | Total Payroll adjustment (Line $1+10$ ) |  |  |  | 360 |
| 12 | O\&M allocation \% |  | 38.05\% |  |  |
| 13 | O\&M payroll adjustment (Line $10 \times 12$ ) | \$ | 211 |  |  |
|  | Allocation of payroll adiustment: |  |  |  |  |
| 14 | Price to Compare |  | 0.00\% | \$ | - |
| 15 | Transmission |  | 0.00\% |  | - |
| 16 | Distribution |  | 61.18\% |  | 129 |
| 17 | Customer accounts |  | 18.53\% |  | 39 |
| 18 | Customer service |  | 14.74\% |  | 31 |
| 19 | Administrative and general |  | 5.54\% |  | 12 |
| 20 | Total |  | 100\% | \$ | 211 |
|  | Service Company |  |  |  |  |
| 21 | Straight time per budget for January 1, 2016 through February 28, 2016 | \$ | 617 |  |  |
| 22 | Straight time 3\% increase effective 3/1/2016 (Line $21 \times 3 \%$ ) |  | 19 |  |  |
| 23 | Straight time per budget for the 12 months ending $12 / 31 / 2016$, as adjusted | \$ | 4,098 |  |  |
| 24 | Straight time 3\% increase effective 3/1/2016 (Line $23 \times 3 \%$ ) |  | 123 |  |  |
| 25 | Total service company payroll adjustments (Lines $22+24$ ) |  |  | \$ | 141 |
|  | Allocation of Service Company payroll adjustment (Exhibit RAD-25) |  |  |  |  |
| 26 | Price to Compare |  | 0.00\% | \$ | - |
| 27 | Transmission |  | 0.00\% |  | - |
| 28 | Distribution |  | 24.69\% |  | 35 |
| 29 | Customer accounts |  | 24.17\% |  | 34 |
| 30 | Administrative and general |  | 51.16\% |  | 72 |
| 31 | Total |  | 100\% | \$ | 141 |

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 6
$\$ 000$

## Adjustment of Customer Accounts Expense

To adjust customer account expense (1) to reflect year end wage rates and employee levels, (2) to reflect Service Company year end wage rates and employee levels, (3) to include increased O\&M costs associated with serving new customers, and (4) to include interest on customer deposits.

## Line No.

Description

| Amount |
| :---: |
| $(1)$ |

1 Customer Account expense per budget for the 12 months ending 12/31/16

2 Customer Account payroll expense adjustment to reflect year end employee levels and ongoing wage \& salary rates
(Normalizing Adjustment No. 5, Supporting Schedule No. 1, Line 17, Column 2)

3 Service Company customer account payroll expense adjustment allocated to Penn Power to reflect year end employee levels and ongoing wage and salary rates,
(Normalizing Adjustment No. 5, Supporting Schedule 1, Line 29, Col. 2)
4 Increased O\&M costs associated with increased number of customers in normalized revenue levels
(Supporting Schedule 1, Line 10)
2
5 Interest on customer deposits, (Supporting Schedule 2, Line 3)

6 Total normalizing adjustment (Lines $2+3+4+5$ )

7 Customer Account expense per budget for the 12 months ending 12/31/16, as adjusted

# Penn Power Exhibit RAD-4 <br> Witness: R. A. D'Angelo <br> Page 14 

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 1 to Normalizing Adjustment No. 6
(\$000)

## Adjustment of Other O\&M Costs Associated with Serving New Customers

To determine the cost associated with serving the additional customers reflected in Normalization Adjustment No. 1. The ratio of non-payroll customer account expense to total revenue is applied to the additional revenue from increased customers to estimate this cost. The Commission previously recognized and approved this adjustment. The adjustment to base operating revenue for changes in number of customers is supported by Mr. K. M. Siedt.

| Line No. | Description | Amount |  |
| :---: | :---: | :---: | :---: |
|  |  |  | (1) |
|  | Customer Account Expense Excluding Labor and Uncollectible |  |  |
| 1 | Customer Account expense per budget for the 12 months ending $12 / 31 / 16$ | \$ | 6,410 |
| 2 | Less: Uncollectible expense |  | $(3,365)$ |
| 3 | Less: Labor expense |  | $(1,661)$ |
| 4 | Customer Account expense excluding labor and uncollectible expense | \$ | 1,384 |
|  | Total Distribution Revenue |  |  |
| 5 | Distribution revenues per budget | \$ | 92,126 |
| 6 | Late payment charges per budget |  | 1,291 |
| 7 | Total | \$ | 93,417 |
| 8 | Ratio of customer account expense to total revenue (Line $4 /$ Line 7 ) |  | 1.48\% |
| 9 | Revenue from added customers (Normalization Adjustment No. 1, Line 2) | \$ | 160 |
| 10 | Additional expense from added customers (Lines $8 \times 9$ ) | \$ | 2 |

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 2 to Normalizing Adjustment No. 6
(\$000)

## Adjustment to Allow for Interest Expense on Customer Deposits

To determine the interest paid on customer deposits. Since customer deposits are funds supplied to the Company by customers, they are included in rate base as a deduction. The Commission previously recognized this adjustment to include the corresponding interest paid to customers on these deposits as a expense.

Line No.
Description

| Non |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| (1) |  |  |  | ) |
| \$ 2,790 | \$ | 2,450 | \$ | 5,239 |
| 3\% |  | 6\% |  |  |
| \$ 84 | \$ | 147 | \$ | 231 |

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 7 $\$ 000$

## Adjustment of Customer Service and Information Expense

To adjust customer service and information expense to reflect year end wage and employee levels.

Line No.
Description

1 Customer Service expense per budget for the 12 months ending 12/31/16

2 Customer Service payroll expense adjustment to reflect year end employee levels and ongoing wage \& salary rates
(Normalization Adjustment No. 5, Supporting Schedule No. 1, Line 18, Column 2)

Amount

## (1) <br> (2)

\$ 11,350
$\$$ 31

3 Total normalizing adjustment 31

4 Customer Service expense per budget for the 12 months ending $12 / 31 / 16$, as adjusted

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 8 <br> $\$ 000$

## Adjustment of Administrative and General Expense

To adjust administrative and general expenses (1) to reflect year end wage rates and employee levels, (2) to reflect Service Company year end wage rates and employee levels, (3) to reflect OPEB expense at service cost level, (4) to reflect pension expense at the ten year cash level, (5) to reflect employee benefits expense at year end wage rates and employee levels, and (6) to include amortization of rate case expenses.

## Line No.

Description

| Amount |  |
| :--- | :--- |
| (1) | $(2)$ |
|  |  |
|  | $\$$ |
|  |  |
|  |  |
| $(5,941)$ |  |
| $(3,989)$ |  |
| $(9,930)$ |  |

5 Administrative \& general payroll expense adjustment to reflect year end employee levels and ongoing wage \& salary rates (Normalization Adjustment No. 5, Supporting Schedule No. 1, Line 19, Column 2)

6 Service Company Administrative \& general payroll expense adjustment allocated to Penn Power to reflect year end employee levels and ongoing wage \& salary rates,
(Normalization Adjustment No. 5, Supporting Schedule No. 1, Line 30, Column 2)
7 Adjust OPEB expense to service cost level,
(Supporting Schedule No. 1, Line 12, Col. 1)
8 Adjust pension expense to ten year cash level, (Supporting Schedule No. 2, Line 19, Col. 3)

9 Adjust employee benefit costs (Supporting Schedule No. 3, Line 8, Column 3) 101
10 Rate case expenses to be incurred during current rate proceeding (Exhibit RAD-23)
11 Recovery period - 2 years
12 Annual amount (Line 7 /Line 8)

| $\$$ | 162 |  |  |
| :--- | ---: | :--- | :--- | :--- |
|  | 2 |  |  |
| $\$$ | 81 | $\$$ | 81 |

13 Total normalizing adjustment (Lines $5+6+7+8+9+12$ )
$\$ \quad 2,495$

14 Administrative and general expense per budget for the
12 months ending 12/31/16, as adjusted

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 1 to Normalizing Adjustment No. 8
$\$ 000$

## Adjustment for OPEB Expense

To adjust OPEB expense to the test year service cost. The service cost represents the actuarial present value of benefit liabilities accrued under the plan benefit formula for services rendered during the test year. Inclusion of the service cost in rates provides for recovery of the current cost of benefits earned by plan participants. Any excess or shortfall related to the expected return on plan assets are not included because their inclusion would artificially reduce or increase total costs and result in the recovery of more or less than the actual normal cost of service. The adjustment for OPEB expense to the current service cost amount was adopted by the Commission at Docket Numbers R-00061366 and R-00061367 and included at Docket Nos. R-2014-2428745; R-2014-2428743; R-20142428744 and R-2014-2428742.

| Line No. | Description |
| :---: | :---: |
| 1 | O\&M - Capital allocation ratios |
| 2 | Company OPEB expense included in budget (Exhibit RAD 27) |
| 3 | FirstEnergy Service Corp. OPEB expense |
| 4 | Allocation ratio |
| 5 | Allocated FirstEnergy Service Corp. OPEB expense included in budget (Lines $3 \times 4$ ) |
| 6 | Total OPEB expense included in budget (Lines $2+5$ ) |
| 7 | Service cost for company OPEB expense |
| 8 | Service cost for FirstEnergy Service Corp. OPEB expense |
| 9 | Allocation ratio |
| 10 | Allocated FirstEnergy Service Corp. service cost (Lines $8 \times 9$ ) |
| 11 | Total OPEB service cost (Line $7+10$ ) |
| 12 | Adjustment to set OPEB expense at ongoing service cost level (Lines 11-6) |


|  | O\&M |  | Capital | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) |  | (2) |  | (3) |
|  | 38.05\% |  | 61.95\% |  | 100.00\% |
| \$ | (592) | \$ | (965) | \$ | $(1,557)$ |
| \$ | $\begin{array}{r} (9,220) \\ 1.56 \% \\ \hline \end{array}$ | \$ | $\begin{array}{r} (15,012) \\ 1.56 \% \\ \hline \end{array}$ |  | $\begin{array}{r} (24,232) \\ 1.56 \% \end{array}$ |
| \$ | (144) | \$ | (234) | \$ | (378) |
| \$ | (736) | \$ | $(1,199)$ | \$ | $(1,935)$ |
| \$ | 3 | \$ | 6 | \$ | 9 |
| \$ | 207 | \$ | 337 | \$ | 544 |
|  | 1.56\% |  | 1.56\% |  | 1.56\% |
| \$ | 3 | \$ | 5 | \$ | 8 |
| \$ | 6 | \$ | 11 | \$ | 17 |

$\$ \quad 742 \quad \$ \quad 1,210 \quad \$ \quad 1,952$

PENNSYLVANIA POWER COMPANY
Supporting Schedule No. 2 to Normalizing Adjustment No. 8 $\$ 000$

## Adjustment for Pension Expense

To adjust pension expense to a ten year average level of actual cash contributions under the methodology that was adopted by the Commission at Docket Numbers R-00061366 and R-0061367, and included at Docket Nos. R-2014-2428745; R-20142428743; R-2014-2428744 and R-2014-2428742.

| Line No. | Description | Amount |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) <br> Total |  | (2) | (3) O8M |  |
|  |  |  |  | O\&M \% |  |  |
| 1 | Company Cash Contributions |  |  |  |  |  |
| 2 | 2009 Cash Pension Contribution |  | 21,359 | 33.35\% |  | 7,123 |
| 3 | 2011 Cash Pension Contribution |  | 12,000 | 41.69\% |  | 5,003 |
| 4 | 2016 Cash Pension Contribution |  | 14,856 | 38.05\% |  | 5,653 |
| 5 | Total Company Cash Pension Contributions | \$ | 48,215 |  | \$ | 17,779 |
| FirstEnergy Service Company Cash Contributions |  |  |  |  |  |  |
| 6 | 2016 Pension Contribution |  | 24,760 |  |  |  |
| 7 | Company Allocation Factor |  | 1.56\% |  |  |  |
| 8 | 2016 Service Company Pension Contribution allocated to the Company | \$ | 386 | 38.05\% |  | 147 |
| 9 | Total Pension cash contributions (Lines $5+8$ ) | \$ | 48,601 |  | \$ | 17,926 |
| 10 | Number of years |  | 10 |  |  | 10 |
| 11 | Pension expense cash contribution, averaged over 10 years | \$ | 4,860 |  | \$ | 1,793 |
| 12 | O\&M Pension Expense included in budget |  |  |  |  | 305 |
| 13 | Adjustment to Pension Expense (Lines 11-12) |  |  |  | \$ | 1,487 |

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 3 to Normalizing Adjustment No. 8 $\$ 000$

## Adjustment to Employee Benefit Expense to Reflect Year End Employee Levels and Ongoing Wage Rates

To determine the normalized costs associated with providing additional employee benefits related to the increased O\&M payroll expense reflected in Normalization Adjustment No. 5, Supporting Schedule No. 1.

Employee benefits applicable to operating expenses:

| Line No. | Description | Effective <br> Rate (a) | Payroll Adjustment |  |  | Benefit Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  |  |  |  |  |
| 1 | Workers compensation | 0.736\% | \$ | 211 | (b) | \$ | 2 |
| 2 | Pension costs | 27.079\% | \$ | 211 | (b) |  | 57 |
| 3 | OPEB costs | 0.051\% | \$ | 211 | (b) |  | - |
| 4 | Life insurance | 0.157\% | \$ | 211 | (b) |  | - |
| 5 | Medical insurance | 9.632\% | \$ | 211 | (b) |  | 20 |
| 6 | Savings plan | 3.038\% | \$ | 211 | (b) |  | 6 |
| 7 | Other (Exhibit RAD-27) | 7.588\% | \$ | 211 | (b) |  | 16 |
| 8 | Total increase due to payroll adjustment |  |  |  |  | \$ | 101 |

(a) Summary of effective employee benefit rates based on total payroll for the 12 months ending 12/31/16

|  | Total Amount |  | Total Payroll |  |  | $\begin{gathered} \text { Effective } \\ \text { Rate } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Workers compensation (Exhibit RAD 27) | \$ | 131 | \$ | 17,805 | (a) | 0.736\% |
| Pension costs - normalized basis |  | 4,822 | \$ | 17,805 | (a) | 27.079\% |
| OPEB costs - service cost |  | 9 | \$ | 17,805 | (a) | 0.051\% |
| Life insurance (Exhibit RAD 27) |  | 28 | \$ | 17,805 | (a) | 0.157\% |
| Medical insurance (Exhibit RAD 27) |  | 1,715 | \$ | 17,805 | (a) | 9.632\% |
| Savings plan (Exhibit RAD 27) |  | 541 | \$ | 17,805 | (a) | 3.038\% |
| Other (Exhibit Rad 27) |  | 1,351 | \$ | 17,805 | (a) | 7.588\% |

(b) Adjustment No. 5, Supporting Schedule No. 1, Line 7.

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 9 $\$ 000$

## Adjustment of Depreciation Expense

To adjust depreciation expense (1) to reflect equal life group (ELG) rates on adjusted rate base, (2) to adjust cost of removal / salvage expense to a five year average per Commission practice, and (3) eliminate legacy meter cost of removal from the five year average. Mr. J. J. Spanos supports the ELG depreciation rates.

| Line No. | Description | Amount |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (1) |  | (2) |  | (3) |  | (4) |
| 1 | Depreciation expense per budget for the 12 months ending 12/31/16 |  |  |  |  |  |  | \$ | 17,534 |
| 2 | Cost of removal/salvage expense per budget for the 12 months ending 12/31/16 (Exhibit RAD-30) |  |  | \$ | 3,242 |  |  |  |  |
| 3 | Depreciation accrual per budget (Lines 1-2) |  |  | \$ | 14,292 |  |  |  |  |
| 4 | Depreciation expense accrual on adjusted rate base at average remaining life rate (Exhibit RAD-53, page 2) |  |  | \$ | 19,723 |  |  |  |  |
| 5 | Adjustment for average remaining life accrual for plant (Lines 4-3) |  |  |  |  | \$ | 5,431 |  |  |
| 6 | Cost of removal/salvage expense per budget for the 12 months ending 12/31/16 (Exhibit RAD-30) |  |  | \$ | 3,242 |  |  |  |  |
|  | Cost of removal and salvage 2011-2015 (Exhibit RAD-30) |  |  |  |  |  |  |  |  |
| 7 | 2013 | \$ | 1,332 |  |  |  |  |  |  |
| 8 | 2014 |  | 2,217 |  |  |  |  |  |  |
| 9 | 2013 |  | 5,046 |  |  |  |  |  |  |
| 10 | 2014 |  | 2,666 |  |  |  |  |  |  |
| 11 | 2015 |  | 4,032 |  |  |  |  |  |  |
| 12 | Total | \$ | 15,293 |  |  |  |  |  |  |
| 13 | Five year average (Line 12/5) | \$ | 3,059 |  |  |  |  |  |  |
| 14 | Less five year average for legacy meter cost of removal |  | (481) |  |  |  |  |  |  |
| 15 | Total cost of removal | \$ | 2,578 |  |  |  |  |  |  |
| 16 | Adjustment of cost of removal/salvage expense to a five year average (Lines 15-6) |  |  |  |  |  | (664) |  |  |
| 17 | Total normalizing adjustment (Lines $5+16$ ) |  |  |  |  |  |  |  | 4,767 |
| 18 | Depreciation expense per budget for the 12 months ending $12 / 31 / 16$, as adjusted |  |  |  |  |  |  | \$ | 22,300 |

# PENNSYLVANIA POWER COMPANY 

Normalization Adjustment No. 10
$\$ 000$

## Adjustment of Amortization Expense

To adjust amortization expense to (1) exclude smart meter amortization in the budget; and (2) include the amortization of additional legacy meters.

Line No.
Description

1 Amortization expense per budget for the 12 months ending 12/31/2016

2 Adjustment for amortization of legacy meters (Adj. 10 Sched 1, Line 4)

3 Eliminate smart meter amortization per budget

4 Total normalizing adjustment

5 Amortization expense per budget for the
12 months ending $12 / 31 / 16$, as adjusted

Amount
(1)
(2)

## PENNSYLVANIA POWER COMPANY

## Adjustment for Amortization Expense of Legacy Meters

To determine additional legacy meters to fully recover all legacy meter costs over 39 months of the original amortization period.

Line No.

Description

## Amount

(1)
\$ 9,287

10,797

Unrecovered Legacy Meters $(1,510)$

# Penn Power Exhibit RAD-4 <br> Witness: R. A. D'Angelo <br> Page 24 

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 11 <br> $\$ 000$

Adjustment of Taxes Other Than Income
To adjust gross receipts tax expense to (1) reflect normalized sales revenues, to (2) adjust payroll tax expenses for normalized payroll and employee expenses.

Line No.

## Description

1 Taxes Other Than income per budget for the 12 months ending 12/31/16

Gross Receipts Tax
2 Normalized sales revenues (Exhibit RAD-4, page 1, Col. 3)
3 Gross receipts tax @ 5.9\%
4 Gross receipts tax included in budget (Exhibit RAD-32, page 1)

5 Adjustment for gross receipts tax at normalized revenue level (Lines 3-4)
6 Adjustment for payroll taxes on normalized payroll
(Supporting Schedule No. 1, Line 8)

7 Total normalizing adjustment (Lines 5 +6)
8 Taxes other than income per budget for the

| Amount |  |  |
| :---: | :---: | :---: |
| $(1)$ | $(2)$ |  |

\$ 17,292
\$ 277,252
16,358
16,496
\$ (138)

5

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 1 to Normalizing Adjustment No. 11 $\$ 000$

## Adjustment to Taxes Other Than Income to reflect changes in payroll taxes.

To determine the additional payroll tax expense associated with the increased O\&M payroll expense reflected in Normalization Adjustment No. 5, Supporting Schedule No. 1.
Line No. Description Amount ..... (1)
\$ ..... 17,805
(Normalization Adjustment No. 5, Schedule 1, Line 1, Col 3)
(Normalization Adjustment No. 5, Schedule 1, Line 1, Col 3)Total payroll tax included in budget, (Exhibit RAD-32)Total payroll as adjusted (Normalization Adjustment No. 5Schedule 1, Line 5)
Adjustment for payroll tax (Lines $6 \times 7$ )$\$$449
Effective payroll tax rate (Line 2 / Line 1) 3$\$ \quad 18,360$
Payroll tax on normalized payroll (Lines $3 \times 4$ ) ..... \$ ..... 463
2.52\%
6 Total Company payroll tax adjustment (Lines 5-2) \$ ..... \$ ..... 14
O\&M Allocation percentage ..... $38.05 \%$
7
O\&M Allocation percentage
38.05\%5

1 Total payroll per budget for the 12 months ending 12/31/2016

2 Total payroll tax included in budget, (Exhibit RAD-32)

4 Total payroll as adjusted (Normalization Adjustment No. 5

8 Adjustment for payroll tax (Lines $6 \times 7$ )


Adjustment of Federal \& State Income Taxes
To adjust federal and state income taxes to reflect the revenue and expense levels shown on Exhibit RAD-4, Page 1, Col. 3 - Budget as Adjusted.
(A) Computation of Interest charges



## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 1 to Normalization Adjustment No. 12
$\$ 000$

## Adjustment of Tax Depreciation

To adjust tax depreciation to eliminate the cost of removal component.

| Line No. | Description | Total <br> Exhibit RAD-33 <br> (1) |  |
| :---: | :---: | :---: | :---: |
| 1 | Tax depreciation expense per budget | \$ | 32,747 |
| 2 | Cost of removal salvage in tax depreciation |  | 2,851 |
| 3 | Net Tax depreciation (Line 1 - Line 2) |  | 29,897 |
| 4 | Smart Meter tax depreciation |  | 10,611 |
| 5 | Distribution tax depreciation (Line 3-Line 4) | \$ | 19,286 |

## Penn Power Exhibit RAD-4

Witness: R. A. D'Angelo
Page 28

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 13 <br> $\$ 000$

## Adjustment of Provision for Deferred Income Taxes

This adjustment to the Provision for Deferred Income Taxes reflects (1) the adjustment of Federal deferrals to reflect year-end plant and (2) miscellaneous federal deferred taxes not associated with liberalized depreciation. All state deferred taxes associated with liberalized depreciation have been eliminated.

Line No.

## Description

1 Deferred taxes per budget, 12 months ending 12/31/2016

2 Deferred taxes - liberalized depreciation, (Exhibit RAD-41, page 17)
3 Less Deferred taxes - Smart meters

4 Distribution deferred taxes

Adjustment to deferred tax expense (Lines 2-1)

Deferred tax expense per budget for the 12 months ending $12 / 31 / 16$, as adjusted

Provision for Deferred

| Federal State |  |  |  |
| :---: | :---: | :---: | :---: |
|  | (1) |  | (2) |
| \$ | 8,374 | \$ | 1,150 |
|  | 3,915 |  |  |
|  | 2,581 |  | - |

[^9]$\$ \quad(4,459) \$(1,150)$
$\$ \quad 3,915 \$$ $\qquad$

# PENNSYLVANIA POWER COMPANY 

Normalization Adjustment No. 14 $\$ 000$

## Adjustment of Investment Tax Credit

## Not Applicable



$$
\begin{aligned}
& \begin{array}{c}
\text { PENNSYLVANIA POWER COMPANY } \\
\text { Rate Base At Original Cost } \\
\text { Normalized To Year-End Conditions at December 31, } 2015 \\
\text { ( } \$ 000)
\end{array}
\end{aligned}
$$

$$
\begin{aligned}
& \begin{array}{lr}
\$ & 178,126 \\
\hline & - \\
\hline \$ & 178,126 \\
\hline \$ & 443,672 \\
\hline
\end{array}
\end{aligned}
$$

$$
\begin{aligned}
& \begin{array}{c}
\stackrel{8}{+} \\
\stackrel{8}{9} \\
\alpha_{1} \\
\hline
\end{array}
\end{aligned}
$$

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 1 (\$000)

Adjustment of Electric Plant in Service

To adjust the budgeted gross plant in service to (1) eliminate the Asset Retirement Cost ("ARC"); (2) to include LED Street Lights. (3) eliminate Transmission easements and land (4) eliminate American Transmission Systems, Inc. ("ATSI") plant in accordance with the settlement agreement at Docket A-110450F0016. An asset retirement cost ("ARC") increases the carrying amount of a long-lived asset when a liability for an asset retirement obligation ("ARO") is recognized. The ARC is depreciated over the life of the asset. The ARC and related reserve are excluded from Rate Base, while the associated depreciation expense is excluded from the Income Statement. This treatment is in accordance with 18 CFR Chapter 1 § 35.18 Asset retirement obligations.

| Line No. | Description | Adjustments |  | rvice |
| :---: | :---: | :---: | :---: | :---: |
|  |  | (1) | (2) |  |
| 1 | Plant in Service at 12/31/2015 (Exnibit RAD-48, Attach. B, p. 2) |  | \$ | 620,034 |
|  | Normalizing adjustment: |  |  |  |
| 2 | Eliminate ARC (Exhibit RAD-48, Attach. B, p. 2) | (37) |  |  |
| 3 | Increase LED Street Lighting (Exhibit RAD-48, Attach. B, p. 2) | 4,578 |  |  |
| 4 | Eliminate Transmission easements and land (Exhibit RAD-48, Attach. B, p. 1) | $(10,520)$ |  |  |
| 5 | Eliminate ATSI Plant from 1999 Agreement (Exhibit RAD-48, Attach. B, p. 2) | (775) |  |  |
| 6 | Normalization Adjustment |  |  | (6,754) |
| 7 | Plant in Service at 12/31/2015, as adjusted |  | \$ | 613,280 |

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 2 (\$000)

## Adjustment of Plant Held for Future Use

To adjust Plant Held for Future Use. As an alternative to rate base treatment, the Company is requesting the allowance of deferred carrying charges on any current or future investments in Plant Held for Future Use with definitive plans of utilization within a ten-year period. This is consistent with long-standing Commission policy.

Line
No.

1
Plant Held for Future Use at 12/31/2015
Normalizing adjustment:

2

3
Plant Held for Future Use at 12/31/2015, as adjusted
Eliminate Plant Held for Future Use

Amount
(1)
$\$ \quad 1,764$
$(1,764)$
$\$$ $\qquad$

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 3 (\$000)

## Adjustment of Depreciation Reserves - Plant in Service

To adjust the budgeted gross plant in service to (1) eliminate the Asset Retirement Cost ("ARC"); and (2) eliminate American Transmission Systems, Inc. ("ATSI") plant in accordance with the settiement agreement at Docket A-110450F0016. An asset retirement cost ("ARC") increases the carrying amount of a long-lived asset when a liability for an asset retirement obligation ("ARO") is recognized. The ARC is depreciated over the life of the asset. The ARC and related reserve are excluded from Rate Base, while the associated depreciation expense is excluded from the Income Statement. This treatment is in accordance with 18 CFR Chapter 1 § 35.18 Asset retirement obligations.

Line
$\qquad$

1 Plant in Service depreciation reserves at 12/31/2015 (Exhibit RAD-48, Attach. B, p. 3)

Normalizing adjustments:
Eliminate ARC (Exhibit RAD-48, Attach. B. p. 3)

Eliminate ATSI reserve per 1999 Agreement (Exhibit RAD-48, Attach. B, p. 3)

Normalization Adjustment (Lines 3 +4)

| Adjusiments | Depreciation Reserves Plant in Service |
| :---: | :---: |
| (1) | (2) |(24)(639)

## PENNSYLVANIA POWER COMPANY Normalization Adjustment No. 4 (\$000)

## Adjustment of Cash Working Capital

To recognize cash working capital at year-end level. This adjustment is supported by Penn Power Witness Mr. J.L. Adams in Statement No. 5.
Line
No

2

3

4

5

Description

Cash working capital per book at 12/31/2015
Normalizing adjustment:

Cash working capital normalized to year-end
\$ 28,906

Cash working capital per book $\qquad$ -

Normalization Adjustment

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 5 (\$000)

## Adjustment of Material and Supplies Inventories

To recognize the Company's distribution portion of FE Service material and services ("M\&S") inventory levels at 12/31/2015.

| Line <br> No. | Description | M\&S Inventories |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (1) |  | (2) |
| 1 | M\&S Inventory per book at 12/31/2015 |  |  | \$ | - |
|  | Normalizing adjustment: |  |  |  |  |
| 2 | Distribution component of projected FE Service M\&S Inventory allocated to the company at 12/31/2015 (Exhibit RAD-13) | \$ | 3,245 |  |  |
| 3 | M\&S Inventory per book at 12/31/2015 |  | - |  |  |
| 4 | Normalization Adjustment |  |  |  | 3,245 |
| 5 | M\&S inventory at 12/31/2015, as adjusted |  |  | \$ | 3,245 |

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 6
(\$000)

## Adjustment for Legacy Meters

Line

Legacy meter normalized to year-end
7,847

3 Normalization Adjustment
7,847

## Penn Power Exhibit RAD-5

Witness: R. A. D'Angelo Page 8

## PENNSYLVANIA POWER COMPANY

## Normalization Adjustment No. 7

 (\$000)
## Adjustment for Deferred Storm Damage Epenses

| Line |
| :---: |
| No. |

Description

## Unamortized storm damage deferral expense per book at

 12/31/2015Storm Reserve Balance

Normalization Adjustment

Storm damage deferral expense at $12 / 31 / 2015$, as adjusted

Storms
(1) (2)
\$

- \$

1,430

1,430
$\$ \quad 1,430$

## Adjustment of Accumulated Deferred Income Taxes - Liberalized Depreciation

This adjustment adjusts the budgeted deferred tax balances for liberalized depreciation (excluding the impact of SFAS No. 109 deferrals) to (1) eliminate remaining state deferred taxes - liberalized depreciation balances including the federal benefit of those taxes; and (2) Ellminate Other excludable items.

| Line No. | Description | Adjustments |  | Accum Reserve for Deferred Taxes - Liberalized Depreciation |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (1) |  | 144,004 |
| 1 | Deferred taxes per book - liberalized depreciation at 12/31/2015 |  |  | \$ |  |
|  | Normalizing adjustments: |  |  |  |  |
| 2 | Eliminate remaining state deferred taxes - liberalized depreciation including the federal benefit of those taxes | \$ | $(18,783)$ |  |  |
| 3 | Eliminate Other Excludable Items (Leases) |  | (9,942) |  |  |
| 4 | Normalization Adjustment |  |  |  | $(28,725)$ |
| 5 | Deferred taxes - liberalized depreciation at 12/31/2015, as adjusted |  |  | \$ | 115,279 |

# PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 9 (\$000) 

## Adjustment of Operating Reserves

Not Applicable

Penn Power Exhibit RAD-5
Witness: R. A. D'Angelo Page 11

PENNSYLVANIA POWER COMPANY
Rate of Return at December 31, 2015

| Line <br> No. |  | Exhibit JD-24 Capital $\qquad$ <br> (1) |  | Capital Ratios | Cost <br> Rate | Weighted Cost Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (2) | (3) | $(3)=(2) \times(3)$ |
| 1 | Total long-term debt |  | 151,981 | 49.9\% | 5.88\% | 2.94\% |
| 2 | Total preferred stock |  | - | 0.00\% | 0.00\% | 0.00\% |
| 3 | Total common equity |  | 152,390 | 50.1\% | 11.50\% | 5.76\% |
| 4 | Total capitalization | \$ | 304,371 | 100.00\% |  | 8.70\% |



Penn Power Exhibit RAD-6 Witness. R. A. D'Angelo
Page 2
PENNSYLVANIA POWER COMPANY
Statement of Operating Income, 12 Months ended Decenber 31, 2015, Normalized and Adjusted ssary to Achieve Allowable Return
( $\$ 000$ )

| Line No. | Description | Distribution |  | Smart Meters |  | Total Distribution |  | Riders |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Price to Compare | Universal Service |  | Energy Efficiency |  | Default Service Support |  | Solar |  |
|  |  | (13) |  |  |  | (14) | (15) |  | (16) |  | (17) |  | (18) |  | (20) |  | (21) |  |
| Operating revenues |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Retail sales | \$ | 16,231 | \$ | $(2,039)$ |  |  | \$ | 14,192 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 2 | STAS revenue |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 3 | DSIC revenue |  |  |  | - |  | - |  |  |  |  |  |  |  |  |  |  |
| 4 | Sales for resale |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 5 | Other operating revenue |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 6 | Total operating revenue | \$ | 16,231 | \$ | $(2,039)$ | \$ | 14,192 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Operating expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | PTC | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 8 | Distribution |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 9 | Customer accounts |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 10 | Customer service \& info |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 11 | Admin \& gen expense |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 12 | Depreciation - accrual |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 13 | Amortization |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 14 | Taxes other than income |  | 958 |  | (120) |  | 837 |  | - |  | - |  | - |  | - |  | - |
| 15 | Operating expense before tax | \$ | 958 | \$ | (120) | \$ | 837 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 16 | Operating income before income tax | \$ | 15,273 | \$ | $(1,919)$ | \$ | 13,354 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
|  | Income taxes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Federal income tax - current | \$ | 4,812 | \$ | (605) | \$ | 4,207 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 18 | State income tax - current |  | 1,526 |  | (192) |  | 1,334 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 19 | Deferred income tax - federal |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 20 | Deferred income tax - state |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 21 | Investment tax credit |  | - |  | - |  | - - |  | - |  | - |  | - |  | - |  | - |
| 22 | Total tax expense | \$ | 6,337 | \$ | (796) | \$ | 5,541 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 23 | Total operating expenses | \$ | 7,295 | \$ | (917) | \$ | 6,378 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 24 | Operating income | \$ | 8,936 | \$ | $(1,123)$ | \$ | 7,813 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |



| PENNSYLVANIA POWER COMPANY <br> Statement of operating Income, 12 Months ended December 31, 2015, Normalized and Adjusted to Reflect Revenue Necessary to Achleve Allowable Return (\$000) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\text { Line No. }}$ | Description | Distribution |  | Smart Meters |  | $\begin{aligned} & \text { Total } \\ & \text { Distribution } \end{aligned}$ |  | Price to Compare |  | Universal Service |  | EnergyEfficiency |  | Default Service |  | Solar |  |
|  |  | $(23)=(4)+(13)$ |  | (24) $=(5)+(14)$ |  | (25) $=(6)+(16)$ |  | $(26)=(7)+(17)$ |  | $(27)=(8)+(18)$ |  | (28) $=(9)+(19)$ |  | $(29)=(10)+(20)$ |  | (30) $=(11)+(21)$ |  |
|  | Operating revenues |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Retail sales | \$ | 96,191 | \$ | 10,444 | \$ | 106,635 | \$ | 139,477 | \$ | 4,861 | s | 6,027 | \$ | 7,344 | \$ | 936 |
| 2 | STAS revenue |  | . |  | - |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | DSIC revenue |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |
| 4 | Sales for resale |  |  |  | - |  | - |  | 1 |  | - |  | 158 |  | - |  |  |
| 5 | Other operating revenue |  | 3,159 |  |  |  | 3,159 |  | 31 |  |  |  | $\bigcirc$ |  |  |  |  |
| 6 | Total operating revenue | \$ | 99,350 | \$ | 10,444 | \$ | 109,794 | \$ | 139,509 | \$ | 4,861 | \$ | 6,185 | \$ | 7,344 | \$ | 936 |
|  | Operating expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | PTC | \$ | - | \$ | - | \$ | - | \$ | 131,004 | \$ | - | \$ | - | \$ |  | \$ | 940 |
| 8 | Distribution |  | 14,726 |  | - |  | 14,726 |  | 1,298 |  | - |  | - |  | 2,046 1 1728 |  |  |
| 9 | Customer accounts |  | 5,222 |  | - |  | 5,222 |  | - |  | - ${ }^{-}$ |  | - |  | 1,728 |  |  |
| 10 | Customer service $\&$ info |  | 3,743 |  | - |  | 3,743 |  | - |  | 5,779 |  | - |  | 70 |  |  |
| 11 | Admin \& gen expense |  | 267 |  | 3,739 |  | 4,006 |  | - |  | - |  | 4,786 |  |  |  |  |
| 12 | Depreciation-accrual |  | 18,247 |  | 2,740 |  | 20,987 |  | - |  | - |  |  |  | - |  |  |
| 13 | Amortization |  | $(3,774)$ |  | 982 |  | $(2,792)$ |  | (1,410) |  | $(1,005)$ |  | 1,112 |  | 3,105 |  | (55) |
| 14 | Taxes other than income |  | 9,307 |  | 14 |  | 9,321 |  | 7,222 |  | 245 |  | 288 |  | 381 |  | 49 |
| 15 | Operating expense before tax | \$ | 47,739 | \$ | 7,475 | \$ | 55,214 | \$ | 138,115 | \$ | 5,019 | \$ | 6,185 | \$ | 7,330 | \$ | 933 |
| 16 | Operating income before tax | \$ | 51,611 | \$ | 2,969 | \$ | 54,580 | \$ | 1,394 | \$ | (158) | \$ | - | \$ | 14 | \$ | 3 |
|  | Income taxes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Federal income tax - current | \$ | 11,424 | \$ | $(2,525)$ | \$ | 8,898 | \$ | 439 | \$ | (50) | \$ | - | \$ | 4 | \$ |  |
| 18 | State income tax-current |  | 5,654 |  | (801) |  | 4,853 |  | 139 |  | (16) |  | - |  | 1 |  | 0 |
| 19 | Deferred income tax - federal |  | 6,210 |  | 3,898 |  | 10,108 |  |  |  | - |  | - |  | - |  |  |
| 20 | Deferred income tax - state |  |  |  | - |  |  |  | - |  | - |  | - |  | - |  | - |
| 21 | Investment tax credit |  | (189) |  |  |  | (189) |  |  |  |  |  | - |  |  |  |  |
| 22 | Total tax expense | \$ | 23,099 | \$ | 571 | \$ | 23,670 | \$ | 578 | \$ | (66) | \$ | - | \$ | 6 | \$ | 1 |
| 23 | Total operating expenses | \$ | 70,838 | \$ | 8,046 | \$ | 78,884 | \$ | 138,693 | \$ | 4,954 | \$ | 6,185 | \$ | 7,336 | \$ | 934 |
| 24 | Operating income | \$ | 28,512 | \$ | 2,398 | \$ | 30,910 | \$ | 816 | \$ | (92) | \$ | - | \$ | 8 | \$ | 2 |
| 25 | Rate Base | \$ | 327,868 | \$ | 27,574 | \$ | 355,443 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 26 | Rate of Return overall |  | 8.70\% |  | 8.70\% |  | 8.70\% |  | NA |  | NA |  | NA |  |  |  |  |
| 27 | Return on Equity |  | 11.50\% |  | 11.50\% |  | 11.50\% |  | NA |  | NA |  | NA |  |  |  |  |

## PENNSYLVANIA POWER COMPANY Summary of Revenue Requirements <br> Distribution <br> $\$ 000$

| Line No. | Description |  | et as sted | Revenue Adjustment Required |  | Allowable Revenue |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  | ${ }^{(2)}$ |  | (3) |  |
| Operating revenues |  |  |  |  |  |  |  |
| 1 | Retail sales | \$ | 79,960 | \$ | 16,231 | \$ | 96,191 |
| 2 | STAS revenue |  | - |  | - |  | - |
| 3 | DSIC revenue |  |  |  | - |  | - |
| 4 | Sales for resale |  |  |  | - |  | - |
| 5 | Other operating revenue |  | 3,159 |  | - |  | 3,159 |
| 6 | Total operating revenue | \$ | 83,119 | \$ | 16,231 | \$ | 99,350 |
| Operating expenses |  |  |  |  |  |  |  |
| 7 | PTC | \$ | - | \$ | - | \$ | , ${ }^{-}$ |
| 8 | Distribution |  | 14,726 |  | - |  | 14,726 |
| 9 | Customer accounts |  | 5,222 |  | - |  | 5,222 |
| 10 | Customer service \& info |  | 3,743 |  | - |  | 3,743 |
| 11 | Admin \& gen expense |  | 267 |  | - |  | 267 |
| 12 | Depreciation-acrrual |  | 18,247 |  | - |  | 18,247 |
| 13 | Amortization |  | $(3,774)$ |  | - |  | $(3,774)$ |
| 14 | Taxes other than income |  | 8,350 |  | 958 |  | 9,307 |
| 15 | Operating expense before tax | \$ | 46,781 | \$ | 958 | \$ | 47,739 |
| 16 | Operating income before tax | \$ | 36,338 | \$ | 15,273 | \$ | 51,611 |
| Income taxes |  |  |  |  |  |  |  |
| 17 | Federal income tax - current | \$ | 6,612 | \$ | 4,812 | \$ | 11,424 |
| 18 | State income tax - current |  | 4,128 |  | 1,526 |  | 5,654 |
| 19 | Deferred income tax - federal |  | 6,210 |  | - |  | 6,210 |
| 20 | Deferred income tax - state |  | - |  | - |  | - |
| 21 | Investment tax credit |  | (189) |  | - |  | (189) |
| 22 | Total tax expense | \$ | 16,761 | \$ | 6,337 | \$ | 23,099 |
| 23 | Total operating expenses | \$ | 63,543 | \$ | 7,295 | \$ | 70,838 |
| 24 | Operating income | \$ | 19,576 | \$ | 8,936 | \$ | 28,512 |
| 25 | Rate Base | \$ | 327,868 |  |  | \$ | 327,868 |
| 26 | Rate of Return overall |  | 5.97\% |  |  |  | 8.70\% |
| 27 | Return on Equity |  | 6.06\% |  |  |  | 11.50\% |

## PENNSYLVANIA POWER COMPANY Summary of Revenue Requirements <br> Smart Meter <br> $\$ 000$

Line No.

## Description

| Operating revenues |
| :--- |
| Retail sales |
| STAS revenue |
| DSIC revenue |
| Sales for resale |
| Other operating revenue |
| Total operating revenue |
| Operating expenses |
| PTC |
| Distribution |
| Customer accounts |
| Customer service \& info |
| Admin \& gen expense |
| Depreciation - accrual |
| Amortization |
| Taxes other than income |
| Operating expense before tax |
| Operating income before tax |


| Budget as <br> Adjusted | Revenue <br> Adjustment <br> Required | Allowable <br> Revenue |
| :---: | :---: | :---: |
|  |  | $\left.\begin{array}{c}(3)\end{array}\right)$ |


| $\$$ | 12,483 | $\$$ | $(2,039)$ | $\$$ | 10,444 |
| :--- | ---: | :--- | :---: | :--- | ---: |
|  | - | - | - |  |  |
|  | - | - | - |  |  |
|  | - | - | - |  |  |
|  |  | - | - | - |  |
|  | 12,483 | $\$$ | $(2,039)$ | $\$ 10,444$ |  |


| $\$$ | - | $\$$ | - |
| ---: | ---: | ---: | ---: |
|  | - | - | - |
|  | - | - | - |
|  | 3,739 | - | - |
|  | 2,740 | - | 3,739 |
|  | 982 | - | 2,740 |
|  | 134 | $(120)$ | 982 |
|  | 7,595 | $\$$ | $(120)$ |
|  | $\$$ |  | 7,475 |
|  | 4,888 | $(1,919)$ | 2,969 |

Income taxes
Federal income tax - current
State income tax - current
Deferred income tax - federal
Deferred income tax - state Investment tax credit
Total tax expense
Total operating expenses
Operating income
Rate Base

| \$ | $(1,921)$ | \$ | (605) | \$ | $(2,525)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (609) |  | (192) |  | (801) |
|  | 3,898 |  | - |  | 3,898 |
|  | - |  | - |  | - |
| \$ | 1,367 | \$ | (796) | \$ | 571 |
| \$ | 8,962 | \$ | (917) | \$ | 8,046 |
| \$ | 3,521 | \$ | $(1,123)$ | \$ | 2,398 |
| \$ | 27,574 |  |  | \$ | 27,574 |
|  | 12.77\% |  |  |  | 8.70\% |
|  | 19.63\% |  |  |  | 11.50\% |

## PENNSYLVANIA POWER COMPANY Summary of Revenue Requirements Total Distribution $\$ 000$

Line No.

## Description

## Operating revenues

## Retail sales <br> STAS revenue <br> DSIC revenue

Sales for resale
Other operating revenue
Total operating revenue

Operating expenses

## PTC

Distribution
Customer accounts
Customer service \& info
Admin \& gen expense
Depreciation-accrual
Amortization
Taxes other than income
Operating expense before tax
Operating income before tax
Income taxes
Federal income tax - current
State income tax - current
Deferred income tax - federal
Deferred income tax - state Investment tax credit
Total tax expense
Total operating expenses
Operating income
Rate Base

Rate of Return overall
Return on Equity

| Budget as <br> Adjusted | Revenue <br> Adjustment <br> Required | Allowable <br> Revenue |
| :---: | :---: | :---: |
|  | $(1)$ | $(3)$ |


| $\$ 92,443$ | $\$$ | 14,192 | $\$$ | 106,635 |
| ---: | ---: | ---: | ---: | ---: |
| - | - | - |  |  |
| - | - |  |  |  |
| - | - | - |  |  |
| 3,159 | - | 3,159 |  |  |
|  | 14,192 | 109,794 |  |  |


| \$ | - | \$ | - | \$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 14,726 |  | - |  | 14,726 |
|  | 5,222 |  | - |  | 5,222 |
|  | 3,743 |  | - |  | 3,743 |
|  | 4,006 |  | - |  | 4,006 |
|  | 20,987 |  | - |  | 20,987 |
|  | $(2,792)$ |  | - |  | $(2,792)$ |
|  | 8,484 |  | 837 |  | 9,321 |
| \$ | 54,376 | \$ | 837 | \$ | 55,214 |
| \$ | 41,226 | \$ | 13,354 | \$ | 54,580 |


| \$ | 4,691 | \$ | 4,207 | \$ | 8,898 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3,519 |  | 1,334 |  | 4,853 |
|  | 10,108 |  | - |  | 10,108 |
|  | - |  | - |  | - |
|  | (189) |  | - |  | (189) |
| \$ | 18,129 | \$ | 5,541 | \$ | 23,670 |
| \$ | 72,505 | \$ | 6,378 | \$ | 78,884 |
| \$ | 23,097 | \$ | 7,813 | \$ | 30,910 |
| \$ | 355,443 |  |  | \$ | 355,443 |
|  | 6.50\% |  |  |  | 8.70\% |
|  | 6.06\% |  |  |  | 11.50\% |

# PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 1 <br> $\$ 000$ 

## Adjustment of Base Operating Revenues

To adjust base operating revenues (1) for changes in number of customers, (2) to roll in State Tax Adjustment Surcharge ("STAS") revenues into base rates, (3) to roll in Distribution System Improvement Charge ("DSIC") revenue into base rates, (4) for Energy Efficiency and Behind the Meter generation, (5) for other revenue, and (6) to eliminate unbilled revenues. Adjustments (1) through (5) are supported by Mr. K. M. Siedt. The adjustment for unbilled revenues is supported by Mr. R. A. D'Angelo.

Line
No. Description
Amount
(1)
(2)

1 Base revenues per book for the 12 months ended 12/31/15
Normalizing adjustments:
2 Customers - increase to yr end level
\$ 304
Specific adjustments
3 Roll-in of STAS
4 Roll-in of DSIC
$5 \quad$ Adjust for Energy Efficiency and Behind the Meter Generation
$6 \quad$ Adjust for Other Revenues
\$ 892

7 Annualize rate increase effective May 2015 $(4,179)$

8 Eliminate unbilled revenues
7,792
$(3,115)$
9 Total (Lines 3+4+5+6+7+8)
\$ 843

10 Normalizing adjustment (Lines $2+8$ )
1,146
11 Base revenues per book for the 12 months ended $12 / 31 / 15$, as adjusted
$\$ \quad 251,089$

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 2 $\$ 000$

## Adjustment of State Tax Adjustment Surcharge Revenues

To remove state tax adjustment surcharge ("STAS") revenues. Normalized STAS revenues are being rolled into base rates.

Line No.

1 STAS revenue per book for the 12 months ended 12/31/15
2 Eliminate per book STAS
3 STAS revenue per book for the
12 months ended $12 / 31 / 15$, as adjusted

Amount
(1)
\$ 892
(892)
\$ $\qquad$

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 3 $\$ 000$

## Adjustment of Distribution Improvement System Charge Revenues

To remove distribution system improvement charge ("DSIC") revenues. Normalized DSIC revenues are being rolled into base rates in Normalization Adjustment No. 1.

Description
Amount
(1)

1 DSIC revenue per book for the 12 months ended 12/31/15
2 Eliminate per book DSIC

3 DSIC revenue per book for the
12 months ended $12 / 31 / 15$, as adjusted
\$


# Penn Power Exhibit RAD-6 Witness: R. A. D'Angelo <br> Page 10 

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 4
$\$ 000$

## Adjustment of Other Operating Revenues

To adjust other operating revenue (1) to remove American Transmission System Incorporated (ATSI) ground lease revenues; and (2) to adjust late payment charges. The adjustment to late payment charge is supported by Mr. K. M. Siedt.

Line No.
Description
Amount
(1) (2)

1 Other Operating revenue per book for the 12 months ended 12/31/15
2 Eliminate ATSI ground lease

3 Normalizing adjustment
4 Other Operating revenue per book for the 12 months ended $12 / 31 / 15$, as adjusted
$\$$
3,189

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 5
$\$ 000$

## Adjustment of Distribution Expense

To adjust distribution payroll expense (1) to reflect year end wage and employee levels, (2) to adjust service company payroll expenses to reflect year end and wage and employee levels, and (3) to include the amortization of gains or losses on reacquired debt.

6 Total normalizing adjustment (Lines $2+3+4+5$ )

7 Distribution expense per book for the 12 months ended $12 / 31 / 15$, as adjusted (Lines $1+6$ )

## Line No.

## Description

Amount
(1) (2)
$\$ 100$
$\$ \quad 17,479$
Amount

2 Distribution payroll expense adjustment to reflect year end employee levels, and ongoing wage and salary rate (Supporting Schedule No. 1, Line 16, Col 2).

3 Service Company Distribution payroll expense adjustment allocated to Penn Power to reflect year end employee levels and ongoing wage and salary rate (Supporting Schedule 1, Line 28, Col. 2) 4 Amortization of (gain) or loss on reacquired debt

5 Increase distribution expenses for contractor safety request
1 Distribution expense per book for the 12 months ended 12/31/15 32

| PENNSYLVANIA POWER COMPANY <br> Supporting Schedule No. 1 to Normalizing Adjustment No. 5 (\$000) |  | Penn Power Exhibit RAD-6 Witness: R. A. D'Angelo Page 12 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Adjustment to Payroll Expense to Reflect Year End Employee Levels and Wage Rates |  |  |  |  |
|  | To determine the additional payroll expense associated with (1) year end bargaining and non-bargaining wage rates and employee levels, and (2) Service Company year end wage rates and employee levels; and to allocate the additional payroll expense to individual components. Mr. T. J. Dolezal supports the labor allocation factors. |  |  |  |
| Line No. | Description | Amount |  |  |
|  |  | (1) (2) |  |  |
| 1 | Total company payroll (Exhibit RAD 27) | \$ 19,163 |  |  |
|  | Non-Bargaining | \$ 619 |  |  |
| 2 | Straight time per book for January 1, 2015 through February 28, 2015 |  |  |  |
| 3 | Straight time 3\% increase effective 3/1/2015 (Line $2 \times 3 \%$ ) | 19 |  |  |
| 4 | Straight time per book for the 12 months ended 12/31/2015, as adjusted | \$ 3,961 |  |  |
| 5 | Straight time 3\% increase effective 3/1/2015 (Line $4 \times 3 \%$ ) | 119 |  |  |
| Bargaining |  |  |  |  |
| 6 | Straight time per book for January 1, 2015 through June 30, 2015 | \$ 5,233 |  |  |
| 7 | Straight time 2.5\% increase effective 3/1/2015 (Line $2 \times 2.5 \%$ ) | 131 |  |  |
| 8 | Straight time per book for the 12 months ended 12/31/2015, as adjusted | \$ 10,166 |  |  |
| 9 | Straight time 2.5\% increase effective 3/1/2015 (Line $8 \times 2.5 \%$ ) | 254 |  |  |
| 10 | Total company payroll adjustments | 522 |  |  |
| 11 | Total Payroll adjustment (Line $1+10$ ) | 19,685 |  |  |
| 12 | O\&M allocation \% | 31.27\% |  |  |
| 13 | O\&M payroll adjustment (Line $10 \times 12$ ) | \$ 163 |  |  |
|  | Allocation of payroll adjustment: |  |  |  |
| 14 | Price to Compare | 0.00\% | \$ | \$ |
| 15 | Transmission | 0.00\% |  | - |
| 16 | Distribution | 61.18\% |  | 100 |
| 17 | Customer accounts | 18.53\% |  | 30 |
| 18 | Customer service | 14.74\% |  | 24 |
| 19 | Administrative and general | 5.54\% |  | 9 |
| 20 | Total | 100\% | \$ | \$ 163 |
|  | Service Company |  |  |  |
| 21 | Straight time per book for January 1, 2015 through February 28, 2015 | \$ 783 |  |  |
| 22 | Straight time 3\% increase effective 3/1/2016 (Line $21 \times 3 \%$ ) | 23 |  |  |
| 23 | Straight time per book for the 12 months ended 12/31/2015, as adjusted | \$ 4,647 |  |  |
| 24 | Straight time 3\% increase effective 3/1/2015 (Line $23 \times 3 \%$ ) | 139 |  |  |
| 25 | Total service company payroll adjustments (Lines $22+24$ ) |  |  | \$ 163 |
|  | Allocation of Service Company payroll adjustment (Exhibit RAD-25) |  |  |  |
| 26 |  |  |  |  |  |  |  |
| 27 | Transmission | 0.00\% |  | - |
| 28 | Distribution | 19.44\% |  | 32 |
| 29 | Customer accounts | 26.77\% |  | 44 |
| 30 | Administrative and general | 53.76\% |  | 88 |
| 31 | Total | 100\% |  | \$ 163 |

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 6
$\$ 000$

## Adjustment of Customer Accounts Expense

To adjust customer account expense (1) to reflect year end wage rates and employee levels, (2) to reflect Service Company year end wage rates and employee levels, (3) to include increased O\&M costs associated with serving new customers, and (4) to include interest on customer deposits.

Line No.
Description

| Amount |  |
| :---: | :---: |
| $(1)$ | $(2)$ |

1 Customer Account expense per book for the 12 months ended 12/31/15

2 Customer Account payroll expense adjustment to reflect year end employee levels and ongoing wage \& salary rates
(Normalizing Adjustment No. 5, Supporting Schedule No. 1, Line 17, Column 2)
\$ 30

3 Service Company customer account payroll expense adjustment allocated to Penn Power to reflect year end employee levels and ongoing wage and salary rates,
(Normalizing Adjustment No. 5, Supporting Schedule 1, Line 29, Col. 2) 44
4 Increased O\&M costs associated with increased number of customers in normalized revenue levels
(Supporting Schedule 1, Line 10)
6

5 Interest on customer deposits, (Supporting Schedule 2, Line 3)

6 Total normalizing adjustment (Lines $2+3+4+5$ )
$\$ \quad 6,950$

# Penn Power Exhibit RAD-6 Witness: R. A. D'Angelo Page 14 

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 1 to Normalizing Adjustment No. 6 (\$000)

## Adjustment of Other O\&M Costs Associated with Serving New Customers

To determine the cost associated with serving the additional customers reflected in Normalization Adjustment No. 1. The ratio of non-payroll customer account expense to total revenue is applied to the additional revenue from increased customers to estimate this cost. The Commission previously recognized and approved this adjustment. The adjustment to base operating revenue for changes in number of customers is supported by Mr. K. M. Siedt.

Line No. $\qquad$ Amount
(1)

## Customer Account Expense Excluding Labor and Uncollectible

1 Customer Account expense per book for the 12 months ended 12/31/15
2 Less: Uncollectible expense
$\$ \quad 6,639$
$(3,074)$
3 Less: Labor expense
4 Customer Account expense excluding labor and uncollectible expense

Total Distribution Revenue
5 Distribution revenues per book
6 Late payment charges per book
7 Total
Ratio of customer account expense to total revenue (Line $4 /$ Line 7)
Revenue from added customers (Normalization Adjustment No. 1, Line 2)
10 Additional expense from added customers (Lines $8 \times 9$ )
$\$ \quad 91,729$
$\$ \quad 1,904$
$\$ \quad 92,611$
\$ 304
$\$$ 6

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 2 to Normalizing Adjustment No. 6 (\$000)

## Adjustment to Allow for Interest Expense on Customer Deposits

To determine the interest paid on customer deposits. Since customer deposits are funds supplied to the Company by customers, they are included in rate base as a deduction. The Commission previously recognized this adjustment to include the corresponding interest paid to customers on these deposits as a expense.

Line No.
Description

1 Customer deposits included in rate base
(Exhibit RAD-5, Page 1, Column 1, Line 14)
2 Interest rate on deposits
3
Interest expense on customer deposits

| Non |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Residential <br> (1) | $\frac{\text { Residential }}{(2)}$ |  | $\frac{\text { Total }}{(3)}$ |  |
| \$ 2,790 | \$ | 2,450 | \$ | 5,239 |
| 3\% |  | 6\% |  |  |
| \$ 84 | \$ | 147 | \$ | 231 |

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 7 $\$ 000$

## Adjustment of Customer Service and Information Expense

To adjust customer service and information expense to reflect year end wage and employee levels.

Line No.
Description

1 Customer Service expense per book for the 12 months ended $12 / 31 / 15$
2 Customer Service payroll expense adjustment to reflect year end employee levels and ongoing wage \& salary rates (Normalization Adjustment No. 5, Supporting Schedule No. 1, Line 18, Column 2)

3 Total normalizing adjustment
4 Customer Service expense per book for the 12 months ended 12/31/15, as adjusted

Amount
(1) (2)
\$ 9,568
$\$ \quad 24$
$\$ \quad 9,592$

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 8 $\$ 000$

## Adjustment of Administrative and General Expense

To adjust administrative and general expenses (1) to reflect year end wage rates and employee levels, (2) to reflect Service Company year end wage rates and employee levels, (3) to reflect OPEB expense at service cost level, (4) to reflect pension expense at the ten year cash level, (5) to reflect employee benefits expense at year end wage rates and employee levels, and ( 6 ) to include amortization of rate case expenses.

| Line No. | Description | Amount |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  |  | (2) |
| 1 | Administrative \& general expense per book for the 12 months ended 12/31/15 |  |  | \$ | 13,034 |
| 2 | Administrative \& general expenses related to EE\&C |  | $(4,786)$ |  |  |
| 3 | Administrative \& general expenses related to Smart Meters |  | $(3,739)$ |  |  |
| 4 | Adjustment to administrative \& general expenses |  | $(8,525)$ |  |  |
| 5 | Administrative \& general payroll expense adjustment to reflect year end employee levels and ongoing wage \& salary rates (Normalization Adjustment No. 5, Supporting Schedule No. 1, Line 19, Column 2) |  |  |  | 9 |
| 6 | Service Company Administrative \& general payroll expense adjustment allocated to Penn Power to reflect year end employee levels and ongoing wage \& salary rates, <br> (Normalization Adjustment No. 5, Supporting Schedule No. 1, Line 30, Column 2) |  |  |  | 88 |
| 7 | Adjust OPEB expense to service cost level, (Supporting Schedule No. 1, Line 12, Col. 1) |  |  |  | 1,008 |
| 8 | Adjust pension expense to ten year cash level, (Supporting Schedule No. 2, Line 19, Col. 3) |  |  |  | $(5,496)$ |
| 9 | Adjust employee benefit costs (Supporting Schedule No. 3, Line 8, Column 3) |  |  |  | 68 |
| 10 | Rate case expenses to be incurred during current rate proceeding (Exhibit RAD-23) | \$ | 162 |  |  |
| 11 | Recovery period - 2 years |  | 2 |  |  |
| 12 | Annual amount (Line $10 /$ Line 11) | \$ | 81 | \$ | 81 |
| 13 | Total normalizing adjustment (Lines $5+6+7+8+9+12$ ) |  |  | \$ | $(4,243)$ |
| 14 | Administrative and general expense per book for the 12 months ended 12/31/15, as adjusted |  |  | \$ | 8,791 |

## PENNSYLVANIA POWER COMPANY <br> Supporting Schedule No. 1 to Normalizing Adjustment No. 8 $\$ 000$

## Adjustment for OPEB Expense

To adjust OPEB expense to the test year service cost. The service cost represents the actuarial present value of benefit liabilities accrued under the plan benefit formula for services rendered during the test year. Inclusion of the service cost in rates provides for recovery of the current cost of benefits earned by plan participants. Any excess or shortfall related to the expected return on plan assets are not included because their inclusion would artificially reduce or increase total costs and result in the recovery of more or less than the actual normal cost of service. The adjustment for OPEB expense to the current service cost amount was adopted by the Commission at Docket Numbers R-00061366 and R-00061367 and included at Docket Nos. R-2014-2428745; R-2014-2428743; R-20142428744 and R-2014-2428742.

| Line No. | Description |  | O\&M |  | Capital |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (1) |  | (2) |  | (3) |
| 1 | O\&M - Capital allocation ratios |  | 31.27\% |  | 68.73\% |  | 00.00\% |
| 2 | Company OPEB expense included in budget (Exhibit RAD 27) | \$ | (900) | \$ | $(1,977)$ |  | $(2,877)$ |
| 3 | FirstEnergy Service Corp. OPEB expense | \$ | $(6,311)$ |  | $(13,871)$ |  | (20,182) |
| 4 | Allocation ratio |  | 1.65\% |  | 1.65\% |  | 1.65\% |
| 5 | Allocated FirstEnergy Service Corp. OPEB expense included in budget (Lines $3 \times 4$ ) | \$ | (104) | \$ | (229) | \$ | (333) |
| 6 | Total OPEB expense included in budget (Lines $2+5$ ) | \$ | $(1,004)$ | \$ | (2,206) |  | $(3,210)$ |
| 7 | Service cost for company OPEB expense | \$ | 2 | \$ | 5 | \$ | 7 |
| 8 | Service cost for FirstEnergy Service Corp. OPEB expense | \$ | 136 | \$ | 300 | \$ | 436 |
| 9 | Allocation ratio |  | 1.65\% |  | 1.65\% |  | 1.65\% |
| 10 | Allocated FirstEnergy Service Corp. service cost (Lines $8 \times 9$ ) | \$ | 2 | \$ | 5 | \$ | 7 |
| 11 | Total OPEB service cost (Line $7+10$ ) | \$ | 4 | \$ | 10 | \$ | 14 |
| 12 | Adjustment to set OPEB expense at ongoing service cost level (Lines 11-6) |  | 1,008 |  | 2,216 | \$ | 3,224 |

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 2 to Normalizing Adjustment No. 8 $\$ 000$

## Adjustment for Pension Expense

To adjust pension expense to a ten year average level of actual cash contributions under the methodology that was adopted by the Commission at Docket Numbers R-00061366 and R-0061367, and included at Docket Nos. R-2014-2428745; R-20142428743; R-2014-2428744 and R-2014-2428742.

| Line No. | Description | Amount |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { (1) } \\ \text { Total } \end{gathered}$ |  | (2) | $\begin{gathered} (3) \\ \mathrm{O}, \mathrm{M} \end{gathered}$ |  |
|  |  |  |  | O8M \% |  |  |
| 1 | Company Cash Contributions |  |  |  |  |  |
| 2 | 2009 Cash Pension Contribution |  | 21,359 | 33.35\% |  | 7,123 |
| 3 | 2011 Cash Pension Contribution |  | 12,000 | 41.69\% |  | 5,003 |
| 4 | 2016 Cash Pension Contribution |  | 14,856 | 38.05\% |  | 5,653 |
| 5 | Total Company Cash Pension Contributions | \$ | 48,215 |  | \$ | 17,779 |
| FirstEnergy Service Company Cash Contributions |  |  |  |  |  |  |
| 6 | 2016 Pension Contribution |  | 24,760 |  |  |  |
| 7 | Company Allocation Factor |  | 1.56\% |  |  |  |
| 8 | 2016 Service Company Pension Contribution allocated to the Company | \$ | 386 | 38.05\% |  | 147 |
| 9 | Total Pension cash contributions (Lines $5+8$ ) | \$ | 48,601 |  | \$ | 17,926 |
| 10 | Number of years |  | 10 |  |  | 10 |
| 11 | Pension expense cash contribution, averaged over 10 years | \$ | 4,860 |  | \$ | 1,793 |
| 12 | O\&M Pension Expense |  |  |  |  | 7,289 |
| 13 | Adjustment to Pension Expense (Lines 11-12) |  |  |  | \$ | $(5,496)$ |

## PENNSYLVANIA POWER COMPANY

## Adjustment to Employee Benefit Expense to Reflect Year End Employee Levels and Ongoing Wage Rates

To determine the normalized costs associated with providing additional employee benefits related to the increased O\&M payroll expense reflected in Normalization Adjustment No. 5, Supporting Schedule No. 1.

Employee benefits applicable to operating expenses:

| Line No. | Description | Effective <br> Rate (a) | Payroll Adjustment |  |  | Benefit Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  |  |  |  |  |
| 1 | Workers compensation | 0.814\% | \$ | 163 | (b) | \$ | 1 |
| 2 | Pension costs | 25.160\% | \$ | 163 | (b) |  | 41 |
| 3 | OPEB costs | 0.110\% | \$ | 163 | (b) |  |  |
| 4 | Life insurance | 0.110\% | \$ | 163 | (b) |  |  |
| 5 | Medical insurance | 5.615\% | \$ | 163 | (b) |  | 9 |
| 6 | Savings plan | 2.693\% | \$ | 163 | (b) |  | 4 |
| 7 | Other (Exhibit RAD-27) | 8.135\% | \$ | 163 | (b) |  | 13 |
| 8 | Total increase due to payroll adjustment |  |  |  |  | \$ | 68 |

(a) Summary of effective employee benefit rates based on total payroll for the 12 months ended 12/31/15

| Total |
| :---: |
| Amount | | Total |
| :---: |
| Payroll |


| Effective |
| :---: |
| Rate |

Workers compensation (Exhibit RAD 27)
Pension costs - normalized basis
OPEB costs - service cost
Life insurance (Exhibit RAD 27)
Medical insurance (Exhibit RAD 27)
Savings plan (Exhibit RAD 27)
Other (Exhibit RAD 27)
\$

| 156 | $\$$ | 19,163 | (a) | $0.814 \%$ |
| ---: | :--- | :--- | :--- | ---: |
| 4,822 | $\$$ | 19,163 | (a) | $25.160 \%$ |
| 21 | $\$$ | 19,163 | (a) | $0.110 \%$ |
| 21 | $\$$ | 19,163 | (a) | $0.110 \%$ |
| 1,076 | $\$$ | 19,163 | (a) | $5.615 \%$ |
| 516 | $\$$ | 19,163 | (a) | $2.693 \%$ |
| 1,559 | $\$$ | 19,163 | (a) | $8.135 \%$ |

(b) Adjustment No. 5, Supporting Schedule No. 1, Line 7.

## PENNSYLVANIA POWER COMPANY

Normalization Adjustment No. 9
$\$ 000$

## Adjustment of Depreciation Expense


#### Abstract

To adjust depreciation expense (1) to reflect equal life group (ELG) rates on adjusted rate base, (2) to adjust cost of removal / salvage expense to a five year average per Commission practice, and (3) eliminate legacy meter cost of removal from the five year average. Mr. J. J. Spanos supports the ELG depreciation rates.


| Line No. | Description | Amount |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (1) |  | (2) |  | (3) |  | (4) |
| 1 | Depreciation expense per book for the 12 months ended 12/31/15 |  |  |  |  |  |  | \$ | 18,440 |
| 2 | Cost of removal/salvage expense per book for the 12 months ended 12/31/15 (Exhibit RAD-30) |  |  | \$ | 4,032 |  |  |  |  |
| 3 | Depreciation accrual per book (Lines 1-2) |  |  | \$ | 14,408 |  |  |  |  |
| 4 | Depreciation expense accrual on adjusted rate base at average remaining life rate Exhibit RAD-53, page 2) |  |  | \$ | 18,409 |  |  |  |  |
| 5 | Adjustment for average remaining life accrual for (Lines 4-3) |  |  |  |  | \$ | 4,002 |  |  |
| 6 | Cost of removal/salvage expense per book for the 12 months ended 12/31/15 (Exhibit RAD-30) |  |  | \$ | 4,032 |  |  |  |  |
|  | Cost of removal and salvage 2011-2015 (Exhibit RAD-30) |  |  |  |  |  |  |  |  |
| 7 | 2013 | \$ | 1,332 |  |  |  |  |  |  |
| 8 | 2014 |  | 2,217 |  |  |  |  |  |  |
| 9 | 2013 |  | 5,046 |  |  |  |  |  |  |
| 10 | 2014 |  | 2,666 |  |  |  |  |  |  |
| 11 | 2015 |  | 4,032 |  |  |  |  |  |  |
| 12 | Total | \$ | 15,293 |  |  |  |  |  |  |
| 13 | Five year average (Line 12/5) | \$ | 3,059 |  |  |  |  |  |  |
| 14 | Less five year average for legacy meter cost of removal |  | (481) |  |  |  |  |  |  |
| 15 | Total cost of removal | \$ | 2,578 |  |  |  |  |  |  |
| 16 | Adjustment of cost of removal/salvage expense to a five year average (Lines 15-6) |  |  |  |  |  | $(1,454)$ |  |  |
| 17 | Total normalizing adjustment (Lines $5+16$ ) |  |  |  |  |  |  |  | 2,547 |
| 18 | Depreciation expense per book for the |  |  |  |  |  |  |  |  |
|  | 12 months ended $12 / 31 / 15$, as adjusted |  |  |  |  |  |  | \$ | 20,987 |

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 10 $\$ 000$

## Adjustment of Amortization Expense

To adjust amortization expense to (1) exclude smart meter amortization in the budget; and (2) include the amortization of additional legacy meters.
Line No.Description
$\frac{\text { Amount }}{(1)}$
(1)
1 Amortization expense per book for the 12 months ended 12/31/2015
2 Adjustment for amortization of legacy meters (Adj. 10 Sched 1, Line 2)
3 Eliminate smart meter amortization per book
4 Total normalizing adjustment
5 Amortization expense per book for the 12 months ended $12 / 31 / 15$, as adjusted

## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 1 to Normalizing Adjustment No. 10 \$000

## Adjustment for Amortization Expense of Legacy Meters

To determine additional legacy meters to fully recover all legacy meter costs over 39 months of the original amortization period.

Total Legacy Meters and Cost of Removal to be recovered (Exhibit RAD-64)
\$ 9,287

2 Less Legacy Meters and Cost of Removal in Base Rates
10,797

Unrecovered Legacy Meters $(1,510)$

## PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 11 $\$ 000$

Adjustment of Taxes Other Than Income

To adjust gross receipts tax expense to (1) reflect normalized sales revenues, to (2) adjust payroll tax expenses for normalized payroll and employee expenses.

Line No.
Description

1 Taxes Other Than Income per book for the 12 months ended 12/31/15
Gross Receipts Tax
2 Normalized sales revenues (Exhibit RAD-6, page 1, Col. 3) \$ 251,089
3 Gross receipts tax @ 5.9\%
4 Gross receipts tax included in books (Exhibit RAD-32, page 1)

5 Adjustment for gross receipts tax at normalized revenue level (Lines 3-4)

6 Eliminate Capital Stock per books

7 Adjustment for payroll taxes on normalized payroll
(Supporting Schedule No. 1, Line 8)

8 Total normalizing adjustment (Lines $5+6+7$ )
9 Taxes other than income per book for the 12 months ended $12 / 31 / 15$, as adjusted

14,814 14,630

| Amount |  |  |
| :---: | :---: | :---: |
| $(1)$ | $(2)$ |  |

\$ 16,523
\$ 184
(50)

13
$\begin{array}{r}147 \\ \hline\end{array}$
$\$ \quad 16,670$

## PENNSYLVANIA POWER COMPANY

## Supporting Schedule No. 1 to Normalizing Adjustment No. 11

 $\$ 000$
## Adjustment to Taxes Other Than Income to reflect changes in payroll taxes.

To determine the additional payroll tax expense associated with the increased O\&M payroll expense reflected in Normalization Adjustment No. 5, Supporting Schedule No. 1.

Line No.
Description

Total payroll per budget for the 12 months ending 12/31/2016 (Normalization Adjustment No. 5, Schedule 1, Line 1, Col 3)

Total payroll tax included in budget, (Exhibit RAD-32)

Effective payroll tax rate (Line $2 /$ Line 1)

Total payroll as adjusted (Normalization Adjustment No. 5 Schedule 1, Line 5)

Payroll tax on normalized payroll (Lines $3 \times 4$ )
6 Total Company payroll tax adjustment (Lines 5-2)

7 O\&M Allocation percentage
8 Adjustment for payroll tax (Lines $6 \times 7$ )

Amount
(1)
\$ 19,163

1,472
7.68\%
$\$ \quad 19,685$
\$ 1,512
\$ 40
31.27\%
$\$ \quad 13$


## PENNSYLVANIA POWER COMPANY

Supporting Schedule No. 1 to Normalization Adjustment No. 12
$\$ 000$

## Adjustment of Tax Depreciation

To adjust tax depreciation to eliminate the cost of removal component.

| Line No. | Description | Total <br> Exhibit RAD-33 <br> (1) |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 1 | Tax depreciation expense per book | \$ | 31,046 |
| 2 | Cost of removal salvage in tax depreciation |  | 4,491 |
| 3 | Net Tax depreciation (Line 1 - Line 2) |  | 26,555 |
| 4 | Smart Meter tax depreciation |  | 12,916 |
| 5 | Distribution tax depreciation (Line 3-Line 4) | \$ | 13,640 |

# PENNSYLVANIA POWER COMPANY <br> Normalization Adjustment No. 13 <br> $\$ 000$ 

## Adjustment of Provision for Deferred Income Taxes

This adjustment to the Provision for Deferred Income Taxes reflects (1) the adjustment of Federal deferrals to reflect year-end plant and (2) miscellaneous federal deferred taxes not associated with liberalized depreciation. All state deferred taxes associated with liberalized depreciation have been eliminated.

Line No.

1 Deferred taxes per book, 12 months ended 12/31/2015
2 Deferred taxes - liberalized depreciation, (Exhibit RAD-41, page 17)
3 Less Deferred taxes - Smart meters

4 Distribution deferred taxes

5 Adjustment to deferred tax expense (Lines 2-1)

6 Deferred tax expense per book for the 12 months ended $12 / 31 / 15$, as adjusted

Provision for Deferred
$\frac{\text { Taxes - Net }}{\frac{\text { Federal }}{(1)} \frac{\text { State }}{(2)}}$
$\$ \quad(1,956) \$ 12,393$

10,108
3,898 $\qquad$

6,210
\$ 12,064 \$
$(12,393)$
$\$ \quad 10,108 \quad \$ \quad$

# PENNSYLVANIA POWER COMPANY 

Normalization Adjustment No. 14 \$000

Adjustment of Investment Tax Credit

Not Applicable

# Penn Power Exhibit RAD-7 

Witness: R. A. D'Angelo
Page 1 of 1

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT I-B-3:

"Provide an overall system map, including and labeling all generating plants, transmission substations-indicate voltage, transmission system lines-indicate voltage, and all interconnection points with other electric utilities, power pools, and other like systems."

RESPONSE:
See Penn Power Exhibit RAD-7 HIGHLY CONFIDENTIAL Attachment A.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-A-1:

"Provide a schedule showing the test year rate base and rates of return at original cost less accrued depreciation under present rates and under proposed rates. Claims made on this schedule should be cross-referenced to appropriate supporting schedules."

## RESPONSE:

See Penn Power Exhibit RAD-1 for the Fully Projected Future Test Year.
See Penn Power Exhibit RAD-3 for the Future Test Year.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-A-2:

"If the schedule provided in response to item 1 , is based upon a future test year, provide a similar schedule which is based upon actual data for the 12-month period immediately prior to the test year."

## RESPONSE:

See Penn Power Exhibit RAD-5 for the Historical Test Year.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-A-3:

"When a utility files a tariff stating a new rate based in whole or in part on the cost of construction, as defined in 66 Pa.C.S. § 1308(f) (relating to voluntary changes in rates), of an electric generating unit, the utility shall identify:
(a) The total cost of the generating unit
(b) The following costs:
(1) The cost and quantity of each category of major equipment, such as switchgear, pumps or diesel generators and the like.
(2) The cost and quantity of each category of bulk materials, such as concrete, cable and structural steel and the like. .
(3) Manual labor. .
(4) Direct and indirect costs of architect/engineering services.
(5) Direct and indirect costs of subcontracts or other contracts involving major components or systems such as turbines, generators, nuclear steam supply systems, major structures and the like.
(6) Distributed costs.
(c) A cost increase of $\$ 5$ million or more, including AFUDC, over the original utility estimates provided under 66 Pa.C.S. § 515 (a) (relating to construction cost of electric generating units) and its causes.
(d) Compliance with subsections (a) and (b) will be identical in format and substance as that provided under 52 Pa . Code $\S 57.103$ (relating to estimate of construction costs) for original cost estimates submitted under 66 Pa.C.S. § 515(a)."

## RESPONSE:

Not applicable.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-B-1:

"If a claim is made for plant held for future use, supply the following:
a. A description of the plant or land site and its cost and any accumulated depreciation.
b. The expected date of use for each item claimed.
c. An explanation as to why it is necessary to acquire each item in advance of its date of use.
d. The data when each item was acquired.
e. The date when each item was placed in plant held for future use."

## RESPONSE:

There is no rate base claim being made in this proceeding for plant held for future use.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-B-2:

> "If a claim is made for construction work in progress, provide a supporting schedule which sets forth separately, revenue-producing and nonrevenue producing amounts, and include, for each category a summary of all work orders, amounts expended at the end of the test year and anticipated in service dates. Indicate if the construction work in progress will result in insurance recoveries, reimbursements, or retirements of existing facilities. Describe in exact detail the necessity of each project claimed if not detailed on the summary page from the work order. Include final completion dates and estimated total amounts to be spent on each project."

## RESPONSE:

Penn Power is not making any rate base claim for construction work in progress.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-B-3:

"If a claim is made for materials and supplies or fuel inventory provide a supporting schedule for each claim showing the latest actual 13 monthly balances and showing in the case of fuel inventory claims, the type of fuel, and location, as in station, and the quantity and price claimed."

## RESPONSE:

## PENNSYLVANIA POWER COMPANY <br> 13 Month Book Balance of Materials and Supplies

| Line No. | Month | Amount <br> in thousands |  |
| ---: | ---: | ---: | ---: |
| 1 | January 31, 2015 | $\$$ | $3,714,032$ |
| 2 | February 28, 2015 | $\$$ | $3,229,351$ |
| 3 | March 31, 2015 | $\$$ | $3,672,453$ |
| 4 | April 30, 2015 | $\$$ | $3,574,102$ |
| 5 | May 31, 2015 | $\$$ | $3,739,147$ |
| 6 | June 30, 2015 | $\$$ | $3,711,240$ |
| 7 | July 31, 2015 | $\$$ | $3,575,683$ |
| 8 | August 31, 2015 | $\$$ | $3,671,240$ |
| 9 | September 30, 2015 | $\$$ | $3,426,075$ |
| 10 | October 31, 2015 | $\$$ | $3,370,865$ |
| 11 | November 30, 2015 | $\$$ | $3,332,510$ |
| 12 | December 31, 2015 | $\$$ | $3,245,030$ |
| 13 | January 31, 2016 | $\$$ | $3,537,957$ |
| 14 | 13 |  |  |
| 14 | Period Average | $\$$ | $3,523,053$ |

Witness: R. A. D'Angelo
Page 1 of 1

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-B-4:

"If a claim is made for cash working capital provide a supporting schedule setting forth the method and all detailed data utilized to determine the cash working capital requirement. If not provided in the support data provide a lead-lag study of working capital, completed no more than 6 months prior to the rate increase filing."

## RESPONSE:

See the direct testimony of Jeffrey L. Adams, Penn Power Statement No. 5.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-B-6:

"Explain in detail by statement or exhibit the appropriateness of additional claims or the use of a method not previously mentioned, in the claimed rate base."

## RESPONSE:

The supporting schedules included in Penn Power Exhibit RAD-1 explain the appropriateness of various items claimed in the rate base. Items not explained in supporting schedules to Penn Power Exhibit RAD-1, or not mentioned in other responses to filing requirements are explained below:

## 1. Customer Deposits

Customer deposits are deducted from the rate base as they represent a source of non-investor supplied capital. Appropriate interest on such deposits has been included as a normalizing adjustment to the income statement.

## 2. Customer Advances for Construction

In accordance with the practice followed in prior rate filings and accepted by Commission Orders, the Company reduces rate base by the amount of customer advances for construction at the end of the test year.

## 3. Operating Reserves

The Company has adopted a partial self-insurance concept for general and automotive liability insurance, property insurance and a long-term disability plan. The Company has also established an operating reserve for the purpose of providing a pension fund in addition to the normal funded plan. These operating reserves, net of applicable deferred taxes, reduce the Company's total rate base claim.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-C-1:

"Prepare a Statement of Income including:
(a) The book, or budgeted, statement for the test year.
(b) Adjustments to annualize and normalize under present rates, including an elimination of the effects on income of the energy cost rate and state tax adjustment surcharge.
(c) The income statement under present rates after adjustment.
(d) The adjustment for the revenue requested.
(e) The income statement under requested rates after adjustment.
(f) Each adjustment, including those relating to adjustment clauses, shall contain an explanation in sufficient clarifying detail to allow a reasonably informed person to understand the method and rationale of the adjustment."

## RESPONSE:

## Fully Projected Future Test Year

( $a-\mathrm{f}$ ): See Penn Power Exhibit RAD-2. Regarding part (b) pertaining to the annualization and normalization of revenues including applicable surcharges and tariff riders, these adjustments are supported in the Direct Testimony of Penn Power Witness Kevin M. Siedt, Penn Power Statement No. 3 and Penn Power Exhibit KMS-1 Attachment A which accompanies his Direct Testimony.

## Future Test Year

( $a-f$ ): See Penn Power Exhibit RAD-4. Regarding part (b) pertaining to the annualization and normalization of revenues including applicable surcharges and tariff riders, these adjustments are supported in the Direct Testimony of Penn Power Witness Kevin M. Siedt, Penn Power Statement No. 3 and Penn Power Exhibit KMS-1, Attachment B which accompanies his Direct Testimony.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-C-2:

"If the schedule provided in Filing Requirement II-C-1 is based upon budgeted data for a future test year, provide a similar schedule which is based upon actual data for the 12 -month period immediately prior to the test year."

## RESPONSE:

See Penn Power Exhibit RAD-6. Regarding part (b) pertaining to the annualization and normalization of revenues including applicable surcharges and tariff riders, these adjustments are supported in the Direct Testimony of Penn Power Witness Kevin M. Siedt, Penn Power Statement No. 3 and Penn Power Exhibit KMS-1, Attachment C which accompanies his Direct Testimony.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-1

"Provide a schedule showing all revenues and expenses for the test year and for the 12 -month period immediately prior to the test year, together with an explanation for major variances between test year revenues and expenses and those for the previous 12-month period.
Revenues and expenses shall be summarized by the major account categories listed below. If budgeted data for a future test year is not readily available by these categories, an analysis of the data for the 12 -month period immediately prior to the future test year or for the most recent available calendar year may serve as the basis for ratably allocating the budgeted data into the account categories as follows:

## OPERATING REVENUES

```
    Electric Revenues:
    Residential Sales
    Commercial Sales
    Industrial Sales
    Public Street & Highway
    Lighting Sales
    Sales for Resale
    Total Other Electric Revenues
    Other Electric Revenues:
    Late Payment Charges
    Miscellaneous Service Revenues
    Rent from Electric Property
    Other Electric Revenues
    Total Other Electric Revenues
    Total Operating Revenues
```

OPERATING EXPENSES
401-2
Operation and Maintenance Expenses
Power Production Expenses:
Fuel
Net Interchange
Deferred Energy Costs
Other
Transmission Expenses
Distribution Expenses

Customer Service \& Informational Expense
Sales Expenses
Administrative and General Expenses Total Operation \& Maintenance Expenses

Depreciation Expenses
Amortization of Net Salvage
Nuclear Decommissioning Expense
Amortization of Property Losses
Taxes Other Than Income Taxes
Total Operating Expenses Prior To
Federal \& State Income Taxes

## OPERATING EXPENSES

Operating Income Prior To Federal and State Income Taxes

## federal and state income taxes

409
409

411
Federal Income Taxes
State Income Taxes
Deferred Federal Income Taxes
Deferred State Income Taxes
Investment Tax Credit Adjustments
Deferrals
Amortization-Credit
Other Income Tax Credits \& Charges
Total Federal and State Income Taxes
Operating Income After Federal and State Income Taxes

## OTHER INCOME AND DEDUCTIONS

## OTHER INCOME

Non-utility Operating Income
419
419
421
421
Interest and Dividend Income
Allowance for Other Funds Used During Construction
Gain on Disposition of Property
Other Miscellaneous Non-operating Income
Total Other Income

## OTHER INCOME DEDUCTIONS

421
425
426
Loss on Disposition of Property
Miscellaneous Amortization
Miscellaneous
Total Other Income Deductions

## taxes applicable to other income and deductions

| 408 | Taxes Other Than Income Taxes |
| :--- | :--- |
| 409 | Federal Income Tax |
| 409 | State Income Tax |
| Total Taxes Applicable to Other Income and Deductions |  |
|  | Income Before Interest Charges |

## INTEREST CHARGES

427
428
429
431 432

Interest on Long-Term Debt
Amortization of Debt Discount and Expense
Amortization of Premium on Debt
Other Interest Expense
Allowance for Borrowed Funds Used During Construction-Credit Net Interest Charges
Income Before Extraordinary Items
Extraordinary Items After Taxes
Net Income "

## RESPONSE:

See Penn Power Exhibit RAD-18 Attachment A, which provides the requested comparative operating statements. Set forth below are explanations of the causes of major variances.

## OPERATING REVENUES

Residential Sales (Variance ( $\$ 3,395$ ))
Variance is primarily due to decreases in Price to Compare revenues $\$ 5.9$ million and Distribution revenues $\$ 1.0$ million, partially offset by an increase in Distribution System Improvement Charges $\$ 3.2$ million.

## OPERATING EXPENSES

Operation and Maintenance expense Account 401-2 (Variance (\$2,600))
This variance is primarily due to decreases of $\$ 5.8$ million in purchased power expenses offset partly by increases of $\$ 1.7$ million in distribution expenses and $\$ 0.9$ million in customer service expenses.

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{ }_{3}^{x} \quad \theta^{x}: y^{4}
$$

## Pennsyivaina Power Company

Comparative Income Statements

| FERC Account |  | Twelve Mo Dec 31, 2017 |  | Ending Dec 31, 2016 |  | Increase/ (Decrease) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (In thousands) |  |  |  |  |  |
| Operating Revenues |  |  |  |  |  |  |  |
| Electric Service Revenues |  |  |  |  |  |  |  |
| 440 | Residential sales | \$ | 183,245 | \$ | 186,639 | \$ | $(3,395)$ |
| 442 | Commercial sales |  | 79,849 |  | 80,720 |  | (871) |
| 442 | Industrial sales |  | 10,720 |  | 10,779 |  | (59) |
| 444 | Public street and highway lighting |  | 1,472 |  | 1,509 |  | (37) |
| 445 | Other sales to public authorities |  | - |  | - |  |  |
| 447 | Sale for resale |  | 76 |  | 144 |  | (68) |
|  | Total electric service revenues | \$ | 275,362 | \$ | 279,791 | \$ | (4,429) |
| Other Electric Revenue |  |  |  |  |  |  |  |
| 450 | Forfeited discounts | \$ | 1,291 | \$ | 1,291 | \$ | - |
| 451 | Miscellaneouse service revenues |  | 194 |  | 194 |  | - |
| 454 | Rent from electric property |  | 1,636 |  | 1,942 |  | (306) |
| 456 | Other electric revenues |  | 1,498 |  | 1,498 |  | - |
|  | Total other electric revenues | \$ | 4,620 | \$ | 4,926 | \$ | (306) |
|  | Total operating revenues | \$ | 279,981 | \$ | 284,717 | \$ | $(4,735)$ |
| Operating Expenses |  |  |  |  |  |  |  |
| 401-2 | Operation and maintenance expense Power production expenses | \$ | 151,782 | \$ | 157,613 | \$ | $(5,831)$ |
|  | Transmission expenses |  | 4,327 |  | 4,412 |  | (86) |
|  | Regional market expenses |  | - |  | - |  | - |
|  | Distribution expenses |  | 16,234 |  | 14,510 |  | 1,725 |
|  | Customer accounts expense |  | 6,923 |  | 6,410 |  | 513 |
|  | Customer service \& information expense |  | 12,288 |  | 11,350 |  | 938 |
|  | Sales expenses |  | 25 |  | 24 |  | 0 |
|  | Administrative \& general expenses |  | 13,937 |  | 13,796 |  | 141 |
|  | Subtotal | \$ | 205,517 | \$ | 208,117 | \$ | $(2,600)$ |
| 403 | Depreciation expense .. | \$ | 16,413 | \$ | 16,222 | \$ | 191 |
| 404-5 | Amortization and depletion of utility plant |  | 1,939 |  | 1,311 |  | 628 |
| 406 | Amortization and utility plant acq. adjustment |  | - |  | - |  | - |
| 407 | Amortization of property losses |  | - |  | - - |  | - |
| 407.3 | Regulatory debits |  | 2,549 |  | 2,985 |  | (436) |
| 407.4 | Regulatory credits |  | $(2,320)$ |  | (900) |  | $(1,420)$ |
| 408.1 | Taxes other than income taxes |  | 17,082 |  | 17,292 |  | (210) |
| 411.1 | Accretion expense |  | - |  | - |  | - |
| 411.8 | Gains from disposition allowance |  | - |  | - |  | - |
|  | Total operating expenses before |  |  |  |  |  | - |
|  | federal and state income taxes | \$ | 241,180 | \$ | 245,028 | \$ | $(3,848)$ |
|  | Net operating income before |  |  |  |  |  |  |
|  | income taxes | \$ | 38,801 | \$ | 39,688 | \$ | (887) |
| Income taxes |  | \$ |  |  |  |  |  |
| 409.1 | Income taxes-federal |  | 3,274 | \$ | 1,589 | \$ | 1,685 |
| 409.1 | Income taxes-state |  | 1,981 |  | 2,044 |  | (64) |
| 410.1 | Provision for deferred income taxes-federal |  | 6,469 |  | 8,374 |  | $(1,905)$ |
| 410.1 | Provision for deferred income taxes-state |  | 1,144 |  | 1,150 |  | (6) |
| 411.1 | Income taxes deferred in prior years-cr. |  | - |  | - |  | - |
| 411.4 | Investment tax credit adjustments-net |  | - |  | - |  | - |
|  |  |  | - |  | - |  | - |
|  | Total income taxes | \$ | 12,868 | \$ | 13,158 | \$ | (290) |
|  | Net operating income | \$ | 25,933 | \$ | 26,530 | \$ | (598) |

Pennsylvaina Power Company
Comparative Income Statements


## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-2:

"Provide a summary of test year adjustments which sets forth the effect of the adjustment upon the following: operating revenues, operating expenses, taxes other than income taxes, operating income before income taxes, State income tax, Federal income tax and income available for return. In addition, test year adjustments shall be presented on the basis of the major account categories set out at II-D-1."

## RESPONSE:

See Penn Power Exhibit RAD-19 Attachment A.


## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-3:

"List and explain all nonrecurring or extraordinary expenses incurred in the test year and all expenses included in the test year which do not occur yearly but are of a nature that they do occur over an extended period of years, for example, nonyearly maintenance programs, and the like."

## RESPONSE:

The test year ending 12/31/17 does not include any non-recurring or extraordinary expenses.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-4:

"As a separate item, list extraordinary property losses related to property previously included in cost of service when the gain or loss on this property has occurred or is likely to occur in the future test year. The proposed ratemaking treatment of extraordinary gains and losses must also be disclosed. Sufficient supporting data must be provided."

## RESPONSE:

There are no extraordinary property losses.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-5:

"Provide the amount of accumulated reserve for uncollectible accounts, method and rate of accrual, amounts accrued and amounts written off in each of the last 3 calendar years."

## RESPONSE:

The future estimate of uncollectible accounts is based on a historically determined average of net write-offs to sales for each utility company. For the Uncollectible Customer Reserve, the Company determines a 3-year rolling average of net writeoffs to sales ( 36 months of net write-offs/ 36 months of sales). This percentage is then multiplied by the latest 6 months of sales to arrive at a reserve.

The 2013 Uncollectible Customer Reserve includes a reserve for the Purchase of Receivables program ("POR"). This was determined using a percentage of NonPOR Uncollectible Customer Reserve to Non-POR Customer Receivable Arrears (Uncollectible Customer Receivable Reserve/Non-Current Customer Receivable Arrears). This percentage was then multiplied by the POR Non-Current Customer Receivable Arrears to arrive at a reserve. Beginning in 2014, the POR Uncollectible Customer Reserve calculation methodology was changed to align with the 3-year rolling average as discussed above.

The Company may record additional uncollectible customer reserve amounts as deemed necessary to fairly value Accounts Receivable.

The accruals, net write-offs and balance in FERC Account No. 144.1 Accumulated Reserve for Uncollectible Accounts for the last three calendar years are as follows:


## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-6:

"Supply detailed calculations to support the total claim for rate case expense, including supporting data for outside service rendered. Provide the items comprising the estimated rate case expense claim for the current rate case."

## RESPONSE:

The claim in the current rate case proceeding for rate case expenses, shown on Penn Power Exhibit RAD-2 page 17, is based on the following total estimated expenses proposed to be normalized for ratemaking purposes over two years:

| Line No. | Description | Amount |
| :---: | :---: | :---: |
|  |  | (\$000) |
| 1 | Legal Fees | \$ 85 |
| 2 | Expert Witnesses | 13 |
| 3 | Other | 63 |
| 4 | Total Current Filing | \$162 |
| Other Includes but is not limited to: |  |  |
| Copying |  |  |
| Postage/Courier Services |  |  |
| Public Input Hearing Costs (facilities/travel/hotels/meals) |  |  |
| Customer Notifications including Newspaper notices and Bill Inserts |  |  |
| Transcripts |  |  |
| Travel/hotels/meals for evidentiary hearings in Harrisburg, PA |  |  |

# Penn Power Exhibit RAD-24 

Witness: R. A. D'Angelo

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-7:

"Submit schedules for the test year and for the 12-month period immediately prior to the test year showing by major components, if included in claimed test year expenses, the expenses incurred in each of the following expense categories:
(a) Miscellaneous general expenses, including account 930.
(b) Outside service expenses.
(c) Regulatory commission expenses.
(d) Advertising expenses, including advertising engaged in by trade associations whenever the utility has claimed a contribution to the trade association as a ratemaking claim - provide explanation of types and purposes of such advertising.
(e) Research and development expenses - provide a listing of major projects.
(f) Charitable and civic contributions, by recipient and amount.
(g) Explain major variances between the test year expenses and those expenses for the prior 12-month period."

## RESPONSE:

$(a-d)$ : See Page 2 of 3.
$(e-f)$ : See Page 3 of 3 .

# Penn Power Exhibit RAD-24 

Witness: R. A. D'Angelo
Page 2 of 3


Acct 913-Advertising \& 930-Miscellaneous General Expense
Institutional or Goodwill Advertising Expenses (913 \& 930.1)
1 Goodwill Advertising \$
2 Promotion / customer retention
3 Print Advertising
4 Agency Services
5 Total Institutional or Goodwill Advertising

| $\$$ | 0 |  | $\$$ | 0 |  |
| :--- | ---: | :--- | ---: | :--- | ---: |
|  | 7 |  | 7 | 1 |  |
|  | 5 |  | 4 | 8 |  |
|  | 50 |  | 47 |  | 10 |
|  |  |  |  | 6 |  |
|  |  |  |  |  |  |

Misc. General Expenses (930.2)

| 6 | Bank Fees | \$ | 24 | \$ | 24 | \$ | 53 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | Misc Regulatory Expenses |  | 84 |  | 81 |  | 67 |
| 8 | Corporate Dues - Trade |  | 26 |  | 26 |  | 26 |
| 9 | Financing Admin Fees |  | 28 |  | 30 |  | 17 |
| 10 | Corporate Dues - Civic |  | 37 |  | 37 |  | 5 |
| 11 | Association Fees and Dues |  | 2 |  | 2 |  | 4 |
| 12 | FENOC - Benefits |  | 5 |  | 5 |  | 12 |
| 13 | FENOC - Tax |  | 2 |  | 2 |  | 4 |
| 15 | Total Miscellaneous General Expenses |  |  |  |  |  | (0) |
|  |  | \$ | 207 | \$ | 208 | \$ | 188 |
| 16 | Accounts 913 \& 930 | \$ | 269 | \$ | 266 | \$ | 213 |

## Account 923-Outside Services Employed

1 Outside Contractors
2 FE Service Co. Assessments
3 FENOC
4 Total Account 923

| \$ | 4,889 | \$ | 5,711 | \$ | 4,555 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5,385 |  | 4,864 |  | 4,721 |
|  | 40 |  | 39 |  | 77 |
| \$ | 10,314 | \$ | 10,613 | \$ | 9,353 |

## Account 928-Regulatory Commission Expenses

1 Regulatory Commission Expense
2 Total Acct 928

| $\$$ | 742 |  | $\$$ | 822 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\$$ |  | 724 |  |  |

# Penn Power Exhibit RAD-24 

Witness: R. A. D'Angelo
Page 3 of 3

(A) For the year ended December 31, 2015, R\&D expenses represents actual amounts included in the income statement. Future amounts are projected expenditures which will settle to either capital or expense depending on the nature of the project.

## Account 426.1-Donations

| 1 | Property Donations | \$ | 36 | \$ | 36 | \$ | 36 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Civic Donations |  | 7 |  | 7 |  | 8 |
| 3 | Total charitable and civic contributions | \$ | 43 | \$ | 43 | \$ | 44 |

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-8:

"Provide an analysis by function of charges by affiliates, for the test year and the 12-month period immediately prior to the test year, for services rendered included in the operating expenses of the filing company. Explain the nature of the service and the basis on which charges or allocations are made, including a copy of an applicable contract. Also, explain major variances between the charges for the test year and the corresponding charges for the prior 12-month period."

## RESPONSE:

See Penn Power Exhibit RAD-25 Attachment A for a summary of charges budgeted to be billed to Pennsylvania Power Company by FirstEnergy Service Company (FE Service) for the twelve months ending December 31, 2017 and December 31, 2016.

Also included is a copy of the Service Agreement between the operating subsidiary Pennsylvania Power Company and FE Service outlining the services to be provided by FE Service and the basis on which charges are to be billed. See Penn Power Exhibit RAD-25 Attachment B.
Penn Power Exhibit RAD-25
Attachment $A$
Page 1 of 1

$$
\begin{aligned}
& \begin{array}{ll}
\text { Line } & \\
\text { No. } & \text { Description } \\
1 & \text { Production } \\
2 & \text { Transmission } \\
3 & \text { Distribution } \\
4 & \text { Customer Accounting } \\
\hline
\end{array} \\
& \begin{array}{l}
\text { * Labor is direct payroll only; excludes payroll overhead } \\
\text { ** OTL includes payroll overhead }
\end{array}
\end{aligned}
$$

# Service Company Agreoment-Utility [Execution Copy] 

## SERVICE ACREEMENT

This Servie Agrement ("Agrement") is entered into as of the 25th day of February, 2011, by and between each of the associate compaties listed on the signature page hereto (éteh a "Client Company"), and FïrtBnergy Service Compayy, an Ohio. corporation ("Service Company").

WHEREAS; Service Company is a direct wholly-owned subsidiaty of FinstEnergy Corp., a holding company uinder the Public Otility Holding Company Act of 2005, as amended (the "Act");

WhRREASA, Service Company has been formed for the purpose of providing admindstrative, management:and other services to FirstBnergy Corp. and its associate companies, inchuding Client Company (together; the "Client Companies"); and

WHERBAS, Client Company believes that it is in its interest to enter into an arrangement whereby Client Company may agree to purchase such administrative, management and other services from Service Company as Client Company may choose at cost as determined in accordance with this Agreement and the Aot;

NOW, THEREFORB, in consideration of the mumal covenauts contained herein and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the patties hereto, intending to be legally bound, hereby agree as follows:

## 1. DESCRIPTION OF SBRYICBS

Service Company agrees to provide certain administrative, managemonit or other services" (the "Services") to Client Company similar to those supplied to other Client Companies of Service. Company, Such services are and will be provided to ClientCompany only at the request of Client Company. . Exbibit A hereto lists and describes all of the Services that are ayailable from Service Company.

## 2. PERSONNEL.

In otder to provide the Services, Service Company will employ executive officers, accountants, financial advisers, technical advisers, attorneys and other persons with the necessary qualifications. If necessary, Service Company may also arrange for the: services of nouaffiliated experts, consultants and attornoys in compection with the performance of any of the Services provided under this Agreement.

## 3. COMPENSATION AND ACLOCATION

As and to the extent required by law, Service Company provides and will providó such services at fully allocated cost, determined in accordance with the Act, Bxhibit A hereof contains rules for determining and allocating such cosists.

## 4. TRRMINATION AND MODIFICATION.

Either party to this Agreement miny terminatë this Agreement by providing 60 days written notice of such termination to the other paty. This Agreement is subject to termination or modification at any time to the extent its performance may confliot with. the provisions of the Act or with anyy rule, regulation or order of the Federal Regulatory Energy Commission" (the "Commission") adopted before or after the making of this Agreement. This Agreement shall be subject to the approval of any state commission of other state regulatory body whose approval is, by the laws of said state, a legal. prerequisite to the execution and delivery or the perfornance of this Agreement.

## S: SBRYICBRBQUESTS.

Client Company and Service Company will prepare a Service Request on or before September $30^{\text {th }}$ of each year listing Services to be provided to Client Company by Service Company and any special arrangements related to the provision of such Servicess for the coming year, based on Services provided during the preceding year. Client Company and Service Company may supplement the Service Request during the year to reflect any additional or special Services that Client Company wishes to obtain from Service Company, and the arrangements relating thereto.

## 6. BMLING AND PAYMENT.

Onless otherwise set forth in a Service Request, payment for Services provided byService Company shall be by making remittance of the amount billed or by making appropriate accounting entries on the books of Client Company and Seryice Company: Billing will be made on a monthly basis, with the bill to be rendered as soon as practicable anter the close of the month, and remittance or accounting entries completed within 30 days of billing. Any amount remaining unpaid after 30 days following receipt of the bill shall bear interest thereon from the due date of the bill until payment at a rate equal to the prime rate on the due diate.

## 7. NOTICE:

Where written notice is required by this Agreement, all notices, consents, .certificates, or other communications herender shall be in writing and shall be deemed given when mailed by United States xegistered or certified mail; postage prepaid, return receipt requested, addressed as follows:

To Client Company:<br>To Seryice Company:<br>co President 76 South Main St. Akron, Ohio 44308 Co Vice President and Controllèr 76 South Main Sireet Akron, Ohio 44308

## 8. GOYERNING LAW.

This Agreement shall be governed by and construed in accordance with the laws. of the State of Ohio, 点thout regard to its conflict of laws provisions.

## 9. MODIFICATION.

No amendment, change or modification to this Agreement shall be valid, unless made in writing and signed by both paities hereto.

## 10. ENTIṘAGREBMBNT

This Agreement, together with its exbibits, constitutes the enture understanding and agreement of the parties with xespect to its subject matter, and effective upon the execution of this Agreement by the respective parties hereof, any and all prior agreements, understandings or representations with xespect to this subject matter are hereby' terminated and canceled in their entirety and are of no further force and effect," except to the extent transactions thereunder have taken place prior to such effective date in which case such agreements will govern the terms of such transactions: ${ }^{\text {: }}$

## 11. WAFVER.

No waiver by either party hereto of a breach of any provision of ihis Agreement shall constitute a waiver of any preceding or succeeding breach of the same or any other. provision hereof.

## 12. ASSIGNMENT.

This Agreement shall inure to the benefit and shall be binding upon the parties and their respective successors and assigus. No assignment of this Agreement or either patty's rights, interests or obligations hereunder may be made without the other party's consent, whioh shall not be unreasonably withheld, delayed or conditioned.

## 13: SEVERABILITY.

If any provision or provisions of this Agreement shall be held by a court of competent jurisdiction to be invalid, illegal, or unenforceable, the validity, legality, and enforceability of the remaining provisions shall in no way bẹ affected or impaired there

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed effeotive as of the 25th day of Februaty, 2011. This Agreement supercedes any previous agreement between the Service Company and the Clieat Companies.

Fustenergy Sexvice Compay


## Client Coxpänies:

# Ohio Edisòn Company <br> The Clevoland Electric Oliminating Compan̆y 

The Todedo Edison Company
Pemsylvania Porver Company
American Transmissiou Systems,

- yocorporated

Penmsylvania Electric Company
Waperly Electric Power \& Light
Company
Metropolitan Edison Company
Monongahela Powier Company
The Potomardison Company
West Pemn Power Company
PATH - Allegheay Land Acquisitiom
Company
PATH Allegheny Maxyland
Transmission Company, LLC
PATCH Allegheny Transmission
Company, , x,C.
PATA Allegheny Yirginia
Transmassion Corporatión
AYE Series, Potomac-Appalachian Transmission.
Highime, luc.
Trans-Allegheny Xnterstate Line
Company


Donald M. Lÿnch
"President

## CXTMBIT A

## DESCRPTION OF SERVICES AND ALLOCATIONMETHODOLOGX.

## $1 . \therefore$ Descxiption of Serpices

## $\therefore$ Oyervien'

This Exhibit provides a description of all services provided by Service Companiy departments and the cost allocation methodologies to be insed in connection therewith. All prodncts and services are subject to Service Level Standards as negotiated between the Service Company department and Client Company. Bach Client Company is "olassified as either a "Utility Subsidiary". or a "Noni-Utility Subsidiary"."

## 2. Cost Allocation Methodology

## Overviery

The costs of services provided by Service Company will be directly assigned, distributed or allocated by aotivity, project, program, work order or other appropriate basis. The primary basis for charges to affiliates is the direct charge method. The methodologies listed below pertain to all other costs which arè not directly assigned but which make up the filly allocated cost-of providing the product or service. The costs ofproduct and services prowided by the SeryeCo that cannot be charged ditectly to the Subsidiary receiving the product or service will be allocated amiong the associate companies by utilizing one of the methods described below that most accurately distributes the costs. The method of cost allocation varies based on the department xendering the service. The allocation methods used by Service Company are as follows:
a. "Multiple Tactor - All" - For the Indirect Costs for products or": services benefiting the entire FirstEnergy system, FirstBnergy and all Subsidiaties will bear a fair and equitable portion of such costs. FirstBnergy will bear $5 \%$ of these Indirect Costs. The remalaing lodirect Costs will be allocated among the Utility Subsidiaries and the Non-Utility Subsidiaries benefiting from the services provided based on FirstBnergy's equity investment in the respective groups. $A$. subsequent allocation step will then occur. Among the Utility Subsidiaries, allocations wrill be based upon the "Multiple Factor - Utility" methot, Among the Noon-Utility Subsidiaries, allocations will be based upon the "Multiple Factor - Non-Utility": method.
b. "Multiple Factor - Utility" - For the Indirect Costs for a product or service solely benefiting one or more of the Utility Subsidiadies, each such Utility Subsidiary so benetiting will be charged a portion of the Indireot Costs based on the sum of the weighted averages of the following factors:

1. Gross transmission and/or distribution plant:-
2. Operating and maintenaniqe expeñse exöluding purchase power and fuel costs:
3. Transmission and/or distribution revemues, excluding transactions with affiliates

These three (3) factors have been determined to be the most-appropriate for the Utility Subsidiaries in the FirstEnergy system, Bach factor will be weighted equally so that no one facet of the electric utitity operations inordinately. influences thédisistibution of Indirect Cosits.
c. "Moultiple Factor - Non-Utility" For the laditeot Costs. for products or services solely benefiting the Noi-Utility. Subsidiaries, each Non: Utility Subsidiary so benefiting receiving the product or service will be charged a proportlon of the yodirect Costs based upon the total assets of each Non-Utility: Subsidiary, moluding tho generating assets under operating leases from the Utility Subsidiaries.
d. " "Moltiple Factor-Utility and Non-Utility" For the Indirect" Costs for a product or service benefiting one or more of the Utility and NonOtility Subsidiaries, each such Subsidiary: so benefiting is first assigied a distribution xatio that is in proportion to the Yndiiect Costs based on FirstBnergy's equity investment in such Subsidiaties, Following this distribution, a subsequent allocation step will then occur. Among the Utility Subsidiaries, allocations will be based upon the "Multiple Factor-Utility." Among the Non-Utility Subsidiaries, allocations will be based ipon "Multiple Fractor : Non-Utility"
e. "Direct Charge Ratio" - The ratio of direct charges for a partioular product or service to an individual Subsidiary as a percentage of the total direct.charges for a particular product or service to all Subsidiaties benefiting from such services. Indireot Costs are then allocated to each Subsidiary based on the calculated ratios.
$\therefore$ f. "Number of Customers Ratio" - For costs of produols and. services driven by the number of Utility customers, the allocation method that will be used will be the number of Uitity customers for the respective Utility Subsidiary receiving the product or service divided by the total number of utilly. customers.
g. "Number of Shopping Castomers Ratio". - A "shopping customer" is defined as a Utility. customer who has selected a competitive electric generation supplier. For costs of products and services driyen by the number of shopping customers, the allocation mothod that will be used will be the number of shopping customers for the respective Utility Subsidiary receiving the product or service divided by the total number of shopping customers.
h. $\therefore$ "Number of Xarticipating Amployees - Genern"" \& For costs of products and services driven by all participating employees within the firstBinergy system, the allocation method that will be used will be the mmber of participating. employees for the respeotive Subsidiary reciving the product or service divided by the total number of participating employees.
: "Number of Participating Employees ~ Utility and Nou-Utility" - For costs of products and services driven by pattioipating employees who work for the Ubility and Non. Otility Subsidiaries, the subsidiaries teceiving the product or service are first assigned a distribution fatio that is in proportion to the Indirect Costs based on FirstBnergy's' equity investment in the respeative groups. Costs are further allocated by using the number of partioipating employees for the respective'Subsidiary diyided by the total number of participating FirstEnergy employees.
j. "Gigabytes Used Ratio" - Number of gigabytes utilized" by a Subsidiary receiving the product or service diyided by the total number of gigabytes used by the FirstEnexgy system companies applicable to that respective product or service.
k. "Number' of Computer Workstations "Ratio" - Number of. computer workstations utilized by a Subsidiary receiving the product or service divided by the total number of computer workstations in use by the Firstenergy system companies applicable" to that respective product or service.

1. "Number of Billing loserts Ratio" - Number of billiigg insents performed for a Subsidiary receiving the product or seryice divided by the total number of billing inserts performed for the Furstenergy-system companies applicable to that respective product or service.
m. "Nuouber of Tinvoices Ratio"- Number of invoices processed for a Subsidiary receiving the product or service divided by the total number of invoices processed for the FirstBnergy system companies applicable to that respective product or service:
a. "Number of Payments Ratio" - Number of monthly payments processed for a Subsidiary divided by the total mouthly number of payments processed for the PirstBnergy system companies applicable to that respective produot or service. This will not bo utilized until some historical information is available out of our new automated system.

0; "Daily Print Volume" - Average daily print volume performed for a. Subsidiary receiving the service divided by the total average daily printvólunge performed for the entire FirstBnergy system.
p. . "Number of Tntel Servers" - Number of Intel servers utilized by a Subsidiary receiving the product or service divided by the total number of Intel servers utilized by the FirstBnergy system.
q. A Application Development Ratio" - Number of application development hours budgeted for a Subsidiary receiving the service divided by the total number of budgeted application dovelopment hours for the yeax.
$x$. "Seryier. Support Composite" ". The average tatio of unixgigabytes, SAㅇ glgabytes and lntel number of servers for a Subsidiary receiving the service.

## 3. Descriptions of Products and Services

## CAlGCENTLER

| Product ox Sexvice | Proulnct / Serivice Description | - Imdirect Allocation Methöds |
| :---: | :---: | :---: |
| Field All Inbound Regulated Calls | Field calls related to billing, credit, new service, servioe order completion; outages, and other miscellaneous activities. | Multiple Factor - Utility añd Non-Utility |
| Field All Inbound Unregulated Calls | Field oalls related to billing, oredit, new service, service order completion, outages, and other miscellaneous activities. | Muiliple Factor-Utility and Non-Utility |

## CUSTOMACR SIARVICR

| Product or Service | Product/Service Description | Iodirect Allocation Methods |
| :---: | :---: | :---: |
| Sapplier Services | Provide customer services support to electrio generation suppliers, administer and maintain Electronic Data Interface (BDI) functions and inyoice suppliers. | Number'of Shopping Customers Ratio $\cdot$ |
| Regulatory Interface and Process <br> Improvement: Supplier | Liạison to ensure Customer Choice requirements and develop and execute plans to improve supplier services processes. | Number of Shopping Cuistomers Ratio |
| Market Support Generation (MSG) Administrationi | Administer and support MSG supplier functions. | Number of Shopping. Customers Ratio |
| Regulatory Interface and Process <br> Improvement: <br> Regulatory | Respond to regulatory complaints from , customers and develop and exeoute plans to iomprove regulatory compliance processes. | Number of Customers Ratio |
| Compliance. | Work with regions to communicate and ensure regulatory requirements. | Multiple Factor - Útility |
| Power Billing | Provide billing functions for large commercial/industrial contract customers. | Number of Customers Ratio |
| Revenue Reporting | Perform and manage revenue reporting functions. | Number of Customers Ratio |
| Billing Exception Ptocessing | Process billing exceptions. | Number of Customers Ratio. |
| Remittance <br> Processing | Process oustomer payments and deposit funds. | Number of Payments Ratio |
| Human Services | Coordinate and edminister the various sooial services programs. | Number of Customers Ratio |


| Arrears <br> Managgement! <br> Outsourcing <br> Services <br> Xncorporated (OSI) <br> Administration : | Coordinate anid perform arrears, credit and bankruptcy functions. Manage outside collections agencies' performance and OSI credit activities. | Number of Customers Ratio: |
| :---: | :---: | :---: |
| Reyenue Protection Administration | Perform revenue reporting and compliance functions. | Number of Customers Ratio |
| Metrics and Budgetl. <br> Cuistominer <br> Satisfaction <br> Measurement | Manage Customer Services and Call Center Départments' budgets and mensure performance and customer satisfaction results. | Number of Customers Ratio |
| Policy/Procedures Development and Documentation | Develóp, document and communicate Customer Sérvices policies and procedures, . | Number of Customets Ratio. |
| Bill Administration/ <br> Forms <br> Administration: | Desigu standardized onstomer bills, envelopes, and forms. | Number of Customers Ratio |
| Meter Reading Support | Coordinate Meter Reading schedules and routing activities. | Nomber of Customers Ratio |
| Customer: Information Systexa (CISS) Control | Operate aud maintain CIS. | Number of Customers Ratio |

## ECONONOCDEVELOPMENT

| Product or Service | Product/Service Descxiption | Yndirect Allocation <br> Methods |
| :--- | :--- | :--- |
| Bconomic <br> Dovelopment <br> Services | Foster economic development to encourage <br> capital investment in FirstBnergy's service <br> areas. | Multiple Factor-Utility |

## TRANSMMSSION \& DISTRIBUXXON TECENXCAL SERYICES

| Product or Service | Product/Service Descxiption | Tidirect Allocation Methods |
| :---: | :---: | :---: |
| Forestry | Provide forestry services. | Multiple Factor - Utility |
| Distribution | Services include Joint User contracts, public | Multiple Faclor-Utility |
| Reliability and Asset | works coordination, reliability reporting to | - ${ }^{\text {Prama }}$ |
| Recoxds | regions and Public Utility Commissions, |  |
|  | mutual assistance coordination, PowerOn |  |
|  | support, cable locate tioket screening and |  |


| Design Standards | Services include line material and construction standards, distribution line and underground maintenance pratices and suppott, new business process support, and service practioes. | Multiple Factor - Utility |
| :---: | :---: | :---: |
| Substation Services Support | Serṿcoss inolude Substation maintenance plan coordination, practloes and support, mobile substation administration and planning, and envirommerital compliance suapport. | Multiple Faotor - Utility |
| Equipment Repair/Testing Services | Services include the maintenance, installation, maintenance, testing and repair of utility equipment. | Multiple Factor - Utility |
| Fleet Services, | Deyelop fleet strategy, and perform fleet maintenance practices and support. | Multiple factor - Uṭlity |
| Financial Services | Identify revenue euhancements and cost reductions. | Multiple Fator - Utility |
| Substation Design and TransmissionLine Maintenance Support | Perform substation and transmission line. desigh and project managementiand transmission linè and substation designi and material standards, right-of-wày and survey services, transmission line maintenance plan coordination, practices and support;'RAA ativity coordination: | Multiple Factor - Utility |
| Planning and Protection | Perform planning and protection support for subtransmission system and overall radial system capacity planoing overview, and interconnection coordination for distributed technology applications on distribution system. | Multiple Factor - Utility |
| Capital Budget and Bquipment Support | Capital budget development and suppoit, and major equipment specifications and prowuementrepair activities for major: equipment. | Multiple Factor - Utility |

WORKFORCXE DEEYLLOPMENT

| Product or Service | Produet / Service Description | Indirect Allocation: Methods |
| :---: | :---: | :---: |
| Transmission and - Distribution Skills Training | Develop and facilitate teclinical and safety training for workers assoclated with distribution activities, inoluding line. substation, meter, fleet, wavehoise, field engineering, and dispatch. Provide support throngh equipment evaluation, triaining analyses, job assessments, and projeat coordination. | Number of Pardicipating Employees - General |
| Customer Service Skills Training . | Dovelop and faoilitate skills training for oustomer service gróups. | 7actor - Utility |
| External Leaming Opportunities Through the Power Systems Insitute | Develop educational partnerships with colleges to offer two-year degreeses in eleotric ulility technology. | Multiple Factor - Utility |

## ADMINLSTRATXVE SERVICES

| Pxoduct or Service | Product / Service Descriptiou | Fudirect Allocation Methods. |
| :---: | :---: | :---: |
| Provide Administrative Support Services | Provides services in production printing, document imaging, graphic services, food. services, corporate mailroom and corporate courier. | Multiplé Fáctor - Utility and Non-Utility or Multiple Factor Utility* |
| Provide Records Management Services | Provides services in records storage, records retrieval, records retention, records planaing and engineering records. | Multiple Factor - Utility and Non-Útility or Multiple Factor Utility* |
| Provide Business Services | Provides services in convenuence copiers, fax machines, pagers, printers, and business. information center. | Multiple Factor- Utility and Non-Utility or . Multiple Factor Utility* |

* For services rendered only to the utilities.

EXECUTVVE

| Product or Serviee | Product / Service Description |
| :---: | :---: |
| Executive <br> Management | Consultation and servicess in mànagement and administration of all aspects of the business. |

$\left|\begin{array}{ll}\text { Yodixect Allocation } \\ \text { Miethods } \\ \text { Multiple Factor-All } \\ \hdashline & \\ \hdashline\end{array}\right|$

COMMUNXCATIONS


CORPORATE AFTAMS AND COMMUNITY KNYOLVEMENT

| Product orservice | Product / Service Description | ladirect:Alloention Methods |
| :---: | :---: | :---: |
| Comporate Affairs Activitios | Provide administiative suppot through oversight of the business practices and:. planning and implementation of staff, senior. management and related meetings. Serves as community liaison. | Multiple Factor - Utility |
| Direct Community Involvement Initiatives | Provides direction in employee volunteerism, supports viable community partherships and educational initiatives: | Factor Utility |
| Bnergy Efficiency . <br> Programs | Directing and coordinating Ohio Weatherization and Energy Efficiency Programs for Ľow Income Customers. | Multiple Factor $\div$ Otility |
| Community Xuitiatives Consulting Services | Consults to regional operations and other: business units and client managers for the various community.pregrams. | altiple Factor- Utility |
| Contributions Management | Difects, coordinates, monitors; and manages contributions. | Multiple Factor - Utility |

CORPORATE

| Product or Servico | Product/ Service Description | Indirect Allócation. Methods |
| :---: | :---: | :---: |
| Investor Services | Stock administration, perform recordkeeping, transfer agent, registrar, paying agent, rejavestoment plan administration aud other services for sharcholders. | None (All Direct Charge to Holding Co.) |
| Board of Directors Support | Support and administration of Board of Directors meetings and director compensation,: | None <br> (All Direct Chàrge to Holding Co .) |
| Annual Meeting Coordiantion | Coordinate the Annual Meeting of Shareholders, including the preparation and mailing of proxy materials and apmual reports and the tabulation of proxies; | None (All Direct Charge to Holding Co.). |
| Yudenture Compliänce | Administer the company's indentures * | Muldtiple Pactor - Utility |

## HUMAN RESOURCES

| Product or Service | Product / Service Description | Yndirect Alloc̈ation |
| :---: | :---: | :---: |
| Manage En̄ployee Executive <br> Compensation and Benöfils | Provide managèment and supervision for . employebeand execoutive compensation and bonefits. | Number of Participating Employees - General |
| Manage Workers Compensation and Disability. <br> Management | Provide management and supervision for workers compensation and disability programs. | Number of Participating Employees-General |
| Provide and <br> Coordinate Hurrian Resources Training | Design, prepare and conduct training. | Number of Partioipating Employees -- General |
| Provido Employment Services | Provide staffing; relocation ànd employment expertise. | Number of Participating. Employees-General |
| Provide HRIS <br> Services. | Provide and maintain Human Resources information. | Number of Participititing Employees - General |
| Provide Diversity <br> Management <br> Services | Manage Affirmative Action prográms, provide BRO/AA consulting services, and xespond to charges. | Number of Participating Employees - General |
| Manage/ Administor <br> Medical Services <br> and Welliness <br> Programs | Establish compliance, develop, implement, and administer medical and wellness programs, | Nümber of Participating Employees - General |

INDUSTRIAL RELATTONS

| Product or Service | Product / Service Descruption . | Ludirect Allocation Methods |
| :---: | :---: | :---: |
| Provide Labor <br> Contract <br> Negotiations | Provide contract negotiation services for all labor agreements. | Number of Participating Employees - Genèral |
| Provide Labor Consulting Services | Provide labor consulting services. | Number of Participating Employès - General |
| Manage/Administer Safety Programs | Develop, implement and administer occupational safety programs. | Number of Participating Employeas- General |

reatestate

| Product or Sexrvice | Product / Service Description | Indirect Allocation Methods |
| :---: | :---: | :---: |
| Facilities <br> Management | Managemenit and maintenance of office facilities. | Multiple Pactor - All or. Multiple Paictor Utility* |
| Pacilities Planning and P’rojeot <br> Management | Manage office design services, furuiture, project maaagement and other capital. impraveineits. | Multiple Factor-All or Multiple Fàctor Utility* |
| Management of Real. Bstate Assets | Support internal and external inquiries. xegarding the acquisition; divestiture and managoment of real estate assets | Multiple:Factor - All or : Multiple Factor Utility* |
| Managé/Administer Sécurity Programs | Administer physical security, special investigations, seourity rudits, security consultation and contract guardseryices. | Muiltiple Factor - All or Multiple Factor Utility* |

* For services rendered only to the utilities.

FLRSTENERGY TECANOLOGMES

| Product or Service | Product/ Service Description ${ }^{\circ}$ | Yndirect Allocation Méthods |
| :---: | :---: | :---: |
| Strategic Technologies | Develop, support and implement EPRX piograms, judustry initiatiyes, research and development programs, collaboratives and activities with universities, labs and the Depariment of Energy. | Multiple Factor - Otility |
| New Technology <br> Assessiment | Perform assessment activilies for strategic technology pilots, technology assessments, marketing tests, customer pilots and due diligence revievis. | Multiple Factor - Utility and Non-Utility |
| Technioal <br> Application and <br> Product Innovation | Develop, analyze and support strategic alliances, joint ventures, strategio stattups, direot investments and Portfolio initiatives. | Multiple Frotox - Utility and Non-Utility. |
| New Technology and Product Market Deployment | Devolop, support and implement the following initiatives: tailored solntions with : existing products; commercial paokages, operational efficiencies and business area solutions. | Multiple Factor - Utility and Non-Utility |
| Demand Response Initiatives | Provide support for corporate demand responso juitiatives. | Multiple Factor - Utilitẏ and Non-Utility |
| Renewable Energy <br> Program and <br> Strategy | Provide support for vatious corporate and regulatory Initiatives to develop and implement renewable enérgy programs and. products. | Multiple Factor-Utility |


| Regulated Progiams and Services | Develop, stuport and implement programs and strategies to meet corporate initiatives and regulatory mandates and commitments related to Comprehensive Resóurce Asseşiment(CRA), customèr end-use. techiology, distributed generation and load : managemént. | Multiple Factor - Utility |
| :---: | :---: | :---: |
| Project <br> Implèmentation <br> Managemẹnt <br> Services | Dèvelop and implement end-use and. distributed generation teohnology:based products and services: | Multiple Factor - Utillty and Non-Utility |
| TRCHNOLOGY \& SU'PRORT SIERYICES |  |  |
| Product or Service | Product/Serrice Description | Lndirect Allocation Methods: |
| Provide Network <br> Services | Provide Internal Network Services, | Multiple Factot-Otility: añ̈d Non-Utility |
| Maintain wireless cell sites and fiber optics network | Maintain internal witeless cell sites and fiber. optio network; provide engineering; procurement, and installation services. | Multiple Factor - Utility. and Non-Utility |

## INFORMATION TECHNOLOGY

| Product or Service | Product / Service Description | Indirect Allocation Methods |
| :---: | :---: | :---: |
| Application Dẹvelopment: | Create new or enhance existing applications; tinoluding analysis design coding, testing; system integration, and implementation, as well as any required techanical witing or project mauual development. | Directly Billed. |
| Development <br> Supervision and <br> Tool Support | Supervision of application development employees and the support of development software tools. | Application Development Ratio |
| Server Support (Unix, SAP) | Create and support the netivork and server infrastucture to accommodate unix and SAP client server applications. | Gigabytes Used Ratio |
| Client Server. Storage Support | Support of storage requirements for all server applications. | Server Support Composite Ratio |
| Server Suppoxt (Intel) | Create and support the network and server. infrastructure to accommodate windows and NT client server applications. | Number of Intel Servers Ratio |
| Mainframe Processing and Storage Sup̈port | Execute mainftame appliontions, inotuding an appropriate portion of support, started taskss, mainfame backups and microfiohe: séf vices. | Gigabytes Used Ratio |


| Desktop Support- | Help desk email and end-user tools, remote access, xepair sèrvices, and general workstation support. | Number of Computer Workstations Ratio |
| :---: | :---: | :---: |
| Network Services | Yooludes voice, data, EMS and radio access. | Direct Charge Ratio |
| Inserting Services | Provide document bursting, inserting and mailing. | Number of Billing Inserts.Ratio |
| Printing Services | Provide mainftame and client sexver printing services at the data:center, | $\begin{aligned} & \text { Daily Print Volume } \\ & \text { Ratio. } \end{aligned}$ |
| Technical <br> Consulting | Provide consulting sugport to departments and end-users to enable them to leverage their TT capabilities, Provide advice and consultation règarding desktop setups and configurations. | Direotly Billed |
| Training | Provide IT training: | Multiple Frator - Utility and Non-Utility |
| Business Application Support | Support business application related software Hicenses and /or hardwàre maintenance provided by an outside vendor. | Direatly Billed* $\cdot$ ' |
| Data Security | Disaster tecovery and data security services. | Multiple Factor - Utility and Noa-Utility |
| Project Management Office | Oversee technology projects through benefit. | Multiple Factor-Utility and Non-Utility |
| Provide <br> Telecommunication Services | Provide telecommunication services and equipment. | Dired Charge Ratio |
| Portal Suppoit | Support the infastruoture to accommodate internek and intranet application access. | $\begin{aligned} & \text { Multiple Factor - Utility } \\ & \text { and Non-Utility } \end{aligned}$ |
|  | . $:$ |  |
| PEREORMANCE PLANNING |  |  |
| Product or Service | Product / Service Description | Indirect Allocation Methods |
| Performance <br> Plauning Services | Develop, support and execute performance planning services. | Multiple Factor - All |

SUPPLY CHATN

| Product or Service | Product $/$ Service Description - | Tudfrect Allocation Methods |
| :---: | :---: | :---: |
| Strategic Plamaing, Demand Panagement and Procurement Projects. | Provide assistance in materials and services planning (demand management) and. performs special procurement projects: | Maltiple Factor - Utility and Non-U'ility |
| Goods and services procurement . | Procure material, equipment and contraotor services: - Establish, manage and admunister programs, which allow internal customers to obtain goods without having to process the need through Procurement, Develop specifications, construction standards, schectules, and bills of materials. | Multiple Factor- U Uility and Non-Utility |
| Materials <br> Management Suppoit | Maintain the computerized purchasing and materials management systems, and material telated modules; maintain ànd/or modify select management xeports. Analyzo Supply Chain processes and ineasure performazoo. Monitor and forècast demand to ensure a coutinuous supply of materials. | Multiple Factor - Utility and Non-Utility |
| Inyestment Recovery Projects | Dovelop and implement plans for disposition of surphis assets. | Mulliple Factor-Utility and Non-Utility |
| Process, Refurbish and Sell.Materials | Perform recovery processing, investment recovery processing, refurbishing and selling materials. | Multiple Factor.- Utility and. Non Utility |
| Provide <br> Warehousing Services n Nonnuclear | Receive and place material into stock, insure: quallty xequidrements are mef at receipt, maintain inventory counts, and update. information systems; Fill customor requests for material from stock. | Multiple Factor - Utility and Non-Utillty |
| Provide <br> Warehousing Services Nuclear | Receive and place matexial into stock, insure quality requirements are met at receipt, maintain linventory counts, and update information systems, Fill customer requests for material from stock. | None ... (All direct charged) |
| $\begin{aligned} & \text { Warehousing Spaco } \\ & \text { Charge } \end{aligned}$ | Provide warrehousing space to internal oustomers. | Multiple Factor-Utility and Non-Utility |

CONTROLLERS

| Prọduct or Service | Product/Service Description * | Indirect Alloention Methods: |
| :---: | :---: | :---: |
| Accounting Research | Provide accounting research and consulting to ensure cợmpliànce with existing and proposed financial reporting, and regulatory. accounting requirements. | Moltiple Factor - All |
| Accounts Payable | Nonpayroll corporate disbirsement services including accoinnt distribution to the general ledger, Resolve juroblems-associated with invoico processing and maintain the accounts payable system. | Multiple Factor - All |
| Billing Services | Prepare non-retail electric billings. | Multiple Fäctor Utility |
| Infrastmoture and Corporate Reporting, Accounting and Budgetiag. | Prepare Corporate Sustaining reports, subsidiary accounting and cortocate" budgeting, which includes rëporting and support of the ledger, property xecoords aqud SAPB system, | Multiple Factor - All |
| Dne Diligence | Assist value centers to determine whether proposed business acquisitions/combinations and similar transactions are desirabie from a "financial perspéctive; extensive review/analysis followiag proliminary teview and firm intent to proceed with tansaction through commitment and closing phäses. | None. <br> (All drect charged) |
| Yalue Center Accounting and Budgeting | Maintain the property accounting system and provide value center accounting such as management reporting. | Multiple Factor - Utility and Non-Utility |
| Property.Record Maintenance | Maiutain corporate continuing property records. | Multiple Factor -- Utility and Non-Utility or Multiple Finotor Utility* |
| Tax Consulting and Research | Conduct tax researoh and tax consulting to assure compliance with statues, while evaluating alternative tax strategies within the constraints of regulations that provide additional shareholder value to the company. In addition, provido tax consulting advice to the value centers on tax complignce and reporting issues, which includes business "start-up" support to organizations xequiring assistance. |  |


| Tax Compliance | Prepare and process all sohedules and information associated with corporate and subsidiary tax returns, audits, and tax litigation, assuring compliance with tax regulations and statues. | Multiple Factor - All or Mültiple Factor Utility* |
| :---: | :---: | :---: |

For services rendered only to the utilities.
CREDTT MANAGEMENTR

| Product or Service. | Product/Serrice Description | Xndirect Allocation Methods |
| :---: | :---: | :---: |
| Credit Analysis and Supporting: Functions | Provide detailed written eredit analysis issuing recommendations on counterparty. creditworthiness and assigning ciedit limits. | Multiple Factor - Uitlity and Non-Utility |
| Credit Policies and Procedures | Develop and support credit policies and prọcedures for managing credit risk. Implement and support standardized eredit approval processes. | Multiple Factor Oility and Non-Utility |
| Credit Management Information System | Develop and support credit management reports and calculate credit exposure on a corporate wide basis. | Multiple Factor.- All |

ENTERPRISE RISK MANAGEMENT:

| Product or Service | Product / Service Description | Indirect Allocation Methods: |
| :---: | :---: | :---: |
| General Risk Management | Develop and maintain an enterprise risk management system. | Multiple Factor - All |

INSURANCE SERYKCES

| Product or Serrice | Product / Service Description | Indirect Allocation Methods |
| :---: | :---: | :---: |
| Insurance Policies | Manage and support insurance policies for all the business units. | Multiple Fíctor - Utility and Non-Utility |
| Loss Gontrol <br> Services | Manage and support properity inspections to prevent losses. | Multiple Factor-Utility and Non-Utility: |
| Surety Bonds | Mauage and support Surety Bonds. | Multiple Pactor-U'tility and Non-Utility |
| Risk Transfer and Risk Mitigation Services | Manage and support risk transfer and risk mitigation services. | Muitiple Factor - Utility and Non-Utility |
| Anclllary Coverages | Manage and support ancillary coverages. | None <br> (All direct charged) |

mTTORNAL AUDTX

| Product or Service | Product / Service Description | Indirect Allocationa Methods |
| :---: | :---: | :---: |
| Audit Services | Perform the following interaal audit services based on risk levels and / or requests: financial, performance analysis, safeguarding of assets, computer-related and frauid inviestigations. | Multiple Figetor - All or Multiple Factor Utility* |

INVESTMENT MANAGEMENT

| Product or Serivice | Product/Service Description | Indirect Allocation Methods. |
| :---: | :---: | :---: |
| Qualified and Nonqualified Peasion and Sayings Plan | Establish and implement investoment policy and asset allocation strategy and monitor investment performance. | Number of Particlpating Employees - Utility and Non-Utilly |
| FirstBnergy <br> Foundation | Establisli and innplemont investment policy and asset allocation strategy and monitor investment performance. | Muitiple Factor r All |
| Voluntary Bmployee Benefit-Association (VBBA) Trust | Establish and implement investment polioy and asset allocation strategy and monitor investoment performance. | Number of Participating Bmployees - Utility and Non-Utility |
| Nuclear Decommissioning | Establish and implement investment polioy and asset allocation strategy and monitor investment performance. | Nome. <br> (All direct charged) |
| Non-Utility Generator Trust | Establish and implement investment policy and asset allooation strategy and monitor investment performance. | Multiple Factor - NonUtility |
| Spent Nuclear Fuel | Establish and mplement investment policy and asset allocation strategy and monitor investment performance. | None (All direct charged) |
| Low-Income <br> Housing Tax'Credit Patnership | Establish and implement inyestment policy and asset allocation strategy and monitor inyestment performanco. | Multiple Factor - All |

## INVESTOR RELATIONS

| Product or Service | Product/Service Description | Indirect Allocatiön Methods |
| :---: | :---: | :---: |
| Investor Information | Compile and communicate information to investors. | Militile Factor: Utility* or Direct Charge to Holding Co. |
| Yavestor Bdacation | Target and educate potential investors to promote PixsBnergy's yaluation chacacteristios and business strategy. | None (All Direct Charge to Holding Co.) |

* For services rendered only to the utilities.


| FirstBnargy <br> Management <br> Edncation | Provide education to management of business concerns and valuation issues of analyst/investors | Moltiple Factor - All. |
| :---: | :---: | :---: |
| FirstBnergy <br> Bmployee Bducation | Actively promote understanding of financial and inyestor relations' issues. | Multiple Frotor - All.: |

RATES ANO REGULATORY ÁMAURS

| Product or Service | Product/Sorvice Description. | Tondirect Allocation Methods |
| :---: | :---: | :---: |
| Regulatory <br> Accivities and <br> Consulting | Manage regulatory activitios and interfaces, including tariff development and interpretation. Moñitör and partiolpàte iǹ regulatory affairs at the local, state and federal levels. | Multiple Factor-Utility |
| Cistomer Yricing and Contracting | Develop pricing programs for regulated electuic service for xetail and wholesale oustomers; including "unbundled" costs and prices for generation, transtrission and distribution service and support justification to regulators. Provide suppart in developing pricing for special-purpose customer programs and non-regulated energy services. (e.g. prepayment, economic development, interruptible load, conjunctive-billing electric service programs). | Multiple Factor:- Utility |
| Billing Support | Provide assistance calculating customer (external and internal) invoices and operate and maintain systems to render, collect and account for these invoices. | Multiple Factór - Utility |
| Sales and Load Forecasting | Develop short-term and long.term sales foreoast, peak load projections and customer counts | Multiple-Pactor - Utility and Non-Utility |

TREASURY

| Product or Service | Product / Service Description | Indirect Allocation Methods |
| :---: | :---: | :---: |
| Capital Stucture Management and Administration | Perform all activities related to acquiring capital and establish and administer fündiag, legal documentation, and record-keeping activities assciciated with finarice programs | Multiple Factor - All |
| Corporate Funds <br> Maxagement | Plan, manage, añid operate the corporate "cash-flowncyole." | Multiple Factor - All |
| Corporate Forecasting | Provido tegulatory support, strategy support, finanoial modeling and forecasting, finanoial and economic analysis and devolopment of annual corporate kP I target. | Multiple Factor - All |


| Capital Project <br> Evaluation and Support | Provide analytical support in the areas of finañcing, profitability, capital stracture and cash llow. | Multiple Factor - Utility and Non-Utility |
| :---: | :---: | :---: |
| Inyestor Relations Activities | Provide Institutional and retail seourity holder, buy and sell-side analysts, rating agencies, and other key mexibers of the finanoial community. with qualitative and quantitative information: | Multiple Factor - All |

## BUSINESS DEYELOPMCNT

| Product or Serpice | Product/Service Description $\because$ | Tndirect Allocation Methods |
| :---: | :---: | :---: |
| Mergers and . <br> Acquisitions Support | Supporit, evaluate and assist in the management of mergex, asset acquisition and asset disposition notivities. | None <br> (All dixect chatged) |
| Internal Consulting | Perform strategio analysis/business fit, and economic ānalysis. Providé iùtetegration and transitional management services as needed. | None (All direct charged) |

GOVERNMENTAL AFTAMRS

| Product or Service | Product/Service Description. | Tadirect Allocation Methods |
| :---: | :---: | :---: |
| Federal Governmental Affairs Support | Activities associated with developing and maintaining relationships with federal govermment institutions; inoludes lobbying, and other support activities. | None. <br> (All dixeot charged) |
| State Governmental Affairs Support | Activities assoolated with developing and maintaining relationships with state govemtnent-institutions; includes lobbying, and other support activities. | None (All ditect charged) |

LEGAC

| Product or Serrice | Product / Service Description | Yodirect Allocation Methods |
| :---: | :---: | :---: |
| Provide. Governmental. Affairs Support | Activities' associated with developing and maintaining relationskips with government institutions; includes lobbying, litigation, and other suipport activities. | None <br> (Ali direct charged) |
| Nuclear Legal Conș̣ultation and Case Management. | Provide legal advice for federal and state nuclear matters. | None <br> (All direct ohargéd) |
| Human Kesources Legal Consultation\& Casé Management | Provide legal adyica for human resourco matters (including workers compensation, unlon'negotiations, arbitrations, class action lawsuits, etc.). | Multiple Factor- Uulity and Non-Utility |


| Product or Stervice | e Product/Service Desicription | Indirect Allocation Methods |
| :---: | :---: | :---: |
| Bmployee Benefits Legal Consultation \& Case Managemen | Provide legal advice for employece benefits matters (including health and welfare benefits, tax-qualified and non-tax quálified beñefit plans ànd programs, pension: àdministration, etcó.). | Number of Participating Employees- Utility and Non-Utility |
| Tax Legal Consultation \& Case Management | Provide legal advice for tax matters. including federal, state \& local tax magters (land tax́; sales \& use tax, IRS; eto.). | Multiple Factor - All |
| Bạnkouptcy Legal Consultation \& Case Management | Provide legal advice for bänkruptoy matters. | Multiple Factor-Utility and Non-Utility |
| Interitational Legal Consultation \& Casa Mauagement : | Propide legal advice for international matters- contract negotiations, sale/lease agreements. | None <br> (All direct chảgged) |
| Non-Utility Legal <br> Consultation \& Case <br> Mauagement | Provide legal advice on federal and state matters to Non-Utility Subsidiaries. | Multiple Factor - NonUtilities . |
| Regulatory Legal Consultation \& Case Management | Provide legal advice for federal and state xegulatory matters.' | Multiple Factor- Utility. |
| Environmental Legal Consultation \& Case Management | Provide legal advice for envirommental matters (other than PCB-rielated matters) federal (BPA) and state (EPA), xegulatory/legislative compliance issues. | None <br> (All dịrect charged) |
| PCB Environmental Legal Consultation \& Case Management | Provide legal advice for PCB-related mátters - federal (RPA) and state (EPA), regulatoryllegislative compliance issues. | Multiple Factor - Utility |
| Renl Estate Legal Consultation \& Case Management | Provide legal advice for rèal estate matters. | Multiple Fictor- - Utility and Non-Uibily |
| Corporate Legă Consultation \& Case Management | Provide legal adyica for general cotporate: and transactional matters (iucluding SEC filings Board of Directors matters, PUFCA; Financings, Securities Matters, Intellectual Property, Teohnology, General Counsel matters, eta.). | Multiple Factor. - AII |
| Claims Legal. <br> Consultation \& Case <br> Management | Provide legal advice for Claims matters. | Multiple Factor - All ${ }^{\text {- }}$ |

clams:

| Product or Service | Product / Service Description | findirect Allocation Mothdids |
| :---: | :---: | :---: |


| Process Receivable Claims | Provide management, supervision, and performance of tasks associated with the resolntion and chargeback of receivable ctaims. | Multiple Factor - All |
| :---: | :---: | :---: |
| Provide Coxporate Supporl | Claims support in evaluating olaims; and procuring appropriate externalinternallege resources: | Moltiple Factor |

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-9:

"Prepare a detailed schedule for the test year showing types of social and service organization memberships paid for, the cost thereof, the accounting treatment and whether included in claimed test year expenses."

RESPONSE:

## Penn Power Company <br> Social and Service Organization Memberships Paid (000's)

| Line |  | 12 Months Ending December 31, |  |  |
| :---: | :---: | :---: | :---: | :---: |
| No. | Organization | 2017 | 2016 | 2015 |
|  |  | (1) | (2) | (3) |

## Business Associations

Account 930

| 1 | Edison Electric Institute | \$ | 26 | \$ | 26 | \$ | 26 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chamber of Commerce, Economic Development, |  |  |  |  |  |  |
| 2 | \& Local Community Organizations |  | 37 |  | 37 |  | 5 |
| 3 | Other Business / Trade Organizations |  | 2 |  | 2 |  | 4 |
| 4 |  | \$ | 65 | \$ | 65 | \$ | 36 |

## Account 426

5

Edison Electric Institute

Total (line $4+$ line 5)

| \$ | 6 | \$ | 6 | \$ | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| \$ | 71 | \$ | 71 | \$ | 40 |

Account 426 is not included in claimed test year expenses.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-10:

"Provide the following payroll and employee benefit data - regular and overtime separately for the test year and for the 12 -month period immediately prior to the test year:
(a) The average and year-end number of employees and the unadjusted annual payroll expense and employee benefit expense associated with union personnel.
(b) The average and year-end number of employees and the unadjusted annual payroll expense and employee benefit expense associated with nonunion personnel.
(c) The average and year-end number of employees and the unadjusted annual payroll expense and employee benefit expense associated with managerial employees.
(d) A summary of the wage rate, salary and employee benefit changes granted or to be granted during the year.
(e) The claimed test year payroll expense and employee benefit expense.
(f) The percentage of payroll expense and employee benefit expense applicable to operation and maintenance expenses and the basis thereof."

## RESPONSE:

$(a-b):$ See Penn Power Exhibit RAD-27 Attachment A to this response.
(c) Managerial employees shown below are also included in response a and b under "Full-Time Non Bargaining" employees.

|  |  | Payroll and Employee Benefits - Management Employees$(\$ 000)$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12 Months Ending 12/31/2017 |  | 12 Months Ending12/31/2016 |  | 12 Months Ending$12 / 31 / 2015$ |  |
| Line |  | Full-Time |  | Full-Time |  | Full-Time |  |
| No. | Description | NonBargaining |  | NonBargaining |  | NonBargaining |  |
| Number of Management Employees |  |  |  |  |  |  |  |
| 1 | Average |  | 4 |  | 4 |  | 4 |
| 2 | Year-End |  | 4 |  | 4 |  | 5 |
| 3 | Straight Time Payroll | \$ | 487 | \$ | 473 | \$ | 447 |
| 4 | Overtime Payroll |  | - |  | - |  | 2 |
| 5 | Incentive Compensation |  | 54 |  | 53 |  | 49 |
| 6 | Total Payroll | \$ | 541 | \$ | 526 | \$ | 498 |
| 7 | Total Employee Benefits | \$ | 106 | \$ | 103 | \$ | 99 |

(d) The following wage increase assumptions were incorporated in the Jan. 2017 - Dec. 2017 test period: Non-Bargaining 3.00\% effective 3/1/17. Non-Union Physical $3.00 \%$ effective $3 / 1 / 17$. Bargaining UWUA $1402.50 \%$ effective 7/1/17.

The following assumptions were incorporated in the 2017 test period: Pension Discount Rate 4.5\%, Pension Return on Assets 7.5\%, OPEB discount rate 4.25\%, OPEB Return on Assets 7.75\%, effective January 1, 2017.

The following wage increase assumptions were incorporated in the Jan. 2016 - Dec. 2016 period: Non-Bargaining $3.00 \%$ effective $3 / 1 / 16$. Non-Union Physical 3.00\% effective 3/1/16. Bargaining UWUA $1402.50 \%$ effective 7/1/16.

The following assumptions were incorporated in the 2016 test period: Pension Discount Rate 4.5\%, Pension Return on Assets 7.5\%, OPEB discount rate 4.25\%, OPEB Return on Assets 7.75\%, effective January 1, 2016.
(e) The claimed test year payroll expense is detailed on Penn Power Exhibit RAD-2 page 12. Total claimed employee benefit expense consists of the O\&M portion of the test year expense listed on Penn Power Exhibit RAD-2 Attachment A, lines 7 through 21, and the normalizing adjustment detailed on Penn Power Exhibit RAD-2, page 20.
(f) The percentage of forecast payroll expense directly charged to O\&M expense for the Jan. 2017 - Dec. 2017 test period is $45.69 \%$. The percentage of employee benefits directly charged to O\&M expense for the Jan. 2017 - Dec. 2017 test period is $45.69 \%$. The benefit percentage does not include pension or OPEB costs which are not charged to $O \& M$ expense as part of the benefit labor adder applied to payroll.

The percentage of forecast payroll expense directly charged to O\&M expense for the Jan. 2016 - Dec. 2016 test period is $38.05 \%$. The percentage of employee benefits directly charged to O\&M expense for the Jan. 2016 - Dec. 2016 test period is $38.05 \%$. The benefit percentage does not include pension or OPEB costs which are not charged to O\&M expense as part of the benefit labor adder applied to payroll.


## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-11:

"Describe costs relative to leasing equipment, including computer rentals, and office space, including terms and conditions of the leases. State method for calculating monthly or annual payments."

## RESPONSE

| Line No | Name of Lessor | Basic Detail of Lease | 12 Months Ending December 31, 2017 |
| :---: | :---: | :---: | :---: |
|  |  |  | (in thousands) |
| 1 | GE Capital Commercial Inc. (successor-ininterest to BLC Corporation) | Motor Vehicles \& Trailers - Base Term 36-120 months with a Fixed Rate \& maximum expected residual of $25 \%$ with unguaranteed residual of $13 \%$. At end of base term, option for renewal exists for up to 24 months at 474 BPS plus Federal 2 year Swap Rate. At end of renewal term, option to continue to rent for monthly fee equilavent to $1 / 12$ of $1 \%$ of acquisition cost until unit is sold or returned to Lessor. <br> Other Equipment - Base Term 36-120 months with a Fixed Rate \& maximum expected residual of $20 \%$ with unguaranteed residual of $13 \%$. At end of base term, option for renewal exists for up to 24 months at 474 BPS plus Federal 2 year Swap Rate. At end of renewal term, option to continue to rent for monthly fee equilavent to $1 / 12$ of $1 \%$ of acquisition cost until unit is sold or returned to Lessor. | \$622 |
| 2 | Citizens Asset Finance, Inc. ( $f / k / a$ RBS Asset Finance, Inc.) | Motor Vehicles \& Trailers - Base Term 60 months for Light \& Medium Duty Vehicles, 96 months for Heavy Duty High Use Trouble Trucks and 120 months for all other Heavy Duty Vehicles \& Trailers with a $\$ 1$ buy out at end of term for all. <br> Other Equipment - Base Term 96 months for Miscellaneous Equipment like ATVs, Sweeper/Scrubbers, etc. and 120 months for Construction Equipment \& Forklifts with a $\$ 1$ buy out at end of term for all. <br> Rates for both Motor Vehicles/Trailers \& Other Equipment Leases are Fixed based on 200 BPS plus Bloomberg Avg Life Swap Rate ( 2.5 yrs for 60 month term, 4 yrs for 96 month term \& 5.5 yrs for 120 month term) | \$659 |
| 3 | Bank of America NA DBA Banc of America Leasing \& Capital LLC | Motor Vehicles \& Trailers - Base Term 60 months for Light \& Medium Duty Vehicles, 96 months for Heavy Duty Vehicles, Aerial Trouble Trucks and Crane Trucks, 120 months for All other Aerial Trucks, Digger Derricks \& Trailers. All terms have a $20 \%$ residual balance. <br> Other Equipment - Base Term 120 months for Construction \& Miscellaneous Equipment with no residual balance at the end of term instead FMV due. For all others at the end of the term, the options are to return the equipment, purchase at residual/FMV or enter into a renewal term for a minimum of 6 months but no longer than 24 months. At the end of the renewal term, we have the option to purchase at FMV or continue to rent monthly for a $\$ 25$ administrative fee until the unit(s) are sold. <br> Lease Rate is margin 170 BPS for 60 \& 96 term \& 173 for 120 term plus Bloomberg Index Forward Swap Rate. Will use the 1st of each month to determine Swap Rate or next Business Day if 1st falls on bank holiday or weekend. | \$35 |

PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-12:

"Submit a statement of past and anticipated changes, since the previous rate case, in major accounting procedures, explain any differences between the basis or procedure used in allocations of revenues, expenses, depreciation and taxes in the current rate case and that used in the prior rate cases, and list all internal and independent audit reports for the most recent 2 year period."

## RESPONSE:

There have been no major changes in accounting procedures adopted since the previous rate case.

A list of all internal audit reports performed by the Internal Auditing Department from January 2014 through December 2015 appears on pages 1 thru 3.

A list of all independent audits performed from January 2014 through December 2015 appears on page 3.

Internal Audits Performed During - January through December 31, 2014

## Compliance:

1. Audit of FirstEnergy Utilities Waste Management Practices as of November 7, 2013
2. Audit of FirstEnergy's Compliance to the Clean Air Act - Sulfur Hexafluoride Mandatory Emissions Tracking and Reporting as of January 21, 2014
3. Audit of FirstEnergy's Compliance with the 2014 CIP Information Protection Program and CIP-003-3 Requirement 4 as of July 15, 2014
4. Compliance Review of FirstEnergy Corporate Security Policy Guide - Possession/Use Of Weapons By Corporate Security Personnel as of November 20, 2014

## Operational:

1. Audit of the Smart Meter Deployment Process - Phase I as of July 18, 2014
2. Audit of the Smart Meter Deployment Process - Phase II as of December 5, 2014

## Consulting

1. Audit of 2013 Occupational Safety \& Health Administration (OSHA) Recordable Incident Rate as of January 10, 2014
2. FiT Assignment - Governance and Compliance Team
3. Vendor Payroll Tax Reconciliation Audit Review
4. Storm Back-Office Invoice Review Process Development
5. Smart Meter Implementation and Procurement (SMIP) Program Time Charging Guiding Principles
6. Cyber Security Risk Assessment - MTF
7. 2014 Purchase Order Audit Clause Revision Reviews

## IT Related:

1. Audit of Qlikview as of March 14,2014
2. Facilitation of the Control Design for the Office Productivity Transformation Project
3. Pre-Implementation Audit of the Financial Transformation Project Budget, Forecast, and Planning System as of May 23, 2014
4. Pre-Implementation Audit of the Financial Transformation Project New General Ledger Technology as of May 23, 2014
5. Pre-Implementation Audit of the Financial Transformation Project Business Objects Planning and Consolidation System as of May 23, 2014
6. Control Design Workshop for IT Operations
7. Audit of Customer Nightly Batch Automation Project as of May 21, 2014
8. Pre-Implementation Audit of PowerPlant 10.4 Upgrade Project as of October 31, 2014
9. Facilitation of the Control Setup and Test Plan Execution for the Office Productivity Transformation Project

## Financial:

1. Revenue's Payment Recovery Audit for Accounts Payable - 2012
2. Sarbanes-Oxley Annual Progress Report as of December 31, 2013
3. Audit of Pennsylvania Storm Deferral Accounting as of January 14, 2014
4. Sarbanes-Oxley 404 Assessment of Internal Controls Over Financial Reporting as of December 31, 2013
5. Audit of Accounts Payable for Year-Ended December 31, 2013
6. First Quarter Sarbanes-Oxley Assessment of Internal Controls Over Financial Reporting as of March 31, 2014
7. Audit of the FirstEnergy Interconnection Meters and Billing Accuracy as of January 30, 2014
8. Second Quarter Sarbanes-Oxley Assessment of Internal Controls Over Financial Reporting as of June 30, 2014
9. Third Quarter Sarbanes-Oxley Assessment of Internal Controls Over Financial Reporting as of September 30, 2014
10. Audit of Capital and Operation and Maintenance Expenses - Transmission \& Information Technology (IT) Expenditures as of December 15, 2014

## Internal Audits Performed During - January through December 31, 2015

## Compliance:

1. Audit of 2014 Occupational Safety \& Health Administration (OSHA) Recordable Incident Rate as of January 8, 2015
2. Audit of FirstEnergy's Environmental Governance - Environmental Management System (EMS) as of May 12, 2015
3. NERC CIP Version 5 Implementation Project - IT Operations Team as of December 15, 2015

## Operational:

1. Audit of Regulated Generation and Dispatch Processes as of February 27, 2015
2. Audit of SMIP - Interim Meter Reading Data Validation Process as of July 15, 2015
3. PA Rate Order Implementation as of September 15, 2015

## Consulting

1. Audit of FirstEnergy's Compliance with the 2015 CIP Information Protection Program and CIP-003-3 Requirement 4 as of July 31, 2015
2. FEU Final Bill, Write Off, and Outside Collection Agency Process Review as of August 24, 2015
3. Related Party/Person Risk Assessment - MTF
4. Forefront Identity Manager - MTF

## IT Related:

1. Audit of Managed Cloud Environment - IT Controls as of February 13, 2015.
2. Audit of the Information Technology Budget Process as of December 2, 2015
3. Cyber Security Overview - MTF

## Financial:

1. Sarbanes-Oxley 404 Assessment of Internal Controls Over Financial Reporting as of December 31, 2014
2. Audit of Accounts Payable for Year-Ended December 31, 2014
3. 2014 SOX Annual Progress Report
4. Audit of UIPlanner Reports
5. Second Quarter Sarbanes-Oxley Assessment of Internal Controls Over Financial Reporting as of June 30, 2015
6. Third Quarter Sarbanes-Oxley Assessment of Internal Controls Over Financial Reporting
7. Revenue's Payment Recovery Audit for Accounts Payable - 2014
8. Balance Sheet Reconciliation Review
9. Audit of Capital and Operation and Maintenance Expenses - FEU as of December 8, 2015

Independent Audits Performed for the years ended December 31, 2014 and 2015
PricewaterhouseCoopers LLP - Independent Registered Public Accounting Firm.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-13:

"Regardless of whether a claim for negative or positive net salvage is made, attach an exhibit showing gross salvage, cost of removal, third party reimbursements, if any, and net salvage for the test year and 4 previous years."

## RESPONSE:

The Company has not included third party reimbursements or any related costs of removal in the development of its claim allowance. The reasons for not including these amounts are as follows:

1. Depreciation rates are established with the expectation of normal remaining lives and charged capital principal costs to cost of service while an asset is in rate base.
2. When other than a normal circumstances causes equipment to retire, it is often due to third party involvement. When these occur, the Company acts to protect both investors' and customers' interests by seeking reimbursement from the third parties involved.
3. Third party reimbursements are typically for the following unpredictable and non-periodic events:
a. relocation/replacement of equipment for the convenience of the requesting party;
b. damage caused by equipment;
c. occasional sales of equipment for reasons other than normal of useful life.
4. The Company's handling of third party reimbursements is designed to minimize the need for any additional financing as follows:
a. a portion equal to the undepreciated amount of the item involved is credited to the reserve, bringing net plant to zero. There are no further depreciation or carrying charges (with book rate base and remaining life depreciation) relative to this item.
b. A portion equal to labor and other costs of expense is credited to these expenses - thus producing a net incurred expense of zero.

Witness: R. A. D'Angelo
c. Any remaining portion of such reimbursement is credited to related new constructions, thus reducing the cost of replacement plant.

The result of the Company procedure described above is to leave investors and ratepayers in equitable positions. The third party paid for the balance of the old asset (investors' funds outstanding), paid for the extra cost of work involved (no cost to investor or to ratepayer), and paid for some the cost of the replacement equipment (reducing plant rate base, consequently lowering related depreciation and carrying charges to customers). The partial payment of third parties of replacement items also avoids additional financing, with attendant benefits of avoiding increases in capital costs (to customers) and of avoiding possible common equity dilution (to present stockholders).

See Penn Power Exhibit RAD-30 Attachment A.

Penn Power Exhibit RAD-30
Witness: R. A. D'Angelo
Attachment A
Page 1 of 1


$1 / 1 / 2011$ thru $12 / 31 / 2011$
$1 / 1 / 2012$ thru $12 / 31 / 2012$
$1 / 1 / 2013$ thru $12 / 31 / 2013$
$1 / 1 / 2014$ thru $12 / 31 / 2014$
$1 / 1 / 2015$ thru $12 / 31 / 2015$
$1 / 1 / 2016$ thru $12 / 31 / 2016$
$1 / 1 / 2017$ thru $12 / 31 / 2017$

# Penn Power Exhibit RAD-31 

Witness: R. A. D'Angelo
Page 1 of 1

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-14:

"State the amount of debt interest utilized for test year income tax calculations, including the amount so utilized which has been allocated from the debt interest of an affiliate, and provide details of debt interest and allocation computations."

## RESPONSE:

Debt interest utilized in the normalized test year under present rates is $\$ 12,150,000$ as calculated in Penn Power Exhibit RAD-2, Adjustment No. 12 page 26, line 9.

Penn Power Exhibit RAD-32
Witness: R. A. D'Angelo
Page 1 of 1

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-15:

"Provide a schedule for the test year of Federal and Pennsylvania taxes other than income taxes, per books, pro forma at present rates, and pro forma at proposed rates, including the following tax categories:
(a) Social Security.
(b) Unemployment.
(c) Capital stock.
(d) Public utility
(e) P.U.C. assessment.
(f) Other property taxes.
(g) Any other appropriate tax categories."

## RESPONSE:

See Pennsylvania Power Company Exhibit RAD-32 Attachment A for a schedule of taxes other than income taxes showing per budget and pro forma at present rates for the future test years.

Pennsylvania Power Company Summary of Taxes other than Income Taxes Twelve Months Ending December 31, 2017 (\$000)

| Line No. | Description | Per Budget |  | Pro Forma Under Present Rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total Electric Operating |  | Normalizing Adjustments |  | As Adjusted |  |
|  |  | (1) |  | ${ }^{(2)}$ |  | (3) $=$ (1) - (2) |  |
|  | Federal |  |  |  |  |  |  |
| 1 | Federal and State Payroll taxes | \$ | 495 | \$ | (7) | \$ | 502 |
| 2 | Federal Excise tax |  | - |  | - |  | - |
|  | State |  |  |  |  |  |  |
| 3 | Capital Stock |  | - |  | - |  | - |
| 4 | Gross Receipts |  | 16,236 |  | 287 |  | 15,949 |
| 5 | Public Utility Realty |  | 271 |  | - |  | 271 |
| 6 | Highway Use |  | 1 |  | - |  | 1 |
| 7 | Use tax |  | 0 |  | - |  | 0 |
| 8 | Other |  | 0 |  | - |  | 0 |
|  | Local |  |  |  |  |  |  |
| 9 | Real Estate \& Other |  | 79 |  | - |  | 79 |
| 10 | TOTAL | \$ | 17,082 | \$ | 280 | \$ | 16,802 |

# Penn Power Exhibit RAD-33 

Witness: R. A. D'Angelo
Page 1 of 1

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-16:

"Submit a schedule showing the adjustments from taxable net income per books to taxable net income pro forma under existing rates and pro forma under proposed rates, together with an explanation of all normalizing adjustments. Submit detailed calculations supporting taxable income before State and Federal income taxes where the income tax is subject to allocation due to operations in another state or due to operation of other taxable utility or non-utility business, or by operating divisions or areas."

## RESPONSE:

See Penn Power Exhibit RAD-33 Attachment A.

|  |  |  |  |  | Penn Pow Witne | ver | RAD-33 D'Angelo chment A age 1 of 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ho |  |  |  |
| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Description |  | est Year 31/17 <br> get |  | ma Test Under Rates |  | ma Test Under d Rates |
|  |  |  |  |  |  |  |  |
| 1 | Balance after preferred stock dividends | \$ | 18,851 |  |  |  |  |
|  | Net utility operating income: |  |  |  |  |  |  |
| 2 | Exhibit RAD-2, page 1, line 24, column 6 |  |  | \$ | 13,742 |  |  |
| 3 | Exhibit RAD-2, page 3, line 24, column 25 |  |  |  |  | \$ | 35,965 |
|  | Add: |  |  |  |  |  |  |
| 4 | Income Taxes-Federal |  | 3,274 |  | 2,778 |  | 14,744 |
| 5 | Income Taxes-State |  | 1,981 |  | 2,203 |  | 5,998 |
| 6 | Provision for Deferred income Taxes |  | 7,614 |  | 6,351 |  | 6,351 |
| 7 | Provision for Deferred Income Taxes-Credit |  |  |  |  |  |  |
| 8 | Investment Tax Credit |  | - |  | - |  |  |
| 9 | Book Income Subject to Tax | \$ | 31,719 | \$ | 25,074 | \$ | 63,058 |
|  | Adjustments: |  |  |  |  |  |  |
| 10 | Book Depreciation | \$ | 15,440 | \$ | 24,387 | \$ | 24,387 |
| 11 | Tax Depreciation |  | $(30,648)$ |  | $(30,645)$ |  | $(30,645)$ |
| 12 | Interest expense per Ratemaking |  | - |  | $(12,150)$ |  | $(12,150)$ |
| 13 | Business Meals |  | 17 |  | - |  | - |
| 14 | Life Insurance |  | (230) |  | - |  | - |
| 15 | Energy Efficiency Deferral |  | (685) |  | - |  | - |
| 16 | ESOP Dividend |  | (189) |  | - |  | - |
| 17 | FE Service Perm M Allocation |  | (42) |  | - |  | - |
| 18 | FE Service Temporay schedule M allocation |  | $(1,942)$ |  | - |  | - |
| 19 | Lobbying |  | 6 |  |  |  | - |
| 20 | Capitalized Interest-Avoided Costs in Excess of AFC |  | - |  | - |  | - |
| 21 | FAS 123R - Restricted Stock Units |  | - |  | - |  | - |
| 22 | FAS 143 |  |  |  | - |  | - |
| 23 | Price to Compare Rider |  | (933) |  | - |  | - |
| 24 | Default Serv. Support - Unbilled Rev. |  | (551) |  | - |  | - |
| 25 | Storm Damage \& Other Deferrals |  | 2,408 |  | - |  | - |
| 26 | Deferred Interco Gain |  | 4,528 |  | - |  | - |
| 27 | OPEBs |  | $(1,053)$ |  | - |  | - |
| 28 | Tax Capitalized Interest |  | 341 |  | - |  | - |
| 29 | Capitalized Vertical Tree Trimming |  | $(3,500)$ |  | - |  | - |
| 30 | Reacquired Debt - Book Amortization of Loss |  | 514 |  | - |  | - |
| 31 | Casualty Loss |  | - |  | - |  | - |
| 32 | Section 263 |  | $\stackrel{\square}{*}$ |  | * |  | - |
| 33 | Solar Voltaic req charge rider |  | (675) |  | * |  | - |
| 34 | T\&D Repairs |  | $(4,000)$ |  | - |  | - |
| 35 | AFUDC Equity |  | - |  | - |  | - |
| 36 | Capitalized interest-Book AFC |  | (79) |  | - |  | - |
| 37 | PAPTC Deferral |  | - |  | - |  | - |
| 38 | Pension Accrual |  | (173) |  | 1,783 |  | 1,783 |
| 39 | Research \& Development - 174 |  | - |  | - |  | - |
| 40 | Asset Retirement Obligation |  | * |  | * |  | - |
| 41 | Capital Lease Vehicle - Book Expense |  | 146 |  | - |  | - |
| 42 | Universal Service Program (incl interest) |  | 665 |  | - |  | - |
| 43 | Other Reg Assets / Liabilities |  | - |  | 1,694 |  | 1,694 |
| 44 | CIAC - Post 86 |  | - |  | - |  | - |
| 45 | State Taxable Income before Tax Preferences | \$ | 11,086 | \$ | 10,143 | \$ | 48,127 |
| 46 | State Tax Preference items |  | 8,742 |  | 11,913 |  | 11,913 |
| 47 | State Taxable Income | \$ | 19,828 | \$ | 22,056 | \$ | 60,040 |
|  | State Income Tax: |  |  |  |  |  |  |
| 48 | Current Year |  | 1,981 |  | 2,203 |  | 5,998 |
| 49 | Total State Tax | \$ | 1,981 | \$ | 2,203 | \$ | 5,998 |
| 50 | Less: State Tax Preference Items |  | 8,742 |  | 11,913 |  | 11,913 |
| 51 | Federal Taxable Income (Line 45-L47-L48) | \$ | 9,105 | \$ | 7,940 | \$ | 42,129 |

# Penn Power Exhibit RAD-34 

Witness: R. A. D'Angelo

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-17:

"Submit a schedule showing for the last 5 years the income tax refunds, plus interest - net of taxes, received from the Federal government due to prior years' claims."

## RESPONSE:

See Penn Power Exhibit RAD-34 Attachment A.
Penn Power Exhibit RAD-34
Witness: R. A. D'Angelo

ents refunds
Received 2011
Audit Settlement

Claim for Refund

Received 2012
None
Received 2013
None
Received 2014
Audit Settlement
Received 2015
None
Total

# Penn Power Exhibit RAD-35 

Witness: R. A. D’Angelo Page 1 of 1

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-18:

"Furnish a breakdown of major items comprising prepaid and deferred income tax charges and other deferred income tax credits, reserves and associated reversals on liberalized depreciation."

## RESPONSE:

See Penn Power Exhibit RAD-35 Attachment A.

## Pennsylvania Power Company <br> Accumulated Deferred Taxes <br> (\$000)

| Balance at 12/31/17 | Balance at 12/31/16 |  |  | Balance at 12/31/15 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (1) (2) |  | (3) | (4) | (5) |  | (6) |
| \$ 1 | \$ | 1 |  | \$ 1 |  |  |
| 70 |  | 70 |  | 70 |  |  |
| 25 |  | 25 |  | 25 |  |  |
| 585 |  | 585 |  | 585 |  |  |
| 0 |  | 0 |  | 0 |  |  |
| 681 |  | 681 |  | 681 |  |  |
| 7 |  | 7 |  | 7 |  |  |
| 7 |  | 7 |  | 7 |  |  |
| 552 |  | 552 |  | 552 |  |  |
| 87 |  | 87 |  | 87 |  |  |
| 7,839 |  | 7,839 |  | 7.839 |  |  |
| 5 |  | 5 |  | 5 |  |  |
| 2,020 |  | 2,020 |  | 2,020 |  |  |
| 1,134 |  | 1,134 |  | 1,134 |  |  |
| 295 |  | 295 |  | 295 |  |  |
| 397 |  | 681 |  | 758 |  |  |
| 153 |  | 153 |  | 153 |  |  |
| 2 |  | 2 |  | 2 |  |  |
| 12 |  | 12 |  | 12 |  |  |
| 26 |  | 26 |  | 26 |  |  |
| 38 |  | 38 |  | 38 |  |  |
| 25 |  | 25 |  | - |  |  |
| 71 |  | 71 |  | 71 |  |  |
| 1 |  | 1 |  | 1 |  |  |
| 483 |  | 483 |  | 483 |  |  |
| 1 |  | 1 |  | 1 |  |  |
| 23 |  | 23 |  | 23 |  |  |
| 25 |  | 25 |  | 25 |  |  |
| 5 |  | 5 |  | 5 |  |  |
| $(4,611)$ |  | $(4,539)$ |  | 1,883 |  |  |
| 28,073 |  | 28,073 |  | 28,073 |  |  |
| 14,676 |  | 14,676 |  | 14,676 |  |  |
| 3,882 |  | 3,882 |  | 3,882 |  |  |
| 851 |  | 851 |  | 851 |  |  |
| 28 |  | 28 |  | 28 |  |  |
| 103 |  | 103 |  | 103 |  |  |
| 2,550 |  | 2,550 |  | 2,550 |  |  |
| 899 |  | 623 |  | 265 |  |  |
| 870 |  | 870 |  | 870 |  |  |
| \$ 61,891 |  |  | \$ 61,971 |  | \$ | 68,088 |

## Pennsylvania Power Company <br> Accumulated Deferred Taxes <br> (\$000)

| Line No. |  | Balance at 12/31/17 |  | Balance at 12/31/16 |  | Balance at 12/31/15 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) | (2) | (3) | (4) | (5) |  | (6) |
|  | Account 281-283 Accum. Deferred income Taxes |  |  |  |  |  |  |  |
| 40 | 263A Mixed Service Cost | \$ $(8,151)$ |  | \$ $(8,751)$ |  | \$ $(8,151)$ |  |  |
| 41 | Accelerated Depreciation | $(113,213)$ |  | $(108,142)$ |  | $(101,617)$ |  |  |
| 42 | Accounts Receivable - Deferred Revenue | (48) |  | (48) |  | (48) |  |  |
| 43 | Accum Prov For Inj and Damage-Workers Comp | (66) |  | (66) |  | (66) |  |  |
| 44 | AFUDC Debt | (926) |  | (926) |  | (926) |  |  |
| 45 | AFUDC Equity/FAS 143 | $(2,116)$ |  | $(2,116)$ |  | $(2,116)$ |  |  |
| 46 | Asset Retirement Obligation | (6) |  | (6) |  | (6) |  |  |
| 47 | Capitalized Vertical Tree Trimming | $(14,424)$ |  | $(12,972)$ |  | $(11,519)$ |  |  |
| 48 | Capitalized Benefits | $(3,134)$ |  | $(3,134)$ |  | $(3,134)$ |  |  |
| 49 | Casualty Loss | (637) |  | (637) |  | (637) |  |  |
| 50 | Charitable Contribution | (17) |  | (17) |  | (17) |  |  |
| 51 | Contribution in Aid of Construction | $(1,374)$ |  | $(1,374)$ |  | $(1,374)$ |  |  |
| 52 | Consumer Education Cost | (5) |  | (5) |  | (5) |  |  |
| 53 | Default Serv Support-Unbilled | (509) |  | (280) |  | (232) |  |  |
| 54 | Deferred Charge-EIB | (9) |  | (9) |  | (9) |  |  |
| 55 | Deferred Interco Gain - Fossil | $(7,775)$ |  | $(9,068)$ |  | $(10,361)$ |  |  |
| 56 | Deferred Interco Gain - Trans | $(1,052)$ |  | $(1,638)$ |  | $(2,223)$ |  |  |
| 57 | EEC-C Deferral | (32) |  | (32) |  | (32) |  |  |
| 58 | Energy Efficiency Conservation Phase 2 - Unbilled Deferral | (233) |  | (233) |  | (233) |  |  |
| 59 | FAS 123 R - APIC | (4) |  | (4) |  | (4) |  |  |
| 60 | FAS 123R - Performance Shares | 0 |  | 0 |  | 0 |  |  |
| 61 | FAS 123R - Restricted Stock | 1 |  | 1 |  | 1 |  |  |
| 62 | FAS 123R - Restricted Stock Units | (16) |  | (16) |  | (16) |  |  |
| 63 | FAS 123R - Stock Options | (1) |  | (1) |  | (1) |  |  |
| 64 | FE Service Allocations | $(1,244)$ |  | (437) |  | (546) |  |  |
| 65 | Federal NOL | (813) |  | (813) |  | (813) |  |  |
| 66 | General Overheads | $(17,545)$ |  | $(17,545)$ |  | $(17,545)$ |  |  |
| 67 | Highway Reimbursements | 241 |  | 241 |  | 241 |  |  |
| 68 | Meters and Transformers | $(1,371)$ |  | $(1,371)$ |  | $(1,371)$ |  |  |
| 69 | Other Post Employment Benefits | $(7,100)$ |  | $(6,663)$ |  | $(6,290)$ |  |  |
| 70 | Other Basis Differences | $(1,546)$ |  | $(1,546)$ |  | $(1,546)$ |  |  |
| 71 | Other Reg Assets | $(1,440)$ |  | $(1,440)$ |  | $(1,440)$ |  |  |
| 72 | Pension | 6,875 |  | 6,875 |  | 2,761 |  |  |
| 73 | Price to Compare Rider | (739) |  | (352) |  | (136) |  |  |
| 74 | Capitalized Leased Vehicles | 127 |  | 66 |  | 5 |  |  |
| 75 | Sale of Property - Book Gain or (Loss) | 10 |  | 10 |  | 10 |  |  |
| 76 | Solar Voltaic Req Charge | (443) |  | (163) |  | (12) |  |  |
| 77 | Storm Damage and Other Deferrals | 1,406 |  | 406 |  | (593) |  |  |
| 78 | Tax Interest Capitalized | (992) |  | $(1,101)$ |  | $(1,201)$ |  |  |
| 79 | Tax Repairs | $(19,109)$ |  | $(17,449)$ |  | $(15,790)$ |  |  |
| 80 | Unamortized Gain/Loss on Reacquired Debt | (832) |  | $(1,045)$ |  | $(1,273)$ |  |  |
|  |  |  | \$(198,262) |  | \$ $(191,201)$ |  | \$ | $(188,266)$ |
|  |  |  | \$(136,371) |  | \$ $(129,230)$ |  | \$ | $(120,177)$ |

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-19:

"Explain how the Federal corporate graduated tax rates have been reflected for rate case purposes. If the Pennsylvania jurisdictional utility is part of a multi-corporate system, explain how the tax savings are allocated to each member of the system."

## RESPONSE:

Penn Power is not entitled to a Federal graduated tax rate. Penn Power files as a member of a consolidated group and its taxable income exceeds where graduated rates apply. Therefore, the Company uses a flat $35 \%$ Federal income tax rate in this filing.

FirstEnergy Corp. ("FirstEnergy") allocates its current federal consolidated income tax liability, pursuant to an agreement approved by the Securities and Exchange Commission, in accordance with the Energy Policy Act of 2005.

Members of the FirstEnergy consolidated group follow the allocation rules under the IRS Regulations under Code Section 1552. The consolidated group is treated as one taxpayer for federal income tax. Each member is required to compute its separate company taxable income. The members with positive taxable income (Paying Members) pay the consolidate tax liability based on an allocation of its separate company income. The aggregate of all amounts paid by Members of the consolidated group, as a result of the excess of each Members' Separate Return Tax liability, (as determined under Section 1.1552-1(a)(2)(ii) of the IRS Regulations) over the amount allocated to such Member as its share of the Consolidated Tax Liability under Code Section 1552 (i.e., the Tax Benefit Amount) is paid by FirstEnergy to the other Members (the "Loss Members") which had tax deductions, losses and credits to which such payments by the Paying Members are attributable. The apportionment of such payments among Loss Members is allocated among the group Members pursuant to IRS Regulations Section 1.1502-21(b).

However, the Tax Benefit Amount allocated to FirstEnergy and paid to FirstEnergy as a result of its being a Loss Member is limited to its Tax Benefit Amount determined by multiplying it total loss benefit amount by a fraction, the numerator of which is FirstEnergy's interest deduction attributable to Acquisition Indebtedness, and the denominator of which is the sum of all of FirstEnergy's deductions. The portion of FirstEnergy's Tax Benefit Amount which cannot be allocated and paid to FirstEnergy due to the operation of this limitation is reallocated to Paying Members of the Consolidated Group other than FirstEnergy in

## Penn Power Exhibit RAD-36

Witness: R. A. D'Angelo
Page 2 of 2
accordance with the method described in Sections 1.1502-33(d)(3) and 1.15521(a)(2) of the IRS Regulations.

The general effect of the method is to first allocate the consolidated tax liability among the Members of the Consolidated Group on the basis of the percentage of the total consolidated tax which the tax of such Member, if computed on a separate return basis would bear to the total amount of the taxes for all Members of the group so computed. Then the method allocates an additional amount (the "Tax Benefit Amount") to each Member up to, but not greater than, the excess, if any, of its Separate Return Tax liability, over the amount allocated to such Member in the previous sentence. The total of the Tax Benefit Amounts allocated to Members results in payments to the Members who had items of deduction, loss or credits to which such Tax Benefit Amount is attributable.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-20:

"Explain the treatment given to costs of removal in the income tax calculation and the basis for such treatment."

## RESPONSE:

On property acquired between 1971 and 1980, the Company utilizes the Asset Depreciation Range Tax Depreciation Method.

Under those regulations, when an asset is retired, the cost of dismantling, demolishing, or removing is deductible as a current year's expense.

On property acquired in 1981 and subsequent thereto, the company (in accordance with Accelerated Cost Recovery System and Modified Accelerated Cost Recovery System regulations) elected to use Cost of Removal in the calculation of gain or loss on retirements of 1981 and subsequent property.

# Penn Power Exhibit RAD-38 

Witness: R. A. D'Angelo Page 1 of 1

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-21:

"Show income tax loss/gain carryovers from previous years. Show loss/gain carryovers by years of origin and amounts remaining by years at the beginning of the test year."

## RESPONSE:

See Penn Power Exhibit RAD-38 Attachment A for the Net Operating Loss Carryforward schedule.


$$
\begin{aligned}
& \text { Federal NOL } \\
& \text { Balance } \\
& \text { PA NOL } \\
& 2012 \text { Utilization } \\
& 2013 \text { Utilization } \\
& \text { Balance } \\
& \text { Federal Charitable Contributions } \\
& \text { Balance }
\end{aligned}
$$

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-22:

"State whether the company eliminates tax savings by the payment of actual interest on construction work in progress not in rate base claim. If response is affirmative:
(a) Set forth amount of construction claimed in this tax savings reduction, and explain the basis for this amount
(b) Explain the manner in which the debt portion of this construction is determined for purposes of the deferral calculations.
(c) State the interest rate used to calculate interest on this construction debt portion, and the manner in which it is derived.
(d) Provide details of calculation to determine tax savings reduction, and state whether State taxes are increased to reflect the construction interest elimination."

## RESPONSE:

One of the revisions made to the Internal Revenue Code ("IRC") by the Tax Reform Act of 1996 was the elimination of the current deduction for construction period interest. The IRC now requires construction period interest to be capitalized for tax purposes using an avoided cost methodology. This methodology results in a similar required capitalized interest amount for tax purposes than the debt component of Allowance for Funds Used During Construction. Therefore, there are no current tax savings to eliminate.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-23:

"Under section 1552 of the Internal Revenue Code (26 U.S.C.A. § 1552) and 26 CFR 1.1552-1 (1983), if applicable, a parent company, in filing a consolidated income tax return for the group, must choose one of four options by which it must allocate total income tax liability of the group to the participating members to determine each member's tax liability to the Federal government (if this interrogatory is not applicable, so state):
(a) State what option has been chosen by the group.
(b) Provide, in summary form, the amount of tax liability that has been allocated to each of the participating members in the consolidated income tax return for the test year and the most recent 3 years for which data is available.
(c) Provide a schedule, in summary form, of contributions, which were determined on the basis of separate tax return calculations, made by each of the participating members to the tax liability indicated in the consolidated group tax return. Provide total amounts of actual payments to the tax depository for the tax year, as computed on the basis of separate returns of members.
(d) Provide the most recent annual income tax return for the group.
(e) Provide details of the amount of the net operating losses of any member allocated to the income tax returns of each of the members of the consolidated group for the test year and the 3 most recent years for which data is available, together with a summary of the actual tax payments for those years.
(f) Provide details of the amount of net negative income taxes, after all tax credits are accounted for, of any member allocated to the income tax return of each of the members of the consolidated group for the test year and the 3 most recent years for which data is available, together with a summary of the actual tax payments for those years."

## RESPONSE:

(a) The option used is Reg. $\S 1.1552-1(a)(2)$ - the tax liability of the group is allocated based on the percentage of total tax computed on a separate basis for each member over the total amount of tax for all members of the group so computed.
(b) See HIGHLY CONFIDENTIAL Penn Power Exhibit RAD-40 Attachment A - page 1 of 33 for the amount of the tax liability that has been allocated to each of the participating members in the Consolidated Federal income tax return for the most recent three years.
(c) See HIGHLY CONFIDENTIAL Penn Power Exhibit RAD-40 Attachment A - pages 2-28 for the payments and refunds made for the most recent filed returns for years 2012, 2013 and 2014 as computed on the basis of separate returns of members.
(d) See HIGHLY CONFIDENTIAL Penn Power Exhibit RAD-40 Attachment A - pages 29-33 --A copy of the U.S. Corporation Income Tax Return (Form 1120) as filed by FirstEnergy Corp. and its subsidiaries for the year 2014.
(e) See HIGHLY CONFIDENTIAL Penn Power Exhibit RAD-40 Attachment A - pages 1-28.
(f) See HIGHLY CONFIDENTIAL Penn Power Exhibit RAD-40 Attachment A - pages 1-28.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-24:

"Provide detailed computations by vintage year showing State and Federal deferred income taxes resulting from the use of accelerated tax depreciation associated with post-1969 public utility property, ADR rates, and accelerated tax depreciation associated with post-1980 public utility property under the Accelerated Cost Recovery System (ACRS).
(a) Reconcile and explain any differences in the base used to calculate State and Federal deferred income taxes.
(b) State whether tax depreciation is based on all rate base items claimed as of the end of the test year, and whether it is the annual tax depreciation at the end of the test year.
(c) Reconcile differences between the deferred tax balance, as shown as a reduction to rate base, and the deferred tax balance as shown on the balance sheet."

RESPONSE:
(a) See Penn Power Exhibit RAD-41 Attachment A. The attachment was prepared as submitted in the past. Vintage schedules only show Federal deferred income taxes and Gain Loss is post vintage 1986. No basis difference, however, there is a timing difference due to Pennsylvania disallowance in year one of the 50\% Federal Bonus Depreciation.
(b) See Penn Power Exhibit RAD-41 Attachment A. Tax depreciation for the fully projected future test year is based on all electric plant in service claimed as of $12 / 31 / 17$ and the annual tax depreciation is based on the same plant.
(c) See Penn Power Exhibit RAD-41 Attachment B.

|  |  |  |  |  |  |  |  |  | Pres |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Defe | T |  |  |  |  |  |  |  |
|  | Vintage Year |  |  |  | Federal |  | Total |  |  |  | Tolal |
| Provision: | 1970 | \$ | - | \$ | (327) | \$ | (327) | \$ | - | \$ | (327) |
|  | 1971 |  | - |  | (785) |  | (785) |  |  |  | (785) |
|  | 1972 |  | - |  | $(1,415)$ |  | $(1,415)$ |  |  |  | $(1,415)$ |
|  | 1973 |  | - |  | (101) |  | (101) |  |  |  | (101) |
|  | 1974 |  | - |  | 6,131 |  | 6,131 |  |  |  | 6,131 |
|  | 1975 |  | - |  | 33 |  | 33 |  |  |  | 33 |
|  | 1976 |  | - |  | 7,619 |  | 7,619 |  |  |  | 7,619 |
|  | 1977 |  | - |  | (416) |  | (416) |  |  |  | (416) |
|  | 1978 |  | - |  | 72 |  | 72 |  |  |  | 72 |
|  | 1979 |  | - |  | (2,201) |  | $(2,201)$ |  |  |  | $(2,201)$ |
|  | 1980 |  | - |  | 12,659 |  | 12,659 |  |  |  | 12,659 |
|  | 1981 |  | - |  | 136 |  | 136 |  |  |  | 136 |
|  | 1982 |  | - |  | 5,654 |  | 5,654 |  |  |  | 5,654 |
|  | 1983 |  | - |  | - |  | - |  |  |  | - |
|  | 1984 |  | - |  | 2,323 |  | 2,323 |  |  |  | 2,323 |
|  | 1985 |  | - |  | 2,431 |  | 2,431 |  |  |  | 2,431 |
|  | 1986 |  | - |  | - |  | - |  |  |  | - |
|  | 1987 |  | - |  | 33,975 |  | 33,975 |  |  |  | 33,975 |
|  | 1987 A |  | - |  | 2,935 |  | 2,935 |  |  |  | 2,935 |
|  | 1988 |  | - |  | 55,613 |  | 55,613 |  |  |  | 55,613 |
|  | 1988 A |  | - |  | - |  | - |  |  |  | - |
|  | 1989 |  | - |  | 152 |  | 152 |  |  |  | 152 |
|  | 1989 A |  | - |  | - |  | - |  |  |  | - |
|  | 1990 |  | - |  | 898 |  | 898 |  |  |  | 898 |
|  | 1990 A |  | - |  | - |  | - |  |  |  | - |
|  | 1991 |  | - |  | 702 |  | 702 |  |  |  | 702 |
|  | 1992 |  | - |  | 89,809 |  | 89,809 |  |  |  | 89,809 |
|  | 1993 |  | - |  | 7,361 |  | 7,361 |  |  |  | 7,361 |
|  | 1993 A |  | - |  | 644 |  | 644 |  |  |  | 644 |
|  | 1994 |  | - |  | 1,333 |  | 1,333 |  |  |  | 1,333 |
|  | 1995 |  | - |  | 16,476 |  | 16,476 |  |  |  | 16,476 |
|  | 1996 |  | - |  | 79,252 |  | 79,252 |  |  |  | 79,252 |
|  | 1997 |  | - |  | 62,327 |  | 62,327 |  |  |  | 62,327 |
|  | 1998 |  | - |  | 33,904 |  | 33,904 |  |  |  | 33,904 |
|  | 1999 |  | - |  | 33,742 |  | 33,742 |  |  |  | 33,742 |
|  | 2000 |  | - |  | 65,711 |  | 65,711 |  |  |  | 65,711 |
|  | 2001 |  | - |  | 64,129 |  | 64,129 |  |  |  | 64,129 |
|  | 2001 30\% |  | - |  | 2,632 |  | 2,632 |  |  |  | 2,632 |
|  | 2002 |  | - |  | 33,656 |  | 33,656 |  |  |  | 33,656 |
|  | 2002 30\% |  | - |  | 14,334 |  | 14,334 |  |  |  | 14,334 |
|  | 2003 |  | - |  | 11,852 |  | 11,852 |  |  |  | 11,852 |
|  | 2003 30\% |  | - |  | 10,180 |  | 10,180 |  |  |  | 10,180 |
|  | 2003 50\% |  | - |  | 9,326 |  | 9,326 |  |  |  | 9,326 |
|  | 2004 |  | - |  | 31,362 |  | 31,362 |  |  |  | 31,362 |
|  | 2004 30\% |  | - |  | 1,117 |  | 1,117 |  |  |  | 1,117 |
|  | 2004 50\% |  | - |  | 11,535 |  | 11,535 |  |  |  | 11,535 |
|  | 2005 |  | - |  | 169,179 |  | 169,179 |  |  |  | 169,179 |
|  | 2006 |  | * |  | 262,056 |  | 262,056 |  |  |  | 262,056 |
|  | 2007 |  | * |  | 161,194 |  | 161,194 |  |  |  | 161,194 |
|  | 2008 |  | - |  | 88,829 |  | 88,829 |  |  |  | 88,829 |
|  | 2008 50\% |  | - |  | 156,054 |  | 156,054 |  |  |  | 156,054 |
|  | 2009 |  | - |  | 918 |  | 918 |  |  |  | 918 |
|  | 2009 50\% |  | - |  | 462,390 |  | 462,390 |  |  |  | 462,390 |
|  | 2010 |  | - |  | 16,304 |  | 16,304 |  |  |  | 16,304 |
|  | 2010 100\% |  | - |  | - |  | - |  |  |  | - |
|  | 2010 50\% |  | - |  | 27,041 |  | 27,041 |  |  |  | 27,041 |
|  | 2011 |  | $\cdots$ |  | 16,353 |  | 16,353 |  |  |  | 16,353 |
|  | 2011 100\% |  | - |  | 26,812 |  | 26,812 |  |  |  | 26,812 |
|  | 2011 50\% |  | - |  | 346 |  | 346 |  |  |  | 346 |
|  | 2012 |  | - |  | $(14,691)$ |  | $(14,691)$ |  |  |  | $(14,691)$ |
|  | 2012 50\% |  | - |  | 249,094 |  | 249,094 |  |  |  | 249,094 |
|  | 2013 |  | - |  | 15,123 |  | 15,123 |  |  |  | 15,123 |
|  | 2013 50\% |  | - |  | 224,452 |  | 224,452 |  |  |  | 224,452 |
|  | 2014 |  | - |  | 52,996 |  | 52,996 |  |  |  | 52,996 |
|  | 2014 50\% |  | - |  | 120,722 |  | 120,722 |  |  |  | 120,722 |
|  | 2014 EXP |  | - |  | (142) |  | (142) |  |  |  | (142) |
|  | 2015 |  | - |  | 793,478 |  | 793,478 |  |  |  | 793,478 |
|  | 2015 50\% |  | - |  | 9,684,608 |  | 9,684,608 |  |  |  | 9,684,608 |
|  | 2015 EXP |  | - |  | 749,750 |  | 749,750 |  |  |  | 749,750 |
| Total Prov |  | \$ | - | \$ | 13,969,638 | \$ | 13,969,638 | \$ | - | \$ | 13,969,638 |

Summary of Deferred Income Taxes
Based upon Electric Plant in Service January, 2015 - December, 2015


Computation of Deferred Income Taxes
Based upon Electric Plant in Service January, 2015 - December, 2015

| Vintage Year | Accelerate Tax Depreciation less Straight Line Depreciation | Effective Rates |  | Deferral of Taxes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | State | Federal |  | State |  | ederal |  | Total |
|  |  |  |  |  |  |  |  |  |  |
| 1970 | \$ (933) | 0\% | 35\% | \$ | - | \$ | (327) | \$ | (327) |
| 1971 | $(2,243)$ | 0\% | 35\% |  | - |  | (785) |  | (785) |
| 1972 | $(4,041)$ | 0\% | 35\% |  | - |  | $(1,415)$ |  | $(1,415)$ |
| 1973 | (289) | 0\% | 35\% |  | - |  | (101) |  | (101) |
| 1974 | 17,518 | 0\% | 35\% |  | - |  | 6,131 |  | 6,131 |
| 1975 | 95 | 0\% | 35\% |  | - |  | 33 |  | 33 |
| 1976 | 21,768 | 0\% | 35\% |  | - |  | 7,619 |  | 7,619 |
| 1977 | $(1,188)$ | 0\% | 35\% |  | - |  | (416) |  | (416) |
| 1978 | 204 | 0\% | 35\% |  | - |  | 72 |  | 72 |
| 1979 | $(6,287)$ | 0\% | 35\% |  | - |  | $(2,201)$ |  | $(2,201)$ |
| 1980 | 36,168 | 0\% | 35\% |  | - |  | 12,659 |  | 12,659 |
| 1981 | 390 | 0\% | 35\% |  | - |  | 136 |  | 136 |
| 1982 | 16,155 | 0\% | 35\% |  | - |  | 5,654 |  | 5,654 |
| 1983 | - | 0\% | 35\% |  | - |  | - |  | - |
| 1984 | 6,637 | 0\% | 35\% |  | - |  | 2,323 |  | 2,323 |
| 1985 | 6,947 | 0\% | 35\% |  | - |  | 2,431 |  | 2,431 |
| 1986 | - | 0\% | 35\% |  | - |  | - |  | - |
| 1987 | 97,073 | 0\% | 35\% |  | - |  | 33,975 |  | 33,975 |
| 1987 A | 8,387 | 0\% | 35\% |  | - |  | 2,935 |  | 2,935 |
| 1988 | 158,894 | 0\% | 35\% |  | - |  | 55,613 |  | 55,613 |
| 1988 A | - | 0\% | 35\% |  | - |  | - |  | - |
| 1989 | 433 | 0\% | 35\% |  | - |  | 152 |  | 152 |
| 1989 A | - | 0\% | 35\% |  | - |  | - |  | - |
| 1990 | 2,566 | 0\% | 35\% |  | - |  | 898 |  | 898 |
| 1990 A | - | 0\% | 35\% |  | - |  | - |  | - |
| 1991 | 2,007 | 0\% | 35\% |  | - |  | 702 |  | 702 |
| 1992 | 256,596 | 0\% | 35\% |  | - |  | 89,809 |  | 89,809 |
| 1993 | 21,031 | 0\% | 35\% |  | - |  | 7,361 |  | 7,361 |
| 1993 A | 1,840 | 0\% | 35\% |  | - |  | 644 |  | 644 |
| 1994 | 3,808 | 0\% | 35\% |  | - |  | 1,333 |  | 1,333 |
| 1995 | 43,800 | 0\% | 35\% |  | - |  | 15,330 |  | 15,330 |
| 1996 | 219,639 | 0\% | 35\% |  | - |  | 76,874 |  | 76,874 |
| 1997 | 164,262 | 0\% | 35\% |  | - |  | 57,492 |  | 57,492 |
| 1998 | 74,327 | 0\% | 35\% |  | - |  | 26,014 |  | 26,014 |
| 1999 | 58,265 | 0\% | 35\% |  | - |  | 20,393 |  | 20,393 |
| 2000 | 155,834 | 0\% | 35\% |  | - |  | 54,542 |  | 54,542 |
| 2001 | 149,070 | 0\% | 35\% |  | - |  | 52,175 |  | 52,175 |
| 2001 30\% | 4,955 | 0\% | 35\% |  | - |  | 1,734 |  | 1,734 |
| 2002 | 88,819 | 0\% | 35\% |  | - |  | 31,087 |  | 31,087 |
| $200230 \%$ | 35,445 | 0\% | 35\% |  | - |  | 12,406 |  | 12,406 |
| 2003 | 32,960 | 0\% | 35\% |  | - |  | 11,536 |  | 11,536 |
| 2003 30\% | 18,384 | 0\% | 35\% |  | - |  | 6,434 |  | 6,434 |
| 2003 50\% | 21,433 | 0\% | 35\% |  | - |  | 7,502 |  | 7,502 |
| 2004 | 89,434 | 0\% | 35\% |  | - |  | 31,302 |  | 31,302 |
| 2004 30\% | 2,967 | 0\% | 35\% |  | - |  | 1,039 |  | 1,039 |
| 2004 50\% | $(24,767)$ | 0\% | 35\% |  | - |  | $(8,669)$ |  | $(8,669)$ |
| 2005 | 409,431 | 0\% | 35\% |  | - |  | 143,301 |  | 143,301 |
| 2006 | 579,827 | 0\% | 35\% |  | - |  | 202,940 |  | 202,940 |
| 2007 | 333,167 | 0\% | 35\% |  | - |  | 116,608 |  | 116,608 |
| 2008 | 211,211 | 0\% | 35\% |  | - |  | 73,924 |  | 73,924 |
| 2008 50\% | 363,825 | 0\% | 35\% |  | - |  | 127,339 |  | 127,339 |
| 2009 | 2,384 | 0\% | 35\% |  | - |  | 834 |  | 834 |
| 2009 50\% | 308,265 | 0\% | 35\% |  | - |  | 107,893 |  | 107,893 |
| 2010 | 46,030 | 0\% | 35\% |  | * |  | 16,111 |  | 16,111 |
| 2010 100\% |  | 0\% | 35\% |  | - |  | - |  | - |
| 2010 50\% | 17,689 | 0\% | 35\% |  | - |  | 6,191 |  | 6,191 |
| 2011 | 52,484 | 0\% | 35\% |  | - |  | 18,370 |  | 18,370 |
| 2011 100\% | 76,606 | 0\% | 35\% |  | - |  | 26,812 |  | 26,812 |
| 2011 50\% | 543 | 0\% | 35\% |  | - |  | 190 |  | 190 |
| 2012 | $(29,774)$ | 0\% | 35\% |  | - |  | $(10,421)$ |  | $(10,421)$ |
| 2012 50\% | 632,918 | 0\% | 35\% |  | - |  | 221,521 |  | 221,521 |
| 2013 | 29,728 | 0\% | 35\% |  | - |  | 10,405 |  | 10,405 |
| 2013 50\% | 645,393 | 0\% | 35\% |  | - |  | 225,887 |  | 225,887 |
| 2014 | 151,290 | 0\% | 35\% |  | - |  | 52,952 |  | 52,952 |
| 2014 50\% | 323,706 | 0\% | 35\% |  | - |  | 113,297 |  | 113,297 |
| 2014 EXP | (405) | 0\% | 35\% |  | - |  | (142) |  | (142) |
| 2015 | 2,267,264 | 0\% | 35\% |  | - |  | 793,542 |  | 793,542 |
| 2015 50\% | 27,644,209 | 0\% | 35\% |  | - |  | 9,675,473 |  | 9,675,473 |
| 2015 EXP | 2,142,144 | 0\% | 35\% |  | - |  | 749,750 |  | 749,750 |
|  | \$ 37,986,296.95 |  |  | \$ | - | \$ | 13,295,204 | \$ | 13,295,204 |
| Provision Gains/Lo | sses Page ( 6 ) |  |  | \$ | - | \$ | 674,434 | \$ | 674,434 |
| Provision |  |  |  | \$ | - | \$ | 13,969,638 | \$ | 13,969,638 |

PENN POWER
Computation of Deferred Income Taxes
Based upon Electric Plant in Service January, 2015 - December, 2015

| Vintage Year | Accelerate Tax Depreciation less Straight Line Depreciation | Statutory/ Effective Rates |  | Deferral of Taxes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | State | Federal |  | State |  | Federal |  | Total |
| Reversal |  |  |  |  |  |  |  |  |  |
| 1970 \$ | $\$(38,638)$ | 0\% | 35\% | \$ | - | \$ | $(13,523)$ | \$ | $(13,523)$ |
| 1971 | $(78,948)$ | 0\% | 35\% |  | - |  | $(27,632)$ |  | $(27,632)$ |
| 1972 | $(27,689)$ | 0\% | 35\% |  | - |  | (9,691) |  | $(9,691)$ |
| 1973 | $(109,608)$ | 0\% | 35\% |  | - |  | $(38,363)$ |  | $(38,363)$ |
| 1974 | $(96,769)$ | 0\% | 35\% |  | - |  | $(33,869)$ |  | $(33,869)$ |
| 1975 | $(86,727)$ | 0\% | 35\% |  | - |  | $(30,355)$ |  | $(30,355)$ |
| 1976 | $(3,803)$ | 0\% | 35\% |  | - |  | $(1,331)$ |  | $(1,331)$ |
| 1977 | $(78,476)$ | 0\% | 35\% |  | - |  | $(27,467)$ |  | $(27,467)$ |
| 1978 | $(111,321)$ | 0\% | 35\% |  | - |  | $(38,962)$ |  | $(38,962)$ |
| 1979 | (99,947) | 0\% | 35\% |  | - |  | $(34,982)$ |  | $(34,982)$ |
| 1980 | $(140,279)$ | 0\% | 35\% |  | - |  | $(49,098)$ |  | $(49,098)$ |
| 1981 | $(90,557)$ | 0\% | 35\% |  | - |  | $(31,695)$ |  | $(31,695)$ |
| 1982 | $(109,120)$ | 0\% | 35\% |  | - |  | $(38,192)$ |  | $(38,192)$ |
| 1983 | $(113,570)$ | 0\% | 35\% |  | - |  | $(39,750)$ |  | $(39,750)$ |
| 1984 | $(137,341)$ | 0\% | 35\% |  | - |  | $(48,069)$ |  | $(48,069)$ |
| 1985 | $(151,762)$ | 0\% | 35\% |  | - |  | $(53,117)$ |  | $(53,117)$ |
| 1986 | $(194,685)$ | 0\% | 35\% |  | - |  | (68,140) |  | $(68,140)$ |
| 1987 | $(135,402)$ | 0\% | 35\% |  | - |  | (47,391) |  | $(47,391)$ |
| 1987 A | $(12,975)$ | 0\% | 35\% |  | - |  | $(4,541)$ |  | $(4,541)$ |
| 1988 | $(166,628)$ | 0\% | 35\% |  | - |  | $(58,320)$ |  | $(58,320)$ |
| 1988 A | $(5,566)$ | 0\% | 35\% |  | - |  | $(1,948)$ |  | $(1,948)$ |
| 1989 | $(283,715)$ | 0\% | 35\% |  | - |  | $(99,300)$ |  | $(99,300)$ |
| 1989 A | $(1,784)$ | 0\% | 35\% |  | - |  | (624) |  | (624) |
| 1990 | $(368,723)$ | 0\% | 35\% |  | - |  | $(129,053)$ |  | $(129,053)$ |
| 1990 A | $(1,002)$ | 0\% | 35\% |  | - |  | (351) |  | (351) |
| 1991 | $(448,163)$ | 0\% | 35\% |  | - |  | $(156,857)$ |  | $(156,857)$ |
| 1992 | $(293,729)$ | 0\% | 35\% |  | - |  | $(102,805)$ |  | $(102,805)$ |
| 1993 | $(605,364)$ | 0\% | 35\% |  | - |  | $(211,878)$ |  | $(211,878)$ |
| 1993 A | 225 | 0\% | 35\% |  | - |  | 79 |  | 79 |
| 1994 | $(303,955)$ | 0\% | 35\% |  | - |  | $(106,384)$ |  | $(106,384)$ |
| 1995 | $(186,032)$ | 0\% | 35\% |  | - |  | $(65,111)$ |  | $(65,111)$ |
| 1996 | $(233,230)$ | 0\% | 35\% |  | - |  | $(81,631)$ |  | $(81,631)$ |
| 1997 | $(143,746)$ | 0\% | 35\% |  | - |  | $(50,311)$ |  | $(50,311)$ |
| 1998 | 7,743 | 0\% | 35\% |  | - |  | 2,710 |  | 2,710 |
| 1999 | $(172,058)$ | 0\% | 35\% |  | - |  | $(60,220)$ |  | $(60,220)$ |
| 2000 | $(122,385)$ | 0\% | 35\% |  | - |  | $(42,835)$ |  | $(42,835)$ |
| 2001 | $(103,334)$ | 0\% | 35\% |  | - |  | $(36,167)$ |  | $(36,167)$ |
| 2001 30\% | $80$ | 0\% | 35\% |  | - |  | $28$ |  | $28$ |
| 2002 | $(58,054)$ | 0\% | 35\% |  | - |  | $(20,319)$ |  | $(20,319)$ |
| $200230 \%$ | (934) | 0\% | 35\% |  | * |  | (327) |  | (327) |
| 2003 | $(258,352)$ | 0\% | 35\% |  | - |  | $(90,423)$ |  | $(90,423)$ |
| $200330 \%$ | 4,549 | 0\% | 35\% |  | - |  | 1,592 |  | 1,592 |
| 2003 50\% | $(73,768)$ | 0\% | 35\% |  | - |  | $(25,819)$ |  | $(25,819)$ |
| 2004 | $(165,548)$ | 0\% | 35\% |  | - |  | $(57,942)$ |  | $(57,942)$ |
| 2004 30\% | $(80,513)$ | 0\% | 35\% |  | - |  | $(28,180)$ |  | $(28,180)$ |
| 2004 50\% | $(31,495)$ | 0\% | 35\% |  | - |  | $(11,023)$ |  | $(11,023)$ |
| 2005 | $(247,668)$ | 0\% | 35\% |  | - |  | $(86,684)$ |  | $(86,684)$ |
| 2006 | $(69,991)$ | 0\% | 35\% |  | - |  | $(24,497)$ |  | $(24,497)$ |
| 2007 | $(263,190)$ | 0\% | 35\% |  | - |  | $(92,117)$ |  | $(92,117)$ |
| 2008 | $(291,199)$ | 0\% | 35\% |  | - |  | $(101,920)$ |  | $(101,920)$ |
| 2008 50\% | $(304,391)$ | 0\% | 35\% |  | - |  | $(106,537)$ |  | $(106,537)$ |
| 2009 | $(302,455)$ | 0\% | 35\% |  | - |  | $(105,859)$ |  | $(105,859)$ |
| 2009 50\% | 1,490,432 | 0\% | 35\% |  | - |  | 521,651 |  | 521,651 |
| 2010 | 255,918 | 0\% | 35\% |  | - |  | 89,571 |  | 89,571 |
| 2010 100\% | $(124,320)$ | 0\% | 35\% |  | - |  | $(43,512)$ |  | $(43,512)$ |
| 2010 50\% | $(17,603)$ | 0\% | 35\% |  | - |  | $(6,161)$ |  | $(6,161)$ |
| 2011 | $(770,417)$ | 0\% | 35\% |  | - |  | $(269,646)$ |  | $(269,646)$ |
| 2011 100\% | $(604,208)$ | 0\% | 35\% |  | - |  | $(211,473)$ |  | $(211,473)$ |
| 2011 50\% | $(76,968)$ | 0\% | 35\% |  | - |  | $(26,939)$ |  | $(26,939)$ |
| 2012 | $(296,057)$ | 0\% | 35\% |  | - |  | $(103,620)$ |  | $(103,620)$ |
| 2012 50\% | $(744,906)$ | 0\% | 35\% |  | - |  | $(260,717)$ |  | (260,717) |
| 2013 | $(74,534)$ | 0\% | 35\% |  | - |  | $(26,087)$ |  | $(26,087)$ |
| 2013 50\% | $(433,064)$ | 0\% | 35\% |  | - |  | $(151,572)$ |  | $(151,572)$ |
| 2014 | $(1,206,150)$ | 0\% | 35\% |  | - |  | $(422,152)$ |  | $(422,152)$ |
| 2014 50\% | $(995,145)$ | 0\% | 35\% |  | - |  | $(348,301)$ |  | $(348,301)$ |
| 2014 EXP | $(16,037)$ | 0\% | 35\% |  | - |  | $(5,613)$ |  | $(5,613)$ |
| 2015 | $(40,778)$ | 0\% | 35\% |  | - |  | $(14,273)$ |  | $(14,273)$ |
| 2015 50\% | 45,675 | 0\% | 35\% |  | - |  | 15,986 |  | 15,986 |
| 2015 EXP | $(33,937)$ | 0\% | 35\% |  | - |  | $(11,878)$ |  | $(11,878)$ |
| Reversal | \$ $(11,034,092)$ |  |  | \$ | - | \$ | $(3,861,932)$ | \$ | (3,861,932) |
| Total Net Provison |  |  |  | \$ | - | \$ | 10,107,706 | \$ | 10,107,706 |

PENN POWER
Computation of Deferred Income Taxes
Based upon Electric Plant in Service January, 2015 - December, 2015
Deferred Income Taxes Related to Gains/Losses

| Vintage Year |  |  | Statutory/ |  |  | Deferral of Taxes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Property | Tax Depreciation | recognized | State | Federal | State | Federal | Total |
|  | 1 | 2 | 3 | 4 | 5 | $6=3 \times 4$ | $7=3 \times 5$ | $8=6+7$ |
| Provision-1/15-12/15 |  |  |  |  |  |  |  |  |
| 1987 | \$ 338,682 | \$ 338,682 | \$ | 0\% | 35\% | \$ | \$ - \$ | - |
| 1987 A | 32,564 | 32,564 | - | 0\% | 35\% | - | - | - |
| 1988 | 419,407 | 419,407 | - | 0\% | 35\% | - | - | - |
| 1988 A | 10,676 | 10,676 | - | 0\% | 35\% | - | - | - |
| 1989 | 452,182 | 452,182 | - | 0\% | 35\% | - | - | - |
| 1989 A | 3,357 | 3,357 | - | 0\% | 35\% | - | - | - |
| 1990 | 687,528 | 687,528 | - | 0\% | 35\% | - | - | - |
| 1990 A | 1,974 | 1,974 | - | 0\% | 35\% | - | - | - |
| 1991 | 721,263 | 721,263 | - | 0\% | 35\% | - | - | - |
| 1992 | 838,589 | 838,589 | - | 0\% | 35\% | - | - | - |
| 1993 | 1,027,950 | 1,027,950 | - | 0\% | 35\% | - | - | - |
| 1994 | 882,098 | 882,098 | - | 0\% | 35\% | - | - | - |
| 1995 | 293,723 | 290,448 | 3,275 | 0\% | 35\% | - | 1,146 | 1,146 |
| 1996 | 154,925 | 148,130 | 6,795 | 0\% | 35\% | - | 2,378 | 2,378 |
| 1997 | 158,961 | 145,146 | 13,814 | $0 \%$ | 35\% | - | 4,835 | 4,835 |
| 1998 | 172,230 | 149,688 | 22,542 | 0\% | 35\% | - | 7,889.84 | 7,889.84 |
| 1999 | 213,729 | 175,587 | 38,142 | 0\% | 35\% | - | 13,350 | 13,350 |
| 2000 | 154,432 | 122,520 | 31,912 | 0\% | 35\% | - | 11,169.31 | 11,169.31 |
| 2001 | 127,721 | 93,565 | 34,156 | 0\% | 35\% | - | 11,955 | 11,955 |
| 2001 30\% | 9,584 | 7,019 | 2,566 | 0\% | 35\% | - | 897.98 | 897.98 |
| 2002 | 23,503 | 16,163 | 7,340 | 0\% | 35\% | - | 2,569 | 2,569 |
| 2002 30\% | 17,653 | 12,145 | 5,509 | 0\% | 35\% | - | 1,928 | 1,928 |
| 2003 | 2,533 | 1,629 | 904 | 0\% | 35\% | - | 316 | 316 |
| 2003 30\% | 30,336 | 19,635 | 10,701 | 0\% | 35\% | - | 3,745 | 3,745 |
| 2003 50\% | 14,613 | 9,399 | 5,214 | 0\% | 35\% | - | 1,825 | 1,825 |
| 2004 | 483 | 311 | 172 | 0\% | 35\% | - | 60 | 60 |
| 2004 30\% | 3,751 | 3,526 | 225 | 0\% | 35\% | - | 79 | 79 |
| 2004 50\% | 145,535 | 87,811 | 57,723 | 0\% | 35\% | - | 20,203 | 20,203 |
| 2005 | 166,036 | 92,100 | 73,936 | 0\% | 35\% | - | 25,878 | 25,878 |
| 2006 | 346,725 | 177,821 | 168,903 | 0\% | 35\% | - | 59,116 | 59,116 |
| 2007 | 280,643 | 153,254 | 127,389 | 0\% | 35\% | - | 44,586 | 44,586 |
| 2008 | 81,073 | 38,487 | 42,585 | 0\% | 35\% | - | 14,905 | 14,905 |
| 2008 50\% | 676,400 | 594,356 | 82,044 | 0\% | 35\% | - | 28,715 | 28,715 |
| 2009 | 34,722 | 34,483 | 239 | 0\% | 35\% | - | 84 | 84 |
| 2009 50\% | 1,616,210 | 603,360 | 1,012,850 | 0\% | 35\% | - | 354,497 | 354,497 |
| 2010 | 16,714 | 16,163 | 551 | 0\% | 35\% | - | 193 | 193 |
| 2010 100\% | - | - | - | 0\% | 35\% | - | - | - |
| 2010 50\% | 87,842 | 28,270 | 59,572 | 0\% | 35\% | - | 20,850 | 20,850 |
| 2011 | $(7,857)$ | $(2,096)$ | $(5,761)$ | 0\% | 35\% | - | $(2,016)$ | $(2,016)$ |
| 2011 100\% | - | - | - | 0\% | 35\% | - | (2,016) | - |
| 2011 50\% | 607 | 162 | 445 | 0\% | 35\% | - | 156 | 156 |
| 2012 | $(15,669)$ | $(3,468)$ | $(12,201)$ | 0\% | 35\% | - | $(4,270)$ | $(4,270)$ |
| 2012 50\% | 140,519 | 61,739 | 78,780 | 0\% | 35\% | - | 27,573 | 27,573 |
| 2013 | 15,886 | 2,405 | 13,481 | 0\% | 35\% | - | 4,718 | 4,718 |
| 2013 50\% | 41,122 | 45,222 | $(4,100)$ | 0\% | 35\% | - | $(1,435)$ | $(1,435)$ |
| 2014 | 177 | 51 | 126 | 0\% | 35\% | - | 44 | 44 |
| 2014 50\% | 30,639 | 9,427 | 21,212 | 0\% | 35\% | - | 7,424 | 7,424 |
| 2015 | (184) | - | (184) | 0\% | 35\% | - | (64) | (64) |
| 2015 50\% | 26,098 | - | 26,098 | 0\% | 35\% | - | 9,134 | 9,134 |
| Provision - (gains/losses) |  |  |  |  |  |  | \$ 674,434 \$ | 674,434 |



PENN POWER
Summary of Deferred income Taxes
Based upon Electric Plant in Service January, 2016 - December, 2016


Computation of Deferred Income Taxes
Based upon Electric Plant in Service January, 2016 - December, 2016


Computation of Deferred Income Taxes
Based upon Electric Plant in Service January, 2016 - December, 2016


PENN POWER
Computation of Deferred Income Taxes
Based upon Electric Plant in Service January, 2016 - December, 2016
Deferred Income Taxes Related to Gains/Losses

| Vintage |  | Per Power Ta Basis of |  | Report <br> Accum | 52 <br> ulated |  | Gain)/Loss | Sffec | tory/ Rates |  |  | fer | rral of Tax <br> Federal |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  | Property |  | ax Depr | reciation |  | ecognized | State | Federal |  | State |  |  |  | Total |
|  |  | 1 |  | 2 |  |  | 3 | 4 | 5 |  | $6=3 \times 4$ |  | $7=3 \times 5$ |  | $8=6+7$ |
| Provision-1/16-12/16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1987 | \$ | 131,241 | \$ |  | 131,241 | \$ | - | 0\% | 35\% | \$ | - | \$ | - | \$ | - |
| 1988 |  | 253,596 |  |  | 253,596 |  | - | 0\% | 35\% |  | - |  | - |  | - |
| 1989 |  | 274,208 |  |  | 274,208 |  | - | 0\% | 35\% |  | - |  | - |  |  |
| 1990 |  | 292,257 |  |  | 292,257 |  | - | 0\% | 35\% |  | - |  | - |  | - |
| 1991 |  | 310,854 |  |  | 310,854 |  | - | 0\% | 35\% |  | - |  | - |  | - |
| 1992 |  | 307,448 |  |  | 307,448 |  | - | 0\% | 35\% |  | - |  | - |  | - |
| 1993 |  | 363,130 |  |  | 363,130 |  | - | 0\% | 35\% |  | - |  | - |  | - |
| 1994 |  | 267,989 |  |  | 267,989 |  | - | 0\% | 35\% |  | - |  | - |  | - |
| 1995 |  | 468,424 |  |  | 468,424 |  | - | 0\% | 35\% |  | - |  | - |  | - |
| 1996 |  | 482,266 |  |  | 476,892 |  | 5,374 | 0\% | 35\% |  | - |  | 1,881 |  | 1,881 |
| 1997 |  | 96,423 |  |  | 92,121 |  | 4,302 | 0\% | 35\% |  | - |  | 1,506 |  | 1,506 |
| 1998 |  | 26,635 |  |  | 24,260 |  | 2,375 | 0\% | 35\% |  | - |  | 831.25 |  | 831.25 |
| 2000 |  | 121,363 |  |  | 99,704 |  | 21,658 | 0\% | 35\% |  | - |  | 7,580 |  | 7,580 |
| 2001 |  | 131,409 |  |  | 102,095 |  | 29,314 | 0\% | 35\% |  | - |  | 10,260 |  | 10,260 |
| 2002 |  | 86,618 |  |  | 63,431 |  | 23,187 | 0\% | 35\% |  | - |  | 8,115 |  | 8,115 |
| 2002 30\% |  | 58,118 |  |  | 42,560 |  | 15,558 | 0\% | 35\% |  | - |  | 5,445.14 |  | 5,445.14 |
| Provision - (gains/losses) |  |  |  |  |  |  |  |  |  |  |  |  | 35,618.57 |  | 35,618.57 |

Summary of Deferred income Taxes
Based upon Electric Plant in Service January, 2017 - December, 2017

| Provision: |  | Deferral of Taxes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Vintage Year | State |  | Federal |  | Total |  |
|  | 1970 | \$ | - | \$ | (33) | \$ | (33) |
|  | 1971 |  | - |  | 77 |  | 77 |
|  | 1972 |  | - |  | (137) |  | (137) |
|  | 1973 |  | - |  | 7 |  | 7 |
|  | 1974 |  | - |  | (5) |  | (5) |
|  | 1975 |  | - |  | 1,651 |  | 1,651 |
|  | 1976 |  | - |  | 7,686 |  | 7,686 |
|  | 1977 |  | - |  | (1) |  | (1) |
|  | 1978 |  | - |  | 13 |  | 13 |
|  | 1979 |  | - |  | (14) |  | (14) |
|  | 1980 |  | - |  | 3 |  | 3 |
|  | 1981 |  | - |  | - |  | - |
|  | 1982 |  | - |  | - |  | - |
|  | 1983 |  | - |  | - |  | - |
|  | 1984 |  | - |  | - |  | - |
|  | 1985 |  | - |  | - |  | - |
|  | 1986 |  | - |  | - |  | - |
|  | 1987 |  | - |  | - |  | - |
|  | 1987 A |  | - |  | - |  | - |
|  | 1988 |  | - |  | 11 |  | 11 |
|  | 1988 A |  | - |  | - |  | - |
|  | 1989 |  | - |  | 28 |  | 28 |
|  | 1989 A |  | - |  | - |  | - |
|  | 1990 |  | - |  | 1 |  | 1 |
|  | 1990 A |  | - |  | - |  | - |
|  | 1991 |  | - |  | 130 |  | 130 |
|  | 1992 |  | - |  | 1,931.77 |  | 1,931.77 |
|  | 1993 |  | - |  | (7) |  | (7) |
|  | 1993 A |  | - |  | 98 |  | 98 |
|  | 1994 |  | - |  | 2,015 |  | 2,015 |
|  | 1995 |  | - |  | 1,964 |  | 1,964 |
|  | 1996 |  | - |  | 2,585 |  | 2,585 |
|  | 1997 |  | - |  | 34,437 |  | 34,437 |
|  | 1998 |  | - |  | 33,131 |  | 33,131 |
|  | 1999 |  | - |  | 11,059 |  | 11,059 |
|  | 2000 |  | - |  | 84,222 |  | 84,222 |
|  | 2001 |  | - |  | 91,988 |  | 91,988 |
|  | 2001 30\% |  | - |  | 7,407 |  | 7,407 |
|  | 2002 |  | - |  | 51,054 |  | 51,054 |
|  | 2002 30\% |  | - |  | 45,064 |  | 45,064 |
|  | 2003 |  | - |  | 25,617 |  | 25,617 |
|  | 2003 30\% |  | - |  | 51,973 |  | 51,973 |
|  | 2003 50\% |  | - |  | 28,320 |  | 28,320 |
|  | 2004 |  | - |  | 11,435 |  | 11,435 |
|  | 2004 30\% |  | - |  | 10,291 |  | 10,291 |
|  | 2004 50\% |  | - |  | 60,651 |  | 60,651 |
|  | 2005 |  | - |  | 144,121 |  | 144,121 |
|  | 2006 |  | - |  | 160,741 |  | 160,741 |
|  | 2007 |  | - |  | 171,965 |  | 171,965 |
|  | 2008 |  | - |  | 131,693 |  | 131,693 |
|  | 2008 50\% |  | - |  | 91,992 |  | 91,992 |
|  | 2009 |  | - |  | $(10,450)$ |  | $(10,450)$ |
|  | 2009 50\% |  | - |  | 121,829 |  | 121,829 |
|  | 2010 |  | - |  | 774 |  | 774 |
|  | 2010 100\% |  | - |  | 555 |  | 555 |
|  | 2010 50\% |  | - |  | 53,468 |  | 53,468 |
|  | 2011 |  | - |  | 5,934.59 |  | 5,934.59 |
|  | 2011 100\% |  | - |  | - |  | - |
|  | 2011 50\% |  | - |  | 5,480 |  | 5,480 |
|  | 2012 |  | - |  | $(53,924)$ |  | $(53,924)$ |
|  | 2012 50\% |  | - |  | 69,029 |  | 69,029 |
|  | 2013 |  | - |  | (480) |  | (480) |
|  | 2013 50\% |  | - |  | 103,281 |  | 103,281 |
|  | 2014 |  | - |  | 37,394 |  | 37,394 |
|  | 2014 50\% |  | - |  | 8,011 |  | 8,011 |
|  | 2014 EXP |  | - |  | - |  | - |
|  | 2015 |  | - |  | 141,840 |  | 141,840 |
|  | 2015 50\% |  | - |  | 187,230 |  | 187,230 |
|  | 2015 EXP |  | - |  | $(67,045)$ |  | $(67,045)$ |
|  | 2016 |  | - |  | 293,089 |  | 293,089 |
|  | 2016 50\% |  | - |  | 483,607 |  | 483,607 |
|  | 2017 |  | - |  | 171,498 |  | 171,498 |
|  | 2017 50\% |  | - |  | 7,204,327 |  | 7,204,327 |
| Total Provision |  | \$ | - | \$ | 10,020,614 | \$ | 10,020,614 |

PENN POWER
Summary of Deferred Income Taxes
Based upon Electric Plant in Service January, 2017 - December, 2017

| Reversal | Vintage Year | State |  | Deferral of Taxes |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | 1970 | \$ | - | \$ | $(3,751)$ | \$ | $(3,751)$ |
|  | 1971 |  | - |  | $(8,060)$ |  | $(8,060)$ |
|  | 1972 |  | - |  | $(2,742)$ |  | $(2,742)$ |
|  | 1973 |  | - |  | $(9,879)$ |  | $(9,879)$ |
|  | 1974 |  | - |  | $(13,724)$ |  | $(13,724)$ |
|  | 1975 |  | - |  | $(8,394)$ |  | $(8,394)$ |
|  | 1976 |  | - |  | (642) |  | (642) |
|  | 1977 |  | - |  | $(10,666)$ |  | $(10,666)$ |
|  | 1978 |  | - |  | $(12,348)$ |  | $(12,348)$ |
|  | 1979 |  | - |  | $(13,501)$ |  | $(13,501)$ |
|  | 1980 |  | - |  | $(18,038)$ |  | $(18,038)$ |
|  | 1981 |  | - |  | $(9,738)$ |  | $(9,738)$ |
|  | 1982 |  | - |  | $(12,949)$ |  | $(12,949)$ |
|  | 1983 |  | - |  | $(15,668)$ |  | $(15,668)$ |
|  | 1984 |  | - |  | $(28,518)$ |  | $(28,518)$ |
|  | 1985 |  | - |  | $(37,650)$ |  | $(37,650)$ |
|  | 1986 |  | - |  | $(41,076)$ |  | $(41,076)$ |
|  | 1987 |  | - |  | $(33,958)$ |  | $(33,958)$ |
|  | 1987 A |  | - |  | $(3,175)$ |  | $(3,175)$ |
|  | 1988 |  | - |  | $(43,977)$ |  | $(43,977)$ |
|  | 1988 A |  | - |  | (986) |  | (986) |
|  | 1989 |  | - |  | $(49,555)$ |  | $(49,555)$ |
|  | 1989 A |  | - |  | (342) |  | (342) |
|  | 1990 |  | - |  | $(64,174)$ |  | $(64,174)$ |
|  | 1990 A |  | - |  | (178) |  | (178) |
|  | 1991 |  | - |  | $(69,901)$ |  | $(69,901)$ |
|  | 1992 |  | - |  | $(70,157)$ |  | $(70,157)$ |
|  | 1993 |  | - |  | $(100,874)$ |  | $(100,874)$ |
|  | 1993 A |  | - |  | 1 |  | 1 |
|  | 1994 |  | * |  | $(49,240)$ |  | $(49,240)$ |
|  | 1995 |  | - |  | $(92,581)$ |  | $(92,581)$ |
|  | 1996 |  | - |  | $(86,696)$ |  | $(86,696)$ |
|  | 1997 |  | - |  | $(50,632)$ |  | $(50,632)$ |
|  | 1998 |  | - |  | $(7,248)$ |  | $(7,248)$ |
|  | 1999 |  | - |  | $(34,216)$ |  | $(34,216)$ |
|  | 2000 |  | - |  | $(149,352)$ |  | $(149,352)$ |
|  | 2001 |  | - |  | $(44,907)$ |  | $(44,907)$ |
|  |  |  | - |  | $(3,350)$ |  | $(3,350)$ |
|  | $2002$ |  | - |  | $(17,661)$ |  | $(17,661)$ |
|  | $200230 \%$ |  | - |  | $(10,632)$ |  | $(10,632)$ |
|  | 2003 |  | - |  | $(89,692)$ |  | $(89,692)$ |
|  | 2003 30\% |  | - |  | 6,350 |  | 6,350 |
|  | 2003 50\% |  | - |  | (553) |  | (553) |
|  | 2004 |  | - |  | $(65,355)$ |  | $(65,355)$ |
|  | 2004 30\% |  | - |  | $(11,631)$ |  | $(11,631)$ |
|  | 2004 50\% |  | - |  | $(9,481)$ |  | $(9,481)$ |
|  | 2005 |  | - |  | $(127,186)$ |  | $(127,186)$ |
|  | 2006 |  | - |  | $(122,522)$ |  | $(122,522)$ |
|  | 2007 |  | - |  | $(144,407)$ |  | $(144,407)$ |
|  | 2008 |  | - |  | $(87,808)$ |  | $(87,808)$ |
|  | $2008 \text { 50\% }$ |  | - |  | $(50,944)$ |  | $(50,944)$ |
|  | $2009$ |  | - |  | $(91,069)$ |  | $(91,069)$ |
|  | 2009 50\% |  | - |  | $(15,226)$ |  | $(15,226)$ |
|  | 2010 |  | - |  | 13,599 |  | 13,599 |
|  | 2010 100\% |  | - |  | $(52,141)$ |  | $(52,141)$ |
|  | 2010 50\% |  | - |  | $(65,783)$ |  | $(65,783)$ |
|  | 2011 |  | - |  | $(233,567)$ |  | $(233,567)$ |
|  | 2011 100\% |  | - |  | $(168,502)$ |  | $(168,502)$ |
|  | 2011 50\% |  | - |  | $(29,561)$ |  | $(29,561)$ |
|  | 2012 |  | - |  | $(75,693)$ |  | $(75,693)$ |
|  | 2012 50\% |  | - |  | $(213,237)$ |  | $(213,237)$ |
|  | 2013 |  | - |  | $(22,458)$ |  | $(22,458)$ |
|  | 2013 50\% |  | - |  | $(66,700)$ |  | $(66,700)$ |
|  | 2014 |  | - |  | $(469,509)$ |  | $(469,509)$ |
|  | 2014 50\% |  | - |  | $(396,806)$ |  | $(396,806)$ |
|  | 2014 EXP |  | - |  | (582) |  | (582) |
|  | 2015 |  | - |  | $(21,108)$ |  | $(21,108)$ |
|  | 2015 50\% |  | - |  | $(25,077)$ |  | $(25,077)$ |
|  | 2015 EXP |  | - |  | $(24,448)$ |  | $(24,448)$ |
|  | 2016 |  | - |  | 89,143 |  | 89,143 |
|  | 2016 50\% |  | - |  | 130,432 |  | 130,432 |
|  | 2017 |  | - |  | 8,072 |  | 8,072 |
|  | 2017 50\% |  | . |  | $(5,220)$ |  | $(5,220)$ |
| Total Reversal |  | \$ | - | \$ | (3,669,807) | \$ | $(3,669,807)$ |
| Net Provision |  | \$ | - | \$ | 6,350,808 | \$ | 6,350,808 |

Computation of Deferred Icome Taxes
Based upon Electric Plant in Service January, 2017 - December, 2017

| Vintage Year | Accelerate Tax Depreciation less Straight Line Depreciation | Statutoryl Effective Rates |  | State |  | Deferral of Taxes |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Provision |  |  |  |  |  |  |  |  |  |
| 1970 | \$ (95) | 0\% | 35\% | \$ | - | \$ | (33) | \$ | (33) |
| 1971 | 220 | 0\% | 35\% |  | - |  | 77 |  | 77 |
| 1972 | (391) | 0\% | 35\% |  | - |  | (137) |  | (137) |
| 1973 | 20 | 0\% | 35\% |  | - |  | 7 |  | 7 |
| 1974 | (14) | 0\% | 35\% |  | - |  | (5) |  | (5) |
| 1975 | 4,718 | 0\% | 35\% |  | - |  | 1,651 |  | 1,651 |
| 1976 | 21,961 | 0\% | 35\% |  | - |  | 7,686 |  | 7,686 |
| 1977 | (4) | 0\% | 35\% |  | - |  | (1) |  | (1) |
| 1978 | 37 | 0\% | 35\% |  | - |  | 13 |  | 13 |
| 1979 | (41) | 0\% | 35\% |  | - |  | (14) |  | (14) |
| 1980 | 10 | 0\% | 35\% |  | - |  | 3 |  | 3 |
| 1981 | - | 0\% | 35\% |  | - |  | - |  | - |
| 1982 | - | 0\% | 35\% |  | - |  | - |  | - |
| 1983 | - | 0\% | 35\% |  | - |  | - |  | - |
| 1984 | - | 0\% | 35\% |  | - |  | - |  | - |
| 1985 | - | 0\% | 35\% |  | - |  | - |  | $\cdots$ |
| 1986 | - | 0\% | 35\% |  | - |  | - |  | - |
| 1987 | - | 0\% | 35\% |  | - |  | - |  | - |
| 1987 A | - | 0\% | 35\% |  | - |  | - |  | - |
| 1988 | 33 | 0\% | 35\% |  | - |  | 11 |  | 11 |
| 1988 A | - | 0\% | 35\% |  | - |  | - |  | - |
| 1989 | 81 | 0\% | 35\% |  | - |  | 28 |  | 28 |
| 1989 A | - | 0\% | 35\% |  | - |  | - |  | - |
| 1990 | 3 | 0\% | 35\% |  | - |  | 1 |  | 1 |
| 1990 A | - | 0\% | 35\% |  | - |  | - |  | - |
| 1991 | 372 | 0\% | 35\% |  | - |  | 130 |  | 130 |
| 1992 | 5,519 | 0\% | 35\% |  | - |  | 1,932 |  | 1,932 |
| 1993 | (21) | 0\% | 35\% |  | - |  | (7) |  | (7) |
| 1993 A | 279 | 0\% | 35\% |  | - |  | 98 |  | 98 |
| 1994 | 5,757 | 0\% | 35\% |  | - |  | 2,015 |  | 2,015 |
| 1995 | 5,610 | 0\% | 35\% |  | - |  | 1,964 |  | 1,964 |
| 1996 | 7,387 | 0\% | 35\% |  | - |  | 2,585 |  | 2,585 |
| 1997 | 97,552 | 0\% | 35\% |  | - |  | 34,143 |  | 34,143 |
| 1998 | 93,402 | 0\% | 35\% |  | - |  | 32,691 |  | 32,691 |
| 1999 | 30,766 | 0\% | 35\% |  | - |  | 10,768 |  | 10,768 |
| 2000 | 230,008 | 0\% | 35\% |  | - |  | 80,503 |  | 80,503 |
| 2001 | 246,341 | 0\% | 35\% |  | - |  | 86,220 |  | 86,220 |
| 2001 30\% | 19,900 | 0\% | 35\% |  | - |  | 6,965 |  | 6,965 |
| 2002 | 134,137 | 0\% | 35\% |  | - |  | 46,948 |  | 46,948 |
| 2002 30\% | 119,020 | 0\% | 35\% |  | - |  | 41,657 |  | 41,657 |
| 2003 | 67,649 | 0\% | 35\% |  | - |  | 23,677 |  | 23,677 |
| 2003 30\% | 134,938 | 0\% | 35\% |  | - |  | 47,228 |  | 47,228 |
| 2003 50\% | 72,006 | 0\% | 35\% |  | - |  | 25,202 |  | 25,202 |
| 2004 | 30,739 | 0\% | 35\% |  | - |  | 10,759 |  | 10,759 |
| 2004 30\% | 26,877 | 0\% | 35\% |  | - |  | 9,407 |  | 9,407 |
| 2004 50\% | 152,201 | 0\% | 35\% |  | - |  | 53,271 |  | 53,271 |
| 2005 | 368,147 | 0\% | 35\% |  | - |  | 128,851 |  | 128,851 |
| 2006 | 403,857 | 0\% | 35\% |  | - |  | 141,350 |  | 141,350 |
| 2007 | 402,927 | 0\% | 35\% |  | - |  | 141,024 |  | 141,024 |
| 2008 | 335,802 | 0\% | 35\% |  | - |  | 117,531 |  | 117,531 |
| 2008 50\% | 219,807 | 0\% | 35\% |  | - |  | 76,932 |  | 76,932 |
| 2009 | $(12,029)$ | 0\% | 35\% |  | - |  | $(4,210)$ |  | $(4,210)$ |
| 2009 50\% | 277,020 | 0\% | 35\% |  | - |  | 96,957 |  | 96,957 |
| 2010 | 1,981 | 0\% | 35\% |  | * |  | 693 |  | 693 |
| 2010 100\% | 1,585 | 0\% | 35\% |  | - |  | 554.76 |  | 554.76 |
| 2010 50\% | 135,618 | 0\% | 35\% |  | - |  | 47,466 |  | 47,466 |
| 2011 | 23,407 | 0\% | 35\% |  | - |  | 8,193 |  | 8,193 |
| 2011 100\% | - | 0\% | 35\% |  | - |  | - |  | * |
| 2011 50\% | 13,132 | 0\% | 35\% |  | * |  | 4,596 |  | 4,596 |
| 2012 | $(124,799)$ | 0\% | 35\% |  | - |  | $(43,680)$ |  | $(43,680)$ |
| 2012 50\% | 192,755 | 0\% | 35\% |  | - |  | 67,464 |  | 67,464 |
| 2013 | 1,107 | 0\% | 35\% |  | - |  | 388 |  | 388 |
| 2013 50\% | 267,253 | 0\% | 35\% |  | - |  | 93,538 |  | 93,538 |
| 2014 | 106,165 | 0\% | 35\% |  | - |  | 37,158 |  | 37,158 |
| 2014 50\% | 30,747 | 0\% | 35\% |  | - |  | 10,762 |  | 10,762 |
| 2014 EXP | 73 | 0\% | 35\% |  | - |  | 26 |  | 26 |
| 2015 | 405,231 | 0\% | 35\% |  | - |  | 141,831 |  | 141,831 |
| 2015 50\% | 474,479 | 0\% | 35\% |  | - |  | 166,068 |  | 166,068 |
| 2015 EXP | $(164,491)$ | 0\% | 35\% |  | - |  | $(57,572)$ |  | $(57,572)$ |
| 2016 | 770,468 | 0\% | 35\% |  | - |  | 269,664 |  | 269,664 |
| 2016 50\% | 1,229,283 | 0\% | 35\% |  | - |  | 430,249 |  | 430,249 |
| 2017 | 489,995 | 0\% | 35\% |  | $\cdots$ |  | 171,498 |  | 171,498 |
| 2017 50\% | 20,583,791 | 0\% | 35\% |  | - |  | 7,204,327 |  | 7,204,327 |
|  | \$ 27,940,290 |  |  | \$ | - | \$ | 9,779,101 | \$ | 9,779,101 |
| Provison Gains/Lo | osses Page ( 16 ) |  |  | \$ | - | \$ | 87,458 | \$ | 87,458 |
| Provision |  |  |  | \$ | - | \$ | 9,866,559 | \$ | 9,866,559 |

PENN POWER
Computation of Deferred icome Taxes
Based upon Electric Plant in Service January, 2017 - December, 2017


PENN POWER
Computation of Deferred Income Taxes
Based upon Electric Plant in Service January, 2017 - December, 2017 Deferred Income Taxes Related to Gains/Losses

| Vintage Year | Per Power Tax Report 52 |  |  | Statutory/ | tes | Deferral of Taxes |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Property | Tax Depreciation | recognized | State | Federal | State |  | Federal |  | Total |
|  | 1 | 2 | 3 | 4 | 5 | $6=3 \times 4$ |  | $7=3 \times 5$ |  | $8=6+7$ |
| Provision-1/17-12/17 |  |  |  |  |  |  |  |  |  |  |
| 1987 | \$ 36,741 | \$ 36,741 | \$ | 0\% | 35\% | \$ | \$ | - | \$ | - |
| 1987 A | 3,702 | 3,702 | - | 0\% | 35\% | - |  | - |  | - |
| 1988 | 53,803 | 53,803 | - | 0\% | 35\% | - |  | - |  | - |
| 1988 A | 1,430 | 1,430 | - | 0\% | 35\% | - |  | - |  | - |
| 1989 | 57,739 | 57,739 | - | 0\% | 35\% | - |  | - |  | - |
| 1989 A | 440 | 440 | - | 0\% | 35\% | - |  | - |  | - |
| 1990 | 81,818 | 81,818 | - | 0\% | 35\% | - |  | - |  | - |
| 1990 A | 244 | 244 | - | 0\% | 35\% | - |  | - |  | - |
| 1991 | 87,024 | 87,024 | - | 0\% | 35\% | - |  | - |  | - |
| 1992 | 86,071 | 86,071 | - | 0\% | 35\% | - |  | - |  | - |
| 1993 | 101,659 | 101,659 | - | 0\% | 35\% | - |  | - |  | - |
| 1994 | 75,130 | 75,130 | - | 0\% | 35\% | - |  | - |  | - |
| 1995 | 104,113 | 104,113 | - | 0\% | 35\% | - |  | - |  | - |
| 1996 | 103,316 | 103,316 | - | 0\% | 35\% | - |  | - |  | - |
| 1997 | 75,713 | 74,875 | 838 | 0\% | 35\% | - |  | 293 |  | 293 |
| 1998 | 28,255 | 26,996 | 1,259 | 0\% | 35\% | * |  | 441 |  | 441 |
| 1999 | 11,596 | 10,765 | 831 | 0\% | 35\% | - |  | 290.98 |  | 290.98 |
| 2000 | 85,819 | 75,194 | 10,625 | 0\% | 35\% | - |  | 3,719 |  | 3,719 |
| 2001 | 92,248 | 75,767 | 16,480 | 0\% | 35\% | - |  | 5,768.16 |  | 5,768.16 |
| 2001 30\% | 7,071 | 5,808 | 1,262 | 0\% | 35\% | - |  | 442 |  | 442 |
| 2002 | 52,593 | 40,861 | 11,732 | 0\% | 35\% | - |  | 4,106.25 |  | 4,106.25 |
| $200230 \%$ | 43,539 | 33,804 | 9,735 | 0\% | 35\% | - |  | 3,407 |  | 3,407 |
| 2003 | 20,703 | 15,161 | 5,542 | 0\% | 35\% | - |  | 1,940 |  | 1,940 |
| 2003 30\% | 50,639 | 37,082 | 13,557 | 0\% | 35\% | - |  | 4,745 |  | 4,745 |
| 2003 50\% | 33,234 | 24,325 | 8,909 | 0\% | 35\% | - |  | 3,118 |  | 3,118 |
| 2004 | 6,189 | 4,256 | 1,933 | 0\% | 35\% | - |  | 676 |  | 676 |
| 2004 30\% | 9,057 | 6,531 | 2,526 | 0\% | 35\% | - |  | 884 |  | 884 |
| 2004 50\% | 67,579 | 46,494 | 21,086 | 0\% | 35\% | - |  | 7,380 |  | 7,380 |
| 2005 | 122,265 | 78,636 | 43,629 | 0\% | 35\% | - |  | 15,270 |  | 15,270 |
| 2006 | 138,091 | 82,687 | 55,404 | 0\% | 35\% | - |  | 19,391 |  | 19,391 |
| 2007 | 198,949 | 110,548 | 88,401 | 0\% | 35\% | - |  | 30,940 |  | 30,940 |
| 2008 | 82,748 | 42,284 | 40,464 | 0\% | 35\% | - |  | 14,162 |  | 14,162 |
| 2008 50\% | 88,057 | 45,029 | 43,028 | 0\% | 35\% | - |  | 15,060 |  | 15,060 |
| 2009 | $(32,348)$ | $(14,521)$ | $(17,827)$ | 0\% | 35\% | - |  | $(6,239)$ |  | $(6,239)$ |
| 2009 50\% | 132,707 | 61,646 | 71,062 | 0\% | 35\% | - |  | 24,872 |  | 24,872 |
| 2010 | $(1,539)$ | $(1,770)$ | 230 | 0\% | 35\% | - |  | 81 |  | 81 |
| 2010 100\% | - | - | - | 0\% | 35\% | - |  | - |  | - |
| 2010 50\% | 29,543 | 12,395 | 17,148 | 0\% | 35\% | - |  | 6,002 |  | 6,002 |
| 2011 | $(10,284)$ | $(3,832)$ | $(6,451)$ | 0\% | 35\% | - |  | $(2,258)$ |  | $(2,258)$ |
| 2011 100\% | - |  |  | 0\% | 35\% | - |  | - |  |  |
| 2011 50\% | 4,026 | 1,500 | 2,525 | 0\% | 35\% | - |  | 884 |  | 884 |
| 2012 | $(43,155)$ | $(13,887)$ | $(29,269)$ | 0\% | 35\% | - |  | $(10,244)$ |  | $(10,244)$ |
| 2012 50\% | 8,892 | 4,420 | 4,472 | 0\% | 35\% | - |  | 1,565 |  | 1,565 |
| 2013 | $(3,380)$ | (902) | $(2,478)$ | 0\% | 35\% | - |  | (867) |  | (867) |
| 2013 50\% | 40,660 | 12,824 | 27,836 | 0\% | 35\% | - |  | 9,743 |  | 9,743 |
| 2014 | 851 | 176 | 674 | 0\% | 35\% | - |  | 236 |  | 236 |
| 2014 50\% | $(9,822)$ | $(1,964)$ | $(7,858)$ | 0\% | 35\% | - |  | (2,750) |  | $(2,750)$ |
| 2014 EXP | (92) | (19) | (73) | 0\% | 35\% | - |  | (26) |  | (26) |
| 2015 | 30 | 4 | 25 | 0\% | 35\% | - |  | 9 |  | 9 |
| 2015 50\% | 70,797 | 10,334 | 60,463 | 0\% | 35\% | - |  | 21,162 |  | 21,162 |
| 2015 EXP | $(31,584)$ | $(4,519)$ | $(27,065)$ | 0\% | 35\% | - |  | $(9,472.65)$ |  | (9,472.65) |
| 2016 | 72,653 | 5,723 | 66,930 | 0\% | 35\% | - |  | 23,425 |  | 23,425 |
| 2016 50\% | 165,487 | 13,036 | 152,451 | 0\% | 35\% | - |  | 53,358 |  | 53,358 |
| Provision - (gains/losses) |  |  |  |  |  |  | \$ | 241,513 | \$ | 241,513 |


| PENN POWER$(\$ 000)$ |  |  |  |  | Penn Power Exhlbit RAD-41 Witness: R. A. D'Angelo Attachment A Page 16 of 16 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| POSt 1969 VINTAGES $\quad \begin{gathered}\text { Pro Forma Under } \\ \text { Present Rates }\end{gathered}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | Per Power Tax |  | Normalization Adjustment | Total |  |  |
| Liberalized Depreciation Deferred Taxes |  |  |  |  |  |  |
| Balance per Actuals 12/31/15 | \$ | $(137,602)$ |  | \$ | $(137,602)$ |  |
| Balance per Actuals 12/31/14 |  | $(125,825)$ |  |  | $(126,825)$ |  |
| Liberalized Depreciation Activity - January, 2015 to December, 2015 | 5 | (10,777) |  | \$ | $(10,777)$ |  |
| Net Federal and State Provision | \$ | 10,777 |  | \$ | 10,777 |  |
| Less: Net State Provision (negative) |  | 1,029 |  |  | 1,029 |  |
| Net Federal Provision per Actuals | \$ | 9,748 |  | \$ | 9,748 |  |
| Add: Federal Benefit (increase) of State |  | 360 |  |  | 360.15 |  |
| Net Federal - January, 2015 to December, 2015 Provision for Rates | $\$$ | 10,108 |  | \$ | 10,108 |  |
| POST 1969 VINTAGES ${ }^{\text {a }}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | Per Power Tax |  | Normalization Adjustment | Total |  |  |
| Liberalized Depreciation Deferred Taxes |  |  |  |  |  |  |
| Balance per Budget 12/31/16 | \$ | $(141,089)$ |  | \$ | $(141,089)$ |  |
| Balance per Actuals 12/31/15 |  | $(137,602)$ |  |  | $(137,602)$ |  |
| Liberalized Depreciation Activity - January, 2016 to December, 2016 | S | $(3,487)$ |  | \$ | (3,487) |  |
| Net Federal and State Provision | \$ | 3,487 |  | \$ | 3,487 |  |
| Less: Net State Provision (negative) |  | (659) |  |  | (659) |  |
| Net Federal Provision per Budget | \$ | 4,146 |  | \$ | 4,146 |  |
| Add: Federal Benefit (increase) of State |  | (231) |  |  | (231) |  |
| Net Federal - January, 2016 to December, 2016 Provision for Rates | S | 3,915 |  | $\$$ | 3,915 |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | Per Power Tax |  | Normalization Adjustment | Total |  |  |
| Liberalized Depreciation Deferred Taxes |  |  |  |  |  |  |
| Balance per Budget 12/31/17 | \$ | $(147,820)$ |  | \$ | $(147,820)$ |  |
| Balance per Budget 12/31/16 |  | $(141,089)$ |  |  | $(141,089)$ |  |
| Liberalized Depreciation Activity - January, 2017 to December, 2017 | \$ | $\underline{(6,731)}$ |  | \$ | $(6,731)$ |  |
| Net Federal and State Provision | \$ | \$ 6,731 |  | \$ | 6,731 |  |
| Less: Net State Provision (negative) |  | 584 |  |  | 584 |  |
| Net Federal Provision per Budget | \$ | 6,147 |  | \$ | 6,147 |  |
| Add: Federal Benefit (increase) of State |  | 204 |  |  | 204 |  |
| Net Federal - January, 2017 to December, 2017 Provision for Rates | \$ | $\underline{S}$ |  | - 6, 6, ${ }^{\text {6, }}$ |  |  |

## RECONCILIATION OF APB11 ADIT to BALANCE SHEET DEFERRED TAX BALANCES

|  | Penn Power |  |
| :---: | :---: | :---: |
| Balance Sheet (RAD-54) @ 12/31/14 | \$ | 129,714 |
| Total APB11 Deferreds on Rollforward Schedule @ 12/31/14 |  | 129,714 |
| Difference |  | - |
| Reconciling Items: |  |  |
| FERC vs Rollforward APB11 Discrepancy |  | - |
| Vegetation Management FERC Reclasses |  | - |
| FAS109 related to CWIP |  | - |
| FAS 109 Gross-Up |  | - |
| FAS 109 related to Plant in Service |  | - |
| Total Reconciling Items |  | - |
| Balance Sheet (RAD-54) @ 12/31/15 | \$ | 153,282 |
| Total APB11 Deferreds on Rollforward Schedule @ 12/31/15 |  | 144,004 |
| Difference | \$ | 9,278 |
| Reconciling Items: |  |  |
| CIAC is Booked to Account 190 | \$ | 6,465 |
| Tax Interest Capitalized is Booked to Account 190 |  | 1,349 |
| FAS 109 Gross-Up |  | - |
| FAS 109 related to Plant in Service |  | 887 |
| FAS109 related to CWIP |  | 577 |
| Vegetation Management FERC Reclasses |  | - |
| Total Reconciling Items | \$ | 9,278 |
| Balance Sheet (RAD-54) @ 12/31/16 | \$ | 157,749 |
| Total APB11 Deferreds on Roilforward Schedule @ 12/31/16 |  | 148,470 |
| Difference | \$ | 9,279 |
| Reconciling Items: |  |  |
| CIAC is Booked to Account 190 | \$ | 6,465 |
| Tax Interest Capitalized is Booked to Account 190 |  | 1,350 |
| Vegetation Management FERC Reclasses |  | - |
| FAS 109 Gross-Up |  |  |
| FAS109 related to CWIP |  | 652 |
| FAS 109 related to Plant in Service |  | 812 |
| Total Reconciling Items | $\$$ | 9,279 |
| Balance Sheet (RAD-54) @ 12/31/17 | \$ | 164,866 |
| Total APB11 Deferreds on Rollforward Schedule @ 12/31/17 |  | 151,767 |
| Difference | \$ | 13,099 |
| Reconciling Items: |  |  |
| CIAC is Booked to Account 190 | \$ | 6,465 |
| Tax Interest Capitalized is Booked to Account 190 |  | 1,350 |
| Vegetation Management FERC Reclasses |  | - |
| Deferred Tax Pro-Ration on Rollforward Schedule |  | 3,820 |
| FAS 109 Gross-Up |  | - |
| FAS109 related to MAIT Transfer |  | - |
| FAS109 related to CWIP |  | 688 |
| FAS 109 related to Plant in Service |  | 776 |
| Total Reconciling ltems | \$ | 13,099 |

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-25:

"Submit a schedule showing a breakdown of accumulated and unamortized investment tax credits, by vintage year and percentage rate, together with calculations supporting the amortized amount claimed as a reduction to pro forma income taxes. Provide details of methods used to write-off the unamortized balances."

## RESPONSE:

Investment Tax Credit Balances, Provision and Amortization (In Thousands)

## Balance 12/31/2014

Amortization 2015 Calendar Year
Balance 12/31/2015
Amortization 2016 Calendar Year
Balance 12/31/2016
Amortization 2017 Calendar Year
Balance 12/31/2017


## Investment Tax Credit

Pennsylvania Power Company is amortizing the deferred credit previously created by a ratable flow-through to income over the useful life of the property. The Company has been examined by the Internal Revenue Service for the years in which this tax credit originated and is in compliance with paragraph (2) of Section 46(e) of the Internal Revenue Code of 1954, as amended, for allowance, with respect to public utility property, of the credit as allowed by Section 38 of the Code. Section 46 (e) provides: (a) to reduce the cost of service for ratemaking purposes or in its regulated books of account by no more than the ratable portion of the credit allowable by Section 38; and (b) not to reduce the base to which its rate of return is applied for ratemaking purposes by any portion of the credit allowable by Section 38 .

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-D-26:

"Explain in detail by statement or exhibit the appropriateness of claiming any additional items, not otherwise specifically explained and supported in the statement of operating income."

## RESPONSE:

The appropriateness of claiming the various items included in the statement of operating income is explained in the supporting schedules to Penn Power Exhibit RAD-2 and the testimony and exhibits of the Company's witnesses.

## FILING REQUIREMENT II-D-27:

"If the utility's operations include non-jurisdictional activities, provide a schedule which demonstrates the manner in which rate base and operating income data have been adjusted to develop the jurisdictional test year claim."

## RESPONSE:

Not Applicable

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT II-E-1:

"Supply a copy of any budget utilized as a basis for any test year claim, and explain the utility's budgeting process."

## RESPONSE:

The FirstEnergy "Budget/Forecast Guidelines" details the items required for the preparation of budgets. See attached Penn Power RAD-45 Attachment A for a review of the guidelines.

A copy of the budget utilized for the test year claim is contained in Penn Power Exhibit RAD-18.

Penn Power Exhibit RAD-45
Witness: R. A. D'Angelo

## FirstEnergy

## Budget/Forecast Guidelines


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## CHAPTER 1: INTRODUCTION

The integrated business planning process is critical to the success of FirstEnergy. A key component of this process is the annual budget which provides a method to quantify and report the current year's expectations and helps drive the enterprise toward achieving both short-term and long-term financial and operational objectives. The budget also helps facilitate the efficient usage of the Company's financial resources and allows FE to measure actual performance against projections.

The guidelines in this booklet are intended to assist persons responsible for direct input of data into the UIPlanner system as they prepare annual budgets and quarterly forecasts. The budget/forecast should be based on the business unit's business plans and should align with Executive Council's expectations.

Business Unit Income Statements will be produced using the UIPlanner report view in addition to QlikView and BW. Budget details will be developed and input using the various SAP cost collectors (i.e. cost centers, internal orders and WBSs). Through interface mapping between UIPlanner and SAP, these cost collectors are assigned to Profit Centers. Once data input is completed and the UIPlanner system is closed, Business Unit Income Statements will be available for review. The Profit Center Hierarchy (PC0001B) serves as the source for the structure of Business Unit Income Statements). Earnings Driver reports which measure the impact and contribution of key items to the financial performance of each Business Unit will also be produced. Any questions concerning these statements should be directed to Mike Kreighbaum (825-2556) or Carrie Wokaty (825-6005).

Note: Budget guideline documentation can be found in U:IPublic\Budget InfolBudget

## Overview for Budget Input

```
Planning Must Be Done For The Following:
    > Gross Payroll (Dollars)
     Staffing Level (Headcount) - Coordinate with Short-Term Budget & Forecast - Business
    Services and Workforce Planning
    > Other - Than - Labor (OTL)
    Activity Input Planning (Hours to Cost Centers, WBSs and Internal Orders)
```


## Versions

```
Annual/Quarterly Budgeting \& Forecasting:
\(>\) The budget and forecasting process includes a 5 year forecast horizon, current year plus 4 outer years.
\(>\) Budget/forecast detail planning will be input in Version 20 (Working Forecast)
\(>\) Final Closed detail budget will be in Version 12 unless otherwise noted
```


## Calendar of Events

## Forecast Schedule - ( 6 week forecast period)

## Activity

> Week 1 (UIPlanner available for updates)
$>$ Week 2 (Input of all utility related revenues and expenses required for riders/deferrals, first round of check-in meetings)
$>$ Week 3 ( $2^{\text {nd }}$ round of check-in meetings)
$>$ Week 4 (Loading of previous months actuals, headcount for payroll due, preliminary income tax review)
$>$ Week 5 (Final round of check-in meetings, UIPlanner locked for all edits)
$>$ Week 6 (Assistant Controller, Tax and Treasury final review and approval, final system close with FERC and snapshot)

Throughout the budget cycle you should expect to receive communications as needed to ensure the schedule is met. The purpose of these communications will be to help individuals manage budgeting activities, ensure mid-process completion goals are met, and address any issues that arise during the budget entry period.

## CHAPTER 2: LABOR

## Straight Time Payroll

Straight time payroll for the 2014 Budget will be developed and input by the Business Units. The budget is based on projected staffing levels and estimated employee salaries based on a regular weekly schedule of 40 hours per week per full-time employee
Adjustments should be made for changes in payroll due to attrition, retirements, promotions, demotions, and all salary adjustments including general wage rate increases. Annual wage rate increases need to be applied by the Business Units, based on the appropriate rate change and timing. The assumed wage rate for non-bargaining employees is $3.0 \%$. The non-bargaining WRI should be assumed to be effective September 1, 2014. For bargaining unit employees, the bargaining unit WRI is based on the terms of each union contract.

Penn Power Exhibit RAD-45<br>Witness: R. A. D’Angelo

Attachment A
Page 5 of 34



## Activity Prices Prior to Eucgeting

- UlPlanner will calculate activity prices prior to the start of the amnual budget process. In addition, SAP HR data will be interfaced to UIPlanner monthly


## Calendars 8 loadings Aulo Calculated

- Additional employee information such as vacation eligibility, available payroll hours, etc... will be summarized to help facilitate building of the labor budget


## Enhanced Data Security

- Access to the labor screens will be secured based on user role and business unit/department


## Automated 5 Year Lebor Forecas

- The correct business rules are applied producing calculated results across the planning horizon for each employee
abor Attributes Imported from SAP
Employee Number
- Employee Name
- Company

Organization

- Personnel Area
- Personnel SubArea
- Position

Job
Job Group
Region

- Employee Group

Employee Subgroup

- Cost Center
- Activity Type
- Pay Scale Type
- Pay Scale Area
- Annual Salary
- Unit Pay

Vacation Eligibility Date

- Latest Hire Date
- Vacation Used to Date
- PAD Used to Date
- Vacation Rolled Over from Previous Year


## Overtime Payroll

Costs associated in a given pay week for work exceeding 40 hours. The addition of overtime dollars to the budget should be planned and approved accordingly. Planning for all overtime will be completed by the business units using the appropriate cost elements (based on employee activity type):

> 520110 Payroll - Overtime Bargaining
> 520150 Payroll - Overtime Non Bargaining
> 520151 Payroll - Overtime Temporary Help
> 520162 Payroll - Overtime Co-Op Student
> 520163 Payroll - Overtime Part Time Non Barg
> 520164 Payroll - Overtime Part Time Bargaining

## Payroll Overheads

Payroll Overheads - Employee Benefits, Incentive Comp and Payroll Taxes will be applied as an overhead during the closing process. The rates will be determined by General Accounting and input into the SAP costing sheets and interfaced into UIPlanner. After final payroll is determined and all gross benefit costs (medical, dental, prescription drug etc.) overheads will populate into HR benefit cost centers.

Employee Benefits - Benefit costs will be developed by Human Resources/Corp Budgets \& Forecasts and input into UIPlanner in HR benefit cost centers using the appropriate primary cost elements. Pension and OPEB costs are not included in the Employee Benefits overhead calculation but are applied to capital work as specific capital overheads.

The secondary cost element 850070 - Payroll Overhead Benefits - Straight Time will be used to apply the Benefit overhead on straight time payroll during the budget closing process.

Payroll Taxes - will be budgeted by Corporate Budgets and Forecasts and input into UIPlanner in Special Tax cost centers.

The secondary cost element 850080 - Payroll Overhead - Taxes will be used to apply Payroll Tax overhead on straight time and overtime payroll during the closing process.

Incentive Comp - will be budgeted by Reporting Strategy\& Process Management and input into UIPlanner in Special Incentive Comp cost centers.

The secondary cost element 850090 - Incentive Comp will be used to apply Incentive Comp overhead on straight time and overtime payroll during the closing process.

## Payroll Related Items

## Other payroll related general ledger accounts/cost elements:

520019 Payroll Retention Bonuses - Budgeted by the Business Unit granting the bonus 520165 Payroll Accrual (Budgeted only by General Accounting) 520250 Payroll Bonuses - Represents annual bonuses and other bonuses awarded throughout the year for special circumstances and are the responsibility of the Business Units 520260 Payroll Additional Comp - MGRK (Budgeted by Business Units where appropriate) 520300 Payroll Restricted Stock (Budgeted only by HR/Corporate Budgets and Forecasts) 520400 Payroll Severance - (Budget only by HR/Corporate Budgets and Forecasts) 520500 Payroll Adjustments to Gross - Examples include retro pay, grievance settlements, remote reporting costs, and relocation expenses not covered by HR (See Relocation Policy found on the Services \& Support section of the FirstPlace Portal).

## Endoyec Labor bue vey-calminuens

- Select the Calculation Tab
- Listed are the key data fields and activity price calculation
- Only rows highlighted in yellow can be edited



## Staffing

Staffing levels (Headcount) must be input by month, by individual Cost Center, by individual or activity type. Budget all full-time, part-time, and temporary FE employees on SAP Payroll. New employees should be budgeted in the month in which they will start. Do not include contractor/non-FE employees and do not assume all hires begin the month of January.

## Activity Input Planning (Hours)

Payroll costs can be moved from the employee or originating cost centers to a target or receiving cost collector (Cost Center, Order or WBS element) by planning productive hours by activity type. The activity price associated with each cost center/activity type combination is calculated and updated by Short-Term Budget \& Forecast. These activity prices are then used to produce the standard labor activity allocations.

Unproductive Time - Planning for unproductive time (i.e. sick time, safety meetings, union business, etc.) is not required. These costs remain in the responsible cost center and the unproductive hours and associated costs are incorporated in the calculation of the activity prices.

## CHAPTER 3: OTHER THAN LABOR (OTL)

All transactions for non-labor items must contain:
Cost Center
Cost Element
Target Cost Collector - Cost Center, Order, Network or WBS element
Target Cost Collector Type - (KS, OR, PR)
Cost Type (Capital, O\&M, Other)

## Cost Owner cost center for Other-Than-Labor is defined as the Cost Center with budget responsibility for the expenditure.

Cost Types are defined as follows:
Type 1 Capital - Capital is planned to WBS Elements. WBS Elements are defined as Cost Type 1 if they settle to:

107XXX Construction Work In Progress
108XXX Retirement Work In Progress
Capitalized Nuclear Fuel Accounts
CWIP and RWIP for Non-Utility assets
Type 2 O\&M (Income Statement Accounts)
Type 2 is any cost that settles to a Cost Center and becomes part of the Income Statement (predominately O\&M but includes revenues, interest income, depreciation etc.)

## Type 3 Other

Type 3 charges are any costs that settle to Balance Sheet accounts and are not considered Capital.

## Guidelines for General Business Items:

## Office Supplies - Cost Element 540100

Stationary type items purchased through Staples or similar vendor, e.g., annual planners and calendars, etc. The budget should be at the department/plant level rather than the cost center level to maintain consistency and control within the business unit.

## Telecommunications Equipment and Service - Cost Element 590000

Costs associated with Company approved/provided cellular telephone equipment and associated monthly cellular charges are to be budgeted by cellular user's business unit.

- Basic cellular voice/text service - $\$ 50$ monthly per telephone.
- Smartphone (iPhone) - $\$ 100$ monthly per telephone.
- Cellular broadband data service (laptop and MiFi's/HotSpot) - $\$ 55$ monthly per device. Business Units should refer to the Computer Peripherals Price List (page 11) to budget for costs associated with purchase of the cellular equipment.


## Copies/Multi-functional devices (MFD), Printers, Faxes

Copier/MFD and printer equipment along with maintenance and supplies for general office use are budgeted by IT. Plotter purchase/lease, specialty copiers or printers, fax machines, and associated service/supply costs are to be budgeted by the responsible Business Unit. For special projects, shortterm needs, and plant outages the cost for copy, fax, and print devices are to be budgeted by the responsible Business Unit. Contact IT to determine if existing devices may be redeployed for short term needs.
Budget printer equipment to G/L 580020, supplies to 560200 , and maintenance to 550300 .
Budget copier equipment to $\mathrm{G} / \mathrm{L} 570052$, supplies and maintenance to 560200 .
Budget fax equipment and supplies to $\mathrm{G} / \mathrm{L} 560200$, maintenance to 550300 .

## Employee Expenses - Cost Element 540000

Miscellaneous expenses as a result of conducting company business not captured in other cost elements and reimbursed through an employee expense report.

## Employee Meals - Cost Element 540010

Expensed meals as a result of company business.

## Emergency Employee Expense / No Meals - Cost Element 540015

Miscellaneous expenses that were incurred unexpectedly (call-outs, storms, and outages).

## Travel Expenses - Cost Element 540101

Expenses incurred while traveling on company business that are not reimbursed through employee expense reports. Each business unit should budget for use of the corporate jet by their employees at the rate of $\$ 220$ per "one way trip". Example: For one person flying from Akron to Morristown, \$220 is charged to the employee's responsible cost center. Persons budgeting for Executive travel will be provided more detailed information separately from these guidelines.

## Per Diem - Cost Element 540102

Fixed rate for change in work location, outages, etc. Often used in lieu of meals and possibly other related employee expenses.
Travel Expenses - Corp Jet - Cost Element 540106
Costs associated with use of corporate jet. This cost element is used exclusively by the Flight Operations Group.

## Employee Expense - Training - Cost Element 540020

External seminar fees and associated external training expenses.

## Training Student Expenses - Cost Element 540103

Student training fees for internal courses coordinated by Human Resources.
Postage - Cost Element 650100

All non-customer mailings/billings, including large packages (UPS, FedEx, Overnight Express, etc) should be budgeted by each Business Unit. Postage for customer related mailings and billings should be budgeted by the Customer Service bill production cost centers.

## Other Items:

Application Software Maintenance - Business application software maintenance will be budgeted by IT Business Unit Support. Portfolio Managers will be contacting your department to coordinate budget information and ensure that all maintenance fees are captured.

Banked Vacation - The payout of banked vacation should not be budgeted by the individual cost centers. It is budgeted by Human Resources/Corp Budgets/Forecasts.

Claims (Payable and Receivable) - The ED Operating Companies should budget for (payable) claims and lawsuits related to distribution facilities (including personal injury, property damage, and vegetation management claims), fleet vehicle accidents, and environmental injuries (such as asbestos) for historical ownership of generating plants, as well as the legal fees and other administrative costs to defend against such claims and lawsuits. The ED Operating Companies should also budget for damages caused to their respective distribution facilities by outside parties; applying offsets by taking into consideration historical recovery amounts achieved through (receivable) claims activities. Generating Plants should budget for anticipated (payable) claims and lawsuits related to their facilities, as well as the legal fees and other administrative costs to defend against such claims and lawsuits.

Company Facilities - Real Estate and Facilities will budget for the maintenance and service contracts for Corporate, FENOC and Fossil. Energy Delivery will budget for all Utility Company facilities. The WBS structure will be utilized for both budgeting and tracking of O\&M spend. Budgets will be established using a WBS and WBS Element / Service Categories:

- Landscaping
- Janitorial
- Building Maintenance
- Waste Removal
- Paving repairs
- Elevators
- HVAC
- Roof repairs
- Electrical
- Mechanical Equipment
- Fire Protection
- Construction
- Fences
- Plumbing
- Painting
- Pest Control
- Utilities
- Snow Removal
- Costs will be segregated by line of business (Corporate, FENOC, Fossil, and ED Operating Company)
- Monthly reporting of actuals will include the WBS, the Service Category and Building Cost Center
- This will allow for a direct comparison of Budget to actual spend enabling a monthly view of actuals versus budget.

Real Estate will budget for all building and land leases.
Corporate membership dues and fees, contributions and donations - It is the Company's policy to enter into and maintain Corporate memberships in organizations deemed necessary to maintain professional expertise in various aspects of the Company's operations and to establish and maintain relationships with selected organizations with whom we share common interests.
Corporate memberships will be budgeted and processed through the Contributions Department. The company should not pay dues for an employee's individual membership unless the membership is held at the Company's specific request. When this is the case, the dues and any fees or assessments associated with membership should be budgeted in the employee's administrative cost center. Contributions will also be budgeted through the Contributions Department, working with Operating Company management and the Corporate Affairs staff.

Desktop Computer Hardware and Software - Standard PC workstations and laptops are budgeted in IT Client Support based on a fixed replacement cycle ( 5 years for desktops, 3 years for laptops).
Peripheral equipment is not budgeted in IT. All peripheral equipment requires director approval, will be ordered by the business unit (not IT) using a specific web site, and should be budgeted as a purchase in the requesting business unit cost center. Listed below are some commonly requested peripherals with pricing where applicable.

Computer Peripherals Price List:

| Display Options | Description | Vendor / Model | Approximate Cost |
| :--- | :--- | :--- | :---: |
| For Laptops | Monitors not provided for laptops |  | n/a |
| For Desktops | 17 inch CRT provided for desktops <br> upon failure of previous unit | See HP or SHI catalog on <br> portal for options. |  |
| Cellular | Description | Vendor / Model | Approximate Cost |
| Cellular voice/text | Basic cellular handset and standard <br> accessories. | First Communications | \$30 |
| iPhone | iPhone and standard accessories. | AT\&T, Sprint, Verizon <br> Wireless | \$150 |
| Data-MiFi/Hot Spot | Data device. | AT\&T, Sprint, Verizon <br> Wireless | \$80-\$130 |
| Laptop Options | Description | Vendor / Model | Approximate Cost |
| Port Replicator for <br> nc8440p/8540p/8460/8470 | Part \# A7E34AA\#ABA | \$130 |  |
| Plotters | Description | Hendor / Model | Approximate Cost |
| Standard HP Plotter <br> Purchase | Wide Format plotter/printer purchase <br> and install | HP | \$6,800 |
| Standard HP Plotter <br> Service | Annual service for HP Plotter | Print Service Provider | \$1,654 |

Educational Assistance - Human Resources/Corp Budgets/Forecasts will budget for these expenses.
Environmental Fees - Permit and environmental reporting fees should be budgeted by each location. The Environmental Dept. will budget for all software maintenance fees associated with the ESC CEM data acquisition systems. The Environmental Department will also budget for all stack and CEM RATA testing including labor, materials and outside test contractors. Questions should be directed to Brittany Cannato 879-6442.

EPRI - Business Units should budget for EPRI expenses based on approved programs as well as approved participation in Tailored Collaboration Projects, Co Funding Projects, or Billable Service Agreements (Supplemental Agreements that are in addition to membership selections). Item numbers for EPRI subscriptions will be available from FE Technologies. Subscription payments should be budgeted monthly. Business Units who budget for EPRI should contact Stephen B. Briggs 825-3870, for further information.

Fuel - Nuclear: The nuclear fuel expense budget is developed and entered by the Nuclear Fuels group based on generation plans provided by each nuclear unit. Auxiliary boiler and diesel generator fuel is budgeted by each nuclear site and entered by the Nuclear Generation Business Services. Capital nuclear fuel purchases will be budgeted by the Nuclear Fuels group, to appropriate WBS elements. Fossil: Coal, Oil (light-off and peaking), natural gas, SO2 allowances, NOX allowances, and reagent requirements will be modeled by the FES Planning \& Analysis Group and budgeted by the Fuel Supply Dept., using the plant/unit specific FERC cost centers.

Insurance - Property and liability insurance will be budgeted by Risk Management.
Internal Use of Electricity - The costs of electricity for buildings and power plants owned by FE legal entities within the Competitive Services Unit and Corporate Support Unit, for both generation and nongeneration components will be budgeted by William Shonk (825-5472) of General Accounting Services in coordination with Customer Service, Retail Tariff Analysis \& Forecasting and Facilities Management.

Inter-company Building Rent Revenue/Expense - The inter-company revenue and expense for building rent invoiced between companies will be budgeted by Richard Snyder (500-6807) of General Accounting Services and will be based upon building related operation and maintenance costs budgeted by others.

Materials and Equipment - Material costs for direct purchases and stores issues are budgeted directly in the cost center, order or WBS element along with the responsible cost center. An M\&S overhead will be applied to stores issues. The Controller's Group will enter the rates into the costing sheets and the system will generate the M\&S overheads as part of the budget closing process.

Professional Contractors \& Outside Services - Contracted work from professional and outside services vendors should be accounted for using the categories and cost elements established by Business Unit. Please refer to the tables in Chapter 7 for further details.

Revenues - Budgeted revenues must be entered as negative numbers.
Sales Tax - Business Units should include sales taxes incurred as part of the purchase price of taxable items in their cost centers.

Medical Surveillance Testing - Occupational Health -The outside vendor costs for employees participating in the FirstEnergy Medical Surveillance Program (Regulatory required) should be budgeted in the individual employee's responsible Cost Center. Each Plant and Operating Company should account for these costs (i.e., regulatory required respirator fitness exams, hearing tests, asbestos and lead physicals, etc.). The Industrial Relations-Health \& Safety section will provide specific cost information related to this activity, contact Timothy Walter 825-1706 or Chuck Fabo 825-5162.

Drug \& Alcohol Testing Program - CDLIDOT, Maritime, Safety Sensitive, Ohio State Project Work, New Hires- The outside vendor costs for employees participating in FirstEnergy's Drug \& Alcohol Testing Program (Company and Regulatory required) should be budgeted in the individual employee's responsible Cost Center. Each Plant and Operating Company should account for these
costs in 2014. The Industrial Relations-Health \& Safety section will provide specific cost information related to this activity, contact Timothy Walter 825-1706 or Chuck Fabo 825-5162.

Industrial Hygiene (IH) Assessments - The outside vendor costs associated with OSHA required routine IH monitoring, including associated laboratory analyses and processing costs, should be budgeted in the individual employee's responsible cost center. Routine monitoring (OSHA required) includes periodic assessment of the following hazards: Noise, Asbestos, Inorganic-arsenic, Lead, Personal Protective Equipment, Confined Space Entry, etc. The Industrial Relations-Health \& Safety section will continue to support and budget for special, complex or unique IH assessment needs. Specific cost information related to this budgeting activity will be provided by the Industrial RelationsHealth \& Safety section, contact Timothy Walter 825-1706 or Martin Duffy 825-3814.

Satellite Airtime - The infrastructure cost to provide the service will be paid by IT Network Services. The usage is not an IT cost and should, therefore, be budgeted by the business units at these rates: BTV broadcasts $\$ 800 /$ hour (Bandwidth $3.0 \mathrm{Mb} / \mathrm{hr}$ )

Severance - Each Executive Council member is contacted by HR to determine the appropriate level of severance to be budgeted. Cost of severance payments, as determined by HR, will be entered into the SAP system by HR/Corp Budgets/Forecasts.

Supply Chain/Inventory Items - Inventory Adjustments - Each plant and Operating Company should budget for its own storeroom's inventory adjustments. Assets No Longer Used or Useful - Obsolete Inventory - Each location should budget for its own obsolete inventory write-offs. With market value of these items being unknown, it is recommended that Business Units not budget for proceeds from obsolete inventory sales. Assets Other Than Inventory - Investment recovery proceeds from the sale of items will be given to the Business Unit that provided the items. We will use the accounting the Business Unit provides.

Training - Business unit cost centers should budget for on-site classes that support company-wide, employee, or department-specific programs. The Learning and Development Department (L\&D) will budget for the New Supervisor/Manager program. However, the business unit cost centers should budget for associated travel and lodging expense. Questions should be addressed to Jacqueline Roth 825-7890.

The Information Technology Dept (IT) will budget for on-site classes that support company-wide software applications. Business unit cost centers should budget for on-site classes that support department-specific software applications.

Training - External - The cost of external training and seminars, as well as the travel and lodging expenses will be budgeted in the cost center requesting the training.

Transportation - Energy Delivery Transportation costs will be manually planned to appropriate cost collectors using the cost element 545099 - Fleet usage manual plan. The responsible cost center used on the SPL is the appropriate Operating Company transportation contra cost center.

| CONTRA <br> COST |  |  |
| :---: | :---: | :---: |
| COMPANY | CERTER |  |$\quad$ DESCRIPTION


| Ohio Edison | 406005 | Transportation Costs Undist-OE-Sthrn Reg |
| :---: | :---: | :---: |
| Ohio Edison | 406003 | Transportation Costs Undist-OE-Estrn Reg |
| Penn Power | 436001 | Transportation Costs Undist-PP-Estrn Reg |
| Penelec | 456001 | Transportation Costs Undist-PN-W PA Reg |
| Met Ed | 446001 | Transportation Costs Undist-ME-E PA Reg |
| JCP\&L | 466003 | Transportation Costs Undist-JC-Nrth Reg |
| JCP\&L | 466001 | Transportation Costs Undist-JC-Cntrl Reg |
| West Penn Power | 492001 | Transportation Costs Undistrib-WP01 |
| Mon Power | 470201 | Transportation Costs Undistrib - MP01 |
| Potomac Edison | 483001 | Transportation Costs Undistrib - PE10 |

The Operating Companies must also plan a credit to the contra cost center in the amount planned out to the cost collectors using the same Responsible Cost Center. The contra cost center should be used as the target cost center for these credits.

Vehicle Leases \& Licenses -
Vehicle lease payments should be budgeted, using G/L account 570050 for all Operating Leases and 570075 for all Capital Leases, for the following:

- Fleet Services cost center for Operating Company vehicles, (it is no longer necessary to budget by each department in the Operating Company using the vehicle).
- Each fossil generation plant, each nuclear generation plant, environmental, generation technical services.
- Each non-Operating Company or non-plant department using a vehicle. This would include (but is not limited to): IT, Corporate Transportation, Workforce Development, Administrative Services, T\&D Technical Services.

Vehicle licenses should be budgeted, using G/L account 650300, for the following:

- Fleet Services cost center for Operating Company vehicles.
- Each fossil generation plant, each nuclear generation plant, environmental, generation technical services.
- Each non-Operating Company or non-plant department using a vehicle. This would include (but is not limited to): IT, Corporate Transportation, Workforce Development, Administrative Services, T\&D Technical Services.

All requests for vehicles and/or power operated equipment should be directed to the Fleet Manager (see below) responsible for the area where the vehicle and/or equipment will be assigned. The Fleet Manager will work with Corporate Fleet Services directly to place the order, etc. Any questions related to this matter should be directed to Lisa Pfeifer 824-5090.

| Company | Fleet Services <br> Manager | Internal Phone |  |
| :---: | :---: | :---: | :---: |
| External <br> Phone |  |  |  |
| CEI | Bryan Komlos | $824-5060$ | $216-295-5060$ |
| Toledo Edison | Jeff Burgoon | $883-5938$ | $419-249-5938$ |
| Ohio Edison/Penn <br> Power | Robert Pyles | $835-4099$ | $330-436-4099$ |
| West Penn Power | Mike Geitner | $365-2020$ | $724-743-2020$ |
| Penelec | Bradley Reitmeyer | $430-8844$ | $814-868-8844$ |

# Penn Power Exhibit RAD-45 

Witness: R. A. D'Angelo

| Met Ed | David Naylor | $540-7109$ | $717-848-4109$ |
| :---: | :---: | :---: | :---: |
| Mon Power | Kevin McCleary | $326-1259$ | $304-488-1259$ |
| Potomac Edison | Dale Bohn | $300-6425$ | $301-790-6425$ |
| JCP\&L | Nick Dello Russo | $210-2237$ | $973-989-2237$ |

## Personal Computer Hardware Items that require direct funding by the Business Units:

Unique, non-standard PC configurations. IT budgets each year for standard notebook and desktop models and configurations. At the time IT approaches a client group to plan for the retirement / replacement of their existing computers, the client group will need to provide the funds to cover any cost above the standard model cost. Funding by the client will be required for special features such as:

- RAM (memory) above the standard configuration
- Higher CPU speeds or multiple CPU's
- Tower model
- Floppy drive (no longer provided on new PCs)
- Video graphic cards
- Extra network interface cards
- Optical or wireless mice or special trackball configurations
- Ergonometric keyboards
- Larger internal or external storage drives or memory sticks
- Port replicators or docking stations
- Second batteries for notebook PCs
- Glare shields
- DC power converters or adapters
- Monitors for notebooks (If you presently have one with your notebook, when it fails, it will not be replaced without business unit funding.)
- Local printer (all printer requests must be forwarded to David A. Zeigler for review).

Process related PCs. IT budgets each year for rollover of $\mathbf{2 0 \%}$ of the office desktop PCs and $\mathbf{3 3 \%}$ of the office notebook PCs. PCs that are not typically used by employees, but rather dedicated to a process are not funded out of the PC capital budget. Funding must be provided either within a capital project when these systems are upgraded, or by the business unit. Examples of process PCs include:

- AFSO and MRMS (TPP)
- EMS Consoles
- GMS Consoles
- HVAC controls
- Plant control systems
- Badge readers
- Field equipment testing or data logging PCs
- Special printer, scanner or plotter interfaces
- Cache PCs (pseudo servers)

Off-cycle (premature) replacement PCs. As mentioned earlier, IT budgets each year for rollover of $20 \%$ of the office desktop PCs and $33 \%$ of the office notebook PCs. The scheduling of replacements is determined by the local Desktop Support team. Should any department require a notebook PC to be replaced sooner than every 3 years, or a desktop model to be replaced sooner than every 5 years, the client group must fund the complete cost of the replacement.

Off-cycle upgrade of a desktop unit to a notebook unit. If an employee, because of their job responsibilities, requires switching from a desktop PC to a notebook PC, the full cost of the new notebook PC must be borne by the business unit if their desktop is not scheduled to be replaced. The exception to this rule is if the business unit still has un-deployed notebook PCs in its annual replacement allotment, the business unit leadership may elect to redirect a yet-to-be-deployed
notebook from its pool to the employee in need, at the sacrifice of another employee within the business unit. That impacted employee would then be given the notebook recipient's existing desktop PC.

On-cycle upgrade of a desktop unit to a notebook unit. If an employee, because of their job responsibilities, requires switching from a desktop PC to a notebook PC, and the timing of this need coincides with our replacement schedule, IT will cover the higher cost of the notebook PC. New or replacement notebooks will require director level review and approval. There must be a valid business case for using a notebook model.
Second PCs. If an employee requires more than one PC to perform their job, the full cost of the additional PCs must be borne by the business unit. This includes instances where a hot-standby PC must be provided for a critical function. The exceptions to this rule are console-based PCs, such as those in plant control rooms or regional dispatch centers where 2-3 PCs and/or monitors are part of the console and required for the operator to perform their work. This second PC will be an asset managed and maintained by IT, following the same standards and practices used for ITfunded PCs.

Moves, Adds, Changes (MACs) of Employee Services and Devices at Company Facilities For all locations other than Shared Services' workspace in Akron General Office and the Reading General Office - Business Units will be responsible for budgeting for their planned moves, adds and changes described below:

- Non-computer equipment, such as telephone sets, headsets, speakerphones etc.
- Install and terminate voice cabling to workstations.
- Creation of the workstations in the telephone system database.
- Cross-connected and install telephone instruments.
- Move telephones to existing or new jack locations.
- Install, terminate, and test data cabling to the workstations.
- Activate data jacks by patching through to data switches.
- Install, terminate, and test inside fiber optic cabling.
- Install and terminate coax cabling for applications such as Satellite for IDL.

This does not include maintenance or repair responsibilities for these items. Normally the moves, adds, and changes are considered an O\&M cost, unless they are associated with a major project.

The usual way to schedule moves, adds and changes is to contact your local facilities management team. This team will contact IT Field Operations to arrange for the approved vendors to make your requested changes. MACs that do not require Facilities involvement can be requested by calling the IT Service Desk. Please adjust your 2014 budget to include your facilities plan.

## CHAPTER 4: CAPITAL MANAGEMENT PROCESS

FE's capital investments are integral in helping the company achieve operational excellence and financial success. The capital expenditures, are necessary to ensure the reliable generation and distribution of electricity, and compliance with regulatory requirements.

The Capital Planning \& Management Process is a formalized process that provides the platform for capital discussions and allocation decisions at all levels of the organization. The process helps senior management effectively understand competing uses for FE's cash, funding requirements for capital investments, and to allocate capital dollars across various business units (ED, FENOC, Fossil, Corporate). Ref. Capital Planning \& Management Corporate Policy CP-TPR-6101 and FE 5-year Capital Portfolio Development and Capital Management Procedure (FirstPlace Portal/About FirstEnergy/Policies and Practices/Corporate Policies/Capital Planning \& Management.pdf)

## Capital Categories:

Mandatory - Non-discretionary investment required by law, regulatory order, or duty to serve customers (e.g. new business). Other required investment to meet externally driven regulatory commitment.

Maintain - Discretionary investment to support and sustain existing infrastructure at existing performance levels. Specific operational performance and financial tracking support these projects (e.g. SAIDI, CAIDI, EFOR).

Improve - Discretionary investment to improve existing infrastructure or performnace levels beyond existing business plan key performance metric commitments. Improvement in specific operational performance and financial benchmark targets support these projects (e.g. SAIDI, EFOR, ROI).
Value - Discretionary, non-recurring investment for a defined initiative which improves or expands existing infrastructure or creates new business opportunities and drives improved economic value.

## Capital questions contact:

| Business Area | Business Area Contact | Capital Support |
| :---: | :---: | :---: |
| Corporate Services - IT | Dave Wolfe (500.6004) | Scott McBride (825.4888) |
|  | Megan Mazza (850-2277) |  |
| Corporate Services Facilities | Bob Grosjean (825.6393) |  |
|  | Paul Shultz (825.5495) |  |
| Corporate Services - Other | Business Area Management |  |
| FE Utilities/Transmission | Mark Myers (825.7961) |  |
|  | Rick Long (500.6820) |  |
| Fossil Generation | Kate Pinkus (850.6820) |  |
|  | Lori Sunbury (850.6842) |  |
| FENOC | Kate Pinkus (850.6820) |  |
|  | Lori Sunbury (850.6842) |  |
| FES - Other | Steve Monter (850.7269) |  |
|  | Trevor Fernandez (850.6851) |  |

## Capital Projects - Only budget capital projects to the level of spending identified in Executive Council guidance

Work Breakdown Structures (WBS) - Labor is budgeted through Activity Input Planning using UIPlanner. Loaded labor costs, which include overheads, are moved from the employee or sending cost center to a WBS element by planning productive hours by activity type. Instructions for Activity Input Planning are located in Chapter 2 - Labor. All 'Other than Labor' costs are input into UIPlanner and must include the cost element and the appropriate responsible cost center. Instructions for input are found in Chapter 3 - OTL.

If new WBSs are created, all master data fields (i.e., costing sheets, project type, interest profiles, settlement rules, etc.) must be entered into UIPlanner. (See Key Contact appendix, page 26, for names to set up the WBS Master Data.) In all cases, it is critical that the WBS and WBS element start and finish dates be accurate and the WBS should be established at the Company which will own the assets. Departments which complete work for other Companies should cross charge the other Company WBS. Planning must never be entered in months beyond the finish date. These dates are used by the capital forecast module of UIPlanner to compute and input AFUDC and depreciation and in reporting, including rate cases. All WBSs with settlement rules to asset accounts (CWIP, RWIP \& OWIP) require an AFUDC element regardless if the project would qualify for AFUDC.

The status of WBSs must be TECO (Technically Complete), when the project is ready for service. The TECO date is passed to UIPlanner and the project is placed in-service. If a project is suspended or ceases construction the WBS elements should be locked and the status of the project is changed to "suspended" in PowerPlant. The data will pass to UIPlanner and this will shut off the AFUDC calculation. If a project is cancelled existing charges should be transferred to expense, the AFUDC should be reversed and once the charges have been removed from the WBS, the WBS should be 'business closed". It is important to update the status to TECO on a timely basis since it directly reflects the calculation of AFUDC and the beginning of depreciation in PowerPlant / UIPlanner.

Construction Indirects (Supervisory, Engineering, Administrative and General Overheads) Capital costs should be direct charged to the related WBS whenever possible. However, in those cases where certain costs have a proven relationship to construction, an assessment or allocation will be made from predefined cost centers to Operating Company construction indirect cost centers (Supervision, Engineering, and A\&G). An example of this would be supervision of an engineering group that supports capital projects overall. A portion of those supervision costs will be allocated to capital using the prescribed process. Rates will be calculated by General Accounting Services for each Operating Company and overhead category and will be applied on the labor and contractor portion of the budgeted WBS elements.

PowerPlant Property Unit Catalog - The PowerPlant Property Unit Catalog should be used to determine what items or activities are capital. Assistance in using the Property Unit Catalog or questionable items should be directed to Tim Clyde (825-5863), Property Accounting Services, prior to inclusion of an item in the budget as capital.

Small Tools and Equipment - Only small tools and equipment greater than $\$ 1,000$ should be capitalized.

Corporate Facilities will budget for all facility-related Mandatory and Maintain capital project work across FirstEnergy. Each Business Unit will budget for any Value Added or Improve facility related capital work. If there are questions on definition, please refer to the Capital Definitions section.

## Vehicles/Power Operated Equipment

When acquiring the equipment identified below, the acquisition should be coordinated with the Corporate Fleet Services Department. The Corporate Fleet Services Department will determine with Treasury whether to purchase or lease the equipment. If the decision is to purchase the equipment, Corporate Fleet Services will purchase the equipment and charge the appropriate capital WBS. The equipment will also be given a vehicle number and tracked in the M5 Fleet System.

All requests for vehicles and/or power operated equipment should be directed to the Fleet Manager (see below) responsible for the area where the vehicle and/or equipment will be assigned. The Fleet Manager will work with Corporate Fleet Services directly to place the order, etc. Any questions related to this matter should be directed to Lisa Pfeifer 824-4090.

| Company | Fleet Services Manager | Internal Phone | External Phone |
| :---: | :---: | :---: | :---: |
| CEI | Bryan Komlos | 824-5060 | 216-295-5060 |
| Toledo Edison | Jeff Burgoon | 883-5938 | 419-249-5938 |
| Ohio Edison/Penn Power | Robert Pyles | 835-4099 | 330-436-4099 |
| West Penn Power | Mike Geitner | 365-2020 | 724-743-2020 |
| Penelec | Bradley Reitmeyer | 430-8844 | 814-868-8844 |
| Met Ed | David Naylor | 540-7109 | 717-848-4109 |
| Mon Power | Kevin McCleary | 326-1259 | 304-488-1259 |
| Potomac Edison | Dale Bohn | 300-6425 | 301-790-6425 |
| JCP\&L | Nick Dello Russo | 210-2237 | 973-989-2237 |


| Asset Class | Vehicle Type <br> 1 |
| :---: | :--- |
| 2 | Light Duty - primarily downsize pickups, mini vans, passenger cars \& units <br> impacted by EPAct <br> Medium Duty - includes full size pickups, vans, substation vehicles, small stake <br> body trucks, etc |
| 3 | Heavy Duty - includes heavy trucks other than aerial units, digger derricks or crane <br> trucks |
| 4 | Aerial Trucks - includes all manlift capabilities regardless of size <br> 5 <br> 6 |
| Digger Derrick Trucks - includes all digger derricks <br> Crane Trucks - includes all trucks with cranes mounted on them and licensed. Off |  |
| 7 | road cranes are included in construction equipment <br> Trailers - includes all trailers regardess of size |
| 8 | Construction Equipment - includes backhoes, loaders, excavators, off-road cranes, <br> dozers, etc |
| 9 | Forklifts, Mowers, Misc - includes forklifts, riding sweepers, scrubbers, snow <br> removal equipment, mowers, ATV's \& other. |

Office Furniture - The Real Estate and Facilities Department manages and budgets all capital expenditures for furniture as well as maintains an inventory of existing furniture items. The Facilities Section has developed the Workspace Guidelines Policy and receives substantial discounted pricing on all furniture used by the Company.

All requests for furniture should be directed to Kathy Tatman, Supervisor, Asset Planning through an e-mail notification. Please base your request on budgeted new hire positions and/or replacement requirements for worn, damaged or obsolete furniture. Any purchases of furniture made outside of this arrangement will not be approved.

Software Costs - The following guidelines should be used for capitalizing computer software costs:

## New Computer Software Costs:

- designed as a complete system
- has a life greater than 1 year
- capitalized cost is greater than $\$ \mathbf{5 , 0 0 0}$

Preliminary study costs, data conversions, and training are expensed when installing computer software.

## Upgrades and Enhancements of Existing Software:

Upgrades and enhancements of existing software are expensed unless additional functionality is added and the cost is greater than $\$ 5,000$ and is a significant upgrade or enhancement.

Questions concerning capitalization of Computer Software items should be discussed with Tim Clyde (825-5863), Property Accounting Services, prior to inclusion in the budget.

Generation Employee Training Costs - All employee training costs should be expensed, except for Yards Creek.

IT Projects - Activity allocate appropriate labor charges to IT managed projects that require Business Unit support. All IT projects created under SC00 WBSs that are for the benefit of other Companies should have settlement rules that settle these costs to other company WBSs. IT Department should coordinate these projects with the appropriate Business Services group.

Depreciation - The computation and application of depreciation is forecasted in UIPlanner, it is Property Accounting Services responsibility to ensure the accuracy of the forecast.

Major Retirements of Plant - For retirements of plant, in which the estimated original cost exceeds $\$ 5$ million, the following information is required: the month the item is being retired, the estimated original cost, and a short description of the item being retired. For all other retirements a percentage assumption is applied to all monthly assets in serviced.

Generation Cost of Removal and Salvage - The budgeting of cost of removal and salvage will be performed by Generation. Generation cost of removal is expensed, except for Yards Creek.

# Energy Delivery (Distribution and Transmission) Cost of Removal and Salvage - The budgeting of distribution and transmission cost of removal and salvage will be performed by Energy Delivery. For Met-Ed, Penelec, Penn Power and West Penn Power and JCP\&L, the cost of removal and salvage will be expensed as a component of the depreciation expense in accordance with the current rate making. The planned cost of removal and salvage will settle to Account 403, Depreciation Expense. 

## CHAPTER 5: INTERCOMPANY TRANSACTIONS

Intercompany transactions are now settled within UIPlanner as part of the model sequence iterative report design and verified by Business Planning and Performance.

Some examples of inter-company transactions include:

- Purchased Power and Revenues including RFP and POLR sales
- Interest Income or Expense from Associated Companies
- Leases including ATSI ground lease
- Internal Use of Company Electricity
- Billings between subsidiaries (Bayshore Power, FE Properties, etc.)


## CHAPTER 6: FIRSTENERGY SERVICE COMPANY

## Service Company Cost Centers - Budgeting Guidelines:

## Direct Charging

When preparing your budget and incurring actual expenditures, it is important to consider who the beneficiary of your services is. Direct charging of time and expenses to the entity for which the services are being rendered is the preferred approach, where possible. To the extent that costs can be readily identified and associated with a specific transaction, the charging of those costs should be directed to the company(ies) receiving the goods or services, even when there is more than one receiving company.

## Indirect Charging

Indirect charging through the Service Company assessment process supplements the direct charging of costs. Assessments are used to allocate the costs that were not direct charged from a cost center. Frequently, costs cannot be direct charged because the recipient cannot be readily identified, or excessive administrative expense would result. Indirect charging employs the use of one of FirstEnergy's approved assessment methods. An approved assessment method is assigned to each Service Company cost center. The assessment methodology and the targeted legal entities for the Service Company cost centers can be provided by General Accounting upon request.

## Service Company Assessments

Any desired change to organizational structure or revisions to the methodology used to allocate expenses from a Service Company cost center to the other legal entities must be reviewed and approved by Jason Petrik, Assistant Controller (825-4049), prior to the change being implemented. This review process in necessary to insure that inter-company service agreements remain current and valid and that all regulatory requirements are being satisfied.

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## Budget Reference Material

## Key Terms \& Concepts

## Activity Price

The price calculated for an activity type used for charging labor hours and transportation usage to cost collectors.

## Allocations

Used to: assess shared services costs; move charges to correct legal entity; and/or assign to capital where appropriate.

## Assessments

Transactions that allocate costs from Cost Centers to receiver cost objects.

## Cost Allocation

Distribution of costs from one collector to another to reflect actual usage or predefined rates.

## Costing Sheet

Defines an overhead calculation. Contains the percentages to be applied to the base amount and the collector to be credited.

## CREWS (Customer Request Work

 Scheduling)Used to estimate and schedule Transmission and Distribution projects.

## Customer Care Services (CCS)

The SAP R/3 software module for utility customer information.

BPC (BusinessObjects Planning \& Consolidation)
The consolidation module of used for legal consolidation reports.

Financial Accounting Module (FI) SAP R/3's grouping of financial data required for external reporting purpose such as balance sheet, P\&L statements, cash flows, and retained earnings.

## Overhead Rate

A surcharge, expressed as a percentage, used to spread indirect costs over a defined base.

## Project System (PS) SAP R/3 Module

Module is used to manage large projects. Accounting data used to manage WBS Elements are also located in this module.

## Profit Center

Organizational unit that reflects a managementoriented structure for the purpose of internal control and reporting.

## Profit Center Accounting (PCA)

A module of SAP used to manage the business by segregating costs and revenues by business units. Measures profitability by profit center or high-level business unit.

## Settlement

The SAP process of allocating costs from temporary cost collectors such as orders or WBSs to other cost collectors such as FERC cost centers.

## Settlement Rule

Set of instructions that define distribution of costs incurred on a temporary cost object such as an order or WBS.

## Key Contacts

By Department:

| Area | Kev Contact | Responsibility |
| :---: | :---: | :---: |
| Corporate Budgets and Forecasts | - Olenger Pannell <br> - Mike Kreighbaum <br> - Mark Dudley <br> - Marita Tatarko <br> - Abigail Nahs | - UIPlanner specific budget system preparations <br> - Updating Activity prices <br> - Communicating the dates and times for budget input <br> - Oversight and management of the annual/multi-year budgeting and forecast processes <br> - Tracking budget status and ensuring completion of key budget mid-point deliverables <br> - Ad-hoc budget related reporting |
| Business Services and Corporate Business Planning | - Marie Rote <br> - Mike Clemens <br> - Carrie Wokaty | - Corporate Shared Services - budget and forecast coordination and support <br> - HR Benefits and Special Item budgets and forecasts |
| Capital Management | - Scott McBride | - Capital Management Processes |
| Controllers Department | - Nancy Kramer <br> - Mike Strozak <br> - Rich Snyder | - Processing/Closing of SAP Plan <br> - Develop and input Costing sheets (overheads) <br> - System Maintenance - Versions, SPL, CO <br> - Accounting Issues |
| Competitive Business Planning | - Steve Monter | - Generation and Competitive segment forecasting <br> - Budget and forecasting of competitive retail sales, load \& revenue |
| Rates | - Brad Eberts <br> - Denise Mullins | - Development of the Load, MWH Sales, and Wires Forecast <br> - Forecasting of regulated revenue for budgeting |
| Supply Chain | - David Zeigler | - Personal Printer requests |

For SAP/UIPlanner Master Data questions or to set up new Master Data for the Budget/Forecast:

| Master Data |  |  |
| :---: | :---: | :---: |
| Contact: |  |  |
| $>$ Cost Centers - Nancy Kramer 500-6639; Michael Strozak 500-6554 |  |  |
| $>$ Internal Orders - Nancy Kramer 500-6639; Michael Strozak 500-6554 |  |  |
| $>$ Cost Elements - Will Blair 825-5866 |  |  |
| $>$ WBS Elements - By Business Unit |  |  |
| Energy Delivery Operating companies: |  |  |
| The llluminating Co Ohio Edison/Penn Power | Eric Weaver | $\begin{aligned} & 824-8183 \\ & 835-4021 \end{aligned}$ |
| Toledo Edison | Ann Toth | 883-5016 |
| Jersey Central | Sue Gabel | 200-8673 |
| Met Ed | Pete Dragovich | 500-6892 |
| Penelec | Guy Costa | 430-8874 |
| Mon Power | Sara Cetorelli | 333-7320 |
| Potomac Edison | Terri Kuhn | 200-8711 |
| West Penn | Marianne Sobota | 350-5847 |
| ED Finance | Eric Herrmann | 825-5444 |
| Fossil Generation Group | Katie Pinkus Lori Sunbury | $\begin{aligned} & 850-6820 \\ & 850-6842 \end{aligned}$ |

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| Nuclear (FENOC) | Katie Pinkus <br> Desiree Etchell | $850-6820$ |  |
| :--- | :--- | :--- | :--- |
| $850-6842$ |  |  |  |
|  | Information Technology, Security | Mike Clemens | $825-5394$ |
| Facilities | Mike Clemens | $825-5394$ |  |
|  | All Other Groups | Mike Czubinski | $825-5646$ |

## Key Contacts

For Questions by Topic or Business Unit:

| Questions or Issue Topic | Name | Phone Number |
| :---: | :---: | :---: |
| Inter-company Billings | Mike Kreighbaum | 825-2556 |
| General UIPlanner | Mike Kreighbaum <br> Mark Dudley <br> Marita Tatarko <br> Abigail Nahs | $\begin{aligned} & 825-2556 \\ & 825-1683 \\ & 825-4246 \\ & 825-4180 \end{aligned}$ |
| FE Solutions <br> Fossil Generation Group <br> Nuclear (FENOC) | Steve Monter Mike Kormushoff <br> Katie Pinkus Lori Sunbury <br> Katie Pinkus Lori Sunbury | $\begin{aligned} & \hline 850-7269 \\ & 850-7026 \\ & \\ & 850-6820 \\ & 850-6842 \\ & 850-6820 \\ & 850-6842 \\ & \hline \end{aligned}$ |
| Records Management/Corporate/Real Estate | Marie Rote | 825-3854 |
| Energy Delivery Business <br> The illuminating Co <br> Ohio Edison/Penn Power <br> Toledo Edison <br> Jersey Central <br> Met Ed <br> Penelec <br> Mon Power <br> Potomac Edison <br> West Penn <br> Utility Support <br> Customer Service \& EE <br> (Energy Efficiency) | Gregory Werner <br> Eric Weaver <br> Ann Toth <br> Sue Gabel <br> Pete Dragoich <br> Guy Costa <br> Sara Cetorelli <br> Clarence Haden <br> Marianne Sobota Eugene DeChellis Rob Wemhoff | 824-8783 <br> 835-4021 <br> 883-5016 <br> 200-8673 <br> 500-6892 <br> 430-8874 <br> 333-7320 <br> 300-5218 <br> 350-5847 <br> 825-7969 <br> 825-7981 |
| Finance | Marie Rote | 825-3854 |
| General Counsel (Legal, Claims, Communications, Corp. Affairs, Government Affairs) | Marie Rote | 825-3854 |
| Human Resources | Marie Rote | 825-3854 |
| Information Technology | Mike Clemens | 825-5394 |
| Supply Chain Corporate Security, Flight Operations | Mike Clemens Mike Clemens | $\begin{aligned} & \hline 825-5394 \\ & 825-5394 \\ & \hline \end{aligned}$ |

Penn Power Exhibit RAD-45 Witness: R. A. D'Angelo Page 27 of 34

## Corporate Shared Services - Professional \& Contractor Services - Guidelines

| GL | GL Short Name | GL Long Name | General Description | CsS Description/Examples |
| :---: | :--- | :--- | :--- | :--- |
| 550100 | OutContrctProNonLeg | Outside Services/Contractors - <br> Professional Non-Legal | Service Contracts for unique skill- <br> sets that we don't do in-house. |  |
| 550200 | OutContractProLegal |  <br> Investigations, Software Application <br> Consulting/Training, Lobbying Firms, <br> Ethnics Vendors, Expert Legal <br> Witness, and Facility "White" Collar - <br> Engineering, Electrical, etc. |  |  |
| 550300 | OutContract-Other | Oufessional Legal |  |  |
| 550310 | OutContractTreeTrim | Outside Services/Contractors - <br> Other | Facilities | Legal Fees/Legal Expenses |

Fossil - Professional \& Contractor Services Guidelines (pgs. 28-29)

| GL | GL Short Name | GL Long Name | General Description | Fossil Description/Examples |
| :---: | :---: | :---: | :---: | :---: |
| 550100 | OutContrctProNonLeg | Outside Services/Contractors <br> - Professional Non-Legal | Labor outside of the plants possessing skills/knowledge that the plant does not have. | Examples include: NDE testing, Divers, Hydrochem (hydro blasting), Training Vendors (providing training on and off site), Guest Speakers, Inspection Services, Lab testing/services, Calibration, Non-repair/non-refurbishment of equipment, Welding Inspectors (x-ray team), Screening Systems International, David C Kissig Enterprises Inc., Turbine Services Incorporated, Structural Integrity Associates, Janx, Surveying, Schedulers, Ardmore, Gas line maintenance. |
| 550105 | OutsideSrvsContFees | Outside Srvs/Contractors Profess Conting | Contingency Fees (jefferson wells for example) | Contingency and incentive fees paid to vendors. |
| 550200 | OutContractProLegal | Outside Services/Contractors <br> - Professional Legal | Legal Fees/Legal Expenses | FERC relicensing (primarily used by CT/Hydro plants) |
| 550210 | OutContractEngineer | Outside Services/Contractors <br> - Engineering | Contractors asked to provide engineering analysis/studies, project support, or technical development that cannot be completed with in-house engineering staff. | Examples include: Monitoring wells, Marland, RE Warner Consultants helping with outages, GE Energy, Kleinschmidt, Alstom, Siemens, Middough, Door maintenance (CT/Hydro). |
| 550300 | OutContract-Other | Outside Services/Contractors <br> - Other | Facilities related work | Examples include: Scrap Removal, Garbage and Sewage removal, HVAC/ Gaiorial work, Lawn care, Snow remov Non-Plant Equipment, Sirens maintenance, Building and structures maintenance, General Pest Control, Elevator repairs, Grounds and roads maintenance, Auto Repair, Laundry Services, Fence Repairs, |


| GL | GL Short Name | GL Long Name | General Description | Fossil Description/Examples |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | US Coast Guard, Fire Inspections, Vegetation Management. |
| 550305 | OutContract-ProjMgmt | Outside Services/Contractors <br> - Project Mgmt | Consultants providing project management services such as costing reports. | Examples include JR Johnson, Sargent and Lundy. |
| 550335 | OutContrRepairRefurb | Outside Services/Contractors <br> - Repair/Refurbishment <br> /Overhaul of Plant Equipment | Off-site labor repairing/refurbishing/replacing plant production equipment. | Examples include: Repair/refurbish valves, motors, circuit boards, etc.; CMT for Motor repairs, Cleveland Valve \& Gauge for valves, Columbus Equipment Company, City Machine Technologies Inc., Monarch Electric Service Company, 3-D Service LTD. |
| 550500 | ONSITECONSLT/ STFFAUG | On-Site Consultants/Staff Augmentation | Managed Service Provider - used to manage co-employment issues | Example: Guidant |
| 550501 | PRIMMNT CONTRCRAFT | Primary Maintenance Contractor - Craft | On-site craft labor | Examples include: Enerfab, outage work/support, GMAs for bringing in Boilermakers, Insulators, Electrical Contractors, Mechanical Contractors, Patent Construction Systems, Enerfab, Burnham Industrial Contractors, McCarl's Incorporated, ERB Electric Company, Crane Inspections. |
| 550503 | Envrmnt Wrk \& Comp | Environmental Work and Compliance | Contractors working on Environmental projects or performing work in support of Environmental Compliance. | Examples include: any fees, Consulting services, Test monitors, Replace monitors/analyzers, Ash site maintenance, Cleaning spills, air/water waste, Performing lab work. |

Penn Power Exhibit RAD-45 Witness: R. A. D'Angelo Attachment A
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| GL | GL Short Name | GL Long Name | General Description | Fossil Description/Examples |
| :---: | :---: | :---: | :---: | :--- |
| 550513 | OnSiteContractedLbr | On-Site Contractor Labor | Labor outside of the plants providing <br> "turn-key solutions". | Examples include: Fluor, Stein <br> (preventative maintenance). |

## Fossil - Project Construction - Professional \& Contractor Services Guidelines

| GL | GL Short Name | GL Long Name | General Description | Fossil - Project Construction Description/Examples |
| :--- | :--- | :--- | :--- | :--- |
| 550100 | OutContrctProNonLeg | Outside <br> Services/Contractors <br> -Professional Non- <br> Legal | Labor outside of FirstEnergy <br> possessing specialized <br> skills/knowledge that we do not <br> have in-house. | Examples include: Print Services, Nurses, Investigation <br> Services, Background Checks/Investigations, Training, <br> Inspection Services. |
| 550105 | OutsideSrvsContFees | Outside <br> Srvs/Contractors - <br> Profess Conting | Incentive fees | Examples include: Incentive arrangements, Contractor <br> Shared Savings (for example B\&W), Contractor Bonuses <br> and Incentives. |
| 550210 | OutContractEngineer | Outside <br> Services/Contractors <br> -Engineering | Contractors asked to provide <br> engineering analysis/studies, <br> project support, or technical <br> development that cannot be <br> completed with in-house <br> engineering staff. | Examples include Conceptual Designs, Detailed Design <br> Mods, Eng. Studies, Non-Mod, Calculations, Evaluations. |
| 550300 | OutContract-Other | Outside <br> Services/Contractors <br> - Other | Facilities related work | Facilities related work such as: Scrap Removal, Janitorial <br> work, Lawn care, Snow removal, Garbage and Sewage <br> removal, HVAC/ Non-Plant Equipment, Sirens <br> maintenance, Building and structures maintenance, <br> General Pest Control, Elevator repairs, Grounds and <br> roads maintenance, Auto Repair, Laundry Services, Fence |

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Attachment A
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|  |  |  |  | Repairs, US Coast Guard, Fire Inspections, Vegetation <br> Management. |
| :--- | :--- | :--- | :--- | :--- |
| 550305 | OutContract-ProjMgmt | Outside <br> Services/Contractors <br> - Project Mgmt | Consultants providing project <br> management services such as <br> costing reports. | Examples include JR Johnson, Sargent and Lundy. |
| 550501 | PRIMMNT <br> CONTRCRAFT | Primary <br> Maintenance <br> Contrator -Craft | On-site craft labor | Examples include: Enerfab, GMAs for bringing in <br> Boilermakers, Insulators, Electrical Contractors, <br> Mechanical Contractors. |
| 550513 | OnSiteContractedLbr | On-Site Contractor <br> Labor | Fixed price, milestone payment, <br> or other "turn key" type <br> purchase agreement. | Examples include: OEM contracts (B\&W), EPC contracts <br> (Bechtel), Patent, ERB, contractors for excavating, <br> painting, etc. |

Nuclear - Professional \& Contractor Services Guidelines (pgs. 31-32)

| GL | GL Short Name | GL Long Name | General Description | FENOC Description/Examples |
| :---: | :---: | :---: | :---: | :---: |
| 550100 | OutContrctProNonLeg | Outside Services/Contractors - Professional NonLegal | Service Contracts for Unique skill sets that we don't do in-house | Divers, Vendor Reps, Training Vendors (providing training on and off site), Guest Speakers, Inspection Services, Vendor Source Inspections, Refueling Services, Chemistry Services, RP Services (excluding on-site support), Laundry Services, Management requested contractors/facilitators, Lab testing, Calibration of M\&TE, Software customization (firm price), CNRB Members, Investigation Support, TLD Contracts, Supplier List Updates, ANI Support, Corrective Action Program Support, Print Services (Kinkos), Bulk Gas Delivery, Demurrage. Refer to cost element 550513 to ensure correct placement of vendor. |

Penn Power Exhibit RAD-45 Witness: R. A. D'Angelo
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| GL | GL Short Name | GL Long Name | General Description | FENOC Description/Examples |
| :---: | :---: | :---: | :---: | :---: |
| 550210 | OutContractEngineer | Outside <br> Services/Contractors <br> - Engineering | Engineering Expenses | Engineering support occurring predominantly offsite, Conceptual Design, Detailed Design Mods/ECR, Eng. Studies, Non-Mod, Calculations, Evaluations. Refer to cost element 550513 to ensure correct placement of vendor. |
| 550300 | OutContract-Other | Outside Services/Contractors - Other | Other | Lawn care and Snow removal, Garbage and Sewage removal, HVAC/ Non-Plant Equipment, Sirens (Maintenance), Building, Structures, Beta Security, Security Range Maintenance, General Pest Control. Refer to cost element 550513 to ensure correct placement of vendor. |
| 550325 | OutContractRadwstDsp | Outside <br> Services/Contractors <br> - Radwaste | FENOC specific | Transportation, Burial, Compacting, Processing and Analysis/Characterization of radwaste. Refer to cost element 550513 to ensure correct placement of resource. |
| 550335 | OutContrRepairRefurb | Outside <br> Services/Contractors <br> - <br> Repair/Refurbishment IOverhaul of Plant Equipment | Self-explanatory - see FENOC Description | Repair/refurbish valves, motors, circuit boards, etc. Security Repairs (Target Systems, Scope, NVG units), Beta test equipment. Refer to cost element 550513 to ensure correct placement of vendor. |

Penn Power Exhibit RAD-45

| GL | GL Short Name | GL Long Name | General Description | FENOC Description/Examples |
| :--- | :--- | :--- | :--- | :--- |
| 550500 | $\begin{array}{l}\text { ONSITECONSLT/ } \\ \text { STFFAUG }\end{array}$ | $\begin{array}{l}\text { On-Site } \\ \text { Consultants/Staff } \\ \text { Augmentation }\end{array}$ | $\begin{array}{l}\text { Managed Service } \\ \text { Provider - used to } \\ \text { manage co-employment } \\ \text { issues }\end{array}$ | Guidant |
| 550501 | $\begin{array}{l}\text { PRIMMNT } \\ \text { CONTRCRAFT }\end{array}$ | $\begin{array}{l}\text { Primary Maintenance } \\ \text { Contractor - Craft }\end{array}$ | $\begin{array}{l}\text { Interfab/Day } \\ \text { Zimmerman/etc }\end{array}$ | NPS contracted labor, site manager, administrative personnel. |
| 550502 | TIME\&MATCONTR | $\begin{array}{l}\text { Time and Material } \\ \text { Contractor }\end{array}$ | $\begin{array}{l}\text { Primary Security } \\ \text { Contractor }\end{array}$ | $\begin{array}{l}\text { Subcontracted outside security for Beaver Valley (Burns and } \\ \text { Securitas). }\end{array}$ |
| 550513 | OnSiteContractedLbr | $\begin{array}{l}\text { On-Site Contractor } \\ \text { Labor }\end{array}$ | $\begin{array}{l}\text { Goes back into capital } \\ \text { allocation process for } \\ \text { FENOC. }\end{array}$ | $\begin{array}{l}\text { Contracted workers that are on site for a continuous period of 5 } \\ \text { days or greater. Construction contractors other than NPS or } \\ \text { Guidant that are brought on site to support a specific PRC, } \\ \text { MERP, or outage project as identified by project managers. } \\ \text { Contracted workers that are on site for a continuous period of } \\ \text { time (e.g. 5 or greater continuous days i.e. Janitorial services). }\end{array}$ |
| Part of fixed price, milestone payment, or other "turn key" type |  |  |  |  |
| purchase agreement which represents the portion that is |  |  |  |  |
| contract labor and performed on-site. Examples of included |  |  |  |  |
| services are: Maxcom (telecommunication support), |  |  |  |  |$\}$

Penn Power Exhibit RAD-45 Witness: R. A. D'Angelo Attachment A
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Energy Delivery - Professional \& Contractor Services Guidelines

| GL | GL Short Name | GL Long Name | General Description | FEU Description/Examples |
| :---: | :--- | :--- | :--- | :--- |
| 550100 | OutContrctProNonLeg | Outside Services/Contractors - <br> Professional Non-Legal | Service Contracts for Unique <br> skill sets that we don't do in- <br> house | OSI inbound calling, Vendor services, Training |
| 550210 | OutContractEngineer | Outside Services/Contractors - <br> Engineering | Engineering Expenses | Off-site enginearing that is primarily in <br> Transmission and Substation voltages. |
| 550300 | OutContract-Other | Outside Services/Contractors - <br> Other | Other | Storms Transmission aerial inspections, <br> Facility improvements, Cable locating, Grass <br> cutting, Snow removal, Janitorial, Heating, and <br> Electrical repair |
| 550310 | OutContractTreeTrim | Outside Services/Contractors - <br> Tree Trim | Tree trimming | Vegetation management |
| 550320 | OutContractTempAgnc | Outside Services/Contractors - <br> Temporary | Temp hires not managed by a <br> staff service provider. | Flaggers (Traffic control), Safety audits, Call- <br> Center Temp Workers |
| 550330 | OutContrctEngDrawing | Outside Services/Contractors - <br> Engineering Drawings | Engineering Drawings | Lightly used. Outside drafting distribution work. <br> Roll into 550210. |
| 550335 | OutContrRepairRefurb | Outside Services/Contractors - <br> Repair/Refurbishment/Overhaul <br> of Plant Equipment | Outside Services/Contractors - <br> Repair/Refurbishment/Overhaul <br> of Plant Equipment | Outside Services/Contractors - <br> Repair/Refurbishment/Overhaul of Plant <br> Equipment |
| 550500 | ONSITECONSLT// <br> STFFAUG | On-Site Consultants/Staff <br> Augmentation | Managed Service Provider | Guidant |
| 550503 | Envrmnt Wrk \& Comp | Environmental Work and <br> Compliance | Environmental | Claims follow-ups, Oil testing, and Clean-ups. |
| 550506 | CollAgencyCreditBur | Collection Agency - Credit <br> Bureau | Collection Agencies | Revenue operations collections. |

## PENNSYLVANIA POWER COMPANY

Original Cost of Plant, Reserves and Accruals by Functions for Fully Projected Test Year Ending 12/31/2017

## FILING REQUIREMENT V-A-1:

"Provide schedules supporting claimed amounts for Electric Plant in Service by function and by account if available."

FILING REQUIREMENT V-A-2:
"Provide a comparison of calculated depreciation reserve versus book reserve at the end of the test year. Provide this comparison by functional group and by account if available."

## FILING REQUIREMENT V-B-1:

"Provide a comparison of calculated depreciation accruals versus book accruals by function and by account if available."

## FILING REQUIREMENT V-D-1:

"Provide the surviving original cost plant at the appropriated test year date or dates by account and functional property group and include claimed depreciation reserves. Provide annual depreciation accruals where appropriate. These calculations should be provided for plant in service as well as other categories of plant, including but not limited to, contributions in aid of construction, customers' advances for construction and anticipated retirements associated with construction work in progress claims, if applicable."

## RESPONSE:

V-A-1
See Penn Power Exhibit RAD-46 Attachments A and B.
V-A-2
See Penn Power Exhibit RAD-46 Attachments A and B.

## V-B-1

See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-7.

## V-D-1

See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-10.


Accrual Expense Computation after Adjustments
Activity Updated from January 2017 to December 2017

| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Description | Adjusted Plant Balances |  |  | $\begin{gathered} \text { Book } \\ \text { Depreciation } \\ \text { Reserve } \\ \hline \end{gathered}$ | $\begin{array}{\|c} \begin{array}{c} \text { Depreciation } \\ \text { Reserve } \\ \text { Ratio } \end{array} \\ \hline \end{array}$ | Net Uncovered Book <br> Plant | Accrual Average Remaining Life Basis |  | Target Reserve | BookReserve | Difference | Difference as a $\%$ of Target Reserve |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Non } \\ \text { Depreciable } \end{gathered}$ |  | Total |  |  |  | Amount |  |  |  |  |  |
|  |  | (1) | $\frac{\text { Depreciable }}{\text { (2) }}$ |  | (4) | (5) | (6) |  | $\frac{\text { Rate }}{(8)}$ |  |  |  | (12) |
| 1 Transmission |  | (0) | 13,040 | 13,040 | 7,403 | 56.77\% | 5,637 | 154 | 1.18\% | 4,730 | 7,403 | $(2,672)$ | -56.50\% |
| 2 Distribution |  | 578 | 647,622 | 648,201 | 170,145 | 26.25\% | 478,056 | 16,780 | 2.59\% | 144,261 | 170,145 | $(25,884)$ | -17.94\% |
| 3 General Plant |  | 227 | 18,498 | 18,725 | 9,867 | 52.69\% | 8,858 | 2,176 | 11.76\% | 11,515 | 9,867 | 1,648 | 14.31\% |
| 4 Subtotal |  | 805 | 679,160 | 679,965 | 187,414 | 27.56\% | 492,551 | 19,110 | 2.81\% | 160,506 | 187,414 | $(26,908)$ | -16.76\% |
| 5 Intangible Plant |  | 91 | 18,883 | 18,975 | 12,447 | 65.60\% | 6,527 | 2,698 | 14.29\% | 14,871 | 12,447 | 2,424 | 16.30\% |
| 6 Total |  | 897 | 698,043 | 698,940 | 199,862 | 28.59\% | 499,078 | 21,808 | 3.12\% | 175,377 | 199,862 | $(24,485)$ | -13.96\% |
| Exhibit Reference |  | $\begin{gathered} \text { RAD-46 } \\ \text { Attachment B } \\ \hline \text { P 1-2 } \end{gathered}$ | $\begin{gathered} \text { RAD-46 } \\ \text { Attachment B } \\ \mathbf{P} 1-2 \end{gathered}$ |  | RAD-46 Attachment $B$ $P 3$ |  |  | $\begin{gathered} \text { RAD-53 } \\ \text { ctachment A } \\ \text { P } 1-2 \end{gathered}$ |  | $\begin{gathered} \text { RAD-46 } \\ \text { Attachment B } \\ \text { P 4-5 } \end{gathered}$ | RAD-46 Attachment B P3 |  |  |

## Pennsylvania Power Company

Original Cost - Plant and Depreciation Reserves
Activity Updated from 1/1/17 to $12 / 31 / 17$
Plant-In-Service

| Acct <br> No | Description | $\begin{gathered} \text { Balance } \\ 1 / 1 / 17 \\ \hline \end{gathered}$ | Actual Activity |  |  | Balance$12 / 31 / 17$ | Adjustments | Adjusted Balance$12 / 31 / 17$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Additions | Retirements | Transfers/ Adjustments |  |  |  |

NONDEPRECIABLE PLANT Intangible Plant
Organization
Franchise And Consents Total Intangible Plant


Land
Transmission Substations
Transmission Lines
Distribution Substations.
Distribution Lines
General

Genal

TOTAL NON-DEPRECIABLE PLANT

| $\$$ | 917,485 | $\$$ | - | $\$$ | - | $\$$ | - | $\$$ | 917,485 | $\$(917,485)$ | $\$$ |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $1,172,320$ | - |  | - |  | - |  | $1,172,320$ | $(1,172,320)$ | $(0)$ |  |
| 573,086 | - |  | - |  | - |  | 573,086 | - | 573,086 |  |  |
|  | 5,371 | - |  | - |  | - |  | 5,371 | - | 5,371 |  |
|  | 226,639 | - |  | - |  | - | 226,639 | - | 226,639 |  |  |
| $\$$ | $2,894,900$ | $\$$ | - | $\$$ | - | $\$$ | - | $\$$ | $2,894,900$ | $\$(2,089,805)$ | $\$$ |
|  |  |  |  |  |  |  |  |  | 805,095 |  |  |
| $\$$ | $2,986,400$ | $\$$ | - | $\$$ | - | $\$$ | - | $\$$ | $2,986,400$ | $\$(2,089,805)$ | $\$$ |

```
NIANGIBLE PLANT
Misc. Intangible Plant
Smart Meter Software
TOTAL INTANGIBLE PLANT
```

| $\$$ | $12,119,673$ | $\$ 679,997$ | $\$$ | - | $\$$ | - | $\$ 12,799,670$ | $\$$ | - | $\$ 12,799,670$ |  |
| ---: | ---: | ---: | ---: | :--- | :--- | :--- | :--- | ---: | :--- | ---: | ---: | ---: |
|  | $4,089,337$ | $1,994,182$ |  | - |  | - | $6,083,519$ | - | $6,083,519$ |  |  |
| $\$$ | $16,209,010$ | $\$ 2,674,179$ | $\$$ | - | $\$$ | - | $\$$ | $18,883,189$ | $\$$ | - | $\$ 18,883,189$ |

```
NUCLEAR PRODUCTION
Nuclear Production
Asset Retirement Costs Nuclear TOTAL NUCLEAR PRODUCTION
```



```
transmsoovpuart
    TRANSMISSION PLANT
350.12 Easements - Trans. Subs.
350.22 Easements - Trans. Lines
352.1 Structures, Improvements
352.2 Clearing, Grading Of Land
353 Station Equipment
354 Towers And Fixtures
355 Poles And Fixtures
    Overhd Conductr, Devices
    Clearing, Grading of Land
    Underground Conduit
    Undergrnd Conductr,Devices
    Roads And Tralls
TOTAL TRANSMISSION PLANT
```

356.1
356.2
357
358

| \$ | 931,483 | \$ | - | \$ | - | \$ | - | \$ | 931,483 | \$ $(931,483)$ | \$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7,498,624 |  | - |  | - |  | - |  | 7,498,624 | $(7,498,624)$ |  | -7 |
|  | 764,598 |  | - |  | - |  | - |  | 764,598 | - |  | 764,598 |
|  | 195,216 |  | - |  | - |  | - |  | 195,216 | - |  | 195,216 |
|  | 6,417,734 |  | - |  | - |  | - |  | 6,417,734 | - |  | 6,417,734 |
|  | 7,576 |  | - |  | - |  | - |  | 7,576 | - |  | 7,576 |
|  | 2,825,553 |  | * |  | - |  | $\cdots$ |  | 2,825,553 | - |  | 2,825,553 |
|  | 2,591,159 |  | - |  | - |  | - |  | 2,591,159 | - |  | 2,591,159 |
|  | 130,852 |  | - |  | - |  | - |  | 130,852 | - |  | 130,852 |
|  | 64,654 |  | - |  | - |  | - |  | 64,654 | - |  | 64,654 |
|  | 36,071 |  | - |  | - |  | - |  | 36,079 | - |  | 36,071 |
|  | 6,324 |  | - |  | - |  | - |  | 6,324 | - |  | 6,324 |
| \$ | 21,469,844 | \$ | - | \$ | - | \$ | - | \$ | 21,469,844 | \$ $(8,430,107)$ | \$ | 13,039,737 |

Pennsylvania Power Company
Original Cost-Plant and Depreciation Reserves
Activity Updated from 1/1/17 to 12/31/17
Plant-In-Service

| $\begin{aligned} & \text { Acct } \\ & \mathrm{No} \end{aligned}$ | Description | $\begin{gathered} \text { Balance } \\ 1 / 1 / 17 \\ \hline \end{gathered}$ |  | Actual Activity |  |  | $\begin{aligned} & \text { Balance } \\ & 12 / 31 / 17 \\ & \hline \end{aligned}$ |  | Adjustments | Adjusted Balance 12/31/17 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Additions | Retirements | Transfers/ Adjustments |  |  |  |  |
|  |  |  | (1) | (2) | (3) | (4) |  | (5) | (6) | (7) |
| DISTRIBUTION PLANT |  |  |  |  |  |  |  |  |  |  |
| 360.12 | Easements - Subs. | \$ | 10,977 | \$ | \$ | \$ | \$ | 10,977 | \$ | \$ 10,977 |
| 360.22 | Easements - Trans. |  | 5,791,894 | - | - | - |  | 5,791,894 | - | 5,791,894 |
| 361.1 | Structures, Improvements |  | 1,297,037 | 51,183 | $(5,118)$ | - |  | 1,343,103 | $(15,260)$ | 1,327,843 |
| 361.2 | Clearing, Grading Of Land |  | 448,649 | - | - | - |  | 448,649 | - | 448,649 |
| 362 | Station Equipment |  | 52,509,890 | 5,015,981 | $(501,598)$ | - |  | 57,024,272 | $(703,738)$ | 56,320,534 |
| 364 | Poles, Towers And Fixtures |  | 110,824,666 | 10,499,316 | $(1,049,932)$ | - |  | 120,274,050 | $(31,122)$ | 120,242,928 |
| 365 | Overhd Conductr, Devices |  | 116,208,290 | 14,394,613 | $(1,439,461)$ | - |  | 129,163,442 | $(22,070)$ | 129,141,372 |
| 365.1 | Clearing, Grading of Land |  | 48,591,447 | - | - | - |  | 48,591,447 | - | 48,591,447 |
| 366 | Underground Conduit |  | 7,645,677 | 59,565 | $(5,957)$ | - |  | 7,699,286 | - | 7,699,286 |
| 367 | Undergmd Conductr,Devices |  | 66,219,919 | 5,307,558 | $(530,756)$ | - |  | 70,996,721 | - | 70,996,721 |
| 368 | Line Transformers |  | 107,870,423 | 5,408,623 | $(540,862)$ | - |  | 112,738,183 | (2,858) | 112,735,325 |
| 369 | Services OH |  | 38,808,793 | 723,388 | $(72,339)$ | - |  | 39,459,842 | - | 39,459,842 |
| 369 | Unground Services |  | - | - | - | - |  | - | - | - |
| 370 | Meters |  | - | - | - | - |  | - | - | - |
| 370 | Smart Grid - 10 yr Life |  | 145,735 | - | - | - |  | 145,735 | - | 145,735 |
| 370 | Smart Meters non classified 15 yr |  | 12,719,801 | 2,528,538 | - | - |  | 15,248,339 | - | 15,248,339 |
| 370 | Smart Meter Commercial - 15yr Life |  | 2,971,079 | - | - | - |  | 2,971,079 | - | 2,971,079 |
| 370 | Smart Meter Industrial - 15yr Life |  | 80 | - | - | - |  | 80 | - | 80 |
| 370 | Smart Meter Infrastructure-15yr L. |  | 2,414,213 | - | - | - |  | 2,414,213 | - | 2,414,213 |
| 370 | Smart Meter Residential - 15yr Life |  | 17,924,425 | - | - | - |  | 17,924,425 | - | 17,924,425 |
| 371 | Inst. On Cust. Prem. |  | 3,792,738 | - | - | - |  | 3,792,738 | - | 3,792,738 |
| 373.1 | Street Light - Oh, Ug Lines |  | 7,715,683 | 72,687 | $(7,269)$ | - |  | 7,781,101 | 4,577,895 | 12,358,996 |
| 374 | ARC Distribution |  | 4,408 | - | - | - |  | 4,408 | $(4,408)$ | (0) |
|  | TOTAL DISTRIBUTION PLANT | \$ | 603,915,822 | \$44,061,452 | \$ $(4,153,291)$ | \$ | \$ | 643,823,983 | \$ 3,798,439 | \$ 647,622,422 |


|  | GENERAL PL_ANT |
| :--- | :--- |
| 389.2 | Easements |
| 390.1 | Structures, Improvements |
| 390.2 | Clearing, Grading of Land |
| 390.3 | Struct Imprv, Leasehold Imp |
| 391.1 | Office Furn., Mech. Equip. |
| 391.2 | Data Processing Equipment |
| 391.2 | Project Evolution |
| 391.2 | Smart Grid - 5 Year Life |
| 392 | Transportation Equipment |
| 393 | Stores Equipment |
| 394 | Tools, Shop, Garage Equip. |
| 395 | Laboratory Equipment |
| 396 | Power Operated Equipment |
| 397 | Communication Equipment |
| 398 | Misc. Equipment |
| 399.1 | ARC General Plant |
|  | TOTAL GENERAL PLANT |
|  |  |
|  | TOTAL |


| \$ | 311 | \$ | - | \$ | - | \$ | - | \$ | 311 | \$ | - | \$ | 311 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5,745,175 |  | 335 |  | (34) |  | - |  | 5,745,477 |  | - |  | 5,745,477 |
|  | 41,299 |  | - |  | - |  | - |  | 41,299 |  | - |  | 41,299 |
|  | 407,069 |  | - |  | * |  | - |  | 407,069 |  | ${ }^{*}$ |  | 407,069 |
|  | 739,893 |  | - |  | - |  | - |  | 739,893 |  | - |  | 739,893 |
|  | 1,878,444 |  | - |  | - |  | - |  | 1,878,444 |  | - |  | 1,878,444 |
|  | 13,028 |  | - |  | - |  | - |  | 13,028 |  | - |  | 13,028 |
|  | 3,167,936 |  | 204,071 |  | - |  | - |  | 3,372,007 |  | - |  | 3,372,007 |
|  | 594,878 |  | - |  | * |  | - |  | 594,878 |  | " |  | 594,878 |
|  | 171,743 |  | - |  | - |  | - |  | 171,743 |  | - |  | 171,743 |
|  | 2,433,042 |  | - |  | - |  | - |  | 2,433,042 |  | - |  | 2,433,042 |
|  | 72,968 |  | - |  | - |  | - |  | 72,968 |  | $\cdots$ |  | 72,968 |
|  | 461,035 |  | - |  | - |  | - |  | 461,035 |  | - |  | 461,035 |
|  | 2,379,512 |  | 137,179 |  | $(13,718)$ |  | - |  | 2,502,973 |  | - |  | 2,502,973 |
|  | 63,790 |  | - |  | - |  | - |  | 63,790 |  | - |  | 63,790 |
|  | 32,875 |  | - |  | - |  | - |  | 32,875 |  | $(32,875)$ |  | 0 |
| \$ | 18,202,997 | \$ | 341,586 | \$ | (13,751) | \$ | - | \$ | 18,530,832 | \$ | $(32,875)$ | \$ | 18,497,957 |



[^10]| $\begin{aligned} & \text { Acct } \\ & \text { No } \end{aligned}$ | Description | $\begin{gathered} \text { Balance } \\ 1 / 1 / 17 \\ \hline \end{gathered}$ | Actual Activity |  |  | Balance$12 / 31 / 17$ | Adjustments | Adjusted <br> Balance <br> 12/31/17 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Accruals | Retirements | Transfers/ Adjustments |  |  |  |
|  |  | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| INTANGIBLE PLANT |  |  |  |  |  |  |  |  |
| 302 | Franchise \& Consents | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 303 | Misc. Intangible Plant | 11,617,139 | 1,780,487 | - | - | 13,397,626 | - | 13,397,626 |
| 303 | Smart Meter Software | 746,725 | 726,851 | - | - | 1,473,576 | - | 1,473,576 |
|  | TOTAL INTANGIBLE PLANT | 12,363,864 | 2,507,338 | \$ | \$ | 14,871,202 | \$ | 14,871,202 |


|  | TRANSMISSION PLANT |
| :--- | :--- |
| 350.12 | TRANSMISSION PLANT |
| Easements - Trans. Subs. |  |
| 350.22 | Easements - Trans. Lines |
| 352.1 | Structures, Improvements |
| 352.2 | Clearing, Grading Of Land |
| 353 | Station Equipment |
| 354 | Towers And Fixtures |
| 355 | Poles And Fixtures |
| 356.1 | Overhd Conductr, Devices |
| 356.2 | Clearing, Grading of Land |
| 357 | Underground Conduit |
| 358 | Undergrnd Conductr,Devices |
| 359 | $\quad$ Roads And Trails |
|  | TOTAL TRANSMISSION PLANT |

DISTRIBUTION PLANT

| 360.12 | Easements - Dist. Subs. |
| :--- | :--- |
|  | Easements - Dist. Lines |
| 360.22 | Etructures, Improvements |
| 361.2 | Clearing, Grading of Land |
| 362 | Station Equipment |
| 364 | Poles, Towers And Fixtures |
| 365 | Overhd Conductr, Devices |
| 365.1 | Clearing, Grading of Land |
| 366 | Underground Conduit |
| 367 | Undergrnd Conductr, Devices |
| 368 | Line Transformers |
| 369 | Services |
| 369 | Underground Conduit |
| 370 | Meters |
| 370 | Smart Grid - 10yr Life |
| 370 | Smart Meters non classified 15 yr |
| 370 | Smart Meter Commercial - 15yr Life |
| 370 | Smart Meter Industrial - 15yr Life |
| 370 | Smart Meter Infrastructure-15yr L |
| 370 | Smart Meter Residential - 15yr Life |
| 371 | Inst. On Cust. Prem. |
| 373.1 | Street Light - Oh, Ug Lines |
| 374 | ARC Distribution |


| \$ | - | \$ | \$ | \$ | - | \$ | - | \$ | - | \$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - | - | - |  | - |  | - |  | - |  |  |
|  | 383,272 | 17,293 | $(5,118)$ |  | - |  | 395,446 |  | $(15,260)$ |  | 380,186 |
|  | 133,475 | 6,146 | - |  |  |  | 139,621 |  |  |  | 139,621 |
|  | 10,472,064 | 1,511,571 | $(501,598)$ |  | - |  | 11,482,037 |  | $(609,247)$ |  | 10,872,790 |
|  | 29,531,229 | 2,588,306 | $(1,049,932)$ |  | - |  | 31,069,603 |  | $(22,546)$ |  | 31,047,057 |
|  | 19,521,747 | 2,944,461 | $(1,439,461)$ |  | - |  | 21,026,747 |  | $(16,965)$ |  | 21,009,782 |
|  | 4,355,321 | 1,132,181 | - |  | - |  | 5,487,502 |  | - |  | 5,487,502 |
|  | 2,131,337 | 141,941 | $(5,957)$ |  | - |  | 2,267,321 |  | - |  | 2,267,321 |
|  | 17,095,860 | 1,529,966 | $(530,756)$ |  | - |  | 18,095,070 |  | - |  | 18,095,070 |
|  | 27,461,837 | 2,934,094 | $(540,862)$ |  | - |  | 29,855,068 |  | $(2,858)$ |  | 29,852,210 |
|  | 13,059,283 | 528,313 | $(72,339)$ |  | - |  | 13,515,257 |  | - |  | 13,515,257 |
|  | - | - | - |  | - |  | - |  | - |  | - |
|  | - | - | - |  | - |  | - |  | - |  | - |
|  | 281,982 | 14,573 | - |  | - |  | 296,555 |  | - |  | 296,555 |
|  | 704,749 | 932,737 | - |  | - |  | 1,637,486 |  | $(3,332)$ |  | 1,634,154 |
|  | 320,548 | 198,171 | - |  | - |  | 518,719 |  | - |  | 518,719 |
|  | 8 | 5 | - |  | - |  | 13 |  | - |  | 13 |
|  | 148,996 | 161,028 | - |  | - |  | 310,024 |  | - |  | 310,024 |
|  | 1,959,367 | 1,195,559 | - |  | - |  | 3,154,926 |  | - |  | 3,154,926 |
|  | 1,869,926 | 77,372 | - |  | - |  | 1,947,298 |  | - |  | 1,947,298 |
|  | 3,516,542 | 223,154 | $(7,269)$ |  | - |  | 3,732,427 |  | - |  | 3,732,427 |
|  | 171 | 85 | - |  | - |  | 256 |  | (256) |  | (1) |
| \$ | 132,947,710 | \$16,136,956 | \$ $(4,153,291)$ | \$ | - | \$ | 144,931,375 | \$ | (670,464) | \$ | 44,260,911 |



## PENNSYLVANIA POWER COMPANY

Original Cost of Plant, Reserves and Accruals by Functions for Future Test Year Ending 12/31/2016

## FILING REQUIREMENT V-A-1:

"Provide schedules supporting claimed amounts for Electric Plant in Service by function and by account if available."

## FILING REQUIREMENT V-A-2:

"Provide a comparison of calculated depreciation reserve versus book reserve at the end of the test year. Provide this comparison by functional group and by account if available."

## FILING REQUIREMENT V-B-1:

"Provide a comparison of calculated depreciation accruals versus book accruals by function and by account if available."

## FILING REQUIREMENT V-D-1:

"Provide the surviving original cost plant at the appropriated test year date or dates by account and functional property group and include claimed depreciation reserves. Provide annual depreciation accruals where appropriate. These calculations should be provided for plant in service as well as other categories of plant, including but not limited to, contributions in aid of construction, customers' advances for construction and anticipated retirements associated with construction work in progress claims, if applicable."

## RESPONSE:

V-A-1
See Penn Power Exhibit RAD-47 Attachments A and B.
V-A-2
See Penn Power Exhibit RAD-47 Attachments A and B.
V-B-1

# Penn Power Exhibit RAD-47 

Witness: R. A. D'Angelo
Page 2 of 2
See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-7.

## V-D-1

See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-10.



## Pennsylvanla Power Company

Original Cost - Plant and Depreciation Reserves
Activity Updated from $1 / 1 / 16$ to $12 / 31 / 16$
Plant-In-Service

Asset Retirement Costs Nuclear
TOTAL NUCLEAR PRODUCTION

## TRANSMISSION PLANT

TRANSMISSION PLANT
Easements - Trans. Subs. Easements - Trans. Lines Structures, Improvements Clearing, Grading Of Land Station Equipment
Towers And Fixtures
Poles And Fixtures
Overhd Conductr, Devices
Clearing, Grading of Land
Underground Conduit
Undergrnd Conductr, Devices
Roads And Trails
TOTAL TRANSMISSION PLANT


| 350.12 | Easements - Trans. Subs. |
| :--- | :--- |
| 350.22 | Easements - Trans. Lines |
| 352.1 | Structures, Improvements |
| 352.2 | Clearing, Grading Of Land |
| 353 | Station Equipment |
| 354 | Towers And Fixtures |
| 355 | Poles And Fixtures |
| 356.1 | Overhd Conductr, Devices |
| 356.2 | Clearing, Grading of Land |
| 357 | Underground Conduit |
| 358 | Undergrnd Conductr, Devices |
| 359 | Roads And Trails |
|  | TOTAL TRANSMISSION PLANT |


| \$ | 931,483 | \$ | - | \$ | - | \$ | * | \$ | 931,483 | \$ | $(931,483)$ | \$ | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7,498,624 |  | - |  | - |  | * |  | 7,498,624 |  | $(7,498,624)$ |  | 0 |
|  | 764,598 |  | - |  | - |  | - |  | 764,598 |  | . |  | 764,598 |
|  | 195,216 |  | - |  | - |  | - |  | 195,216 |  | - |  | 195,216 |
|  | 6,417,734 |  | - |  | $\sim$ |  | - |  | 6,417,734 |  | - |  | 6,417,734 |
|  | 7,576 |  | - |  | - |  | - |  | 7,576 |  | - |  | 7,576 |
|  | 2,683,169 |  | 158,204 |  | $(15,820)$ |  | - |  | 2,825,553 |  | - |  | 2,825,553 |
|  | 2,591,159 |  | - |  | - |  | - |  | 2,591,159 |  | - |  | 2,591,159 |
|  | 130,852 |  | - |  | - |  | - |  | 130,852 |  | - |  | 130,852 |
|  | 64,654 |  | - |  | - |  | - |  | 64,654 |  | - |  | 64,654 |
|  | 36,071 |  | - |  | - |  | - |  | 36,071 |  | - |  | 36,071 |
|  | 6,324 |  | - |  | - |  | - |  | 6,324 |  | - - |  | 6,324 |
| \$ | 21,327,461 | \$ | 158,204 | \$ | (15,820) | \$ | - | \$ | 21,469,844 | \$ | $(8,430,107)$ | \$ | 13,039,737 |

## Pennsylvania Power Company

Original Cost - Plant and Depreciation Reserves
Activity Updated from $1 / 1 / 16$ to $12 / 31 / 16$
Plant-In-Service

| $\begin{aligned} & \text { Acct } \\ & \text { No } \end{aligned}$ | Description | Balance1/1/16 |  | Actual Activity |  |  |  | $\begin{aligned} & \text { Balance } \\ & 12 / 31 / 16 \\ & \hline \end{aligned}$ |  | Adjustments |  | Adjusted Balance$12 / 31 / 16$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Additions | Retirements | Transfers/ Adjustments |  |  |  |  |  |  |
|  |  |  | (1) |  | (2) | (3) | (4) |  | (5) |  | (6) |  | (7) |
| DISTRIBUTION PLANT |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 360.12 | Easements - Subs. | \$ | 10,977 | \$ | \$ | \$ | \$ | \$ | 10,977 | \$ | - | \$ | 10,977 |
| 360.22 | Easements - Trans. |  | 5,791,894 |  | - | - | - |  | 5,791,894 |  | - |  | 5,791,894 |
| 361.1 | Structures, Improvements |  | 1,278,980 |  | 20,064 | $(2,006)$ | - |  | 1,297,037 |  | $(15,260)$ |  | 1,281,777 |
| 361.2 | Clearing, Grading Of Land |  | 448,649 |  |  |  | - |  | 448,649 |  |  |  | 448,649 |
| 362 | Station Equipment |  | 50,740,001 |  | 1,966,543 | $(196,654)$ | - |  | 52,509,890 |  | $(703,738)$ |  | 51,806,152 |
| 364 | Poles, Towers And Fixtures |  | 102,990,881 |  | 8,704,205 | $(870,420)$ | - |  | 110,824,666 |  | $(31,122)$ |  | 110,793,544 |
| 365 | Overhd Conductr, Devices |  | 105,166,441 |  | 12,268,721 | $(1,226,872)$ | - |  | 116,208,290 |  | $(22,070)$ |  | 116,186,220 |
| 365.1 | Clearing, Grading of Land |  | 48,591,447 |  | - | (1,226,872) | - |  | 48,591,447 |  | (22,07) |  | 48,591,447 |
| 366 | Underground Conduit |  | 7,586,389 |  | 65,875 | $(6,588)$ | - |  | 7,645,677 |  | - |  | 7,645,677 |
| 367 | Undergrnd Conductr,Devices |  | 61,907,364 |  | 4,791,727 | $(479,173)$ | - |  | 66,219,919 |  | - |  | 66,219,919 |
| 368 | Line Transformers |  | 102,964,358 |  | 5,451,183 | $(545,118)$ | - |  | 107,870,423 |  | $(2,858)$ |  | 107,867,565 |
| 369 | Services OH |  | 38,032,759 |  | 862,261 | $(86,226)$ | - |  | 38,808,793 |  | (2,85) |  | 38,808,793 |
| 369 | Unground Services |  | - |  | - | - | - |  | - |  | - |  | - |
| 370 | Meters |  | - |  | - | - | - |  | - |  | - |  | - |
| 370 | Smart Grid - 10yr Life |  | 145,735 |  | - | - | - |  | 145,735 |  | - |  | 145,735 |
| 370 | Smart Grid - 15yr Life |  | 4,041,294 |  | 8,678,507 | - | - |  | 12,719,801 |  | - |  | 12,719,801 |
| 370 | Smart Meter Commercial - 15yr Life |  | 2,971,079 |  | - | - | - |  | 2,971,079 |  | - |  | 2,971,079 |
| 370 | Smart Meter Industrial - 15yr Life |  | 80 |  | - | - | - |  | 80 |  | - |  | 80 |
| 370 | Smart Meter Infrastructure-15yr L |  | 2,414,213 |  | - | - | - |  | 2,414,213 |  | - |  | 2,414,213 |
| 370 | Smart Meter Residential - 15yr Life |  | 17,924,425 |  | - | - | - |  | 17,924,425 |  | - |  | 17,924,425 |
| 371 | Inst. On Cust. Prem. |  | 3,792,738 |  | - | - | - |  | 3,792,738 |  | - |  | 3,792,738 |
| 373.1 | Street Light - Oh, Ug Lines |  | 7,641,561 |  | 82,358 | $(8,236)$ | - |  | 7,715,683 |  | 4,577,895 |  | 12,293,578 |
| 374 | ARC Distribution |  | 4,408 |  |  | (8,236) | - |  | 4,408 |  | $(4,408)$ |  | (0) |
|  | TOTAL DISTRIBUTION PLANT | \$ | 564,445,672 |  | \$42,891,444 | \$(3,421,294) | \$ | \$ | 603,915,822 | \$ | 3,798,439 | \$ | 607,714,261 |
| GENERAL PLANT |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 389.2 | Easements | \$ | 311 |  | \$ | \$ | \$ | \$ | 311 | \$ | - | \$ | 311 |
| 390.1 | Structures, improvements |  | 5,202,574 |  | 602,890 | $(60,289)$ | - |  | 5,745,175 |  | - |  | 5,745,175 |
| 390.2 | Clearing, Grading of Land |  | 41,299 |  | - | - | - |  | 41,299 |  | - |  | 41,299 |
| 390.3 | Struct Imprv, Leasehold Imp |  | 407,069 |  | - | - | - |  | 407,069 |  | - |  | 407,069 |
| 391.1 | Office Furn., Mech. Equip. |  | 739,893 |  | - | - | - |  | 739,893 |  | - |  | 739,893 |
| 391.2 | Data Processing Equipment |  | 1,878,444 |  | * | - | - |  | 1,878,444 |  | - |  | 1,878,444 |
| 391.2 | Project Evolution |  | 13,028 |  | - | - | - |  | 13,028 |  | - |  | 13,028 |
| 391.2 | Smart Grid - 5 Year Life |  | 2,482,617 |  | 685,319 | - | - |  | 3,167,936 |  | - |  | 3,167,936 |
| 392 | Transportation Equipment |  | 594,878 |  | - | - | - |  | 594,878 |  | - |  | 594,878 |
| 393 | Stores Equipment |  | 171,743 |  | - | - | - |  | 171,743 |  | - |  | 171,743 |
| 394 | Tools, Shop, Garage Equip. |  | 2,433,042 |  | - | - | - |  | 2,433,042 |  | - |  | 2,433,042 |
| 395 | Laboratory Equipment |  | 72,968 |  | - | - | - |  | 72,968 |  | - |  | 72,968 |
| 396 | Power Operated Equipment |  | 461,035 |  | - | - | - |  | 461,035 |  | - |  | 461,035 |
| 397 | Communication Equipment |  | 2,125,868 |  | 281,827 | $(28,183)$ | - |  | 2,379,512 |  | - |  | 2,379,512 |
| 398 | Misc. Equipment |  | 63,790 |  | - | - | - |  | 63,790 |  | - |  | 63,790 |
| 399.1 | ARC General Plant |  | 32,875 |  | - | - | - |  | 32,875 |  | $(32,875)$ |  | 0 |
|  | TOTAL GENERAL PLANT | \$ | 16,721,433 |  | \$ 1,570,036 | \$ (88,472) | \$ | \$ | 18,202,997 | \$ | $(32,875)$ | \$ | 18,170,122 |

TOTAL

| $\$ 620,034,082$ | $\$ 46,275,577$ | $\$(3,525,586)$ | $\$$ | - | $\$ 662,784,073$ | $\$(6,754,348)$ | $\$ 656,029,725$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



Pennsyivania Power Company
Original Cost - Plant and Depreciation Reserves
Activity Updated from 1/1/16 to 12/31/16 Target Reserve

| $\begin{aligned} & \text { Acct } \\ & \text { No } \\ & \hline \end{aligned}$ | Description | $\begin{gathered} \text { Balance } \\ 1 / 1 / 16 \\ \hline \end{gathered}$ |  | Actual Activity |  |  |  |  |  | $\begin{aligned} & \text { Balance } \\ & 12 / 31 / 16 \\ & \hline \end{aligned}$ |  | Adjustments |  | Adjusted Balance$12 / 31 / 16$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Accruals |  | etirements |  | Transfers/ djustments |  |  |  |  |  |  |
| INTANGIBLE PLANT (1) (2) (3) (3) (3) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 302 | Franchise \& Consents | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| $\begin{aligned} & 303 \\ & 303 \end{aligned}$ | Misc. Intangible Plant |  | 9,913,703 |  | 1,703,436 |  | - |  | - |  | 11,617,139 |  | - |  | 11,617,139 |
|  | Smart Meter Software |  | 252,207 |  | 494,518 |  | - |  | - |  | 746,725 |  | - |  | 746,725 |
|  | TOTAL INTANGIBLE PLANT | \$ | 10,165,910 | \$ | 2,197,954 | \$ | - | \$ | - | \$ | 12,363,864 | \$ | - | \$ | 12,363,864 |


|  | TRANSMISSION PLANT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TRANSMISSION PLANT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 350.12 | Easements - Trans. Subs. | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 350.22 | Easements - Trans. Lines |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 352.1 | Structures, Improvements |  | 416,772 |  | 6,117 |  | - |  | - |  | 422,889 |  | - |  | 422,889 |
| 352.2 | Clearing, Grading Of Land |  | 78,292 |  | 2,635 |  | - |  | - |  | 80,927 |  | - |  | 80,927 |
| 353 | Station Equipment |  | 2,602,971 |  | 52,625 |  | - |  | - |  | 2,655,596 |  |  |  | 2,655,596 |
| 354 | Towers And Fixtures |  | 6,339 |  | 5 |  | - |  | - |  | 6,344 |  | - |  | 6,344 |
| 355 | Poles And Fixtures |  | 612,566 |  | 51,231 |  | $(15,820)$ |  | - |  | 647,976 |  | - |  | 647,976 |
| 356.1 | Overhd Conductr, Devices |  | 631,022 |  | 41,718 |  | - |  | - |  | 672,740 |  |  |  | 672,740 |
| 356.2 | Clearing, Grading of Land |  | 6,139 |  | 2,107 |  | - |  | - |  | 8,246 |  |  |  | 8,246 |
| 357 | Underground Conduit |  | 48,954 |  | 1,009 |  | * |  | - |  | 49,963 |  |  |  | 49,963 |
| 358 | Undergrnd Conductr,Devices |  | 26,085 |  | 617 |  | - |  | - |  | 26,702 |  | - |  | 26,702 |
| 359 | Roads And Trails |  | 4,281 |  | 72 |  | - |  | - |  | 4,353 |  | - |  | 4,353 |
|  | TOTAL TRANSMISSION PLANT | \$ | 4,433,422 | \$ | 158,136 | \$ | $(15,820)$ | \$ | - | \$ | 4,575,738 | \$ | - | \$ | 4,575,738 |
|  | DISTRIBUTION PLANT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 360.12 | Easements - Dist. Subs. | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| 360.22 | Easements - Dist. Lines |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 361.1 | Structures, Improvements |  | 368,791 |  | 16,487 |  | $(2,006)$ |  | - |  | 383,272 |  | - |  | 383,272 |
| 361.2 | Clearing, Grading of Land |  | 127,284 |  | 6,191 |  | * |  | * |  | 133,475 |  | - |  | 133,475 |
| 362 | Station Equipment |  | 9,274,844 |  | 1,393,874 |  | $(196,654)$ |  | - |  | 10,472,064 |  |  |  | 10,472,064 |
| 364 | Poles, Towers And Fixtures |  | 28,081,750 |  | 2,319,899 |  | $(870,420)$ |  | - |  | 29,531,229 |  | - |  | 29,531,229 |
| 365 | Overhd Conductr, Devices |  | 18,147,466 |  | 2,601,153 |  | $(1,226,872)$ |  | - |  | 19,521,747 |  | - |  | 19,521,747 |
| 365.1 | Clearing, Grading of Land |  | 3,169,690 |  | 1,185,631 |  | - |  | - |  | 4,355,321 |  | - |  | 4,355,321 |
| 366 | Underground Conduit |  | 1,995,504 |  | 142,420 |  | $(6,588)$ |  | - |  | 2,131,337 |  | - |  | 2,131,337 |
| 367 | Undergmd Conductr,Devices |  | 16,165,632 |  | 1,409,400 |  | $(479,173)$ |  | - |  | 17,095,860 |  |  |  | 17,095,860 |
| 368 | Line Transformers |  | 25,171,227 |  | 2,835,728 |  | $(545,118)$ |  | - |  | 27,461,837 |  |  |  | 27,461,837 |
| 369 | Services |  | 12,634,513 |  | 510,996 |  | $(86,226)$ |  | - |  | 13,059,283 |  | - |  | 13,059,283 |
| 369 | Underground Conduit |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 370 | Meters |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 370 | Smart Grid-10yr Life |  | 267,409 |  | 14,573 |  | - |  | - |  | 281,982 |  | - |  | 281,982 |
| 370 | Smart Meters non classified - 15yr Life |  | 145,766 |  | 558,983 |  | - |  | - |  | 704,749 |  |  |  | 704,749 |
| 370 | Smart Meter Commercial - 15yr Life |  | 122,377 |  | 198,171 |  | - |  | - |  | 320,548 |  | - |  | 320,548 |
| 370 | Smart Meter Industrial - 15yr Life |  | 3 |  | 5 |  | - |  | - |  | 8 |  | - |  | 8 |
| 370 | Smart Meter Infrastructure-15yr L |  | $(12,032)$ |  | 161,028 |  | - |  | - |  | 148,996 |  | - |  | 148,996 |
| 370 | Smart Meter Residential - 15yr Life |  | 763,808 |  | 1,195,559 |  | - |  | - |  | 1,959,367 |  | - |  | 1,959,367 |
| 371 | Inst. On Cust. Prem. |  | 1,788,761 |  | 81,165 |  | - |  | - |  | 1,869,926 |  | - |  | 1,869,926 |
| 373.1 | Street Light - Oh, Ug Lines |  | 3,289,043 |  | 235,734 |  | $(8,236)$ |  | - |  | 3,516,542 |  | - |  | 3,516,542 |
| 374 | ARC Distribution |  | 86 |  | 85 |  | - |  | - |  | 171 |  | - |  | 171 |
|  | TOTAL DISTRIBUTION PLANT | \$ | 121,501,922 |  | 14,867,082 |  | $(3,421,294)$ | \$ | - | \$ | 132,947,710 | \$ | - | \$ | 32,947,710 |

## Pennsylvania Power Company

Original Cost - Plant and Depreciation Reserves Activity Updated from $1 / 1 / 16$ to $12 / 31 / 16$

Target Reserve

| $\begin{aligned} & \text { Acct } \\ & \text { No } \end{aligned}$ | Description | $\begin{gathered} \text { Balance } \\ 1 / 1 / 16 \\ \hline \end{gathered}$ |  | Actual Activity |  |  |  |  |  | $\begin{aligned} & \text { Balance } \\ & 12 / 31 / 05 \\ & \hline \end{aligned}$ |  | Adjustments |  | $\begin{gathered} \hline \text { Adjusted } \\ \text { Balance } \\ 12 / 31 / 16 \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Additions | Retirements |  | Transfers/ Adjustments |  |  |  |  |  |  |  |
|  |  | (1) |  | (2) |  | (3) |  | (4) |  | (5) |  | (6) |  | (7) |  |
| GENERAL PLANT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 389.2 | Easements | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - ${ }^{-}$ |
| 390.1 | Structures, Improvements |  | 2,382,971 |  | 100,719 |  | (60,289) |  | - |  | 2,423,401 |  | - |  | 2,423,401 |
| 390.2 | Clearing, Grading of Land |  | 5,947 |  | 929 |  | - |  | - |  | 6,876 |  | - |  | 6,876 |
| 390.3 | Struct Imprv, Leasehold Imp |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| 391.1 | Office Furn., Mech. Equip. |  | 777,256 |  | 115,201 |  | - |  | - |  | 892,457 |  | - |  | 892,457 |
| 391.2 | Data Processing Equipment |  | 1,645,595 |  | 179,204 |  | - |  | - |  | 1,824,799 |  | - |  | 1,824,799 |
| 391.2 | Project Evolution |  | $(3,810)$ |  | 1,243 |  | - |  | - |  | $(2,567)$ |  | $\cdots$ |  | $(2,567)$ |
| 391.25 | Data Proc Smart Meters |  | 406,310 |  | 565,055 |  | - |  | - |  | 971,365 |  | - |  | 971,365 |
| 392 | Transportation Equipment |  | 198,675 |  | 67,697 |  | - |  | - |  | 266,372 |  | - |  | 266,372 |
| 393 | Stores Equipment |  | 156,107 |  | 15,113 |  | - |  | - |  | 171,220 |  | - |  | 171,220 |
| 394 | Tools, Shop, Garage Equip. |  | 1,465,846 |  | 224,813 |  | - |  | - |  | 1,690,659 |  | - |  | 1,690,659 |
| 395 | Laboratory Equipment |  | 61,451 |  | 3,641 |  | - |  | - |  | 65,092 |  | - |  | 65,092 |
| 396 | Power Operated Equipment |  | 170,113 |  | 27,063 |  | - |  | - |  | 197,176 |  | - |  | 197,176 |
| 397 | Communication Equipment |  | 609,413 |  | 223,467 |  | $(28,183)$ |  | - |  | 804,697 |  | - |  | 804,697 |
| 398 | Misc. Equipment |  | 65,561 |  | 1,097 |  | - |  | - |  | 66,658 |  | - |  | 66,658 |
| 399.1 | ARC General Plant |  | 812 |  | 812 |  | - - |  | - |  | 1,623 |  | * |  | 1,623 |
|  | TOTAL GENERAL PLANT | \$ | 7,942,246 | \$ | 1,526,054 | \$ | (88,472) | \$ | - | \$ | 9,379,828 | \$ | - | \$ | 9,379,828 |
| TOTAL |  | \$ 144,043,501 |  | \$18,749,226 |  | \$ $(3,525,586)$ |  | \$ - |  | \$ 159,267,140 |  | \$ |  | \$ 159,267,140 |  |

## PENNSYLVANIA POWER COMPANY

Original Cost of Plant, Reserves and Accruals by Functions for Historical Test Year Ended 12/31/2015

## FILING REQUIREMENT V-A-1:

"Provide schedules supporting claimed amounts for Electric Plant in Service by function and by account if available."

## FILING REQUIREMENT V-A-2:

"Provide a comparison of calculated depreciation reserve versus book reserve at the end of the test year. Provide this comparison by functional group and by account if available."

## FILING REQUIREMENT V-B-1:

"Provide a comparison of calculated depreciation accruals versus book accruals by function and by account if available."

## FILING REQUIREMENT V-D-1:

"Provide the surviving original cost plant at the appropriated test year date or dates by account and functional property group and include claimed depreciation reserves. Provide annual depreciation accruals where appropriate. These calculations should be provided for plant in service as well as other categories of plant, including but not limited to, contributions in aid of construction, customers' advances for construction and anticipated retirements associated with construction work in progress claims, if applicable."

## RESPONSE:

V-A-1

See Penn Power Exhibit RAD-48 Attachments A and B.
V-A-2
See Penn Power Exhibit RAD-48 Attachments A and B.

## V-B-1

See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-7.

V-D-1
See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-10.




## Original Cost - Plant and Depreciation Reserves

Activity Updated from $1 / 1 / 15$ to $12 / 31 / 15$
Plant-In-Service

| $\begin{aligned} & \text { Acct } \\ & \text { No } \end{aligned}$ | Description | $\begin{gathered} \text { Balance } \\ 1 / 1 / 15 \\ \hline \end{gathered}$ |  | Actual Activity |  |  | $\begin{aligned} & \text { Balance } \\ & 12 / 31 / 15 \\ & \hline \end{aligned}$ |  | Adjustments | AdjustedBalance$12 / 31 / 15$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Additions | Retirements | Transfers/ Adjustments |  |  |  |  |  |
|  |  |  | (1) | (2) | (3) | (4) |  | (5) | (6) |  | (7) |
| DISTRIBUTION PLANT |  |  |  |  |  |  |  |  |  |  |  |
| 360.12 | Easements Subs. | \$ | 10,963 | \$ 13 | \$ | \$ | \$ | 10,977 | \$ | \$ | 10,977 |
| 360.22 | Easements - Trans. |  | 5,789,305 | 2,588 | - | - |  | 5,791,894 | - |  | 5,791,894 |
| 361.1 | Structures, Improvements |  | 1,174,161 | 104,339 | - | 480 |  | 1,278,980 | $(15,260.00)$ |  | 1,263,720 |
| 361.2 | Clearing, Grading Of Land |  | 451,496 | 17 | $(2,865)$ | - |  | 448,649 | - |  | 448,649 |
| 362 | Station Equipment |  | 43,328,332 | 7,698,123 | $(421,926)$ | 135,472 |  | 50,740,001 | (703,738.00) |  | 50,036,263 |
| 364 | Poles, Towers And Fixtures |  | 98,509,922 | 4,680,552 | $(254,504)$ | 54,911 |  | 102,990,881 | $(31,122.00)$ |  | 102,959,759 |
| 365 | Overhd Conductr, Devices |  | 98,828,126 | 5,973,325 | $(1,030,533)$ | 1,395,524 |  | 105,166,441 | $(22,070.00)$ |  | 105,144,371 |
| 365.1 | Clearing, Grading of Land |  | 44,870,538 | 3,718,408 | - | 2,501 |  | 48,591,447 | - |  | 48,591,447 |
| 366 | Underground Conduit |  | 7,442,818 | 124,002 | (54) | 19,623 |  | 7,586,389 | - |  | 7,586,389 |
| 367 | Undergmd Conductr, Devices |  | 58,328,949 | 3,312,501 | $(83,336)$ | 349,250 |  | 61,907,364 | * |  | 61,907,364 |
| 368 | Line Transformers |  | 99,756,623 | 4,191,806 | $(1,483,782)$ | 499,711 |  | 102,964,358 | (2,858.00) |  | 102,961,500 |
| 369 | Services OH |  | 37,074,299 | 924,540 | 259 | 36,661 |  | 38,032,759 | - |  | 38,032,759 |
| 369 | Unground Services |  | - | - | - | - |  | - | - |  | - |
| 370 | Meters |  | 22,378,743 | 934,635 | $(10,508,937)$ | $(12,804,440)$ |  | - | - |  | - |
| 370 | Smart Grid - 10yr Life |  | 152,840 | 443 | $(7,548)$ | - |  | 145,735 | - |  | 145,735 |
| 370 | Smart Grid - 15yr Life |  | 1,746,285 | 3,696,648 | (523) | $(1,401,115)$ |  | 4,041,294 | - |  | 4,041,294 |
| 370 | Smart Meter Commercial - 15yr Life |  | 454,629 | 2,272,686 | - | 243,764 |  | 2,971,079 | - |  | 2,971,079 |
| 370 | Smart Meter industrial - 15yr Life |  | 6 | 80 | - | (6) |  | 80 | * |  | 80 |
| 370 | Smart Meter infrastructure-15yr L |  | 84,105 | 2,235,459 | $(101,906)$ | 196,556 |  | 2,414,213 | - |  | 2,414,213 |
| 370 | Smart Meter Residential - 15yr Life |  | 4,325,962 | 12,946,071 | - | 652,392 |  | 17,924,425 | - |  | 17,924,425 |
| 371 | Inst. On Cust. Prem. |  | 3,765,161 | 49,161 | $(16,266)$ | $(5,318)$ |  | 3,792,738 | * |  | 3,792,738 |
| 373.1 | Street Light - Oh, Ug Lines |  | 7,497,538 | 209,961 | $(118,746)$ | 52,807 |  | 7,641,561 | 4,577,895 |  | 12,219,456 |
| 374 | ARC Distribution |  | 4,408 | - | - | - |  | 4,408 | $(4,408)$ |  | (0) |
|  | TOTAL DISTRIBUTION PLANT | \$ | 535,972,210 | \$53,075,357 | \$(14,030,667) | \$(10,571,228) | \$ | 564,445,672 | \$ 3,798,439 | \$ | 568,244,111 |


|  | GENERAL PLANT |
| :--- | :--- |
| 389.2 | Easements |
| 390.1 | Structures, Improvements |
| 390.2 | Clearing, Grading of Land |
| 390.3 | Struct Imprv, Leasehold Imp |
| 391.1 | Office Furn., Mech. Equip. |
| 391.2 | Data Processing Equipment |
| 391.2 | Project Evolution |
| 391.2 | Smart Grid - 5 Year Life |
| 392 | Transportation Equipment |
| 393 | Stores Equipment |
| 394 | Tools, Shop, Garage Equip. |
| 395 | Laboratory Equipment |
| 396 | Power Operated Equipment |
| 397 | Communication Equipment |
| 398 | Misc. Equipment |
| 399.1 | ARC General Plant |
|  | TOTAL GENERAL PLANT |
|  |  |
|  | TOTAL |


| \$ | 311 | \$ | - | \$ | - | \$ | - | \$ | 311 | \$ | - | \$ | 311 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5,201,546 |  | 1,028 |  | - |  | - |  | 5,202,574 |  | * |  | 5,202,574 |
|  | 41,239 |  | 60 |  | - |  | - |  | 41,299 |  | - |  | 41,299 |
|  | 407,069 |  | - |  | - |  | - |  | 407,069 |  | - |  | 407,069 |
|  | 781,359 |  | 7 |  | $(41,473)$ |  | - |  | 739,893 |  | - |  | 739,893 |
|  | 2,031,254 |  | 112,318 |  | $(391,634)$ |  | 126,507 |  | 1,878,444 |  | - |  | 1,878,444 |
|  | 20,525 |  | - |  | $(7,497)$ |  | - |  | 13,028 |  | - |  | 13,028 |
|  | 1,443,425 |  | 2,014,256 |  | $(38,049)$ |  | $(937,016)$ |  | 2,482,617 |  | - |  | 2,482,617 |
|  | 300,778 |  | 31,742 |  | $(50,943)$ |  | 313,301 |  | 594,878 |  | - |  | 594,878 |
|  | 176,993 |  | - |  | $(5,250)$ |  | - |  | 171,743 |  | - |  | 171,743 |
|  | 2,447,820 |  | 24,598 |  | $(39,376)$ |  | - |  | 2,433,042 |  | - |  | 2,433,042 |
|  | 78,583 |  | 32 |  | $(5,648)$ |  | - |  | 72,968 |  | - |  | 72,968 |
|  | 460,370 |  | 665 |  | - |  | - |  | 461,035 |  | - |  | 461,035 |
|  | 2,839,364 |  | 283,296 |  | $(996,792)$ |  | - |  | 2,125,868 |  | - |  | 2,125,868 |
|  | 66,995 |  | 11 |  | $(3,217)$ |  | - |  | 63,790 |  | - |  | 63,790 |
|  | 32,875 |  | - |  |  |  | - |  | 32,875 |  | $(32,875)$ |  | 0 |
| \$ | 16,330,506 | \$ | 2,468,014 | \$ | $(1,579,879)$ | \$ | $(497,208)$ | \$ | 16.721.433 | \$ | $(32,875)$ | \$ | 16,688,558 |
| \$ | 586,654,340 |  | 60,206,849 |  | 15,683,642) | \$ | 1,143,465) | \$ | 620,034,082 | \$ | ,754,348) | \$ | 613,279,734 |



Retirement work in progress has not classified on a FERC account number basis

Pennsylvania Power Company
Original Cost - Plant and Depreciation Reserves
Activity Updated from 1/1/15 to 12/31/15
Target Reserve

| Acct No | Description | Balance 1/1/15 |  | Actual Activity |  |  |  |  | Balance 12/31/15 |  | Adjustments |  | Adjusted <br> Balance <br> 12/31/15 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Accruals |  | Retirements | Transfers/ Adjustments |  |  |  |  |  |  |  |
|  |  |  | (1) |  | (2) | (3) |  |  | (5) |  | (6) |  | (7) |  |
| INTANGIBLE PLANT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 302 | Franchise \& Consents | \$ | - | \$ | - | \$ | \$ | - | \$ | - | \$ | - | \$ | - |
| 303 | Misc. Intangible Plant |  | 8,372,238 |  | 1,541,465 | - |  | - |  | 9,913,703 |  | - |  | 9,913,703 |
| 303 | Smart Meter Software |  | - |  | 252,207 | - |  | . |  | 252,207 |  | - |  | 252,207 |
|  | TOTAL INTANGIBLE PLANT | \$ | 8,372,238 | \$ | 1,793,672 | \$ | \$ | - | \$ | 10,165,910 | \$ | - | \$ | 10,165,910 |
| NUCLEAR PRODUCTION |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 326 | Nuclear Production |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Asset Retirement Costs Nuclear | \$ | - | \$ | - | \$ | \$ | - | \$ | - | \$ | - | \$ | - |
|  | TOTAL NUCLEAR PRODUCTION | \% | - | \$ | - | \$ | \$ | - | \$ | - | \$ | - | \$ | - |
| TRANSMISSION PLANT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TRANSMISSION PLANT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 350.12 | Easements - Trans. Subs. | \$ | - | \$ | - | \$ | \$ | - | \$ | - | \$ | - | \$ | - |
| 350.22 | Easements - Trans. Lines |  | - |  | - | - |  | - |  | - |  | - |  | - |
| 352.1 | Structures, Improvements |  | 412,165 |  | 6,199 | $(1,592)$ |  | - |  | 416,772 |  | - |  | 416,772 |
| 352.2 | Clearing, Grading Of Land |  | 76,586 |  | 2,661 | (955) |  |  |  | 78,292 |  | - |  | 78,292 |
| 353 | Station Equipment |  | 2,617,115 |  | 54,193 | $(68,337)$ |  | - |  | 2,602,971 |  | - |  | 2,602,971 |
| 354 | Towers And Fixtures |  | 6,334 |  | 5 | - |  | - |  | 6,339 |  | - |  | 6,339 |
| 355 | Poles And Fixtures |  | 566,210 |  | 47,326 | (970) |  | - |  | 612,566 |  | - |  | 612,566 |
| 356.1 | Overhd Conductr, Devices |  | 592,344 |  | 39,284 | (606) |  |  |  | 631,022 |  | - |  | 631,022 |
| 356.2 | Clearing, Grading of Land |  | 4,704 |  | 2,072 | (637) |  | - |  | 6,139 |  | - |  | 6,139 |
| 357 | Underground Conduit |  | 47,881 |  | 1,073 | - |  | - |  | 48,954 |  |  |  | 48,954 |
| 358 | Undergrnd Conductr,Devices |  | 25,429 |  | 656 | - |  | - |  | 26,085 |  | - |  | 26,085 |
| 359 | Roads And Trails |  | 4,202 |  | 79 | - |  | - |  | 4,281 |  | - |  | 4,281 |
|  | TOTAL TRANSMISSION PLANT | \$ | 4,352,970 | \$ | 153,548 | \$ $(73,096)$ | \$ | - | \$ | 4,433,422 | \$ | - | \$ | 4,433,422 |
| DISTRIBUTION PLANT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 360.12 | Easements - Dist. Subs. | \$ | - | \$ | - | \$ | \$ | - | \$ | - | \$ | - | \$ | - |
| 360.22 | Easements - Dist. Lines |  | - |  | - | - |  |  |  | - |  |  |  | - |
| 361.1 | Structures, Improvements |  | 353,088 |  | 15,703 | - |  | - |  | 368,791 |  | - |  | 368,791 |
| 361.2 | Clearing, Grading of Land |  | 123,893 |  | 6,256 | $(2,865)$ |  | - |  | 127,284 |  | - |  | 127,284 |
| 362 | Station Equipment |  | 8,354,366 |  | 1,342,404 | $(421,926)$ |  | - |  | 9,274,844 |  | - |  | 9,274,844 |
| 364 | Poles, Towers And Fixtures |  | 26,219,919 |  | 2,116,335 | $(254,504)$ |  | - |  | 28,081,750 |  | - |  | 28,081,750 |
| 365 | Overhd Conductr, Devices |  | 16,826,282 |  | 2,351,717 | $(1,030,533)$ |  | - |  | 18,147,466 |  | - |  | 18,147,466 |
| 365.1 | Clearing, Grading of Land |  | 1,954,652 |  | 1,215,038 | - |  | - |  | 3,169,690 |  | - |  | 3,169,690 |
| 366 | Underground Conduit |  | 1,853,347 |  | 142,211 | (54) |  | - |  | 1,995,504 |  | - |  | 1,995,504 |
| 367 | Undergrnd Conductr,Devices |  | 14,952,673 |  | 1,296,295 | $(83,336)$ |  | - |  | 16,165,632 |  | - |  | 16,165,632 |
| 368 | Line Transformers |  | 23,891,208 |  | 2,763,801 | $(1,483,782)$ |  | - |  | 25,171,227 |  | - |  | 25,171,227 |
| 369 | Services |  | 12,142,082 |  | 492,172 | 259 |  | - |  | 12,634,513 |  | - |  | 12,634,513 |
| 369 | Underground Conduit |  | - |  | - | - |  | - |  | - |  | - |  | - |
| 370 | Meters |  | - |  | - | - |  | - |  | - |  | - |  | - |
| 370 | Smart Grid-10yr Life |  | 260,028 |  | 14,929 | $(7,548)$ |  | - |  | 267,409 |  | - |  | 267,409 |
| 370 | Smart Meters non classified - 15 yr Life |  | - |  | 146,289 | (523) |  | - |  | 145,766 |  | - |  | 145,766 |
| 370 | Smart Meter Commercial - 15 yr Life |  | - |  | 122,377 | - |  | - |  | 122,377 |  | - |  | 122,377 |
| 370 | Smart Meter Industrial - 15 yr Life |  | - |  | 3 | - |  | - |  | 3 |  | - |  | 3 |
| 370 | Smart Meter Infrastructure-15yr L |  | - |  | 89,874 | $(101,906)$ |  | - |  | $(12,032)$ |  | - |  | $(12,032)$ |
| 370 | Smart Meter Residential - 15 yr Life |  | - ${ }^{-}$ |  | 763,808 | - |  | - |  | 763,808 |  | - |  | 763,808 |
| 371 | Inst. On Cust. Prem. |  | 1,720,060 |  | 84,967 | $(16,266)$ |  | - |  | 1,788,761 |  | - |  | 1,788,761 |
| 373.1 | Street Light - Oh, Ug Lines |  | 3,157,123 |  | 250,666 | $(118,746)$ |  | - |  | 3,289,043 |  | - |  | 3,289,043 |
| 374 | ARC Distribution |  | - |  | 86 | - |  | - |  | 86 |  | - |  | 86 |
|  | TOTAL DISTRIBUTION PLANT | \$ | 111,808,721 |  | 13,214,931 | \$(3,521,729) | \$ | - | \$ | 121,501,922 | \$ | - |  | 121,501,922 |

## Pennsylvania Power Company

Original Cost - Plant and Depreciation Reserves
Activity Updated from 1/1/15 to 12/31/15
Target Reserve

| Acct No | Description | $\begin{gathered} \text { Balance } \\ 1 / 1 / 15 \\ \hline \end{gathered}$ |  | Actual Activity |  |  |  | $\begin{aligned} & \text { Balance } \\ & 12 / 31 / 05 \\ & \hline \end{aligned}$ |  | Adjustments | Adjusted <br> Balance $12 / 31 / 15$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Additions | Retirements | Transfers/ Adjustments |  |  |  |  |  |
|  |  | (1) |  | (2) |  | (3) | (4) | (5) |  | (6) | (7) |  |
| GENERAL PLANT |  |  |  |  |  |  |  |  |  |  |  |  |
| 389.2 | Easements | \$ | - | \$ | - | \$ | \$ | \$ | - | \$ | \$ | -781 |
| 390.1 | Structures, Improvements |  | 2,291,415 |  | 91,556 | - | - |  | 2,382,971 | - |  | 2,382,971 |
| 390.2 | Clearing, Grading of Land |  | 5,006 |  | 941 | - | - |  | 5,947 | - |  | 5,947 |
| 390.3 | Struct Impry, Leasehold imp |  | - |  | - | - ${ }^{-}$ | - |  | - | - |  | - |
| 391.1 | Office Furn., Mech. Equip. |  | 729,660 |  | 89,069 | $(41,473)$ | - |  | 777,256 | - |  | 777,256 |
| 391.2 | Data Processing Equipment |  | 1,593,650 |  | 443,579 | $(391,634)$ | - |  | 1,645,595 | - |  | 1,645,595 |
| 391.2 | Project Evolution |  | - |  | 3,687 | $(7,497)$ | - |  | $(3,810)$ | - |  | $(3,810)$ |
| 391.25 | Data Proc Smart Meters |  | 145,456 |  | 298,903 | $(38,049)$ | - |  | 406,310 | - |  | 406,310 |
| 392 | Transportation Equipment |  | 171,882 |  | 77,736 | $(50,943)$ | - |  | 198,675 | - |  | 198,675 |
| 393 | Stores Equipment |  | 150,581 |  | 10,776 | $(5,250)$ | - |  | 156,107 | - |  | 156,107 |
| 394 | Tools, Shop, Garage Equip. |  | 1,273,869 |  | 231,353 | $(39,376)$ | - |  | 1,465,846 | - |  | 1,465,846 |
| 395 | Laboratory Equipment |  | 63,454 |  | 3,645 | $(5,648)$ | - |  | 61,451 | - |  | 61,451 |
| 396 | Power Operated Equipment |  | 141,780 |  | 28,333 | ( | - |  | 170,113 | - |  | 170,113 |
| 397 | Communication Equipment |  | 1,212,214 |  | 393,991 | (996,792) | - |  | 609,413 | - |  | 609,413 |
| 398 | Misc. Equipment |  | 58,518 |  | 10,260 | $(3,217)$ | - |  | 65,561 | - |  | 65,561 |
| 399.1 | ARC General Plant |  | - |  | 812 | - | - |  | 812 | - |  | 812 |
|  | TOTAL GENERAL PLANT | \$ | 7,837,485 | \$ | 1,684,641 | \$ (1,579,879) | \$ | \$ | 7,942,246 | \$ | \$ | 7,942,246 |
| TOTAL |  | \$ 132,371,414 |  | $\$ 16,846,791$ |  | $\$(5,174,704)$ | \$ | \$ | 144,043,501 | \$ | \$ | 144,043,501 |

RWIP balance not included

## PENNSYLVAINA POWER COMPANY

## FILING REQUIREMENT V-A-3:

"Provide supporting schedules which indicate the procedures and calculations employed to develop the original cost plant and applicable reserves to the test year end as submitted in the current proceeding."

## RESPONSE:

See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-6.

## PENNSYLVANIA POWER COMPANY

Original Cost Plant and Reserve and Accrual Rate Adjustments for Rate Case Purposes
(Fully Projected Future Test Year)
(Fully Projected Future Test Year)

## FILING REQUIREMENT V-A-4:

"Provide a schedule showing details of rate case adjustments."

## RESPONSE:

This response provides original cost plant and reserve adjustments for rate case purposes at $12 / 31 / 17$, the fully future test year. This information is in support of Penn Power Exhibit RAD-46 Attachment B.

The following provide detail for plant and reserve adjustment items:

1. Asset Retirement Costs -for Asset Retirement Obligations and FIN 47 Accounting for Asset Retirement Obligations. The Plant in Service, budgeted book has been reduced by $\$ 37,283$; book reserve were reduced by $\$ 25,625$.
2. LED Streetlight plant in service was increased by $\$ 4,577,895$ in accordance with the latest work plan. No corresponding book reserves or calculated reserves were included.
3. ATSI plant were removed in accordance with the settlement, at Docket No. A-110450F0016, by $\$ 775,048$; ATSI book reserved were reduced by \$666,876.
4. ATSI transmission easements and land were removed by $\$ 10,519,912$.

# PENNSYLVANIA POWER COMPANY 

Original Cost Plant and Reserve and Accrual Rate Adjustments for Rate Case Purposes (Future Test Year)

## FILING REQUIREMENT V-A-4:

"Provide a schedule showing details of rate case adjustments."

## RESPONSE:

This response provides original cost plant and reserve adjustments for rate case purposes at $12 / 31 / 16$, the future test year. This information is in support of Penn Power Exhibit RAD-47 Attachment B.

The following provide detail for plant and reserve adjustment items:

1. Asset Retirement Costs -for Asset Retirement Obligations and FIN 47 Accounting for Asset Retirement Obligations. The Plant in Service, budgeted book has been reduced by $\$ 37,283$; book reserve were reduced by $\$ 24,728$.
2. ATSI plant were removed in accordance with the settlement, at Docket No. A-110450F0016, by $\$ 775,048$; ATSI book reserved were reduced by \$650,776.
3. LED Streetlight plant in service was increased by $\$ 4,577,895$ in accordance with the latest work plan. No corresponding book reserves or calculated reserves were included.
4. ATSI transmission easements and land were removed by $\$ 10,519,912$.

# PENNSYLVANIA POWER COMPANY 

Original Cost Plant and Reserve and Accrual Rate Adjustments for Rate Case Purposes
(Historical Test Year)

## FILING REQUIREMENT V-A-4:

"Provide a schedule showing details of rate case adjustments."

## RESPONSE:

This response provides original cost plant and reserve adjustments for rate case purposes at $12 / 31 / 15$, the historic test year. This information is in support of Penn Power Exhibit RAD-48 Attachment B.

The following provide detail for plant and reserve adjustment items:

1. Asset Retirement Costs -for Asset Retirement Obligations and FIN 47

Accounting for Asset Retirement Obligations. The Plant in Service, budgeted book has been reduced by $\$ 37,283$; book reserves were reduced by $\$ 23,831$.
2. ATSI plant was removed in accordance with the settlement, at Docket No. A-110450F0016, by $\$ 775,048$; ATSI book reserves were reduced by \$638,592.
3. LED Streetlight plant in service was increased by $\$ 4,577,895$ in accordance with the latest work plan. No corresponding book reserves or calculated reserves were included.
4. ATSI transmission easements and land were removed by $\$ 10,519,912$.

# PENNSYLVANIA POWER COMPANY 

Annual Depreciation Review on Capital Plant Investments

## FILING REQUIREMENT V-B-2

"Supply a schedule by account or by depreciable group showing the survivor curve or interim survivor curve or interim survivor curse and annual accrual rate estimated to be appropriate:
a. For the purpose of this filing
b. For the purposes of the most recent filing prior to the current proceeding.
c. Supply an explanation for any major change in annual accrual rate by account or by depreciable group
d. Supply a comprehensive statement of major changes in depreciation methods, procedures and techniques and the effect of the changes upon accumulated and annual depreciation, if any."

## FILING REQUIREMENT V-C

"Where the retirement rate actuarial method of mortality is utilized, set forth representative examples including charts depicting the observed and estimated survivor curves and a tabular presentation of the observed and estimated life tables plotted on the chart. Other analysis results shall be subject to request."

## FILING REQUIREMENT V-D Item 2

"Provide representative examples of detail calculations by vintage at account or at a more detailed level, as performed for those purposes. Other vintage detail calculations shall be subject to request."

## FILING REQUIREMENT V-E

"Provide a description of depreciation methods utilized in calculating annual depreciation amounts and depreciation reserves, together with a discussion of significant factors which were considered in arriving at estimates of service life and forecast retirements by facilities, accounts or sub-accounts as applicable."

## RESPONSE:

Witness: R. A. D'Angelo
a. See Penn Power Exhibit RAD-53 Attachment A for the accrual expenses. Pages 1 and 2 show the accrual expense for the fully projected future test year, pages 3 and 4 show the accrual expense for the future test year, and pages 5 and 6 show the accrual expense for the historical test year.
b. See Penn Power Exhibit RAD-53 Attachment B for the accrual expenses from the Company's last base rate case. Pages 1 and 2 show the accrual expense for the fully projected future test year, twelve months ended April 30, 2016; pages 3 and 4 show the accrual expense for the future test year, twelve months ended March 31, 2015 and pages 5 and 6 show the accrual expense for the historical test year, twelve months ended March 31, 2014.
c. See the direct testimony and exhibits of John J. Spanos, Penn Power Statement No. 7, Exhibit JJS-8.
d. See the direct testimony and exhibits of John J. Spanos, Penn Power Statement No. 7, Exhibit JJS-8.

## V-C

See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-9.

## V-D

See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-11.

V-E
See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-12.

## Pennsylvania Power Company

Accrual Expense after Adjustment-Claim Basis Activity Updated from January 2017 to December 2017

| Acct <br> No | Description | Adjusted <br> Depreciable <br> Base | Accrual Rate <br> Ave Remaining <br> Life Basis | Accrual <br> Expense <br> Amount |
| :---: | :---: | :---: | :---: | :---: |

(1)
(2)
(3)

## INTANGIBLE PLANT

Miscellaneous Intangible Plant
Smart Meters
TOTAL INTANGIBLE PLANT

| $\$$ | $12,799,670$ | $14.29 \%$ |
| ---: | ---: | ---: |
|  | $6,083,519$ |  |
| $\$$ | $18,883,189$ |  |


| $\$$ | $1,829,073$ |
| ---: | ---: |
|  | 869,335 |
| $\$ \quad 2,698,408$ |  |

TRANSMISSION PLANT
350.12
350.22
352.1
352.2
353
354
355
356.1
356.2
357
358
359

Land Rights-subs
Land Rights-lines
Structures
Clearing Costs
Station Equipment
Towers and Fixtures
Poles and Fixtures
Overhead Conductors
Clearing Costs
Underground Conductors
Underground Conductors
Roads \& Trails
TOTAL TRANSMISSION PLANT

| $\$$ | 0 | $0.00 \%$ |
| ---: | ---: | ---: |
|  | 0 | $0.00 \%$ |
|  | 764,598 | $0.80 \%$ |
|  | 195,216 | $1.35 \%$ |
|  | $6,417,734$ | $0.80 \%$ |
|  | 7,576 | $0.05 \%$ |
|  | $2,825,553$ | $1.77 \%$ |
|  | $2,591,159$ | $1.57 \%$ |
|  | 130,852 | $1.57 \%$ |
|  | 64,654 | $1.47 \%$ |
|  | 36,071 | $1.57 \%$ |
|  | 6,324 | $1.17 \%$ |
| $\$ 13,039,737$ |  |  |


| $\$$ | - |
| ---: | ---: |
|  | - |
|  | 6,117 |
| 2,635 |  |
|  | 51,342 |
|  | 4 |
|  | 50,012 |
| 40,681 |  |
|  | 2,054 |
|  | 950 |
|  | 566 |
|  | 74 |
|  |  |
| $\$$ | 154,435 |

DISTRIBUTION PLANT
360.22

| \$ 10,977 | 0.00\% | \$ | - |
| :---: | :---: | :---: | :---: |
| 5,791,894 | 0.00\% |  | - |
| 1,327,843 | 1.31\% |  | 17,395 |
| 448,649 | 1.37\% |  | 6,146 |
| 56,320,534 | 2.76\% |  | 1,554,447 |
| 120,242,928 | 2.24\% |  | 2,693,442 |
| 129,141,372 | 2.40\% |  | 3,099,393 |
| 48,591,447 | 2.33\% |  | 1,132,181 |
| 7,699,286 | 1.85\% |  | 142,437 |
| 70,996,721 | 2.23\% |  | 1,583,227 |
| 112,735,325 | 2.66\% |  | 2,998,760 |
| 39,459,842 | 1.35\% |  | 532,708 |
| - | 0.00\% |  | - |
| - | 0.00\% |  | - |
| 145,735 | 10.00\% |  | 14,573 |
| 15,248,339 | 6.67\% |  | 1,017,064 |
| 2,971,079 | 6.67\% |  | 198,171 |
| 80 | 6.67\% |  | 5 |
| 2,414,213 | 6.67\% |  | 161,028 |
| 17,924,425 | 6.67\% |  | 1,195,559 |
| 3,792,738 | 2.04\% |  | 77,372 |
| 12,358,996 | 2.88\% |  | 355,939 |
| \$ 647,622,422 | 2.59\% | \$ | 16,779,847 |

## Pennsylvania Power Company

Accrual Expense after Adjustment-Claim Basis
Activity Updated from January 2017 to December 2017

| Acct <br> No | Description | Adjusted <br> Depreciable <br> Base | Accrual Rate <br> Ave Remaining <br> Life Basis | Accrual <br> Expense <br> Amount |
| :---: | :---: | :---: | :---: | :---: |


| GENERAL PLANT |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Land Rights | \$ | 311 | 0.00\% |  | - |
| Structures |  | 5,745,477 | 1.79\% |  | 102,844 |
| Clearing |  | 41,299 | 2.22\% |  | 917 |
| Structure LH |  | 407,069 | 0.00\% |  | - |
| Office Furniture \& Equipment |  | 739,893 | 24.10\% |  | 178,314 |
| Data processing Equip |  | 1,878,444 | 35.63\% |  | 669,290 |
| Data processing Equip Prj Evolution |  | 13,028 | 35.63\% |  | 4,642 |
| Data Processing Smart Meters |  | 3,372,007 | 20.00\% |  | 674,401 |
| Transportation |  | 594,878 | 10.04\% |  | 59,726 |
| Stores Equipment |  | 171,743 | 11.10\% |  | 19,063 |
| Tools, Shop, \& Garage Equipment |  | 2,433,042 | 8.50\% |  | 206,809 |
| Laboratory Equipment |  | 72,968 | 6.93\% |  | 5,057 |
| Power Operated Equipment |  | 461,035 | 5.56\% |  | 25,634 |
| Communications Equipment |  | 2,502,973 | 9.01\% |  | 225,518 |
| Miscellaneous Equipment |  | 63,790 | 6.42\% |  | 4,095 |
| TOTAL GENERAL PLANT | \$ | 18,497,957 | 11.77\% | \$ | 2,176,310 |
| TOTAL |  | 698,043,305 | 3.12\% | \$ | 21,809,000 |

## Pennsylvania Power Company

Accrual Expense after Adjustment-Claim Basis
Activity Updated from January 2016 to December 2016

| Acct No | Description | Adjusted Depreciable Base | Accrual Rate Ave Remaining Life Basis |  | Accrual <br> Expense Amount |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) | (2) | (3) |  |
| INTANGIBLE PLANT |  |  |  |  |  |
| 303 | Miscellaneous Intangible Plant | \$ 12,119,673 | 14.29\% | \$ | 1,731,901 |
| 303 | Smart Meters | 4,089,337 | 14.29\% |  | 584,366 |
|  | TOTAL INTANGIBLE PLANT | \$ 16,209,010 | 14.29\% | \$ | 2,316,267 |
| TRANSMISSION PLANT |  |  |  |  |  |
| 350.12 | Land Rights-subs | \$ 0 | 0.00\% | \$ |  |
| 350.22 | Land Rights-lines | 0 | 0.00\% |  | - |
| 352.1 | Structures | 764,598 | 0.80\% |  | 6,117 |
| 352.2 | Clearing Costs | 195,216 | 1.35\% |  | 2,635 |
| 353 | Station Equipment | 6,417,734 | 0.82\% |  | 52,625 |
| 354 | Towers and Fixtures | 7,576 | 0.07\% |  | 5 |
| 355 | Poles and Fixtures | 2,825,553 | 1.86\% |  | 52,555 |
| 356.1 | Overhead Conductors | 2,591,159 | 1.61\% |  | 41,718 |
| 356.2 | Clearing Costs | 130,852 | 1.61\% |  | 2,107 |
| 357 | Underground Conduit | 64,654 | 1.56\% |  | 1,009 |
| 358 | Underground Conductors | 36,071 | 1.71\% |  | 617 |
| 359 | Roads \& Trails | 6,324 | 1.22\% |  | 77 |
|  | TOTAL TRANSMISSION PLANT | \$ 13,039,737 | 1.22\% | \$ | 159,465 |
| DISTRIBUTION PLANT |  |  |  |  |  |
| 360.12 | Land Rights-subs | \$ 10,977 | 0.00\% | \$ | - |
| 360.22 | Land Rights-lines | 5,791,894 | 0.00\% |  | - |
| 361.1 | Structures | 1,281,777 | 1.28\% |  | 16,407 |
| 361.2 | Clearing Costs | 448,649 | 1.38\% |  | 6,191 |
| 362 | Station Equipment | 51,806,152 | 2.70\% |  | 1,398,766 |
| 364 | Poles, Towers and Fixtures | 110,793,544 | 2.17\% |  | 2,404,220 |
| 365 | Overhead Conductors | 116,186,220 | 2.35\% |  | 2,730,376 |
| 365.1 | Clearing Costs | 48,591,447 | 2.44\% |  | 1,185,631 |
| 366 | Underground Conduit | 7,645,677 | 1.87\% |  | 142,974 |
| 367 | Underground Conductors | 66,219,919 | 2.20\% |  | 1,456,838 |
| 368 | Line Transformers | 107,867,565 | 2.69\% |  | 2,901,637 |
| 369 | Overhead Services | 38,808,793 | 1.33\% |  | 516,157 |
| 369 | Underground Services | - | 0.00\% |  | - |
| 370 | Meters | - | 0.00\% |  | - |
| 370.1 | Smart Grid Meters 10 yr | 145,735 | 10.00\% |  | 14,573 |
| 370.1 | Smart Meters 15 yr | 12,719,801 | 6.67\% |  | 848,411 |
| 370 | Smart Meter Commercial - 15yr Life | 2,971,079 | 6.67\% |  | 198,171 |
| 370 | Smart Meter Industrial - 15yr Life | 80 | 6.67\% |  | 5 |
| 370 | Smart Meter Infrastructure-15yr L | 2,414,213 | 6.67\% |  | 161,028 |
| 370 | Smart Meter Residential - 15yr Life | 17,924,425 | 6.67\% |  | 1,195,559 |
| 371 | Installed on Customer Premises | 3,792,738 | 2.14\% |  | 81,165 |
| 373.1 | Street Lighting \& Signal Systems | 12,293,578 | 3.07\% |  | 377,413 |
|  | TOTAL DISTRIBUTION PLANT | \$607,714,261 | 2.57\% | \$ | 15,635,522 |

## Pennsylvania Power Company

Accrual Expense after Adjustment-Claim Basis Activity Updated from January 2016 to December 2016

| Acct No | Description | Adjusted Depreciable Base | Accrual Rate Ave Remaining Life Basis | Accrual Expense Amount |
| :---: | :---: | :---: | :---: | :---: |
|  |  | (1) | (2) | (3) |
| GENERAL PLANT |  |  |  |  |
| 389.1 | Land Rights | \$ 311 | 0.00\% | \$ |
| 390.1 | Structures | 5,745,175 | 1.84\% | 105,711 |
| 390.2 | Clearing | 41,299 | 2.25\% | 929 |
| 390.3 | Structure LH | 407,069 | 0.00\% | - |
| 391.1 | Office Furniture \& Equipment | 739,893 | 15.57\% | 115,201 |
| 391.2 | Data processing Equip | 1,878,444 | 9.54\% | 179,204 |
| 391.2 | Data processing Equip Prj Evolution | 13,028 | 9.54\% | 1,243 |
| 391.3 | Data Processing Smart Meters | 3,167,936 | 20.00\% | 633,587 |
| 392 | Transportation | 594,878 | 11.38\% | 67,697 |
| 393 | Stores Equipment | 171,743 | 8.80\% | 15,113 |
| 394 | Tools, Shop, \& Garage Equipment | 2,433,042 | 9.24\% | 224,813 |
| 395 | Laboratory Equipment | 72,968 | 4.99\% | 3,641 |
| 396 | Power Operated Equipment | 461,035 | 5.87\% | 27,063 |
| 397 | Communications Equipment | 2,379,512 | 9.92\% | 236,048 |
| 398 | Miscellaneous Equipment | 63,790 | 1.72\% | 1,097 |
|  | TOTAL GENERAL PLANT | \$ 18,170,122 | 8.87\% | \$ 1,611,347 |
|  | TOTAL | \$ 655,133,131 | 3.01\% | \$ 19,722,601 |

Penn Power Exhibit RAD-53 Witness: R. A. D'Angelo Attachment A
Page 5 of 6

## Pennsylvania Power Company

Accrual Expense after Adjustment-Claim Basis At Future Year from January 2015 to December 2015

| Acct <br> No | Description | Adjusted <br> Depreciable <br> Base | Accrual Rate <br> Ave Remaining <br> Life Basis | Accrual <br> Expense <br> Amount |
| :---: | :---: | :---: | :---: | :---: |

(1) (2) (3)

INTANGIBLE PLANT

| 303 | Miscellaneous Intangible Plant | \$ | 11,721,276 | 14.29\% | \$ | 1,674,970 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 303 | Smart Meters |  | 2,831,841 | 14.29\% |  | 404,670 |
|  | TOTAL INTANGIBLE PLANT | \$ | 14,553,117 | 14.29\% | \$ | 2,079,640 |
| TRANSMISSION PLANT |  |  |  |  |  |  |
| 350.12 | Land Rights-subs | \$ | 0 | 0.00\% | \$ | - |
| 350.22 | Land Rights - lines |  | 0 | 0.00\% |  |  |
| 352.1 | Structures |  | 764,598 | 0.81\% |  | 6,193 |
| 352.2 | Clearing Costs |  | 195,216 | 1.36\% |  | 2,655 |
| 353 | Station Equipment |  | 6,417,734 | 0.84\% |  | 53,909 |
| 354 | Towers and Fixtures |  | 7,576 | 0.07\% |  | 5 |
| 355 | Poles and Fixtures |  | 2,683,169 | 1.81\% |  | 48,565 |
| 356.1 | Overhead Conductors |  | 2,591,159 | 1.68\% |  | 43,531 |
| 356.2 | Clearing Costs |  | 130,852 | 1.68\% |  | 2,198 |
| 357 | Underground Conduit |  | 64,654 | 1.66\% |  | 1,073 |
| 358 | Underground Conductors |  | 36,071 | 1.82\% |  | 656 |
| 359 | Roads \& Trails |  | 6,324 | 1.25\% |  | 79 |
|  | TOTAL TRANSMISSION PLANT | \$ | 12,897,354 |  | \$ | 158,864 |
| DISTRIBUTION PLANT |  |  |  |  |  |  |
| 360.12 | Land Rights-subs | \$ | 10,977 | 0.00\% | \$ |  |
| 360.22 | Land Rights-lines |  | 5,791,894 | 0.00\% |  | - |
| 361.1 | Structures |  | 1,263,720 | 1.28\% |  | 16,176 |
| 361.2 | Clearing Costs |  | 448,649 | 1.39\% |  | 6,236 |
| 362 | Station Equipment |  | 50,036,263 | 2.85\% |  | 1,426,033 |
| 364 | Poles, Towers and Fixtures |  | 102,959,759 | 2.10\% |  | 2,162,155 |
| 365 | Overhead Conductors |  | 105,144,371 | 2.29\% |  | 2,407,806 |
| 365.1 | Clearing Costs |  | 48,591,447 | 2.60\% |  | 1,263,378 |
| 366 | Underground Conduit |  | 7,586,389 | 1.89\% |  | 143,383 |
| 367 | Underground Conductors |  | 61,907,364 | 2.15\% |  | 1,331,008 |
| 368 | Line Transformers |  | 102,961,500 | 2.72\% |  | 2,800,553 |
| 369 | Overhead Services |  | 38,032,759 | 1.31\% |  | 498,229 |
| 369.1 | Underground Services |  | - | 0.00\% |  | - |
| 370 | Meters |  | - | 0.00\% |  | - |
| 370 | Smart Grid - 10yr Life |  | 145,735 | 10.00\% |  | 14,573 |
| 370 | Smart Meters non classified-15yr Life |  | 4,041,294 | 6.67\% |  | 269,554 |
| 370 | Smart Meter Commercial - 15 yr Life |  | 2,971,079 | 6.67\% |  | 198,171 |
| 370 | Smart Meter Industrial - 15yr Life |  | 80 | 6.67\% |  | 5 |
| 370 | Smart Meter Infrastructure-15yr L |  | 2,414,213 | 6.67\% |  | 161,028 |
| 370 | Smart Meter Residential - 15yr Life |  | 17,924,425 | 6.67\% |  | 1,195,559 |
| 371 | Inst. On Cust. Prem. |  | 3,792,738 | 2.25\% |  | 85,337 |
| 373 | Street Lighting and Signal Systems |  | 12,219,456 | 3.30\% |  | 403,242 |
|  | TOTAL DISTRIBUTION PLANT | \$ | 568,244,111 | 2.53\% | \$ | 14,382,426 |

Penn Power Exhibit RAD-53
Witness: R. A. D'Angelo Attachment A

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## Pennsylvania Power Company

Accrual Expense after Adjustment-Claim Basis At Future Year from January 2015 to December 2015


Pennsylvania Power Company
Accrual Expense after Adjustment-Claim Basis At Fully Future Year from May 2015 to April 2016

| Acct <br> No | Description | Adjusted <br> Depreciable <br> Base | Accrual Rate <br> Ave Remaining <br> Life Basis | Accrual <br> Expense <br> Amount |
| :---: | :---: | :---: | :---: | :---: |

INTANGIBLE PLANT
Miscellaneous Intangible Plan Smart Meters TOTAL INTANGIBLE PLANT

TRANSMISSION PLANT
350.12
350.22
352.1
352.2
353
354
355
356.1
356.2
357
358
359

| 360.12 | Land Rights-subs |
| :--- | :--- |
| 360.22 | Land Rights-lines |
| 361.1 | Structures |
| 361.2 | Clearing Costs |
| 362 | Station Equipment |
| 364 | Poles, Towers and Fixtures |
| 365 | Overhead Conductors |
| 365.1 | Clearing Costs |
| 366 | Underground Conduit |
| 367 | Underground Conductors |
| 368 | Line Transformers |
| 369 | Overhead Services |
| 369.1 | Underground Services |
| 370 | Meters |
| 370.1 | Smart Meters |
| 371 | Installed on Customer Premises |
| 373.1 | Street Lighting \& Signal Systems |
| 373.2 | Street light- ESIP |
|  | TOTAL DISTRIBUTION PLANT |


| \$ | $10,044,766$ | $10.25 \%$ |
| ---: | ---: | ---: |
|  | $3,889,274$ |  |
| $\$$ | $13,934,040$ |  |


| $\$$ | 879,341 | $0.00 \%$ | $\$$ | - |
| ---: | ---: | ---: | ---: | ---: |
|  | $7,550,676$ | $0.00 \%$ |  | - |
|  | 854,898 | $1.26 \%$ |  | 10,772 |
|  | 196,171 | $1.26 \%$ |  | 2,472 |
| $6,647,966$ | $0.92 \%$ |  | 61,161 |  |
|  | 7,576 | $0.00 \%$ |  | - |
|  | $3,054,138$ | $1.57 \%$ |  | 47,950 |
| $1,870,438$ | $1.30 \%$ |  | 24,316 |  |
|  | 100,481 | $1.30 \%$ |  | 1,306 |
|  | 64,654 | $1.34 \%$ |  | 866 |
|  | 36,070 | $1.25 \%$ |  | 451 |
|  | 6,324 | $2.84 \%$ |  | 180 |
| $\$ 21,268,734$ | $0.70 \%$ | $\$$ | 149,474 |  |


| \$ 10,964 | 0.00\% | \$ |
| :---: | :---: | :---: |
| 5,786,805 | 0.00\% | - |
| 1,143,120 | 2.05\% | 23,434 |
| 451,497 | 2.05\% | 9,256 |
| 46,262,687 | 1.96\% | 906,749 |
| 94,910,388 | 1.87\% | 1,774,824 |
| 94,122,216 | 1.72\% | 1,618,902 |
| 41,196,197 | 1.72\% | 708,575 |
| 7,012,991 | 1.74\% | 122,026 |
| 55,361,879 | 2.40\% | 1,328,685 |
| 138,117,480 | 2.00\% | 2,762,350 |
| 36,086,064 | 2.02\% | 728,938 |
| - | 0.00\% | - |
| 0 | 2.27\% | 0 |
| 23,746,461 | 6.67\% | 1,583,889 |
| 3,744,945 | 2.42\% | 90,628 |
| 7,291,975 | 2.94\% | 214,384 |
| 28,502 | 2.94\% | 838 |
| \$ 555,274,170 | 2.05\% | \$ 11,872,640 |

Penn Power Exhibit RAD-53 Witness: R. A. D'Angelo Attachment A Page 2 of 6

Pennsylvania Power Company
Accrual Expense after Adjustment-Claim Basis At Fully Future Year from May 2015 to April 2016

| GENERAL PLANT |  | \$ |  |  | \$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 389.1 | Land Rights |  | 311 | 0.00\% |  |  |
| 390.1 | Structures |  | 5,318,674 | 1.46\% |  | 77,653 |
| 390.2 | Clearing |  | 41,241 | 1.46\% |  | 602 |
| 390.3 | Structure L.H |  | 407,069 | 1.46\% |  | 5,943 |
| 391.1 | Office Furniture \& Equipment |  | 823,951 | 1.78\% |  | 14,666 |
| 391.2 | Data processing Equip |  | 2,414,745 | 25.84\% |  | 623,970 |
| 391.25 | Data Processing Smart Meters |  | 2,830,074 | 20.00\% |  | 566,015 |
| 392 | Transportation |  | 341,819 | 8.82\% |  | 30,148 |
| 393 | Stores Equipment |  | 182,266 | 2.16\% |  | 3,937 |
| 394 | Tools, Shop, \& Garage Equipment |  | 2,449,505 | 2.46\% |  | 60,258 |
| 395 | Laboratory Equipment |  | 84,583 | 2.18\% |  | 1,844 |
| 396 | Power Operated Equipment |  | 460,387 | 5.68\% |  | 26,150 |
| 397 | Communications Equipment |  | 3,413,190 | 3.17\% |  | 108,198 |
| 398 | Miscellaneous Equipment |  | 70,284 | 3.93\% |  | 2,762 |
|  | TOTAL GENERAL PLANT | \$ | 18,838,097 | 7.51\% | \$ | 1,522,146 |
|  | TOTAL |  | 09,315,041 | 2.31\% | \$ | 15,129,625 |

Penn Power Exhibit RAD-53
Witness: R. A. D'Angelo
Attachment A
Page 3 of 6

## Pennsylvania Power Company <br> Accrual Expense after Adjustment-Claim Basis <br> At Future Year from April 2014 to March 2015

| Acct <br> No | Description | Adjusted <br> Depreciable <br> Base | Accrual Rate <br> Ave Remaining <br> Life Basis | Accrual <br> Expense <br> Amount |
| :---: | :---: | :---: | :---: | :---: |

INTANGIBLE PLANT
303
Miscellaneous Intangible Plant Smart Meters
TOTAL INTANGIBLE PLANT


TRANSMISSION PLANT
350.12
350.22
352.1
352.2
353
354
355
356.1
356.2
357
358
359

Land Rights-subs
Land Rights-lines
Structures
Clearing Costs
Station Equipment
Towers and Fixtures
Poles and Fixtures
Overhead Conductors
Clearing Costs
Underground Conductors
Underground Conductors
Roads \& Trails
TOTAL TRANSMISSION PLANT
DISTRIBUTION PLANT

| 360.12 | Land Rights-subs |
| :--- | :--- |
| 360.22 | Land Rights-lines |
| 361.1 | Structures |
| 361.2 | Clearing Costs |
| 362 | Station Equipment |
| 364 | Poles, Towers and Fixtures |
| 365 | Overhead Conductors |
| 365.1 | Clearing Costs |
| 366 | Underground Conduit |
| 367 | Underground Conductors |
| 368 | Line Transformers |
| 369 | Overhead Services |
| 369.1 | Underground Services |
| 370 | Meters |
| 370.1 | Smart Meters |
| 371 | Installed on Customer Premises |
| 373.1 | Street Lighting \& Signal Systems |
| 373.2 | Street light- ESIP |
|  | TOTAL DISTRIBUTION PLANT |


| $\$$ | 10,964 | $0.00 \%$ | $\$$ | - |
| ---: | ---: | ---: | ---: | ---: |
|  | $5,786,805$ | $0.00 \%$ |  | 0 |
|  | $1,143,120$ | $2.05 \%$ |  | 23,434 |
|  | 451,497 | $2.05 \%$ |  | 9,256 |
|  | $44,919,335$ | $1.96 \%$ |  | 880,419 |
|  | $94,910,388$ | $1.87 \%$ |  | $1,774,824$ |
|  | $94,122,216$ | $1.72 \%$ |  | $1,618,902$ |
|  | $41,196,197$ | $1.72 \%$ |  | 708,575 |
|  | $7,012,991$ | $1.74 \%$ |  | 122,026 |
|  | $55,361,879$ | $2.40 \%$ |  | $1,328,685$ |
|  | $122,066,615$ | $2.00 \%$ |  | $2,441,332$ |
|  | $36,086,064$ | $2.02 \%$ |  | 728,938 |
|  | - | $0.00 \%$ |  | - |
|  | 0 | $2.27 \%$ |  | - |
|  | $11,332,672$ | $6.67 \%$ |  | 755,889 |
|  | $3,744,945$ | $2.42 \%$ |  | 90,628 |
|  | $7,291,975$ | $2.94 \%$ |  | 214,384 |
|  | 28,502 | $2.94 \%$ |  | 838 |
| $\$$ | $525,466,165$ | $2.04 \%$ | $\$$ | $10,697,292$ |

# Pennsylvania Power Company <br> Accrual Expense after Adjustment-Claim Basis <br> At Future Year from April 2014 to March 2015 

## GENERAL PLANT

| 389.1 | Land Rights | \$ | 311 | 0.00\% | \$ | - ${ }^{-}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 390.1 | Structures |  | 5,318,674 | 1.46\% |  | 77,653 |
| 390.2 | Clearing |  | 41,241 | 1.46\% |  | 602 |
| 390.3 | Structure LH |  | 407,069 | 1.46\% |  | 5,943 |
| 391.1 | Office Furniture \& Equipment |  | 823,951 | 1.78\% |  | 14,666 |
| 391.2 | Data processing Equip |  | 2,414,745 | 25.84\% |  | 623,970 |
| 391.25 | Data Processing Smart Meters |  | 1,933,535 | 20.00\% |  | 386,707 |
| 392 | Transportation |  | 341,819 | 8.82\% |  | 30,148 |
| 393 | Stores Equipment |  | 182,266 | 2.16\% |  | 3,937 |
| 394 | Tools, Shop, \& Garage Equipment |  | 2,449,505 | 2.46\% |  | 60,258 |
| 395 | Laboratory Equipment |  | 84,583 | 2.18\% |  | 1,844 |
| 396 | Power Operated Equipment |  | 460,387 | 5.68\% |  | 26,150 |
| 397 | Communications Equipment |  | 3,318,572 | 3.17\% |  | 105,199 |
| 398 | Miscellaneous Equipment |  | 70,284 | 3.93\% |  | 2,762 |
|  | TOTAL GENERAL PLANT | \$ | 17,846,940 | 7.51\% | \$ | 1,339,839 |
|  | TOTAL | \$ | 575,037,769 | 2.31\% | \$ | 13,296,759 |

# Penn Power Exhibit RAD-53 

Witness: R. A. D'Angelo Attachment $A$

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## Pennsylvania Power Company

Accrual Expense after Adjustment-Claim Basis At Future Year from April 2013 to March 2014

| $\begin{aligned} & \text { Acct } \\ & \text { No } \end{aligned}$ | Description |  | Adjusted Depreciable Base | Accrual Rate Ave Remaining Life Basis |  | Accrual Expense Amount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (1) |  | (2) | (3) |  |
| INTANGIBLE PLANT |  |  |  |  |  |  |
| 303 | Miscellaneous Intangible Plant | \$ | 9,506,440 | 14.20\% | \$ | 1,349,915 |
| 303 | Smart Meters |  |  | 14.29\% |  |  |
|  | TOTAL INTANGIBLE PLANT | \$ | 9,506,440 | 14.20\% | \$ | 1,349,915 |
| TRANSMISSION PLANT |  |  |  |  |  |  |
| 350.12 | Land Rights-subs | \$ | 879,341 | 0.00\% | \$ | - |
| 350.22 | Land Rights-lines |  | 7,550,676 | 0.00\% |  | - |
| 352.1 | Structures |  | 854,898 | 1.20\% |  | 10,259 |
| 352.2 | Clearing Costs |  | 196,171 | 1.20\% |  | 2,354 |
| 353 | Station Equipment |  | 6,511,785 | 0.91\% |  | 59,257 |
| 354 | Towers and Fixtures |  | 7,576 | 0.00\% |  | - |
| 355 | Poles and Fixtures |  | 2,294,979 | 2.34\% |  | 53,702 |
| 356.1 | Overhead Conductors |  | 1,870,438 | 1.40\% |  | 26,186 |
| 356.2 | Clearing Costs |  | 100,481 | 1.40\% |  | 1,407 |
| 357 | Underground Conductors |  | 64,654 | 1.39\% |  | 899 |
| 358 | Underground Conductors |  | 36,070 | 1.29\% |  | 465 |
| 359 | Roads \& Trails |  | 6,324 | 4.11\% |  | 260 |
|  | TOTAL TRANSMISSION PLANT | \$ | 20,373,392 |  | \$ | 154,789 |
| DISTRIBUTION PLANT |  |  |  |  |  |  |
| 360.12 | Land Rights-subs | \$ | 10,964 | 0.00\% | \$ | - |
| 360.22 | Land Rights-lines |  | 5,786,805 | 0.00\% |  | - |
| 361.1 | Structures |  | 1,143,120 | 2.13\% |  | 24,348 |
| 361.2 | Clearing Costs |  | 451,497 | 2.13\% |  | 9,617 |
| 362 | Station Equipment |  | 41,535,467 | 1.95\% |  | 809,942 |
| 364 | Poles, Towers and Fixtures |  | 94,910,388 | 2.09\% |  | 1,983,627 |
| 365 | Overhead Conductors |  | 94,122,216 | 2.26\% |  | 2,127,162 |
| 365.1 | Clearing Costs |  | 41,196,197 | 2.26\% |  | 931,034 |
| 366 | Underground Conduit |  | 7,012,991 | 1.74\% |  | 122,026 |
| 367 | Underground Conductors |  | 55,361,879 | 2.43\% |  | 1,345,294 |
| 368 | Line Transformers |  | 98,109,592 | 1.90\% |  | 1,864,082 |
| 369 | Overhead Services |  | 36,086,064 | 2.41\% |  | 869,674 |
| 369.1 | Underground Services |  | - | 0.00\% |  | - |
| 370 | Meters |  | 0 | 2.24\% |  | - |
| 370.1 | Smart Meters |  | 561,562 | 6.67\% |  | 37,456 |
| 371 | Installed on Customer Premises |  | 3,744,945 | 2.52\% |  | 94,373 |
| 373.1 | Street Lighting \& Signal Systems |  | 7,291,975 | 3.32\% |  | 242,094 |
| 373.2 | Street light- ESIP |  | 28,502 | 3.32\% |  | 946 |
|  | TOTAL DISTRIBUTION PLANT | \$ | 487,354,162 | 2.15\% | \$ | 10,460,729 |

## Pennsylvania Power Company

Accrual Expense after Adjustment-Claim Basis At Future Year from April 2013 to March 2014

| GENERAL PLANT |  | \$ |  |  | \$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 389.1 | Land Rights |  | 311 | 0.00\% |  | - |
| 390.1 | Structures |  | 5,318,735 | 1.67\% |  | 88,823 |
| 390.2 | Clearing |  | 41,241 | 1.67\% |  | 689 |
| 390.3 | Structure LH |  | 407,069 | 1.67\% |  | 6,798 |
| 391.1 | Office Furniture \& Equipment |  | 823,951 | 1.61\% |  | 13,266 |
| 391.2 | Data processing Equip |  | 2,414,745 | 19.72\% |  | 476,188 |
| 391.25 | Data Processing Smart Meters |  | 272,553 | 20.00\% |  | 54,511 |
| 392 | Transportation |  | 341,819 | 8.89\% |  | 30,388 |
| 393 | Stores Equipment |  | 182,266 | 2.16\% |  | 3,937 |
| 394 | Tools, Shop, \& Garage Equipment |  | 2,449,505 | 2.48\% |  | 60,748 |
| 395 | Laboratory Equipment |  | 84,583 | 2.14\% |  | 1,810 |
| 396 | Power Operated Equipment |  | 460,387 | 5.71\% |  | 26,288 |
| 397 | Communications Equipment |  | 2,830,603 | 3.18\% |  | 90,013 |
| 398 | Miscellaneous Equipment |  | 70,284 | 3.97\% |  | 2,790 |
|  | TOTAL GENERAL PLANT | \$ | 15,698,050 | 5.45\% | \$ | 856,249 |
|  | TOTAL | \$ | 532,932,045 | 2.41\% | \$ | 12,821,682 |

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT VI-A:

"Provide the following unadjusted detailed schedules by function and by FERC account for the claimed test year and for each of the 3 preceding comparable years:
A. Balance sheet in the form available."

RESPONSE:
See Penn Power Exhibit RAD-54 Attachment A.

## Pennsylvania Power Company Balance Sheet

| FERC <br> Account | Assets and Other Debits |  | 2017 |  | $2016$ |  | $2015$ |  | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | (In tho |  |  |  |  |
|  | Utility Plant |  |  |  |  |  |  |  |  |
| 101-107 | Total electric utility plant at original cost | \$ | 724,323 | \$ | 682,790 | \$ | 644,833 | \$ | 614,996 |
| 108-110 | Less: Accum. Provision for depreciation |  | 200,554 |  | 189,283 |  | 178,125 |  | 184,916 |
| 120.1-120.4 | Nuclear plant |  | - |  | - |  | - |  | - |
| 120.5 | Less: accum. provision for amortization of nuclear fuel |  | - |  | - |  | - |  | - |
|  | Net utility plant |  | 523,769 |  | 493,508 |  | 466,708 |  | 430,080 |
|  | Other Property and Investments |  |  |  |  |  |  |  |  |
| 121 | Non-utility property |  | 296 |  | 296 |  | 296 |  | 296 |
| 122 | Prov. for depreciation of non-utility prop. |  | 74 |  | 72 |  | 70 |  | 69 |
| 123.1 | Investments in subsidiary companies |  | - |  | - |  | . |  | - |
| 124 | Other investments |  | - |  | - |  | - |  | - |
| 125-8 | Special funds |  | 9,561 |  | 9,561 |  | 9,561 |  | 9,720 |
|  | Total other property and investments |  | 9,783 |  | 9,785 |  | 9,787 |  | 9,947 |
|  | Current and Accrued Assets |  |  |  |  |  |  |  |  |
| 131 | Cash |  | - |  | - |  | - |  | - |
| 132-134 | Special deposits |  | - |  | - |  | - |  | - |
| 135 | Working funds |  | 2 |  | 2 |  | 2 |  | 2 |
| 136 | Temporary cash investments |  | - |  | - |  | - |  | - |
| 142 | Customer accounts receivable |  | 21,582 |  | 22,682 |  | 24,229 |  | 23,104 |
| 143 | Other accounts receivable |  | 3,519 |  | 3,520 |  | 3,532 |  | 926 |
| 144 | Accum. provision for uncollectible accts |  | $(1,331)$ |  | $(1,331)$ |  | $(1,331)$ |  | $(1,092)$ |
| 145 | Notes receivable from associated companies |  | - |  | - |  | - |  | - |
| 146 | Receivables from associated companies |  | 14,580 |  | 14,580 |  | 14,580 |  | 6,351 |
| 151 | Fuel stock |  | - |  | - |  | - |  | - |
| 154-163 | Plant materials and operating supplieselectric |  | 3 |  | 3 |  | 3 |  | - |
| 165 | Prepayments |  | 2,297 |  | 2,297 |  | 2,297 |  | 1,090 |
| 171 | Interest and dividends receivable |  | - |  | - |  | - |  | - |
| 172 | Rents receivable |  | 1,568 |  | 1,568 |  | 1,568 |  | 1,714 |
| 173 | Accrued utility revenues |  | 16,724 |  | 16,724 |  | 16,724 |  | 11,421 |
| 174 | Misc. current and accrued assets |  | - |  | - |  | - |  | - |
|  | Total current and accrued assets |  | 58,944 |  | 60,045 |  | 61,604 |  | 43,516 |
|  | Deferred Debits |  |  |  |  |  |  |  |  |
| 181 | Unamortized debt expense |  | 782 |  | 930 |  | 718 |  | 830 |
| 182 | Other regulatory assets |  | 12,108 |  | 13,278 |  | 16,304 |  | 6,817 |
| 183 | Preliminary survey and investigation charges |  |  |  |  |  |  |  |  |
|  |  |  | - |  | - |  | " |  | - |
| 184 | Clearing accounts |  | 5 |  | 5 |  | 5 |  | 6 |
| 185 | Temporary facilities |  | 376 |  | 331 |  | 285 |  | 502 |
| 186 | Miscellaneous deferred debits |  | (94) |  | 410 |  | 254 |  | 946 |
| 188 | Research and development expenditures |  | 4 |  | 4 |  | 4 |  | 3 |
| 189 | Unamortized loss on reacquired debt |  | 2,400 |  | 2,786 |  | 3,218 |  | 3,650 |
| 190 | Accumulated deferred income taxes |  | 61,891 |  | 61,971 |  | 68,088 |  | 51,247 |
|  | Total deferred debits |  | 77,472 |  | 79,714 |  | 88,876 |  | 64,001 |
|  | Total assets and other debits | \$ | 669,968 | \$ | 643,051 | \$ | 626,975 | \$ | 547,544 |

## Pennsylvania Power Company <br> Balance Sheet

| FERC <br> Account | Liabilities and Other Credits | 2017 |  | 2016 |  | 2015 | December 31, | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (In thousands) |  |  |  |  |  |  |  |
|  | Proprietary Capital |  |  | \$ | 85,325 | \$ | 93,325 | \$ | 93,325 |
| 201 | Common stock issued | \$ | 77,325 | \$ | 85,325 | \$ | 93,32. | ¢ | 93,325 |
| 204 | Preferred stock issued |  | - |  | - |  |  |  |  |
| 207 | Premium on capital stock |  | - |  | - |  |  |  |  |
| 208 | Other paid in capital |  | 14,816 |  | 14,282 |  | 13,743 |  | 3,172 |
| 210 | Gain on resale or cancellation of reacquired capital stock |  | - |  | - |  | - |  |  |
| 214 | Capital stock expense |  |  |  | - ${ }^{-}$ |  | - ${ }^{-}$ |  | 15381 |
| 216 | Retained earnings |  | 40,627 |  | 37,801 |  | 34,920 |  | 15,381 |
| 216.1 | Unappropriated Undistributed Subsidiary Earnings |  | - |  | - ${ }^{*}$ |  | - |  | - |
| 219 | Accumulated other comprehensive income |  | 622 |  | 1,554 |  | 2,485 |  | 4,290 |
| 21 | Total proprietary capital |  | 133,390 |  | 138,962 |  | 144,473 |  | 116,168 |
|  | Long-Term Debt |  | 137955 |  | 137,955 |  | 103,929 |  | 104,903 |
| 221 | Bonds |  | 137,955 |  | 137,955 |  | 103,929 |  | 104,903 |
| 224 | Other long-term debt |  | - |  | - |  |  |  |  |
| 225 | Unamortized premium on long-term debt |  | - |  | - |  | - |  |  |
| 226 | Less: Unamortized discount on long-term debt |  | - |  | - |  | - |  | - - |
|  | Total long-term debt |  | 137,955 |  | 137,955 |  | 103,929 |  | 104,903 |
| 227-230 | Other Non-Current Liabilities |  | 43,756 |  | 45,095 |  | 60,864 |  | 49,611 |
|  | Current and Accrued Liabilities |  |  |  |  |  |  |  |  |
| 231 | Notes payable |  | 19,623 |  | - |  | - ${ }^{-}$ |  | ${ }^{-}$ |
| 232 | Accounts payable |  | 15,206 |  | 12,042 |  | 14,367 |  | 8,863 |
| 233 | Notes payable to associated companies |  | 51,630 |  | 44,888 |  | 43,133 |  | 37,313 |
| 234 | Accounts payable to associated companies |  |  |  |  |  |  |  |  |
|  |  |  | 3,312 |  | 5,512 |  | 7,407 |  | 9,802 |
| 235 | Customer deposits |  | 5,239 |  | 5,239 |  | 5,239 |  | 4,940 |
| 236 | Taxes accrued |  | 3,863 |  | 5,946 |  | 3,769 |  | 1,831 |
| 237 | Interest accrued |  | 3,160 |  | 1,410 |  | 118 |  | 129 |
| 238 | Dividends declared |  |  |  | - |  |  |  |  |
| 241 | Tax collections payable |  | - |  | - ${ }^{-}$ |  | - ${ }^{-}$ |  |  |
| 242 | Misc. current and accrued liabilities |  | 9,316 |  | 9,316 |  | 9,699 |  | 9,576 |
| 243 | Oblig. under capital leases-current |  | 572 |  | 572 |  | 572 |  | 561 |
|  | Total current and accrued liabilities |  | 111,921 |  | 84,926 |  | 84,304 |  | 73,015 |
|  | Deferred Credits |  |  |  |  |  |  |  |  |
| 252 | Customer advances for construction |  | 33 |  | 33 |  | 33 |  | 33 |
| 253 | Other deferred credits |  | 28,435 |  | 28,435 |  | 28,435 |  | 26,157 |
| 254 | Other regulatory liabilities |  | 16,423 |  | 16,443 |  | 16,462 |  | 14,871 |
| 255 | Accum. deferred investment tax credits |  | (318) |  | (129) |  | 60 |  | 249 |
| 256 | Deferred gains on disposition of plant |  | - |  | - |  | - |  | 169 |
| 257 | Unamortized gain on reacquired debt |  | 110 |  | 130 |  | 150 |  | 169 |
|  | Total deferred credits |  | 44,684 |  | 44,913 |  | 45,140 |  | 41,479 |
|  | Accumulated Deferred Income Taxes |  |  |  |  |  |  |  |  |
| 282 | Other property |  | 164,866 |  | 157,749 |  | 153,282 |  | 129,714 |
| 283 | Other |  | 33,397 |  | 33,452 |  | 34,983 |  | 32,654 |
|  | Total accum. deferred income taxes |  | 198,263 |  | 191,200 |  | 188,265 |  | 162,368 |
|  | Total liabilities and other credits |  | 669,968 | \$ | 643,051 |  | 626,975 | \$ | 547,544 |

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT VI-B:

"Provide the following unadjusted detailed schedules by function and by FERC account for the claimed test year and for each of the 3 preceding comparable years:
B. Statement of income."

## RESPONSE:

See Penn Power Exhibit RAD-55 Attachment A.

| FERC <br> Account |  | December 31, |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
|  |  | (In thousands) |  |  |  |  |  |  |  |
| Operating Revenues |  |  |  |  |  |  |  |  |  |
| Electric Service Revenues |  |  |  |  |  |  |  |  |  |
| 440 | Residential sales | \$ | 183,245 | \$ | 186,639 | \$ | 177,115 | \$ | 135,525 |
| 442 | Commercial sales |  | 79,849 |  | 80,720 |  | 63,765 |  | 55,971 |
| 442 | Industrial sales |  | 10,720 |  | 10,779 |  | 8,606 |  | 5,053 |
| 444 | Public street and highway lighting |  | 1,472 |  | 1,509 |  | 1,349 |  | 1,059 |
| 445 | Other sales to public authorities |  | - |  | - |  | - |  | - |
| 447 | Sale for resale |  | 76 |  | 144 |  | 160 |  | 54 |
|  | Total electric service revenues | \$ | 275,362 | \$ | 279,791 | \$ | 250,995 | \$ | 197,662 |
| Other Electric Revenue |  |  |  |  |  |  |  |  |  |
| 450 | Forfeited discounts | \$ | 1,291 | \$ | 1,291 | \$ | 882 | \$ | 748 |
| 451 | Miscellaneouse service revenues |  | 194 |  | 194 |  | 1 |  | 988 |
| 454 | Rent from electric property |  | 1,636 |  | 1,942 |  | 2,098 |  | 1,899 |
| 456 | Other electric revenues |  | 1,498 |  | 1,498 |  | 1,526 |  | 1,485 |
|  | Total other electric revenues | \$ | 4,620 | \$ | 4,926 | \$ | 4,507 | \$ | 5,120 |
|  | Total operating revenues | \$ | 279,981 | \$ | 284,717 | \$ | 255,502 | \$ | 202,782 |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| 401-2 | Operation and maintenance expense |  |  |  |  |  |  |  |  |
|  | Power production expenses | \$ | 151,782 | \$ | 157,613 | \$ | 131,944 | \$ | 96,791 |
|  | Transmission expenses |  | 4,327 |  | 4,412 |  | 5,024 |  | 7,200 |
|  | Regional market expenses |  | - |  | - |  | 12 |  | 19 |
|  | Distribution expenses |  | 16,234 |  | 14,510 |  | 12,443 |  | 12,063 |
|  | Customer accounts expense |  | 6,923 |  | 6,410 |  | 6,639 |  | 4,833 |
|  | Customer service \& information expense |  | 12,288 |  | 11,350 |  | 9,557 |  | 10,693 |
|  | Sales expenses |  | 25 |  | 24 |  | 11 |  | 9 |
|  | Administrative \& general expenses |  | 13,937 |  | 13,796 |  | 13,033 |  | 20,237 |
|  | Subtotal | \$ | 205,517 | \$ | 208,117 | \$ | 178,663 | \$ | 151,845 |
| 403 | Depreciation expense | \$ | 16,413 | \$ | 16,222 | \$ | 17,750 | \$ | 15,357 |
| 404-5 | Amortization and depletion of utility plant |  | 1,939 |  | 1,311 |  | 690 |  | 292 |
| 406 | Amortization and utility plant acq. adjustment |  | - |  | - |  | - |  | - |
| 407 | Amortization of property losses |  | - |  | " |  | - |  | - |
| 407.3 | Regulatory debits |  | 2,549 |  | 2,985 |  | 2,914 |  | $(2,925)$ |
| 407.4 | Regulatory credits |  | $(2,320)$ |  | (900) |  | $(2,513)$ |  | $(3,697)$ |
| 408.1 | Taxes other than income taxes |  | 17,082 |  | 17,292 |  | 16,523 |  | 13,810 |
| 411.1 | Accretion expense |  | - |  | - |  | - |  | - |
| 411.8 | Gains from disposition allowance |  | - |  | - |  | - |  | - |
|  | Total operating expenses before |  |  |  |  |  | - |  | - |
|  | federal and state income taxes | \$ | 241,180 | \$ | 245,028 | \$ | 214,027 | \$ | 174,682 |
|  | Net operating income before |  |  |  |  |  |  |  |  |
|  | income taxes | \$ | 38,801 | \$ | 39,688 | \$ | 41,475 | \$ | 28,100 |
| Income taxes |  |  |  |  |  |  |  |  |  |
| 409.1 | Income taxes-federal | \$ | 3,274 | \$ | 1,589 | \$ | 1,479 | \$ | 750 |
| 409.1 | Income taxes-state |  | 1,981 |  | 2,044 |  | 1,582 |  | (421) |
| 410.1 | Provision for deferred income taxes-federal |  | 6,469 |  | 8,374 |  | 53,056 |  | 30,688 |
| 410.1 | Provision for deferred income taxes-state |  | 1,144 |  | 1,150 |  | 12,393 |  | 4,899 |
| 411.1 | Income taxes deferred in prior years-cr. |  | - |  | - |  | $(55,012)$ |  | $(29,860)$ |
| 411.4 | Investment tax credit adjustments-net |  | - |  | - |  | (189) |  | (189) |
|  |  |  | - |  | - |  | (18) |  |  |
|  | Total income taxes | \$ | 12,868 | \$ | 13,158 | \$ | 13,309 | \$ | 5,867 |
|  | Net operating income | \$ | 25,933 | \$ | 26,530 | \$ | 28,166 | \$ | 22,233 |

Pennsylvaina Power Company

## Comparative Income Statements

| FERC <br> Account |  | December 31, |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
|  |  |  |  |  | (In thous | nd |  |  |  |
| Other income |  |  |  |  |  |  |  |  |  |
| 415-16 | Revenues from merchandising, jobbing and contract work | \$ | 3,140 | \$ | 764 | \$ | (156) | \$ | 1,221 |
| 417 | Revenues from non-utility operations |  |  |  |  |  | - |  | - |
| 417.1 | Expenses from non-utility operations |  |  |  |  |  | - |  |  |
| 418 | Nonoperating rental income |  | (2) |  | (2) |  | (2) |  | (2) |
| 418.1 | Equity in earnings of subsidiary companies |  | - |  |  |  | - |  | - |
| 419 | Interest and dividend income |  | 763 |  | 763 |  | 3 |  | 1 |
| 419.1 | Allowance for funds used during construction |  | - |  | - |  | (61) |  | (185) |
| 421 | Miscellaneous non-operating income |  | 394 |  | 1,443 |  | 892 |  | 518 |
| 421.1 | Gain on disposition of property |  | - |  | - |  | - |  | - |
|  | Total other income | \$ | 4,296 | \$ | 2,968 | \$ | 676 | \$ | 1,553 |
|  | Gross income | \$ | 30,228 | \$ | 29,499 | \$ | 28,842 | \$ | 23,786 |
| Other Income Deductions |  |  |  |  |  |  |  |  |  |
| 421.2 | Loss on disposition of property | \$ | - | \$ | - | \$ | - | \$ | - |
| 425 | Miscellaneous amortization |  | - |  | - |  | - |  | - |
| 426 | Other income deductions |  | (59) |  | (55) |  | 78 |  | (123) |
|  |  |  |  |  |  |  | - |  | - |
|  | Total other income deductions | \$ | (59) | \$ | (55) | \$ | 78 | \$ | (123) |
| Taxes Applicable to Other Income and Deductions |  |  |  |  |  |  |  |  |  |
| 408.2 | Taxes other than income taxes | \$ | - | \$ | - | \$ | - | \$ | - |
| 409.2 | Income taxes - federal |  | - |  | - |  | 192 |  | 393 |
| 409.2 | Income taxes - state |  | - |  | - |  | 61 |  | 125 |
| 410.2 | Provision for deferred income taxes |  | - |  | - |  | 1 |  | - |
| 411.2 | Provision for deferred income taxes-cr. |  | - |  | - |  | (9) |  | - |
|  |  |  |  |  |  |  | - |  | - |
|  | Total taxes on other income and deductions | \$ | - | \$ | - | \$ | 245 | \$ | 518 |
| Interest Charges |  |  |  |  |  |  |  |  |  |
| 427 | Interest on long term debt | \$ | 8,246 | \$ | 7,853 | \$ | 6,356 | \$ | 6,427 |
| 428 | Amortization of debt discount and expense |  | 147 |  | 138 |  | 112 |  | 112 |
| 428.1 | Amortization of loss on reacquired debt |  | 386 |  | 432 |  | 432 |  | 432 |
| 429 | Amortization of premium on debt credit |  |  |  |  |  | - |  | - |
| 429.1 | Amortization of gain on reacquired debt |  | (20) |  | (20) |  | (20) |  | (20) |
| 430 | Interest on debt to associated companies |  | 1,411 |  | 784 |  | 1,283 |  | 1,285 |
| 431 | Other interest expense |  | 1,344 |  | 1,216 |  | 922 |  | 638 |
| 432 | Allowance for borrowed funds used during |  | (79) |  | (72) |  | (104) |  | (82) |
|  | construction - credit |  | - |  | - |  | - |  | - |
|  |  |  |  |  |  |  | - |  | - |
|  | Total interest charges | \$ | 11,436 | \$ | 10,331 | \$ | 8,981 | \$ | 8,792 |
|  | Income before extraordinary items | \$ | 18,851 | \$ | 19,223 | \$ | 19,538 | \$ | 14,599 |
| Extraordinary Items \& Related Taxes |  |  |  |  |  |  |  |  |  |
| 434 | Extraordinary income | \$ | - | \$ | - | \$ | - | \$ | - |
| 435 | Extraordinary deductions |  | - |  | - |  | - |  | - |
| 409.3 | Income taxes - Federal \& other |  | - |  | - |  | - |  | - |
|  |  |  |  |  |  |  |  |  | - |
|  | Extraordinary items after taxes | \$ | - | \$ | - | \$ | - | \$ | - |
|  | Net income | \$ | 18,851 | \$ | 19,223 | \$ | 19,538 | \$ | 14,599 |

Pennsylvaina Power Company
Comparative Income Statements

| FERC Account | December 31, |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
|  |  |  |  | (In tho | and |  |  |  |
| Power Production Expenses |  |  |  |  |  |  |  |  |
| Steam Power Generation |  |  |  |  |  |  |  |  |
| Operation |  |  |  |  |  |  |  |  |
| 501 Fuel | \$ | - | \$ | - | \$ | - | \$ | - |
| 514 Maintenance of miscellaneous steam plant |  | - |  | - |  | - |  | - |
| Total operation | \$ | - | \$ | - | \$ | - | \$ | - |
| Total steam power generation | \$ | - | \$ | - | \$ | - | \$ | - |
| Nuclear Power Generation |  |  |  |  |  |  |  |  |
| Operation |  |  |  |  |  |  |  |  |
| 518 Fuel | \$ | - | \$ | - | \$ | - | \$ | - |
| Miscellaneous nuclear power expenses |  |  |  |  |  | - |  | - |
| Total operation | \$ | - | \$ | - | \$ | - | \$ | - |
| Total nuclear power generation | \$ | - | \$ | - | \$ | - | \$ | - |
| Other Power Generation |  |  |  |  |  |  |  |  |
| Operation |  |  |  |  |  |  |  |  |
| 549 Miscellaneous other power generation |  |  |  |  | \$ | - | \$ | - |
| expenses |  | - |  | - |  | - |  | - |
| Total operation | \$ | - | \$ | - | \$ | - | \$ | - |
| Total other power generation | \$ | - | \$ | - | \$ | - | \$ | - |
| Other Power Supply Expenses |  |  |  |  |  |  |  |  |
| 555 Purchased Power | \$ | 151,735 | \$ | 157,568 | \$ | 131,917 | \$ | 96,764 |
| 556 System control and load dispatching |  | - |  | - |  | - |  | - |
| 557 Other expenses |  | 47 |  | 46 |  | 27 |  | 27 |
| Total other power supply expenses | \$ | 151,782 | \$ | 157,613 | \$ | 131,944 | \$ | 96,791 |
| Total power production expenses | \$ | 151,782 | \$ | 157,613 | \$ | 131,944 | \$ | 96,791 |
| Transmission Expenses |  |  |  |  |  |  |  |  |
| Operation |  |  |  |  |  |  |  |  |
| 560 Operation supervision and engineering | \$ | 2 | \$ | 2 | \$ | - | \$ | - |
| 561 Load dispatching |  | 7 |  | 9 |  | 91 |  | 114 |
| 562 Station expenses |  | - |  | - |  | 2 |  | - |
| 563 Overhead lines expense |  | - |  | - |  | 3 |  | - |
| 564 Underground lines expenses |  | - |  | - |  | - |  | - |
| 565 Transmission of electricity by others |  | 4,380 |  | 4,158 |  | 4,739 |  | 6,965 |
| 566 Miscellaneous transmission expenses |  | 73 |  | 12 |  | 31 |  | 42 |
| 567 Rents |  | - |  | - |  | - |  | - |
| Total operation | \$ | 4,462 | \$ | 4,181 | \$ | 4,866 | \$ | 7,121 |
| Maintenance |  |  |  |  |  |  |  |  |
| 568 Maintenance supervision and engineering | \$ | 21 | \$ | 23 | \$ | 9 | \$ | 5 |
| 569 Maintenance of structures |  | 14 |  | 115 |  | 36 |  | 27 |
| 570 Maintenance of station equipment |  | 3 |  | 3 |  | - |  | 8 |
| 571 Maintenance of overhead lines |  | (174) |  | 91 |  | 79 |  | 42 |
| 572 Maintenance of underground lines |  | - |  | - |  | 35 |  |  |
| 573 Maintenance of miscellaneous transmission |  | - |  | - |  | (1) |  | (3) |
| Total maintenance | \$ | (135) | \$ | 231 | \$ | 158 | \$ | 79 |
| Total transmission expenses | \$ | 4,327 | \$ | 4,412 | \$ | 5,024 | \$ | 7,200 |
| Regional Market Expenses |  |  |  |  |  |  |  |  |
| Operation |  |  |  |  |  |  |  |  |
| 575 Operation-regional market expense | \$ | - | \$ | - | \$ | 12 | \$ | 19 |
| Total operation | \$ | - | \$ | - | \$ | 12 | \$ | 19 |

## Pennsylvaina Power Company

 Comparative Income StatementsFERC
Account

## Maintenance

576
Maintenance-regional market expense
Total maintenance
Total regional market expenses

| Distribution Expenses |  |
| :--- | :--- |
| Operation |  |
| 580 | Operation supervision and engineering |
| 581 | Load dispatching |
| 582 | Station expenses |
| 583 | Overhead lines expense |
| 584 | Underground lines expenses |
| 585 | Street lighting and signal system expenses |
| 586 | Meter expenses |
| 587 | Customer installation expenses |
| 588 | Miiscellaneous expenses |
| 589 | Rents |
|  | Total operation |


| Maintenance |  |
| :--- | :--- |
| 590 | Maintenance supervision and engineering |
| 591 | Maintenance of structures |
| 592 | Maintenance of station equipment |
| 593 | Maintenance of overhead lines |
| 594 | Maintenance of underground lines |
| 595 | Maintenance of line transformers |
| 596 | Maintenance of street lighting and signal |
|  | systems |
| 597 | Maintenance of meters |
| 598 | Maintenance of miscellaneous |
|  | distribution plant |
|  | Total maintenance |

Customer Account Expenses
Operation

| 901 | Supervision |
| :--- | :--- |
| 902 | Meter reading expenses |
| 903 | Customer records and collection expenses |
| 904 | Uncollectible accounts |
| 905 | Miscellaneous customer accounts expense <br>  |

Customer Service and Informational Expenses

## Operation

| 907 | Supervision |
| :--- | :--- |
| 908 | Customer assistance expenses |
| 909 | Informational and instructional expens |
| 910 | Miscellaneous customer service and |

informational expenses
Total customer service and
informational expense

## Sales Expenses

Operation

| 911 | Supervision |
| :--- | :--- |
| 912 | Demonstrating and selling expenses |
| 913 | Advertising expenses |
| 916 | Miscellaneouse sales expenses |
|  | Total sales expenses |



Pennsylvaina Power Company
Comparative Income Statements

| FERC Account |  | December 31, |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
|  |  |  |  |  | (In tho |  |  |  |  |
| Administrative and general expenses |  |  |  |  |  |  |  |  |  |
| Operation |  |  |  |  |  |  |  |  |  |
| 920 | Administrative and general salaries | \$ | (218) | \$ | (73) | \$ | 55 | \$ | 472 |
| 921 | Office supplies and expense |  | 1,034 |  | 823 |  | 519 |  | 689 |
| 922 | Administrative expenses transferred-credit |  | - |  | - |  | $(2,865)$ |  | $(2,363)$ |
| 923 | Outside services employed |  | 10,314 |  | 10,613 |  | 9,353 |  | 9,522 |
| 924 | Property insurance |  | 29 |  | 30 |  | 25 |  | 21 |
| 925 | Injuries and damages |  | 312 |  | 350 |  | 229 |  | 272 |
| 926 | Employee pensions and benefiits |  | 998 |  | 595 |  | 4,421 |  | 9,839 |
| 927 | Franchise requirements |  | - |  | - |  | - |  | - |
| 928 | Regulatory commission expenses |  | 742 |  | 822 |  | 724 |  | 631 |
| 929 | Duplicate charges - credit |  | - |  | - |  | - |  | - |
| 930.1 | General advertising expenses |  | 55 |  | 51 |  | 17 |  | 9 |
| 930.2 | Miscellaneous general expenses |  | 207 |  | 208 |  | 188 |  | 446 |
| 931 | Rents |  | 17 |  | 17 |  | 139 |  | 397 |
|  | Total administrative and general expenses | \$ | 13,491 | \$ | 13,436 | \$ | 12,805 | \$ | 19,935 |
| Maintenance |  |  |  |  |  |  |  |  |  |
| 935 | Maintenance and general plant | \$ | 446 | \$ | 360 | \$ | 228 | \$ | 302 |
|  | Total maintenance | \$ | 446 | \$ | 360 | \$ | 228 | \$ | 302 |
|  | Total administrative and general expenses | \$ | 13,937 | \$ | 13,796 | \$ | 13,033 | \$ | 20,237 |
|  | Total electric operation and maintenance expenses | \$ | 205,517 | \$ | 208,117 | \$ | 178,663 | \$ | 151,845 |

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT VI-C:

"Provide the following unadjusted detailed schedules by function and by FERC account for the claimed test year and for each of the 3 preceding comparable years:
C. Plant in service."

## RESPONSE:

See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-13.

Witness: R. A. D'Angelo

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT VI-D:

"Provide the following unadjusted detailed schedules by function and by FERC account for the claimed test year and for each of the 3 preceding comparable years:
D. Accumulated depreciation."

## RESPONSE:

See the direct testimony and exhibits of John J. Spanos in Penn Power Statement No. 7, Exhibit JJS-14.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT I-A-4:

"Whenever a major generating plant is placed in operating service or removed from operating service the utility shall separately indicate the effect of the plant addition or removal from service upon rate base, revenue, expense, tax, income and revenue requirement as it affects the test year."

## RESPONSE:

This base rate case filing requirement is not applicable to the Company's filing.

# Penn Power Exhibit RAD-59 

Witness: R. A. D'Angelo

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT I-B-2:

"Provide a description of the property of the utility and an explanation of the system's operation, and supply the following, using available projections if actual data is unavailable
a. A schedule of generating capability showing for the test year, and for the two consecutive 12 -month periods prior to the test year, net dependable capacity in KW by unit, plant capacity factor by unit, and total fuel consumption by type and cost for each unit, if available, or for each station, and operation and maintenance expenses by station.
b. A schedule showing for the test year and for the 12 -month period immediately prior to the test year the scheduled and unscheduled outages-in excess of 48 hours-for each station, the equipment or unit involved, the date the outage occurred, duration of the outage, maintenance expenses incurred for each outage, if available, and amounts reimbursable from suppliers or insurance companies.
c. A schedule for each unit retired during the test year or subsequent to the end of the test year, which shows the unit's KW capacity, hours of operation during the test year, net output generated, cents/KWH of maintenance and fuel expenses, and date of retirement
d. A schedule showing latest projections of capacity additions and retirementscosts and KW-and reserve capacity at the time of peak for at least 10 years beyond the test year, including the in-service dates-actual or expected-and AFDC cutoff dates-if different from in-service dates-for all new generating units coming on line during or subsequent to the test year, if claimed."

## RESPONSE:

This base rate case filing requirement is not applicable to the Company's filing.

## PENNSYLVANIA POWER COMPANY

## FILING REQUIREMENT III-B-5:

"Describe long-term debt reacquisition by issue by Company and Parent as follows:
a. Reacquisition by issue by year.
b. Total gain or loss on reacquisitions by issue by year.
c. Accounting for gain or loss for income tax and book purposes.
d. Proposed treatment of gain or loss on such reacquisition for ratemaking purposes."

## RESPONSE:

a. Please see Penn Power Exhibit RAD-60 Attachment A.
b. Please see Penn Power Exhibit RAD-60 Attachment A.
c. Tax Accounting:

Gains attributable to the reacquisition of long-term debt are recognized currently for income tax purposes in the year of reacquisition, which creates book-tax temporary differences. As a result of these temporary differences, the Company records deferred income taxes by means of debits to Account 190, Accumulated Deferred Income Tax Asset and credits to Account 411.1, Provision for Deferred Income Tax, Cr.- Utility Operating Income. Amounts recorded to Account 190 are reversed over the remaining life of the respective security issue consistent with book amortization of the gain by means of debits to Account 410.1 Provision for Deferred Income Taxes - Debit, Utility Operating Income

Gains and Losses on the reacquisition of long-term debt are deducted currently for income tax purposes in the year of reacquisition, which creates book-tax temporary differences. As a result of these temporary differences, the Company records deferred income taxes by means of debits to Account 410.1, Provision for Deferred Income Taxes, Utility Operating Income, with corresponding credits to Account 283, Accumulated Deferred Income Tax Liability. Amounts recorded in Account 283 are reversed over the remaining life of the respective security issue consistent with book amortization of the loss by means of credits to Account 411.1, Provision for Deferred Income Taxes - Credit, Utility Operating Income.

## Book Accounting:

In accordance with General Instruction 17 of the Uniform System on Accounts, gains on reacquired debt are placed in Account No. 257 "Unamortized Gain on Reacquired Debt". The gains are then amortized to Account No. 429.1 "Amortization of Gain on Reacquired Debt-Credit" over the remaining lives of the respective issues (old original debt).

In accordance with General Instruction 17 of the Uniform System of Accounts, losses on reacquired debt are placed in Account No. 189 "Unamortized Loss on Reacquired Debt". The losses are then amortized to Account No 428.1 Amortization
of Loss on Reacquired Debt" over the remaining lives of the respective issues (old original debt).
d. The gain on long-term debt reacquisitions are amortized to ratepayers over the remaining lives of the respective issues in accordance with the current accounting treatment as directed in General Instruction 17 of the Uniform System of Accounts, Penn Power Exhibit RAD-2 reflects the appropriate adjustment for the fully projected test year, the twelve months ending December 31, 2017.

## PENNSYLVANIA POWER COMPANY

"Filing of information and materials - Whenever a public utility proposes a change in rates under section 1308 (relating to voluntary changes in rates), the public utility shall file with the commission a listing of each type of advertising prepared, distributed or presented by the pubic utility or to be prepared, distributed or presented during the test year utilized by the public utility in discharging its burden of proof, and a listing of each type of advertising prepared, distributed or presented by the utility during the year immediately preceding the test year, as well as an accounting of the expenditures by the public utility for such advertising, to the extent such advertising is proposed to be included as operating expense for ratemaking purposes. The filing requirements imposed by this subsection shall not be construed to limit the right of any party to discovery under this or any other provision of law."

## Summary of Advertising Expenses

Section 1316 of Title 66, Pa. Consolidated Statutes, addresses recovery of advertising expenses. In accordance with the filing requirements specified in § 1316(c), following is a listing of the types of advertising comprising the total advertising expenses for the fully future test year and the immediately preceding 2 years.

Pennwylvania Power Company
Summary of Advertising Expenses
(000's)

| $\begin{aligned} & \text { Line } \\ & \text { No } \\ & \hline \end{aligned}$ | Description | 12 months ended |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | December 31. 2017 Budget |  | December 31. 2016 <br> Budget |  | December 31. 2015 <br> Actual |  |
|  | Customer Senice Informational \& |  |  |  |  |  |  |
| 1 | Instructional Advertising | \$ | 129 | \$ | 129 | \$ | 42 |
| 2 | Sales Advertising |  | 7 |  | 7 |  | 8 |
| 3 | A\&G Advertising - General |  |  |  |  |  |  |
| 4 | Agency Support |  | 50 |  | 47 |  | 6 |
| 5 | Public relations |  | - |  | - |  | 5 |
| 6 | Printing |  | 4 |  | 4 |  | 5 |
| 7 | Miscellaneous |  | 1 |  | - |  | 1 |
| 8 | Total advertising | \$ | 191 | \$ | 187 | \$ | 67 |

## PENNSYLVANIA POWER COMPANY

## PUC STATEMENT OF POLICY TITLE 52, SECTION 69.36

"The Pennsylvania Public Utility Commission intends to examine specific factors in rate proceedings of electric and gas utilities regarding the action or failure to act to encourage development of cost effective energy supply alternatives. Specifically, the Commission will review utilities' efforts to meet the criteria in this section when determining just and reasonable rates in future rate proceedings and may consider those efforts in other proceedings instituted by the Commission
(1) Information. At least twice annually utilities should provide customers with information on specific means of utilizing their energy services more effectively and efficiently. Topic areas should include insulation, lighting efficiencies, appliance efficiencies, conservation practices, load management techniques or other relevant information that informs the customer of the efficient use of energy.
(2) Energy surveys. Class A utilities should offer onsite energy surveys to the residential, commercial and industrial classes on an ongoing basis. Surveys should be conducted by trained personnel and the results of the survey, upon written request of the customer, be delivered in writing with a clear explanation of the resulting components.
(3) Cogeneration and small power production. Electric utilities for which a need for capacity is projected should establish effective programs to explore and encourage the development of additional cogeneration and small power production facilities within their respective service territories.
(4) Least cost planning. Gas and electric utilities should actively pursue a leastcost strategy by acquiring and developing the resources necessary to effectively meet their customers' future energy needs, consistent with established availability and reliability criteria. Utilities should make a reasonable effort to promote the utilization of practical and economical energy conservation and demand management through cost effective programs.
(5) Evaluation. Class A utilities should demonstrate progressive work regarding development of a reliable customer data base, including, but not limited to:
(i) End-use applications for each class of customer in terms of energy and demand.
(ii) Customer behavior with regard to the decision-making process.
(iii) The impact of program decisions or strategies and how they effect the overall planning process.
6) Natural gas co-firing. Electric utilities should explore the potential for increasing capacity and output at coal-fired generating stations through gas cofiring"

## RESPONSE:

1) Customer service representatives discuss these "Energy Efficient" topics with customers by referring to the " 100 Ways to Improve Your Electric Bill" and "Understanding Electric Usage \& Costs" brochures which provides energy saving information for most household electrical appliances and equipment. Representatives offer to either email or mail a copy of the brochures to customers. These "Energy Efficient" topics are also fully described and available $24 / 7$ on the FirstEnergy website under the "Saving Energy" section at the following location:

## http://www.firstenergycorp.com/help/saving energy.html

In addition, on October 15, 2008, Governor Rendell signed HB 2200 into law as Act 129 of $2008^{1}$, with an effective date of November 14, 2008. The Act imposes requirements on electric distribution companies (EDCs), with the overall goal of reducing energy consumption and demand. Act 129 directed all EDCs with at least 100,000 customers to develop and file an energy efficiency and conservation plan. The Company has filed and obtained approval for an Energy Efficiency and Conservation ("EE\&C") Plan that complies with Commission Orders ${ }^{2}$. The EE\&C plan contains numerous programs that are designed to promote, educate and achieve energy efficiency and conservation across all customer segments. Essential to the success of these are marketing and educational campaigns and outreach activities specific to each program that: (i) builds awareness and interest in the programs; (ii) communicates ways that customers may participate; and (iii) explains expected benefits and reasons for participating. Information about the EE\&C programs available to customers is provided using a number of marketing channels such as, but not limited to, bill inserts, advertisements and the Company's website at:

## http://www.firstenergycorp.com/save energy/save energy pennsylvania.html

2) Residential home energy surveys are conducted at no additional cost for incomeeligible customers as part of the Low Income Usage Reduction Program known as "WARM" (Chapter 58). Income eligible customers who have lived at their residence at least 6 months are eligible for WARM. The WARM program home energy survey addresses ways to save electricity for customers who have electric heat, electric water hear, air conditioning or base load use. These surveys are conducted by Building Performance Institute Certified contractors hired by the Company. The program is

[^11]open to both homeowners and renters with landlord agreement. As part of the home energy survey, contractors may perform pressure diagnostic testing using a blower door and manometers to determine where there is air leakage in the home. They also test ducts, conduct combustion safety testing and monitor electricity use of various appliances such as refrigerators and freezers for possible replacement. A personalized partnership agreement and energy-saving strategy for the home and occupants are provided as part of the program.

In addition, residential customers may also participate in the Company's Act 129 energy audit program. Under this program, comprehensive home energy audits are conducted by trained local contractors hired by the Company's Conservation Service Provider for a fee up to $\$ 350$. Customers who participate in this program receive a comprehensive home energy audit which is designed to provide information on how to reduce their energy usage and increase their home's comfort and energy efficiency. Participating customer's qualify for up to $\$ 250$ in rebates towards the cost of a comprehensive residential energy audit and qualified retrofits.

Residential customers can also complete the Company's Home Energy Analyzer online tool at http://www.firstenergycorp.com/content/customer/save energy/save energy pennsyl vania/for your home/pa home energy analyzer.html to save energy and money. The tool enables customers to gain a better understanding of their household energy use and identify ways to improve their efficiency.

Similar to residential customers, business customers can complete the Business Energy Analyzers online tool at https://www.firstenergycorp.com/content/customer/save energy/save energy pennsy lvania/for your business/pennsylvania businessenergyanalyzer.html. The tool will enable business customers to gain a better understanding of their energy use and identify ways to improve their efficiency.

The Company also promotes detailed energy audits for commercial and industrial customers under the Company's Act 129 programs. Customers who implement recommended building and/or system improvements are eligible for incentives towards the cost of the third party audit and qualifying audit recommended improvements.
3) All capacity requirements are secured through Commission approved default service plans.
4) Penn Power's least-cost strategy is detailed in its Annual Resource Planning Report filed with the Commission pursuant to the requirements of 52 Pa Code $\S \S 57.141$ 57.153. Penn Power's most recent filing, dated April 30, 2015, will be provided upon request to interested parties.
5) See the direct testimony of Kevin M. Siedt, Penn Power Statement No. 3.
6) This filing requirement is not applicable to the Company's filing.

# PENNSYLVANIA POWER COMPANY 

Distribution Storm Costs
2011-2017

| Line <br> No. | Year | Storm Costs |
| :---: | :---: | :---: |
|  |  | 2011 |
| 2 | 2012 |  |
| 3 | 2013 | 807,975 |
| 4 | 2014 | 887,519 |
| 5 | 2015 | $1,529,754$ |
| 6 | $2016-$ Budget |  |
| 7 | $2017-$ Budget |  |

## Pennsylvania Power Company

## Updated Legacy Meters and Associated Cost of Removal to be Recovered

## Line No.

1 Legacy Meters currently in Base Rates
2 Cost of Removal of Legacy Meters currently in Base Rates
3 Total Legacy Meters and Cost of Removal in Base Rates (Line $1+$ Line 2)
4 Total Legacy Meters currently in Regulatory Assets
5 Legacy Meters costs to be included in these Base Rate Cases (Line 4-Line 1)

6 Additional Cost of Removal of Legacy Meters to be included in these Base Rate Cases

7 Additional Legacy Meters and Cost of Removal in these Base Rate Cases (Line $5+$ Line 6 )

8 Total Legacy Meters and Cost of Removal to be recovered in rates by April 2020 (Line $3+$ Line 7 )

Amount Amortized by January 2017*
Total Unrecovered Legacy Meters and Cost of Removal at December 2016 to be recovered in these Base Rate Cases by April 2020 (Line 8 - Line 9 )

11 Annual Amortization of Legacy Meters and Cost of Removal in Regulatory Assets (Line 10 /39 X 12)

Less: Amortization of Legacy Meters in Budget
Normalized Amortization for Legacy Meters and COR
$\$ \quad 5,508$
Penn Power
\$ 9,704
1,093
$\$ 10,797$
\$ 8,373
$\$(1,332)$
$\qquad$
$\$(1,510)$
\$ 9,287

3,779
$\$ \quad 1,695$
\$ 2,159
$\$$

* when proposed rates are expected to be implemented
Penn Power Exhibit RAD-65
Witness: R. A. D'Angelo 1 fo 1 abed
Penn Power Company
Bonus Depreciation Tax Adjustments
Year 2015, 2016, 2017
The Pennsylvania adjustment decreases state taxable income on prior bonus depreciation vintages and increases state taxable income on the current vintage bonus depreciation amount taken on the federal return. In the prior rate case bonus depreciation was not projected in the outer years since bonus depreciation rules were not extended at the time. In 2015 bonus depreciation rules were extended through 2019 and is reflected in the budget. The bonus amount projected for the current year vintage in tax years 2015, 2016, and 2017 is greater than the additional Pennsylvania tax depreciation being calculated on the prior year bonus vintages creating a net increase to state taxable income. The prior case only had additional Pennsylvania tax depreciation being calculated on the prior year bonus vintages creating a decrease to state taxable income.

$$
\begin{aligned}
& \text { Subtraction to } \\
& \text { State Taxable Income }
\end{aligned}
$$

| Line No. | Year | Federal Depreciation <br> $168(\mathrm{~K})$ Property | Current Year Bonus <br> Depreciation | Total Bonus <br> Depreciation | Additional PA <br> Depreciation | Additional PA <br> Other Adj | Adj for Sale of <br> 168 $(\mathrm{k})$ Property |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | | Depreciation plus Adj |
| :---: |
| for Sale |


| 1 | 2015 | \$ | 29,301,911 | \$ | 21,600,399 | \$ 7,701,512 | \$ | 3,300,648 | \$ | - | \$ | - | \$ | 3,300,648 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 2016 |  | 29,991,305 |  | 19,930,532 | 10,060,773 |  | 4,311,760 |  | - |  | - |  | 4,311,760 |
| 3 | 2017 |  | 26,368,100 |  | 16,249,637 | 10,118,463 |  | 4,336,484 |  | - |  | - |  | 4,336,484 |



FERC
Account

| Regional Market Expenses |
| :--- |
| Operation <br> $575 \quad$Operation-regional market expense <br> Total operation <br> Maintenance <br> $576 \quad$Maintenance-regional market expense <br> Total maintenance <br> Total regional market expenses |


| Distribution Expenses |  |
| :--- | :--- |
| Operation |  |
| 580 | Operation supervision and engineering |
| 581 | Load dispatching |
| 582 | Station expenses |
| 583 | Overhead lines expense |
| 584 | Underground lines expenses |
| 585 | Street lighting and signal system expenses |
| 586 | Meter expenses |
| 587 | Customer installation expenses |
| 588 | Mirscellaneous expenses |
| 589 | Rents |
|  | Total operation |
| Maintenance |  |
| 590 | Maintenance supervision and engineering |
| 591 | Maintenance of structures |
| 592 | Maintenance of station equipment |
| 593 | Maintenance ov overhead lines |
| 594 | Maintenance of underground lines |
| 595 | Maintenarsce of line transformers |
| 596 | Maintenance of street lighting and signal |
|  | systems |
| 597 | Maintenance of meters |
| 598 | Maintenance of miscellaneous |
|  | distribution plant |
|  | Total maintenance |

## Customer Account Expenses

| Customer Account Expenses |  |
| :--- | :--- |
| Operation |  |
| 901 | Supervision |
| 902 | Meter reading expenses |
| 903 | Customer records and collection expense |
| 904 | Uncollectible accounts |
| 905 | Miscellaneous customer accounts expens |
|  |  |

Customer Service and Informational Expenses

| Customer |  |
| :--- | :--- |
| Opervation | Supervision |
| 907 | Sund |


| 907 | Supervision |
| :--- | :--- |
| 908 | Customer assistance expenses |
| 909 | Informational and instructional expenses |
| 910 | Miscellaneous customer service and |
|  | informational expenses |
|  | Total customer service and |

service and
informational expense

## Sales Expenses



Supervision
Demonstrating and selling expenses
Advertising expenses
Miscellaneouse sales expenses
Total sales expenses

## $\frac{\text { Administrative }}{\text { Operation }}$

| Operation |  |
| :--- | :--- |
| 920 | Administrative and general salaries |
| 921 | Office supplies and expense |
| 922 | Administrative expenses transferred-credit |
| 923 | Outside sevices employed |
| 924 | Property insurance |
| 925 | Injuries and damages |
| 926 | Employee pensions and benefiits |
| 927 | Franchise requirements |
| 928 | Regulatory commission expenses |
| 929 | Ouplicate charges - credit |
| 930.1 | General advertising expenses |
| 930.2 | Miscellaneous general expenses |
| 931 | Rents |
|  | Tolal administrative and general expenses |



| \$ | 95 | \$ | 95 | \$ | 12 | \$ | 107 | \$ | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - |  | - |  | - |  | $70^{-}$ |  |  |
|  | 514 |  | 788 |  | (39) |  | 749 |  | 235 |
|  | 11,004 |  | 9,415 |  | 2,086 |  | 11,500 |  | 496 |
|  | (15) |  | 362 |  | 8 |  | 370 |  | 385 |
|  | - |  | 22 |  | 8 |  | 30 |  | 30 |
|  | 1 |  | 244 |  | - |  | 244 |  | 243 |
|  | - |  | (40) |  | - |  | (40) |  | (40) |
|  | 379 |  | 470 |  | 47 |  | 516 |  | 138 |
|  | 345 |  | 362 |  | 96 |  | 457 |  | 113 |
|  |  |  | (49) |  | - |  | (49) |  | (49) |
| \$ | 12,322 | \$ | 11,668 | \$ | 2,217 | \$ | 13,885 | \$ | 1,563 |
| \$ | 14,242 | \$ | 10,982 | ( | 2,611 | \$ | 13,593 | \$ | (649) |



| \$ |  | \$ | - | \$ |  | \$ | - | \$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9,957 |  | 6,723 |  | 1,595 |  | 8,317 |  | (1,640) |
|  | 129 |  | 35 |  | 20 |  | 55 |  | (74) |
|  | 1,498 |  | 1,365 |  | 241 |  | 1,607 |  | 108 |
|  | . |  | (250) |  | - |  | (250) |  | (250) |
| \$ | 11,585 | \$ | 7,873 | \$ | 1,856 | \$ | 9,729 | \% | (1,855) |



[^12]Pennsylvania Power Company
Comparative income Statement Budget to Actuals
(in thousands)

| Budget Filed in 2014 |  | Current |  |  |
| :---: | :---: | :---: | :---: | :---: |
| General Base Rate Case for 12 months ending | Actuals for 10 months ending | Budget for 2 months ending | Total 12 months ending | Difference for 12 months ending |
| April 30, 2016 | February 29, 2016 | April 30, 2016 | April 30, 2016 | April 30, 2016 |
| ${ }^{(1)}$ | (2) | (3) | (4) $=(2)+(3)$ | (5) $=$ (4) - (1) |


| $\$$ | 331 | $\$$ | 194 | $\$$ | 61 | $\$$ | 255 | $\$$ | $(76)$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$$ | 331 | $\$$ | 194 | $\$$ | 61 | $\$$ | 255 | $\$$ | $(76)$ |
| $\$$ | 11,385 | $\$$ | 12,768 | $\$$ | 2,385 | $\$$ | 15,153 | $\$$ | 3,769 |
|  |  |  |  |  |  |  |  |  |  |
| $\$$ |  |  |  |  |  |  |  |  |  |



## PENNSYLVANIA POWER COMPANY

DOCKET NO. R-2016-2537355

Direct Testimony<br>of<br>Kevin M. Siedt

## List of Topics Addressed

Sales and Revenue Normalization
Rate Design
Customer Impact Analysis
Proof of Revenue Analysis and Bill Comparisons
Tariff Revisions

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VII. CONCLUSION ..... 19
APPENDIX A

DIRECT TESTIMONY
OF
KEVIN M. SIEDT

## I. INTRODUCTION AND BACKGROUND

## Q. Please state your name and business address.

A. My name is Kevin M. Siedt. My business address is 2800 Pottsville Pike, Reading, Pennsylvania 19612.

## Q. By whom are you employed and in what capacity?

A. I am employed by FirstEnergy Service Company as a Consultant in the Rates and Regulatory Affairs Department - Pennsylvania.

## Q. What are your responsibilities as a Consultant?

A. Generally, the Rates and Regulatory Affairs Department - Pennsylvania provides regulatory support for the Pennsylvania electric utility subsidiaries of FirstEnergy Corp. ("FirstEnergy"), which include Pennsylvania Power Company ("Penn Power" or the "Company"). As a Consultant in the Rates and Regulatory Affairs Department, my responsibilities with respect to Penn Power are to support the development, preparation, and presentation of the Company's retail electric rate design and related rules and regulations, and ensure the uniform administration and interpretation in all the Company's rate-related matters before the Pennsylvania Public Utility Commission ("Commission"). I also am responsible for, among other things, default service plan development and implementation, recovery of non-utility generation costs, regulatory program cost recovery and other financial matters.

## Q. What is your educational background and work experience?

A. I obtained a Master's Degree in Business Administration from Moravian College in 1994. I am also a graduate of Rowan University where I received a Bachelor of Science Degree with a major in Accounting and Finance in 1984. My work experience is more fully described in Appendix A to this testimony.
Q. On whose behalf are you testifying in this proceeding?
A. I am testifying on behalf of Penn Power.
Q. What is the purpose of your direct testimony?
A. My testimony addresses: (i) the annualization and normalization of sales and revenues used in the Company's cost of service studies; (ii) the rate design methodology used to develop the distribution rates proposed in this proceeding; (iii) a customer impact analysis, which compares bills at current and proposed rates; (iv) a proof of revenue analysis; and (v) changes to Penn Power's Electric Service tariff.

## Q. Have you prepared and are you sponsoring exhibits to accompany your testimony?

A. Yes. As discussed in more detail later in my testimony, I am sponsoring Exhibits KMS-1 through KMS-8 for the Company, which were prepared by me or under my supervision. The subjects addressed in each of these exhibits are summarized below:

KMS-1 This exhibit consists of Attachments A, B and C, reflecting normalized sales and revenues for the test years ending December 31, 2017, December 31, 2016, and December 31, 2015, respectively

KMS-2 Summary of Present and Proposed Distribution Revenues
KMS-3 Customer Charge Analysis

KMS-4 Proof of Revenues Analyses
KMS-5 Customer Impact Analyses
KMS-6 Cost and Proposed Base Rate Revenue Curves
KMS-7 Matrix of Tariff changes
KMS-8 Responses to the certain Commission filing requirements as specified by 52 Pa. Code $\S \S 53.52$ and 53.53 .

In addition, I am sponsoring modifications to the rate schedules and to certain of the riders in the Company's proposed tariff, which are discussed further in this testimony.

## II. ENERGY SALES AND REVENUE NORMALIZATIONS

Q. What was the basis for developing the Company's claims for energy sales, demand and base rate revenue for the fully projected future test year ("FPFTY")?
A. The starting point for the Company's claims was the budget forecast of energy sales, demand and base rate revenue for the twelve months ending December 31, 2017. The budget forecast was developed by reviewing current customer consumption data, conducting appliance saturation surveys and analyzing actual historical customer usage for the past several years to identify patterns and trends. That information was used to develop detailed projections of the actual billing determinants (number of customers, demand (in kilowatts ("kW")) and energy (in kilowatt hours ("kWh")) for each rate schedule. The actual charges for each component of each rate schedule were applied to the applicable billing determinants (customers, kW or kWh ) to project the revenue to be billed under each rate schedule by month for the FPFTY. This detailed process assures that revenue under proposed rates can be directly tied in to the billing determinants underlying the Company's revenues under existing rates that are used to calculate its revenue deficiency in this case.

## Q. In developing the Company's revenue claims in this case, were the budget projections and, specifically, the application of rates to the projected billing determinants reviewed for computational accuracy?

A. Yes. The budget forecasts were found to be very accurate. Penn Power only made normalization adjustments that were consistent with the Commission's filing requirements.

## Q. Did you make any other adjustment to reflect normalized sales?

A. Yes, I made an adjustment to reflect the impact of the expanding use of light-emitting diode ("LED") street lighting. In its last base rate case, the Company proposed and the Commission approved a new service offering and rate schedule for the installation of LED street lighting. As I previously explained, the 2017 budget, which formed the basis for the FPFTY level of energy sales, demand and base rate revenue, reflects the effects of the current level of LED street lighting installations. Nonetheless, based on the current pace at which LED installations are taking place, it is anticipated that there will be a materially larger number of LED fixtures installed by the end of the FPFTY than is reflected in the 2017 budget forecast. To a very large extent, the LED fixtures are replacing existing sodium vapor and mercury vapor street lighting fixtures. Because LED lighting distribution rates were set at a price lower than the distribution rates for the lights that are being replaced, it is necessary to make a normalization adjustment to reflect the lower level of revenue that will result from the expanded use of LED street lighting.

## Q. Were any adjustments made to the budget forecast data to present energy sales, demand and base rate revenue on a ratemaking basis?

A. Yes. Adjustments for ratemaking purposes were made to annualize and normalize the budget data. Annualization is the process of adjusting budgeted sales and revenues projected to be billed over a full test year to reflect the level of sales and revenues as of the end of the test year. In that way, pro forma sales and revenues are stated on a basis that properly reflects sales and revenues to be experienced going forward. Normalization is the process of adjusting budgeted sales and revenues to remove outliers and anomalies from the test year data. Thus, unusual events and one-time effects are "normalized" to reflect ongoing conditions.

## Q. Have you prepared an exhibit setting forth annualized and normalized sales and revenues?

A. Yes, I have. Annualized and normalized sales and revenues are presented in Attachments A through C of Exhibit KMS-1 for the twelve months ending December 31, 2017, December 31, 2016, and December 31, 2015, respectively. Summaries of the Company's distribution revenues under existing and proposed rates are provided in Exhibit KMS-2. The principal adjustments to the budget forecast data were made to annualize the sales and revenue effect of customers added during the test year and to normalize and annualize sales levels to reflect reductions attributable to measures that have been or will be implemented under the Company's Commission-approved Phase III Energy

Efficiency and Conservation ("EE\&C") Plans, which were adopted pursuant to Section 2806.1 of the Pennsylvania Public Utility Code ${ }^{1}$.
Q. Please describe the adjustment made to budget forecast data for the twelve months ending December 31, 2017 to annualize revenues for changes in the number of customers.
A. In accordance with the Commission's filing requirements, an adjustment was made to annualize energy usage and demand for the difference between the monthly average number of customers forecasted for the FPFTY and the number of customers forecasted for the end of the FPFTY. Usage ( kWh ) and demand $(\mathrm{kW})$ forecasted for the FPFTY were divided by the monthly average number of customers at mid-month (for each month) to calculate the average usage and average billed demand per customer. The average usage (in kWh ) and average demand (in kW ) per customer were multiplied by the difference between the monthly average number of customers and the number of customers forecasted for the end of the test year to determine the additional kWh and kW to be added to the budget forecast to annualize sales and revenue.

The additional revenues attributable to the customer annualization were calculated by multiplying the additional billing determinants (customers, kW or kWh ) derived from the customer annualization by the applicable customer, demand or energy charges. This calculation is shown in Exhibit KMS-1, Attachment A, page 3, column 12.

## Q. Please describe the adjustments made to budget forecast data for the twelve months ending December 31, 2017 to normalize and annualize revenues for conservation

[^13]
## measures implemented or to be implemented pursuant to the Company's EE\&C Phase III Plan.

A. The energy sales that were forecasted by rate schedule for the FPFTY reflect anticipated usage reductions from energy efficiency measures implemented in accordance with the Company's Commission-approved Phase III EE\&C Plan. The forecasted reductions are reflected by month from January 1, 2017 through December 31, 2017. The revenue reductions for the entire FPFTY were calculated by annualizing the usage reduction targets that the Company must achieve by the end of its Phase III EE\&C Plan (May 31, 2021). The annualized amount was netted against the monthly savings already included in the FPFTY sales forecast to derive the additional energy efficiency normalization adjustment. The same approach was used to annualize and normalize behind-the-meter generation to derive a total energy efficiency normalization adjustment. The revenue effect of the annualization was calculated by multiplying the annualized energy efficiency sales reductions by the average rate per customer by rate schedule.

## III. RATE DESIGN

## Q. What considerations, concepts and objectives underlie the rate designs proposed by the Company?

A. The following general principles were employed in designing the proposed rates:

- Rates must be designed to produce revenues equal to the Company's revenue requirement at the appropriate billing determinants.
- Rates should be designed to properly reflect cost causation and, in that regard, the results of a cost of service study are used as a guide.
- Rates generally should be designed, if practicable, to move revenues for each rate schedule (or in some instances, customer classes consisting of aggregated rate schedules) toward that schedule's cost of service, giving due regard to factors such as gradualism, economic efficiency, relative ease or difficulty of administration, and customer understandability.

In addition to the general principles I just described, the Company determined that in developing its proposed rates, it should strive to achieve the following objectives:

- There should be a unified distribution rate design for all four of the FirstEnergy electric utilities that furnish service in Pennsylvania, given that the Companies are managed on a consistent basis with a uniform set of business processes.
- The rate design should give due consideration to the fact that distribution service has now been fully unbundled for ratemaking purposes.
- All else being equal, distribution rates should reflect customer demand rather than energy usage. This is because distribution costs are driven predominantly by investment in fixed assets, which does not vary with a customer's energy usage.
- With the implementation of the Company's Commission-approved Smart Meter Deployment Plan and the significant investment in smart meter technology that the Plan requires, the Company's rate design should incorporate the functionality that smart meters provide to accurately measure demand.
- Reconcilable adjustment clauses, set forth in riders to the Company's base rates, should be used to recover certain costs that are volatile in nature and generally not
under the Company's control, consistent with the criteria for adjustment clauses established under Section 1307 of the Public Utility Code.


## Q. What role did the results of the cost of service study play in designing the proposed distribution rates?

A. The cost of service study for the Company was prepared by Thomas Dolezal and is described in Penn Power Statement No. 4. The results of the cost of service study were the starting point for designing the proposed distribution rates. However, the final rate designs for the distribution rates that $I$ am recommending also incorporate the rate design principles and objectives that I previously described, as well as my experience in designing utility rates.

## Q. How did you design the proposed distribution rates?

A. I began by reviewing the rates of return produced by the various rate schedules under current rates and the FPFTY level of revenue requirement. The rate schedules exhibit a range of returns from positive to negative. The divergent class returns provide an indication, based on a snapshot at a specific moment in time, of the general magnitude of interclass subsidies that exist among rate classes under current rates. Based upon the Company's overall retail rate of return, the cost of service study shows that certain rate schedules are producing less than the Company's overall rate of return, while others are producing rates of return in excess of it.

Next, I reviewed the revenue that each rate schedule would have to produce to achieve a rate of return equal to the Company's overall rate of return under the proposed distribution rates. This level of revenue shows the magnitude of the rate changes
necessary to move each rate schedule to its cost of service as indicated by the cost of service study.

While movement toward cost of service is an important element in designing rates, it is not the only factor that must be considered. For instance, the impact on customers' bills from implementing a range of potential rate increases must be carefully evaluated. Establishing rates for each rate schedule that produce a retail rate of return equal to the Company's overall rate of return is the theoretical target of the rate design process. However, the Company understands that bringing some of the rate schedules to their indicated cost of service would impose rate decreases for some and/or potentially disruptive rate increases for others. The proposed rate design, therefore, properly applies the principle of gradualism to mitigate customer impact.

## Q. Has a table been prepared that shows the rates of return under existing and proposed rates by rate schedule for the Company?

A. Yes. Such tables are set forth in Mr. Dolezal's direct testimony. That table also shows the unitized rates of return ("UROR") for each rate schedule. The UROR of a rate class is the class rate of return divided by the Company's overall average rate of return. A class UROR greater than 1.0 indicates that the class revenue exceeds the class cost of service. A class UROR less than 1.0 indicates that the class revenue is less than the class cost of service. URORs are used as a guide to measure the progress that changes in rates will achieve in moving classes toward a UROR of 1.0 or "unity," which is generally accepted as a desirable goal in rate design, subject to those other rate design factors that $I$ previously discussed.

## Q. Were any specific criteria used in determining how much progress should be made in moving specific rate schedules toward unity, or cost of service?

A. Yes. In order to implement the concept of gradualism as applied to the guidance provided by the results of the Company's cost of service study, two general criteria were developed. The first criterion was that no customer class would experience, on average, an increase of more than $20 \%$ of total revenue assuming customers were taking default service. The second criterion was a benchmark calculated by reference to total distribution revenues. Specifically, for each rate schedule, the Company calculated two percentages, as follows: (1) revenue equal to the rate schedule's cost of service divided by total-Company distribution revenue under existing rates; and (2) revenue under the rate schedule's existing rates divided by total-Company distribution revenue under existing rates. The average of those two percentages became a target, such that revenue produced by each rate schedule under the proposed rates, expressed as a percentage of total-Company distribution revenue under proposed rates, would approximate the target percentage.
Q. Turning to the design of specific rates, please describe, in general, the changes the Company proposes to its existing Residential rate schedules.
A. The Residential rates were designed to recover the targeted level of revenues for that class. The Company proposes that the customer charge be increased by a larger percentage than the overall revenue increase for the class to better reflect actual customer-related costs. The amount of the increase is based on the analysis of customerrelated costs that has been prepared and is provided as Penn Power Exhibit KMS-3. The Company's customer-related cost analysis was performed in the same manner as the
comparable customer-cost analysis presented by PPL Electric Company in its 2012 electric base rate case, where that analysis was approved and used as the basis for the increase in customer charges that the Administrative Law Judge and the Commission adopted. ${ }^{2}$

Once the customer charge was established, customer charge revenue was deducted from the total revenue target for the class to determine the revenues to be recovered in the variable charge. The variable charge was then increased to recover the non-customer charge revenue for the class.

## Q. Was the same general approach to rate design that you explained above for the Residential class employed for the other rate classes?

A. Yes, it was. Customer charges were increased to better reflect customer-related costs and the non-customer charges of each rate schedule were increased to recover the remaining revenue in order to reach the class revenue target. The non-residential customer charges were increased by approximately the same percentage as the distribution percentage increase for each non-residential rate.

## Q. What impact, if any, will this base rate case have on riders that are in place, or are expected to be in place shortly, for the Company?

A. There is a relationship between this case and the Company's existing Default Service Support ("DSS") Rider and Hourly Pricing Default Service ("HP") Rider and its

[^14]proposed Distribution System Improvement Charge ("DSIC"), which is currently pending approval from the Commission. ${ }^{3}$ I will discuss the DSIC first.

On February 16, 2016, the Company filed a Petition requesting Commission approval to implement a DSIC rider and to begin to charge an initial DSIC rate effective July 1, 2016. Pursuant to the applicable provisions of the Public Utility Code, the DSIC will recover the fixed costs of eligible property (as defined in the Code) placed in service since the end of the FPFTY in the Company's last base rate case. The eligible property that will form the basis for the Company's DSIC rates in effect from July 1, 2016 through the end of the future test year ("FTY") in this case (the twelve months ending December 31, 2016) are part of the plant in service that is included in the proposed rate base in this case. Therefore, the fixed costs of that plant will be recovered in the new base rates when they become effective. Accordingly, the "C-Factor" of the DSIC will be reset to zero on the effective date of new base rates, and the "E-Factor" will remain only to true-up prior period DSIC costs and revenues.

In addition, to the impact of the DSIC, discussed above, the Company is proposing in this case to update the charges imposed under its DSS and HP Riders to reflect an increase in uncollectible accounts expense, as explained by Laura W. Gifford in Penn Power Statement No. 6.

[^15]
## IV. PROOF OF REVENUE ANALYSIS AND BILL COMPARISONS

Q. What is a proof of revenue analysis?
A. A proof of revenue analysis provides the total billing units for a specified period (January 1, 2017 through December 31, 2017, for the FPFTY), including pro forma ratemaking adjustments, summarized by rate components for each rate schedule and multiplied by the applicable unit rates to derive the base rate revenues that proposed rates will produce. Exhibit KMS-4 contains the Company's proof of revenue analysis.

## Q. Have you prepared an analysis of the rates in the Company's proposed tariff supplements showing their impact upon various customer classes?

A. Yes. Exhibit KMS-5 sets forth the Company's comparison of bills at current and proposed rates for the Company's residential, commercial and industrial customers at selected ranges of usage. The exhibit shows, among other things, the percentage impact on a customer's total electric service bill based on the proposed rates. For example, as shown on page 1 of Penn Power Exhibit KMS-5, a residential customer of Penn Power that receives service under Rate Schedule RS and uses 1000 kWh per month would pay \$159.69 under the proposed rates, which represents an increase of $13.08 \%$ in the customer's total bill.

## Q. Please explain what is shown in Exhibit KMS-6.

A. Filing Requirement IV-E-2 requires that the Company provide a comparison showing costs, as defined by the cost of service study, and the proposed base rate revenues and usage for all rate schedules. Exhibit KMS-6 depicts that comparison graphically for representative rate schedules.

## V. TARIFF REVISIONS

## Q. Is the Company proposing any changes to its existing tariff in addition to changing the rates for service in the manner you previously described?

A. Yes. The Company is proposing certain technical, non-substantive revisions that are shown in the matrix of changes set forth in Exhibit KMS-7. Those changes are also summarized below:

1) Description of Service Territory - The description of the Company's service territory has been revised to conform to the Company's actual service territory.
2) Modification of the Definitions of Applicant and Customer(s) - The definitions were modified to state that an Applicant or Customer must be at least 18 years old, consistent with 52 Pa . Code § 56.2.
3) Rule 2 - The phrase "in the amount that is equal to one-sixth (1/6) of the Applicant's/Customer's estimated annual bill" is being replaced with "in an amount that conforms to the requirements of 52 Pa . Code § 56.51."
4) Rule 7 - Currently, Rule 7 establishes standard wiring, apparatus, and installation obligations for the Company and the customer. This rule is being modified to adopt power factor requirements that are consistent with the Company's resource planning documents.
5) Rule 10 - "Kilovar" is being changed to "kilovar."
6) Rule 11.b. - Rule 11.b. deals with late payment charges. The rule is being modified to reflect charges of $1.5 \%$ for residential and $2.0 \%$ for non-residential
customers pursuant to 52 Pa . Code $\S 56.22$. The incremental impact of this change has been reflected in Exhibit KMS-2.
7) Rule 22 - Rule 22 deals with the transfer of customers between electric generation suppliers ("EGSs"). The rule is being updated to conform to new regulations ${ }^{4}$.
8) LED Street Lighting - The existing tariff requires a minimum installation of twelve LED lights per customer. A modification is proposed so that this requirement will not apply to new installations.
9) Street Lighting Schedules - The rate schedules are being revised to establish a replacement/removal fee.
10) Rate Schedule Availability - Rate schedules GS-Medium and GS Large currently require that a customer be transferred to another rate schedule if the customer exceeds a specified usage or demand threshold in two consecutive months. The availability section of the applicable rate schedules is being revised to provide that a review for compliance will be performed once per year, and a customer will be deemed out of compliance if it exceeded the specified threshold in two consecutive months during the preceding twelve-month review period.
11) Determination of Billing Demand, Rate Schedule GS-Medium, GS Large, GP, GT - Eliminate non-interval from the sentence that designates which customers the on-peak and off-peak provisions apply.

[^16]12) Change GS Large to be part of the commercial class for the Default Service Support Rider, to be billed on a kWh basis.
13) Rider L - Rider L is the Partial Service Rider. Language was added to expressly state that the General Monthly charges listed in Rider $L$ are in addition to the charges included in the applicable rate schedule, which makes the tariff language clearly reflect the existing manner in which those charges have been applied.
14) Definition of Primary Voltage - The definition is being revised to state that Primary Voltage cannot exceed 23,000 volts.
15) Definition of Sub-Transmission Voltage - The definition is being revised to by adding the following: "Sub-transmission Voltage - Voltage at 23,000 volts."

## Q. Please explain the proposed changes to eliminate certain options under existing street lighting and outdoor lighting rate schedules.

A. The Company proposes to eliminate certain street lighting sizes and general provisions within the lighting schedules that have become obsolete through restrictions (grandfathering) to existing customers on certain lighting schedules and a result of migration to newer technology. The Company proposes to eliminate those options that are part of the rate schedules that are grandfathered for continued use only by existing customers in the existing tariff; have been replaced by newer technologies (such as replacing mercury vapor with high pressure sodium vapor lamps); and have no customers currently on the specific option. A listing of all of the sizes and provisions proposed to be eliminated is set forth on the last page Exhibit KMS-6.

## VI. MISCELLANEOUS MATTERS

## Q. Please describe the provisions of 52 Pa . Code § 69.36 .

A. This section of the Commission's regulations is a Statement of Policy expressing the Commission's intent to examine in electric and gas rate proceedings actions taken by utilities to encourage the development of cost effective energy supply alternatives. I am responding only to 52 Pa . Code $\S 69.36(5)$, which requires utilities to demonstrate "progressive work regarding the development of a reliable customer data base."

## Q. Please address the Company's efforts to develop a reliable customer data base in accordance with 52 Pa . Code § $69.36(5)$.

A. The Company has completed substantial work in this area. The Company's Customer Care System currently contains data for each customer regarding billing, usage and usage-related revenue, demand and demand-related revenue, rate categories and a "premises" code. The premises code keeps track of all data associated with a location, even if the customer at that location changes its name, moves, etc. More recently, the Company has developed a "business warehouse" data base that allows the Company to query customer-specific data. In addition to this data base, the Company routinely completes residential customer surveys, which produce additional information concerning customers' characteristics, such as appliance usage and air conditioning saturation. Also, each year the Company conducts a Large Power Customer contact survey. Throughout the year, Company representatives routinely meet with large customers to discuss their current and long-term needs and other factors related to their electric service. These contacts provide information regarding programs, services, rates and other information which might affect their businesses.

5 VII. CONCLUSION
6 Q. Does this complete your direct testimony?

7 A. Yes, it does.

## Resume: Education and Experience of Kevin M. Siedt

| Education: |  |
| :---: | :---: |
| 1984 | Bachelor of Science Degree- Accounting/Finance, Rowan University, Glassboro, New Jersey |
| 1994 | Masters of Business Administration Degree, Moravian College, Bethlehem, PA |
| Experience: |  |
| 1984-1987 | Commercial Credit Analyst - First Fidelity Bank |
| 1987-1993 | Financial Analyst, Corporate Finance Department - Foster Wheeler Corporation |
| 1993-1996 | Senior Financial Analyst, Corporate and Project Finance - Foster Wheeler Corporation |
| 1996-1997 | Manager of Financial Analysis, Corporate and Project Finance - Foster Wheeler Corporation |
| 1997-1998 | Director of Financial Analysis, Corporate and Project Finance - Foster Wheeler Corporation |
| 1998-2001 | Financial Consultant, Treasury Department - GPU Corporation |
| 2001-2002 | Consultant, Market Economics - GPU Corporation |
| 2002-2010 | Staff Business Analyst, Rates and Regulatory Affairs - FirstEnergy Service Company |
| 2010-2014 | Rate Analyst V, Rates and Regulatory Affairs - FirstEnergy Service Company |
| 2014 - Present | Consultant, Rates and Regulatory Affairs - FirstEnergy Corporation |

Prepared and presented testimony in the following rate-related cases:

| Pa. P.U.C. Cases: Docket Nos. | $\mathrm{P}-00072259$ |
| :--- | :--- |
|  | $\mathrm{P}-2010-2157862$ |
|  | $\mathrm{M}-2011-2250561$ |
|  | $\mathrm{M}-2011-2259298$ |
|  | $\mathrm{M}-2011-2250682$ |
|  | $\mathrm{P}-2012-2292284$ |
|  | $\mathrm{C}-2012-2284617$ |
|  | $\mathrm{C}-2012-2295306$ |
|  | $\mathrm{M}-2012-2312766$ |
|  | $\mathrm{M}-2012-2312767$ |
|  | $\mathrm{M}-2012-2312769$ |
|  | $\mathrm{M}-2012-2312772$ |

Penn Power Statement No. 3
Witness: K. M. Siedt Appendix A
Page 2 of 3

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& \mathrm{M}-2012-2312633 \\
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& \mathrm{P}-2013-2391368 \\
& \mathrm{P}-2013-2391372 \\
& \mathrm{P}-2013-2391375 \\
& \mathrm{P}-2013-2391378 \\
& \mathrm{R}-2014-2428745 \\
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NJ BPU Cases: Docket Nos. ER05121018
EM02030152
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Assisted in development and preparation of the following rate cases:

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& \mathrm{R}-00061367 \\
& \mathrm{P}-0072305 \\
& \mathrm{M}-2008-2069887 \\
& \mathrm{P}-2008-20066692 \\
& \mathrm{P}-2009-2093053 \\
& \mathrm{P}-2009-2093054 \\
& \mathrm{R}-00974008 \\
& \mathrm{R}-00974009 \\
& \mathrm{M}-2009-2092222 \\
& \mathrm{M}-2009-2112952 \\
& \mathrm{M}-2009-2552956 \\
& \mathrm{P}-2009-2093053 \\
& \mathrm{P}-2009-2093054 \\
& \mathrm{M}-\mathrm{A}-2010-2176520
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Penn Power Statement No. 3
Witness: K. M. Siedt
Appendix A
Page 3 of 3
A-2010-2176732
P-2011-2273650
P-2011-2273668
P-2011-2273669
P-2011-2273670
M-2012-2289411

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Pennsylvania Power Company
Sales and Distribution Revenue Normalization
Historic Year Twelve Months Ending December 2015






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## Pennsylvania Power Company

## Customer Charge Analysis

|  | Rates | Tota | tal |  | mand |  | tomer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current Revenue |  |  |  |  |  |  |  |
| Tariff Revenue - Current Rates |  |  | 67,793 | \$ | 45,570 | \$ | 22,223 |
| Other Revenue |  | \$ | 2,391 | \$ | 476 | \$ | 1,915 |
| Total Revenue |  | \$ | 70,184 | \$ | 46,045 | \$ | 24,138 |
| Deductions |  |  |  |  |  |  |  |
| O\&M Expenses |  | \$ | 23,621 | \$ | 10,816 | \$ | 12,806 |
| Depreciation Expense |  | \$ | 13,423 | \$ | 10,489 | \$ | 2,934 |
| Average Net Salvage |  | \$ | (385) | \$ | (315) | \$ | (70) |
| Amortization \& Accretion |  | \$ | 1,227 | \$ | 2 | \$ | 1,225 |
| General Taxes Gross Reciepts |  | \$ | 4,360 | \$ | 2,987 | \$ | 1,373 |
| General Taxes Other |  | \$ | 505 | \$ | 297 | \$ | 209 |
| Total Deductions |  | \$ | 42,752 | \$ | 24,276 | \$ | 18,476 |
| Income Before Income Taxes |  |  |  |  |  |  |  |
| Operating Income Before Income |  |  |  |  |  |  |  |
| Taxes |  | \$ | 33,538 | \$ | 26,829 | \$ | 6,708 |
| Interest Charges |  | \$ | 6,399 | \$ | 5,303 | \$ | 1,096 |
| Net Income before Income Taxes |  | \$ | 27,139 | \$ | 21,526 | \$ | 5,612 |
| Income Adjustments |  |  |  |  |  |  |  |
| Book Average net salvage |  | \$ | 1,364 | \$ | 1,115 | \$ | 249 |
| Adj. of Book Depreciation to Tax |  |  |  |  |  |  |  |
| Basis |  | \$ | $(3,136)$ | \$ | $(2,564)$ | \$ | (572) |
| Tax Cost of Removal / Salvage |  | \$ | $(1,542)$ | \$ | $(1,261)$ | \$ | (281) |
| Adjust Cash Pension |  | \$ | 1,132 | \$ | 518 | \$ | 614 |
| Net Adjustment |  | \$ | $(2,182)$ | \$ | $(2,191)$ | \$ | 9 |
| Income Taxes |  |  |  |  |  |  |  |
| Income Subject to State Income Tax |  | \$ | 24,957 | \$ | 19,336 | \$ | 5,622 |
| State Income Tax | 9.99\% | \$ | 2,493 | \$ | 1,932 | \$ | 562 |
| Federal Taxable Income |  | \$ | 22,464 | \$ | 17,404 | \$ | 5,060 |
| Federal Income Tax | 35.00\% | \$ | 7,862 | \$ | 6,091 | \$ | 1,771 |
| Proposed Revenue |  |  |  |  |  |  |  |
| Operating Expense |  | \$ | 53,108 | \$ | 32,299 | \$ | 20,808 |
| Net Operating Income |  | \$ | 15,577 | \$ | 12,909 | \$ | 2,668 |
| Rate Base |  |  | 217,783 | \$ | 180,484 | \$ | 37,299 |
| Rate of Return |  |  | 7.15\% |  | 7.15\% |  | 7.15\% |
| Debt Ratio |  |  | 49.93\% |  | 49.93\% |  | 49.93\% |
| Cost of Debt |  |  | 5.88\% |  | 5.88\% |  | 5.88\% |
| Weighted Average Cost of Capital |  |  | 8.70\% |  | 8.70\% |  | 8.70\% |
| Tariff Revenue - Proposed Rates |  | \$ | 73,899 | \$ | 50,630 | \$ | 23,269 |
| Number of Customers |  |  |  |  |  |  | 144,576 |
| Customer Charge |  |  |  |  |  |  | 13.41 |



|  |  | Tariff No. 36 |  |  | Tariff No. 36, Supplement XX |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Current Rate <br> (1) | Billing Units <br> (2) | Revenues <br> (3) | Proposed Rate <br> (4) | $\frac{\text { Billing Units }}{(5)}$ | $\frac{\text { Proposed Revenue }}{(6)=(4) \times(5)}$ |
| Line No. | DISTRIBUTION CHARGES |  |  |  |  |  |  |
| 1 | CUSTOMER CHARGES Customer Charge | \$10.85 | 792 | \$8,600 | \$13.41 | 792 | \$10,621 |
| 2 | DEMAND CHARGES | \$2.00 | 1,538 | \$3,078 | \$2.00 | 1,538 | \$3,076 |
| 3 | ENERGY CHARGES All kWh | \$0.03135 | 1,539,607 | \$48,302 | \$0.04690 | 1,539,607 | \$72,208 |
| 4 | TOTAL BASE NORMALIZED DISTRIBUTION REVENUES |  |  | \$59,980 |  |  | \$85,905 |
| 5 | Smart Meter Technologies Charge (Per Bill) | \$0 | 792 | \$0 | \$0 | 792 | \$0 |
| 6 | Distribution System Improvement Charge | 1.327\% | 1,539,607 | \$983 | 0.000\% | 1,539,607 | \$0 |
| 7 | TOTAL DISTRIBUTION INCLUDING RIDER CHANGES |  |  | \$60,963 |  |  | \$85,905 |
| 8 | RIDER CHARGES <br> Default Service Support Charge | \$0.00186 | 1,539,607 | \$2,729 | \$0.00287 | 1,539,607 | \$4,345 |
| 9 | Universal Service Charge | \$0.00411 | 1,539,607 | \$8,475 | \$0.00411 | 1,539,607 | \$8,475 |
| 10 | Solar Photovoltaic Requirements Charge | \$0.00026 | 1,539,607 | \$409 | \$0.00026 | 1,539,607 | \$409 |
| 11 | Phase II Energy Efficiency and Conservation Charge | \$0.02093 | 1,539,607 | \$7,971 | \$0.02093 | 1,539,607 | \$7,971 |
| 12 | PTC* | \$0.08996 | 1,539,607 | \$138,503 | \$0.08996 | 1,539,607 | \$138,503 |
| 13 | Stas | 0\% |  | \$0 | 0\% |  | \$0 |
| 14 | Total Energy and Revenue |  | 1,539,607 | \$219,050 |  | 1,539,607 | \$245,608 |
| 15 | Avg rate per kWh |  |  | \$0.14228 |  |  | \$0.15953 |
| 16 | Proposed Increase |  |  |  |  |  | \$26,558 |
| 17 | Percent Increase |  |  |  |  |  | 12.12\% |

* Total wires kWh used for illustrative purposes

Penn Power Exhibit KMS-4
Witness: K.M. Siedt
Page 3 of 11


Pennsylvania Power Company


* Total wires kWh used for illustrative purposes

Pennsylvania Power Company
Rate GP - General Service Primary
Revenue Effects of Proposed Rates - FTY 12/31/17


| $\$ 159.89$ | 1,344 | $\$ 214,892$ |
| ---: | ---: | ---: |
| $\$ 6.12$ | 915,513 | $\$ 5,602,940$ |
| $\$ 0.20$ | 381,181 | $\$ 76,236$ |
| $\$ 0$ | $393,314,457$ | $\$ 0$ |
|  |  | $\$ 5,894,068$ |
| $\$ 0$ | 1,344 | $\$ 0$ |
| $0.000 \%$ | $393,314,457$ | $\$ 0$ |
|  |  | $\$ 5,894,068$ |




* Total wires kWh used for illustrative purposes. Generation rates vary hourly based on hourly pricing, price based on Dec 2015 average.

| Pennsylvania Power Company <br> Rate GT - General Service Transmission Revenue Effects of Proposed Rates - FTY 12/31/17 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Tariff No. 36 |  |  | Tariff No. 36, Supplement XX |  |  |
|  |  | Current Rate <br> (1) | $\frac{\text { Billing Units }}{(2)}$ | $\frac{\text { Revenues }}{(3)}$ | $\frac{\text { Proposed Rate }}{(4)}$ | $\frac{\text { Billing Units }}{(5)}$ | $\frac{\text { Proposed Revenue }}{(6)=(4) \times(5)}$ |
| Line DISTRIBUTION CHARGES |  |  |  |  |  |  |  |
| 1 | GUSTOMER CHARGES Customer Charge | \$258.42 | 456 | \$117,839 | \$376.85 | 456 | \$171,844 |
| 2 | DEMAND CHARGES | \$0.39 | 3,134,803 | \$1,222,573 | \$0.60 | 3,134,803 | \$1,881,949 |
| 3 | rkVA | \$0.20 | 1,300,938 | \$260,188 | \$0.20 | 1,300,938 | \$260,188 |
| 4 | kW (Transmission 115 kV Credit) | (\$0.13) | 1,939,138 | $(\$ 252,088)$ | (\$0.18) | 1,939,138 | $(\$ 349,045)$ |
| 5 | ENERGY CHARGES All kWh | \$0 | 1,273,769,758 | \$0 | \$0 | 1,273,769,758 | \$0 |
| 6 | TOTAL BASE NORMALIZED DISTRIBUTION REVENUES |  |  | \$1,348,512 |  |  | \$1,964,936 |
| 7 | Smart Meter Technologies Charge (Per Bill) | \$0 | 456 | \$0 | \$0 | 456 | \$0 |
| 8 | Distribution System Improvement Charge | 0.000\% | 1,273,769,758 | \$0 | 0.000\% | 1,273,769,758 | \$0 |
| 9 | TOTAL DISTRIBUTION INCLUDING RIDER CHANGES |  |  | \$1,348,512 |  |  | \$1,964,936 |
|  | RIDER CHARGES |  |  |  |  |  |  |
| 10 | Default Service Support (kW NSPL) | \$0.557 | 1,728,804 | \$887,172 | \$0.557 | 1,728,804 | \$887,172 |
| 11 | Phase II Energy Efficiency (Per kW PLC) | \$0.400 | 1,759,308 | \$440,944 | \$0.40 | 1,759,308 | \$440,944 |
| 12 | Solar Photovoltaic Requirements Charge | \$0.00026 | 1,273,769,758 | \$336,367 | \$0.00026 | 1,273,769,758 | \$336,367 |
| 13 | Hourly Priced Generation* | \$0.04473 | 1,273,769,758 | \$56,975,721 | \$0.04473 | 1,273,769,758 | \$56,976,683 |
| 14 | STAS - Rider charges | 0\% |  | \$0 | 0\% |  | \$0 |
| 15 | Total Energy and Revenue |  | 1,273,769,758 | \$59,988,716 |  | 1,273,769,758 | \$60,606,102 |
| 16 | Avg rate per kWh |  |  | \$0.04710 |  |  | \$0.04758 |
|  | Proposed Increase |  |  |  |  |  | \$617,386 |
|  | Percent Increase |  |  |  |  |  | 1.03\% |

Pennsyivania Power Company




## Pennsylvania Power Company



* Total wires kWh used for illustrative purposes

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Penn Power Exhibit KMS-5



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| Distribution Charge © 519.11 | \＄ | ${ }_{65500}^{19.11}$ | 19.11 65500 s | ${ }_{6}^{19.11}$ | 195．118 | 655．00 | ${ }_{655.00}^{19.15}$ |  |  | 655.00 s | 1，048．00 s | 1．098．00 | 1．088．00 | 1，048．00 | 1.984 .00 |  | 1.048 .00 |  | 1.088 .00 |
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| wb－Total | $s$ | － | 78.25 s | 156.50 | 234.75 | 313.00 | ${ }^{391.25}$ | 469.50 |  | 571.2 | 125.20 | 250.40 | 37.60 |  |  |  |  |  |  |
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| AlkWh © 50.08867 kWh | $s$ |  | 21．75 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Distribution |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 15989 |  |  |
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| sub-Total | \$ | 1,699.89 | s | 1.710.71 | \$ | 1,70.71 | s | 1,70.71 | s | 1,710.71 | s | 3,261.53 | s | 3.261.53 | s | 3,2 | s | 3,261.53 | \$ | 4,81 | s | 4,812.34 | 4,812.34 | s | 4,812.34 | \$ | 6,36.16 | 6,53.16 |  | 0,383.10 |  |  |
| Riders |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Solar Photovotaic Requirements Charge @ 0.026 ¢ 4 WWh | \$ |  | \$ |  | \$ |  |  |  |  |  |  |  | s |  | s |  | 5 |  | 8 | ${ }_{417.75}^{19.70}$ |  | 417.75 | 417.75 | \$ | 417.75 | s | 557.00 | 557.00 |  | 557.00 |  | 557.00 |
| Dofaut Service Support Charge @ 0.555700 kWW NSPL | 8 | 113925 | 8 | ${ }^{139.25}$ | s | $\begin{array}{r}139.25 \\ 10000 \\ \hline\end{array}$ |  | 139.25 10000 |  | 139.25 <br> 10000 |  | ${ }_{200.00}^{279.50}$ | ${ }_{\text {s }}$ | ${ }_{200.00}^{278.50}$ | s | ${ }_{20000}^{278.50}$ | s | 200.00 | s | 300.00 |  | 300.00 | 300.00 | \$ | 300.00 |  | 400.00 | 40.00 |  |  |  | 400.00 |
|  | 5 | 100.00 | \$ | 100.00 | s | 100.00 | s | 100.00 | s |  |  |  | ${ }_{s}$ |  | s | 200.00 | s |  | s |  | s |  | \$ | s |  | 8 | - |  | s |  |  |  |
|  | \$ | 239.25 | s | 245.75 | s | 258.75 | s | 271.75 | \$ | 286.70 | \$ | 491.50 | s | 517.50 | s | 543.50 | \$ | 53.40 | \$ | 737.25 | s | 776.25 | $s 815.25$ | \$ | 860.10 | s | 983.00 | \$ 1,035.00 |  | 1,087.00 |  | 1.146.80 |
| OSIC Charge @ 0.000\% | s |  | s |  | s | - | s |  | \$ |  | s |  | \$ |  | \$ | - | \$ |  | \$ |  | s |  | s . | \$ |  | \$ |  |  |  |  |  |  |
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| Al kWh @ 90.04776 kWh | \$ | - |  | 1,044.09 |  | 3,132.27 | \$ | 5,220,45 | \$ | 7,621.86 |  | 2,088.18 |  | 6,264.54 |  | 10,440.90 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Total Bill | $s$ |  |  | 45.00.55 |  | ${ }^{52}$ |  | ${ }_{14.293 \%}$ |  | 10.7\% |  | 44.67\% |  | 21.88\% |  | 14.49\% |  | 10.43\% |  | 44.45\% |  | 21.69\% | 14.34\% |  | 10.32\% |  | 44.33\% | 21.59\% |  | 14.27\% |  | 10.26\% |




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Penn Power Exhibit KMS-5
Witness: K.M. Siedt
Page 16 of 16




Penn Power Special Provision for Volunteer Fire Companies, Non-Profit
Senior Citizen Centers, Non-Profit Rescue Squads and Non-Profit
Ambulance Services - GS-R
Proposed Revenue vs Cost of Service



Penn Power General Service Medium - GS-M



Penn Power General Service Large - GS-L
Proposed Revenu vs Cost of Service
Demand at 500 kW

Penn Power General Service Primary - GP


$\$ 40,000.00$
$\$ 35,000.00$
$\$ 30,000.00$
Proposed Revenue vs Cost of Service
Demand of $1,000 \mathrm{~kW}$

Penn Power Exhibit KMS-6
Witness: K.M. Siedt
Page 7 of 7

Penn Power General Service Transmission - GT

$\$ 350,000.00$

$\$ 100,000.00$
$\$ 50,000.00$


Penn Power Exhibit KMS-7
Witness: K.M. Siedt

| Penn Power Tariff Revisions - 2016 Filing |  |  |  |  |  |  |  |
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| Tariff No. 36 |  |  |  |  |  |  |  |
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| Revision \# | Companies | Tariff Page | Topic | Current Text | Error/Change | Revised Text | Source/Comments |
| 1 | PP | 2 | List of Modifications | Rider I - Hourly Pricing Default <br> Service Rider <br> Rider J-Default Service Support Rider |  | Rider I - Hourly Pricing Default Service Rider <br> Default Service Support Rider <br> Rider J. |  |
| 2 | PP | 5 | Table of Contents | Rate GS -Medium-Generatl Service Secondary Rate Demand Metered | Change Rate GS-Medium to Rate GMMedium | Rate GM-Medium-Generatl Service Secondary Rate Demand Metered | Change Rate Schedule GSMedium to Rate Schedule GM |
| 3 | PP | 6 | Table of Contents | Rate SM - Street Lighting Service Mercury Vapor | Remove Rate SM |  | Removing Rate Schedule SM- <br> Street Lighting Service <br> Mercury Vapor |
| 4 | PP | 8 | Description of Territory | BEAVER COUNTY <br> North and Sewickley are listed individually <br> LAWRENCE COUNTY <br> South New and Castle are listed individually | Change North and Sewickely to North Sewickley | BEAVER COUNTY <br> North and Swickley is North Sewickley <br> LAWRENCE COUNTY <br> South New and Castle is South New Castle | Formatting/Grammar |
| 5 | PP | 9 | Description of Territory | MERCER COUNTY South and Pymatuning are listed individually | Change South and Pymatuning to South | MERCER COUNTY <br> South and Pymatuning is South Pymatuning | Formatting/Grammar |



| Penn Power Tariff Revisions - 2016 Filing |  |  |  |  |  |  |  |
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| Tariff No. 36 |  |  |  |  |  |  |  |
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| Revision \# | Companies | Tariff Page | Topic | Current Text | Etror/Change | Revised Text | Source/Comments |
| 7 | PP | 13 | $\begin{aligned} & \text { Definition of } \\ & \text { Terms } \end{aligned}$ | Customer(s) - Any person, partnership association, corporation, or other entity (i) in whose namea a service account is listed, (ii) who occupies or is the ratepayer for any premises, building, structure, etc. or (iii) is primarily respossible for payment of bills. For Residential Service, a Customer is a natural person in whose name a Residential Service account tis listed and who is primarily responsible for payment of bills rendered for the service or ann adult tccupant whose name appears on the mortgage, deed, or lease of the property for whicc the Residential Service is beeing received. A Customer includes anyone taking Delivery Service under this Tariff. | Added language to specify person must be at least 18 years of age | Customer(s) - Any person, partnership, association, corporation, or other entity listed, (ii) who occupies or is the ratepayer for any premises, building, structure, etc. or (iii) is primarily responsible for payment of bills. For Residential Service, a Customer is a natural person at least 18 years of age in whose name a Residential Service account is listed and who is primarily responsible for payment of bills rendered for the service or any adult occupant whose name appears on the mortgage, deed, or lease of the property for which the Residential Service is being requested. A natural person remains a Customer after discontinuance or termination until the final bill for service becomes past due. | Pa. Code § 56.2 |
| 8 | PP | 18 | $\begin{aligned} & \text { Definition of } \\ & \text { Terms } \end{aligned}$ | than 600 volts. <br> Primary Voltage - Voltage greater than 600 volts. | Includes upper voltage limit | Primary Voltage - Voltage greater than 600 volts but less than 23,000 volts. | Includes upper voltage limit |
| 9 | PP | 21 | $\begin{aligned} & \text { Definition of } \\ & \text { Terms } \end{aligned}$ |  | Added definition | Sub-transmission Voltage - 23,000 volts. | Addressed in Rule 7 |
| 10 | PP | 23 | Rule 2 Deposits | Deposits may be required by the Company from all other Customers, in an amount that is equal to one-sixth (1/6) of the Applicant's/Customer's estimated annual bill at the time the Company determines a deposit is required. | Change <br> language to cite 52 Pa . Code § 56.51 | Deposits may be required by the Company from all other Customers, in an amount that is in accordance with 52 Pa. Code $\S 56.51$ of the regulations. | 52 Pa. Code § 56.51 |


| Penn Power Tariff Revisions - 2016 Filing |  |  |  |  |  |  |  |
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| Revision \# | Companies | Tariff Page | Topic | Current Text | Erro/Change | Revised Text | Source/Comments |
| 11 | PP | 36 | Rule 7 <br> Wiring, <br> Apparatus and Inspection | The Company will require the customer to maintain a Power Factor in the range of $90 \%$ to $100 \%$ for secondary, primary and sub transmission service and $90 \%$ to $100 \%$ for transmission service, coincident with the customers maximum monthly peak demand and to provide, at the Customer's expense, any corrective equipment necessary in order to do so. | Change transmission power factor values | The Company will require the customer to maintain a Power Factor in the range of $85 \%$ (lagging) to $100 \%$ for secondary, primary and sub transmission service and $97 \%$ (lagging) to $99 \%$ (leading) for transmission service, coincident with the customers maximum monthly peak demand and to provide, at the Customer's expense, any corrective equipment necessary in order to do so. | Ties to FirstEnergy Energy Delivery Planning and Protection Section 5 Load Power Factor Requirements (End-User) |
| 12 | PP | 44 | Rule 10-Meter <br> Reading and Rendering of Bills (9) Power Factor/Kilovar Billing | (9) Power Factor/Kilovar Billing Billing for Power Factor or Kilovars | Change Kilovar to kilovar | (9) Power Factor/kilovar Billing Billing for Power Factor or kilovars | Formatting/Grammar |
| 13 | PP | 46 | Rule 11.b. Late Payment Charges | A Residential Customer's overdue bill shall be subject to a late payment charge of $1.35 \%$ interest per month on the overdue balance of the bill. A NonResidential Customer's overdue bill shall be subject to a late payment charge of $2.0 \%$ interest per month on the overdue balance of the bill. Interest charges shall be calculated by the Company on the overdue portions of the bill and shall not be charged against any sum that falls due during a current billing period. At the Company's option, the interest per month associated with the late payment charge for Residential Customers may be reduced or eliminated in order to facilitate payment of bills under dispute. | Consistent amounts between all 4 PA operating companies | A Residential Customer's overdue bill shall be subject to a late payment charge of $1.5 \%$ interest per month on the overdue balance of the bill. A NonResidential Customer's overdue bill shall be subject to a late payment charge of $2.0 \%$ interest per month on the overdue balance of the bill. Interest charges shall be calculated by the Company on the overdue portions of the bill and shall not be charged against any sum that falls due during a current billing period. At the Company's option, the interest per month associated with the late payment charge for Residential Customers may be reduced or eliminated in order to facilitate payment of bills under dispute. | 52 Pa . Code § 56.22 |


| Penn Power Tariff Revisions - 2016 Filing |  |  |  |  |  |  |  |
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| Revision \# | Companies | Tariff Page | Topic | Current Text | Error/Change | Revised Text | Source/Comments |
| 14 | PP | 56 | Rule 22 <br> Transfer of Electric Generation Supplier | Company shall change Customer's electric supplier only upon receipt of electronic notification from the chosen electric supplier in accordance with the Pa P.U.C. Rules and Regulations as described in the Final Orders on Standards for Electronic Data Transfer and Exchange Electric Distribution Companies and Electric Generation Suppliers, Docket No. M00960890 F0015 and on Establishing Standards for Changing a Customer's Electric Supplier, Docket No. L00970121 and 52 Pa. Code §54.123(2). Changes in Customer's electric Supplier shall only be effective with Customer's normal meter reading date, regardless of whether the meter reading is actual or estimated. | Change to three (3) business days after enrollment request is processed | Company shall change Customer's EGS in accordance with 52 Pa . Code Chapter 57, Subchapter M, "Standards for Changing a Customer's Electricity Generation Supplier". Pursuant to the Commission's Rulemaking to Amend the Provisions of 52 Pa . Code, Chapter 57 Regulations Regarding Standards for Changing a Customer's Electricity Generation Supplier, at Docket No. L-2014-2409383, changes in Customer's EGS shall be effective within three (3) business days after the enrollment request is processed, regardless of whether the meter reading is actual or estimated. | Updating for new regulations |
| 15 | PP | 69 | Rate GM <br> Medium <br> Availability | If an existing Customer's total consumption is less than $1,500 \mathrm{kWh}$ per month for two (2) consecutive months, the Customer may no longer be eligible for service under this Rate Schedule GS-Medium Based upon the Company's then estimate of the Customer's usage, the Customer shall be placed on Rate Schedule GS or such other Rate Schedule for which such Customer most qualifies. | Changed two consecutive months to twelve consecutive months | If an existing Customer's total consumption is less than $1,500 \mathrm{kWh}$ per month for twelve (12) consecutive months, the Customer may no longer be eligible for service under this Rate Schedule GM. Based upon the Company's then estimate of the Customer's usage, the Customer shall be placed on Rate Schedule GS or such other Rate Schedule for which such Customer most qualifies. | Addition to rate schedule availability |
| 16 | PP | 69 | Rate GM <br> Medium <br> Availability | If an existing Customer's billing demand exceeds 400 kW for more than two (2) consecutive months, then the Customer may no longer be eligible for service under this Rate Schedule GSMedium, and shall be placed on Rate Schedule GS-Large or such other Rate Schedule for which such Customer most qualifies. | Added in any 12-month period | If an existing Customer's billing demand exceeds 400 kW for more than two (2) consecutive months in the most recent twelve month period, then the Customer may no longer be eligible for service under this Rate Schedule GM and shall be placed on Rate Schedule GS-Large or such other Rate Schedule for which such Customer most qualifies. | Addition to rate schedule availability |


| Penn Power Tariff Revisions - 2016 Filing |  |  |  |  |  |  |  |
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| Revision \# | Companies | Tariff Page | Topic | Current Text | Error/Change | Revised Text | Source/Comments |
| 17 | PP | 71 | Rate GM <br> Medium | Determination of Billing Load: The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of non-interval Time-of-Use demand meters. | Change Billing Load to Billing Demand Remove noninterval | Determination of Billing Demand: The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of Time-of-Use demand meters. | Change Billing Load to Billing Demand Correction related to noninterval meters |
| 18 | PP | 73 | Rate GS Large Availability | If an existing Customer's billing demand exceeds 400 kW for more than two (2) consecutive months, then the Customer may no longer be eligible for service under this Rate Schedule GSMedium, and shall be placed on Rate Schedule GS-Large or such other Rate Schedule for which such Customer most qualifies. | Added in any twelve month period and Change Rate Schedule GSLarge to Rate Schedule GSLarge. | If an existing Customer's billing demand exceeds 400 kW for more than two (2) consecutive months in the most recent 12-month period, then the Customer may no longer be eligible for service under this Rate Schedule GM, and shall be placed on Rate Schedule GS-Large or such other Rate Schedule for which such Customer most qualifies. | Addition to rate schedule availability |
| 19 | PP | 74 | Rate GS Large | Determination of Billing Demand: The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of non-interval Time-of-Use demand meters. | Remove noninterval | Determination of Billing Demand: The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of Time-of-Use demand meters. | Correction related to noninterval meters |
| 20 | PP | 78 | Rate GP-General Service-Primary | Determination of Billing Demand: The billing demand in the current month shall be the greatest of (i) twenty-five(25) KW, | $\begin{aligned} & \text { Change } 25 \mathrm{KW} \\ & \text { to } 25 \mathrm{~kW} \end{aligned}$ | Determination of Billing Demand: The billing demand in the current month shall be the greatest of (i) twentyfive(25) kW, | Formatting/Grammar |
| 21 | PP | 78 | Rate GP-General Service-Primary | Determination of Billing Demand: The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of non-interval Time-of-Use demand meters. | Remove noninterval | Determination of Billing Demand: The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of Time-of-Use demand meters. | Correction related to noninterval meters |
| 22 | PP | 82 | Rate GT-General <br> Service- <br> Transmission | Determination of Billing Demand: The billing demand in the current month shall be the greater of (i) 200 kVA, | Change 200 <br> kVA to 200 <br> kW | Determination of Billing Demand: The billing demand in the current month shall be the greater of (i) 200 kVA , | Change 200 kVA to 200 kW to align with Availability provision |


| Penn Power Tariff Revisions - 2016 Filing |  |  |  |  |  |  |  |
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| Revision \# | Companies | Tariff Page | Topic | Current Text | Error/Change | Revised Text | Source/Comments |
| 23 | PP | 82 | Rate GT-General ServiceTransmission | Determination of Billing Demand: The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of non-interval Time-of-Use demand meters. | Remove noninterval | Determination of Billing Demand: The on-peak and off-peak hour provisions of this definition are only applicable for those customers who have installations of non-interval Time-of-Use demand meters. | Correction related to noninterval meters |
| 24 | PP | 90 | Rate SV-Street Lighting Service |  | Replacement language | If the customer requests the Company to remove the present high pressure sodium vapor street light system to install LED lights and if the present system is less than twenty years old, the customer shall pay the removal cost plus the remaining value of the system. | Add replacement language |
| 25 | PP | 93 | Rate SVD-Street Lighting Service; High Pressure Sodium Vapor; Divided Ownership |  | Replacement language | If the customer requests the Company to remove the present high pressure sodium vapor street light system to install LED lights and if the present system is less than twenty years old, the customer shall pay the removal cost plus the remaining value of the system. | Add replacement language |
| 26 | PP | 94-95 | Rate SM-Street Lighting Service Mercury Vapor |  | Remove Rate Schedule SM |  | Removing Rate Schedule SMStreet Lighting Service Mercury Vapor |
| 27 | PP | 96 | Rate LED-Street Lighting Service | A minimum installation of 12 LED lights per customer per individuial order is required. | Added restriction language | A minimum installation of 12 LED lights per customer per individuial order is required when replacing existing lighting. This restriction does not apply to new installations. | Clarifying language |
| 28 | PP | 123 | Rider H Price To Compare Default Service Support Rider | Commercial Customer Class (Rate GS (excluding Special Rate GSDS), Rate GM, Rate PNP, PLS, SV, SVD, SM and LED) | Add GS Large to Commercial Customer Class | Commercial Customer Class consists of Rate Schedules GS (excluding GS Special Rule GSDS), PNP, GM, GSLarge, PLS, SV, SVD, SM and LED | Updated to included GS Large in Commercial Customer Class |
| 29 | PP | 135 | Rider J Default Service Support Rider |  | Move GS- <br> Large out of <br> Industrial Class <br> and into <br> Commercial <br> class | Commercial Customer Class consists of Rate Schedules GS (excluding GS Special Rule GSDS), PNP, GM, GSLarge, PLS, SV, SVD, SM and LED | Move GS Large out of Industrial class and into Commercial Class. Also change to a cents per kWh rate |


| Penn Power Tariff Revisions - 2016 Filing |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tariff No. 36 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Revision \# | Companies | Tariff Page | Topic | Current Text | Error/Change | Revised Text | Source/Comments |
| 30 | PP | 146 | Rider L <br> Partial Services <br> Rider- <br> Availability/ <br> Applicability | All of the following general monthly charges are applicable to Delivery Service Customers. | Added In addition to the charges included in the applicable rate schedule | In addition to the charges included in the applicable rate schedule, all of the following general monthly charges are applicable to Delivery Service Customers. | Clarifying charges |

## PENNSYLVANIA POWER COMPANY

## TITLE 52, SECTION 53.52 (a) FILING REQUIREMENT:

"(a) Whenever a public utility, other than a canal, turnpike, tunnel, bridge or wharf company files a tariff, revision or supplement effecting changes in the terms and conditions of service rendered or to be rendered, it shall submit to the Commission, with the tariff, revision or supplement, statements showing all of the following:
(1) The specific reasons for each change.
(2) The total number of customers served by the utility.
(3) A calculation of the number of customers, by tariff subdivision, whose bills will be affected by the change.
(4) The effect of the change on the utility's customers.
(5) The direct or indirect effect of the proposed change on the utility's revenue and expenses.
(6) The effect of the change on the service rendered by the utility.
(7) A list of factors considered by the utility in its determination to make the change. The list shall include a comprehensive statement about why these factors were chosen and the relative importance of each. This subsection does not apply to a portion of a tariff change seeking a general rate increase as defined in 66 Pa.C.S. § 1308 (relating to voluntary changes in rates).
(8) Studies undertaken by the utility in order to draft its proposed change. This paragraph does not apply to a portion of a tariff change seeking a general rate increase as defined in $66 \mathrm{~Pa} . \mathrm{C} . \mathrm{S}$. § 1308.
(9) Customer polls taken and other documents which indicate customer acceptance and desire for the proposed change. If the poll or other documents reveal discernible public opposition, an explanation of why the change is in the public interest shall be provided.
(10) Plans the utility has for introducing or implementing the changes with respect to its ratepayers.
(11) FCC, FERC or Commission orders or rulings applicable to the filing."

## RESPONSE:

## 52 Pa. Code 53.52(a)(1)

See Direct Testimony of Kevin M. Siedt, Penn Power Statement No. 3.

## 52 Pa. Code 53.52(a)(2)

As of December 31, 2015, the end of the historical test year, Penn Power served a total of 166,751 customers.

## 52 Pa. Code 53.52(a)(3)

See Penn Power Exhibit KMS-1, Attachments A, B, and C, Sales and Distribution Revenue Normalization (Fully Projected, Future, and Historical Test Years, respectively).

## 52 Pa. Code 53.52(a)(4)

See Penn Power Exhibit KMS-4, Comparison between Present and Proposed Rates, and Penn Power Statement No. 3, Direct Testimony of Kevin M. Siedt.

## 52 Pa. Code 53.52(a)(5)

See Penn Power Statement No. 2, Direct Testimony of Richard A. D'Angelo; and Exhibits RAD-1 and RAD-2.

## 52 Pa. Code 53.52(a)(6)

See Penn Power Statement No. 1, Direct Testimony of Charles V. Fullem.

# Penn Power Exhibit KMS-8 

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## 52 Pa. Code 53.52(a)(7)

Not Applicable.

## 52 Pa. Code 53.52(a)(8)

Not Applicable.

## 52 Pa. Code 53.52(a)(9)

None

## 52 Pa. Code 53.52(a)(10)

At the time of filing, the Company will issue and provide to customers notice of its distribution rate increase request pursuant to the Commission's general rate case filing regulations. Customer bill messages will direct customers to more information, and a bill insert will describe the rate changes approved by the Commission and indicate the impact on customers. The Company will also inform customers about the Commission-approved rate changes in a press release and a news publication, as well as on the Company's website. After a final Commission order is entered in connection with this rate filing, the Company will file a compliance tariff to implement all of the approved changes.

## 52 Pa. Code 53.52(a)(11)

The following orders or rulings are applicable to the filing:

- Company's 2014 Rate Case Order, Docket No. R-2014-2428744.
- Company's Default Service Plan, Docket No. P-2013-2391375.
- Merger Settlement, Docket Nos. A-2010-2176520 and A-2010-2176732.
- Company's Smart Meter Deployment Plan, Docket No. M-2013-2341993.


# Penn Power Exhibit KMS-8 

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TITLE 52, SECTION 53.52 (b) FILING REQUIREMENT:
"(b) Whenever a public utility other than a canal, turnpike, tunnel, bridge or wharf company files a tariff, revision or supplement which will increase or decrease the bills to its customers, it shall submit in addition to the requirements of subsection (a), to the Commission, with the tariff, revision or supplement, statements showing the following:
(1) The specific reasons for each increase or decrease.
(2) The operating income statement of the utility for a 12-month period, the end of which may not be more than 120 days prior to the filing. Water and wastewater utilities with annual revenues under $\$ 100,000$ and municipal corporations subject to Commission jurisdiction may provide operating income statements for a 12-month period, the end of which may not be more than 180 days prior to the filing.
(3) A calculation of the number of customers, by tariff subdivision, whose bills will be increased.
(4) A calculation of the total increases, in dollars, by tariff subdivision, projected to an annual basis
(5) A calculation of the number of customers, by tariff subdivision, whose bills will be decreased.
(6) A calculation of the total decreases, in dollars, by tariff subdivision, projected to an annual basis.."

## RESPONSE:

Pennsylvania Power Company ("Penn Power" or the "Company") submits the following information in support of Tariff Electric - Pa. P.U.C. No. 36. In response to each of the applicable subsections of 52 Pa . Code $\S 53.52$ (b), Penn Power states the following:

## 52 Pa. Code 53.52(b)(1)

See Testimony of Charles V. Fullem, Penn PowerStatement No. 1, Testimony of Richard A. D'Angelo, Penn Power Statement No. 2; and Testimony of Kevin M. Siedt, Penn Power Statement No. 3.

## 52 Pa. Code 53.52(b)(2)

See Penn Power Exhibit RAD-4.

## 52 Pa. Code 53.52(b)(3)

See Penn Power Exhibit KMS-1, Attachments A, B, and C, Sales and Distribution Revenue Normalization (Fully Projected, Future, and Historical Test Years, respectively); Penn Power Exhibit KMS-2, Summary of Distribution of Revenues; Penn Power Exhibit KMS-3, Proof of Revenues Analysis; and Penn Power Exhibit KMS-4, Bill Comparisons.

## 52 Pa. Code 53.52(b)(4)

See Penn Power Exhibit KMS-2, Summary of Distribution of Revenues; Penn Power Exhibit KMS-3, Proof of Revenues Analysis; and Penn Power Exhibit KMS-4, Bill Comparisons.

## 52 Pa. Code 53.52(b)(5)

See Penn Power Exhibit KMS-2, Summary of Distribution of Revenues; Penn Power Exhibit KMS-3, Proof of Revenues Analysis; and Penn Power Exhibit KMS-4, Bill Comparisons.

## 52 Pa. Code 53.52(b)(6)

See Penn Power Exhibit KMS-2, Summary of Distribution of Revenues; Penn Power Exhibit KMS-3, Proof of Revenues Analysis; and Penn Power Exhibit KMS-4, Bill Comparisons.

## TITLE 52, SECTION 53.52 (c) FILING REQUIREMENT:

"(c) If a public utility files a tariff, revision or supplement which it is calculated will increase the bills of a customer or a group of customers by an amount, when projected to an annual basis, exceeding $3 \%$ of the operating revenues of the utility-subsection (b)(4) divided by the operating revenues of the utility for a 12 month period as defined in subsection (b)(2)-or which it is calculated will increase the bills of $5 \%$ or more of the number of customers served by the utilitysubsection (b)(3) divided by subsection (a)(2)-it shall submit to the Commission with the tariff, revision or supplement, in addition to the statements required by subsections (a) and (b), all of the following information:
(1) A statement showing the utility's calculation of the rate of return or operating ratio (if the utility qualifies to use an operating ratio under § 53.54 (relating to small water and wastewater utilities) earned in the 12 -month period referred to in subsection (b)(2), and the anticipated rate of return or operating ratio to be earned when the tariff, revision or supplement becomes effective. The rate base used in this calculation shall be supported by summaries of original cost for the rate of return calculation. When an operating ratio is used in this calculation, it shall be supported by studies of margin above operation and maintenance expense plus depreciation as referred to in § 53.54(b)(2)(B).
(2) A detailed balance sheet of the utility as of the close of the period referred to in subsection (b)(2).
(3) A summary, by detailed plant accounts, of the book value of the property of the utility at the date of the balance sheet required by paragraph (2).
(4) A statement showing the amount of the depreciation reserve, at the date of the balance sheet required by paragraph (2), applicable to the property, summarized as required by paragraph (3).
(5) A statement of operating income, setting forth the operating revenues and expenses by detailed accounts for the 12-month period ending on the date of the balance sheet required by paragraph (2).
(6) A brief description of a major change in the operating or financial condition of the utility occurring between the date of the balance sheet required by paragraph (2) and the date of transmittal of the tariff, revision or supplement. As used in this paragraph, a major change is one which materially alters the operating or financial condition of the utility from that reflected in paragraphs (1)-(5)."

## RESPONSE:

See Penn Power Statement No. 2, Direct Testimony of Richard A. D'Angelo; and Exhibits RAD-54 and RAD-55.

## TITLE 52, SECTION 53.52 (d) FILING REQUIREMENT:

"(d) If a utility renders more than one type of public service, such as electric and gas, information required by § §53.51-53.53 (relating to information furnished with the filing of rate changes), except subsection (c)(2), relates solely to the kind of service to which the tariff or tariff supplement is applicable. In subsection (c)(2), the book value of property used in furnishing each type of public service, as well as the depreciation reserve applicable to the property, shall be shown separately."

## RESPONSE:

See Penn Power Statement No. 2, Direct Testimony of Richard A. D'Angelo; and Exhibits RAD-54 and RAD-55.

## FILING REQUIREMENTS IV-A-1:

"Provide a summary schedule of the individual rate effects. For each state jurisdictional rate, show the following information to the test period elected:

1. Rate schedule designation."

## FILING REQUIREMENT IV-A-2:

"Provide a summary schedule of the individual rate effects. For each state jurisdictional rate, show the following information to the test period elected:
2. For existing rates:
a. Customers served as of end of period.
b. Annual Kwh sales
c. Base rate revenues adjusted for any changes in base rate application that may have occurred during the test period.
d. Tax surcharge revenues.
e. Energy Cost adjustment clause revenues.
f. Revenues received from other clauses or riders separately accounted for.
g. Total of all revenues."

## FILING REQUIREMENT IV-A-3:

"Provide a summary schedule of the individual rate effects. For each state jurisdictional rate, show the following information to the test period elected:
3. For proposed rates:
(a) Estimated number of customers whose charges for electric service will be increased or decreased as a result of this filing.
(b) Base rate revenues:
(1) Annual dollar amount of increase or decrease.
(2) Percentage change.
(c) Estimated tax surcharge revenues based on the assumption that the base rate changes proposed were in place.
(d) Estimated Energy cost adjustment clause revenues.
(e) Revenues received from other clauses or riders separately accounted for.
(f) Total of all revenues:
(1) Amount of total annual dollar change.
(2) Percentage change."

## FILING REQUIREMENT IV-A-4:

"Provide a summary schedule of the individual rate effects. For each state jurisdictional rate, show the following information to the test period elected:
4. Supplement the revenue summary to obtain a complete revenue statement of the electric business, that is, show delayed payments, other electric revenues, FERC jurisdictional sales and revenues and all other appropriate revenue items and adjustments."

## FILING REQUIREMENT IV-A-5

"Provide a summary schedule of the individual rate effects. For each state jurisdictional rate, show the following information to the test period elected:
5. Develop the grand total showing total sales and revenues as adjusted and the various increases and decreases and percent effects as described above."

## RESPONSES:

See Penn Power Exhibit KMS-1, Attachments A, B, and C, Sales and Distribution Revenue Normalization (Fully Projected, Future, and Historical Test Years, respectively); and Penn Power Exhibit KMS-2, Summary of Distribution of Revenues.

## FILING REQUIREMENT IV-B-1:

"Provide a description of changes proposed for the new tariff:

1. For each rate schedule proposed to be modified."

FILING REQUIREMENT IV-B-2:
"Provide a description of changes proposed for the new tariff:
2. For each rate schedule proposed to be deleted."

## FILING REQUIREMENT IV-B-3:

"Provide a description of changes proposed for the new tariff:
2. For each new rate schedule proposed to be added."

## RESPONSES:

See Penn Power Exhibit KMS-6, Matrix of Tariff changes, and Penn Power Statement No. 3, Direct Testimony of Kevin M. Siedt.

## FILING REQUIREMENT IV-C:

"The annual revenue effect of any proposed change to any rate must be supported by a billing analysis. This may consist of the use of bill frequency distributions or individual customer billing records for the most recent annual periods available. All billing determinants should be displayed. The blocking and corresponding prices of the existing rate and the proposed rate should be applied to the determinants to derive the base rate revenues under both present and proposed rates. The derived base rate revenues should form the basis for measuring the annual base rate effect of the rates in question for the test periods."

## RESPONSE:

See Penn Power Exhibit KMS-3, Proof of Revenues Analysis.

## FILING REQUIREMENT IV-D-1:

"The effects of the proposed rates on monthly billing conditions should be provided as follows:

## 1. Residential Bill Comparisons

For each rate applicable to residential service provide a chart or tabulation which shows the dollar and percentage effect of the proposed base rate on monthly bills ranging from the use of zero kWh to $5,000 \mathrm{kWh}$ at appropriate intervals."

## FILING REQUIREMENT IV-D-2:

"The effects of the proposed rates on monthly billing conditions should be provided as follows:

## 2. General Bill Comparisons

 billing determinants, provide a tabulation or graphical comparison showing the percentage effect of the proposed base rate on monthly bills using several representative demand ( kW ) levels, the monthly kWh for each demand selected to be in load factor increments of $10 \%$ starting at $0 \%$ and ending at $100 \%(730 \mathrm{H})$ or by hours' use increments that covers approximately $95 \%$ of the bills."

## RESPONSE:

See Penn Power Exhibit KMS-4, Comparison between Present and Proposed Rates.

# Penn Power Exhibit KMS-8 <br> Witness: K. M. Siedt <br> Page 14 of 14 

## FILING REQUIREMENT IV-E-2:

"Provide comparisons in either graphical or tabular form showing cost, as defined in the cost of service study, and proposed base rate revenues and usage for all residential and demand/energy rate schedules. Demand shall be for representative loads for each demand/energy rate schedule."

## RESPONSE:

See Penn Power Exhibit KMS-5, Cost Curves.


[^0]:    ${ }^{1}$ Exhibit RAD-7 is Highly Confidential and is being provided to the Commission in hard copy only.

[^1]:    ${ }^{2}$ Exhibit RAD-40 contains a Highly Confidential attachment that is being provided to the Commission in hard copy only.

[^2]:    130-134

[^3]:    ${ }^{1}$ Exhibits CVF-1 through CVF-4 respond to filing requirements outlined in 52 Pa . Code § 53.53(a)(3). Specifically, these exhibits respond to requirements I-A-1, 2 and 3 and I-B-1 of Exhibit C to Section 53.53.

[^4]:    ${ }^{2}$ System Average Interruption Frequency Index, or "SAIFI," represents the average frequency of sustained interruptions per customer during an analysis period.
    ${ }^{3}$ System Average Interruption Duration Index, or "SAIDI," represents the average duration of sustained interruptions per customer during an analysis period.
    ${ }^{4}$ Customer Average Interruption Duration Index, or "CAIDI," represents the average interruption duration sustained interruptions for those customers who experience interruptions during an analysis period.

[^5]:    1 Duquesne Light Company, PECO Energy Company and PPL Electric Utilities Corporation.

[^6]:    ${ }^{1}$ As approved by the Commission at Docket No. M-2015-2514769 on March 10, 2016.

[^7]:    ${ }^{2}$ Petition of Penn Power for Approval to Establish and Implement a DSIC at Docket No. P-2015-2508931.

[^8]:    \$ 616

[^9]:    1,334

[^10]:    * Retirement work in progress has not classified on a FERC account number basis

[^11]:    ${ }^{1} 66$ Pa.C.S. §§ 2806.1 and 2806.2
    ${ }^{2}$ Docket Nos. M-2009-2112956 and M-2012-2334395

[^12]:    FERC
    Account
    Maintenance
    935 Maintenance and general plant
    Total maintenance
    Total administrative and general expenses
    Total electric operation and maintenance expenses

[^13]:    ${ }^{1} 66$ Pa.C.S. § 101, et seq.

[^14]:    ${ }^{2}$ Pa. P. U.C. v. PPL Elec. Util. Corp., Docket No. R-2012-2290597, Recommended Decision (Oct. 19, 2012), pp. 118-120, and Final Order (Dec. 28, 2012), p. 131.

[^15]:    ${ }^{3}$ I would note that the Company's State Tax Adjustment Charge is zero and is expected to remain at zero through to the effective date of the new base rates established in this case.

[^16]:    ${ }^{4} 52 \mathrm{~Pa}$. Code Chapter 57, Subchapter M, Standards for Changing a Customer's Electricity Generation Supplier.

